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# New cutting tools



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<b>General turning</b>		<b>A</b>
<b>Milling</b>		<b>B</b>
<b>Drilling</b>		<b>C</b>
<b>Boring</b>		<b>D</b>
<b>Rotating tool adaptors</b>		<b>E</b>
<b>Accessories</b>		<b>F</b>
<b>General information</b>		<b>G</b>

A

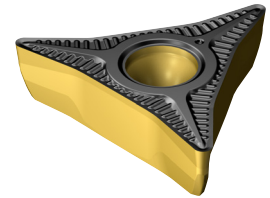
## General turning



CoroTurn® Prime

### L3WX wiper geometry for A-type inserts

For finishing of ductile materials high-strength steels, cold-forging steels and duplex stainless steels, with high demand on surface finish



See page 5

B

CoroTurn® TR and CoroTurn® 107

### With over and under coolant capabilities

Under coolant for increased tool life and productivity, especially in applications generating a lot of heat into the insert. Over coolant for better chip control



See chapter A

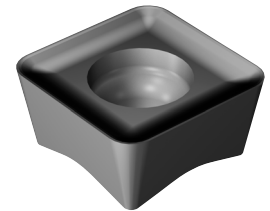
C

## Milling

CoroMill® 415 insert for milling

### New insert geometry

New M-M30 geometry for CoroMill® 415 in both iC05 and iC07 insert sizes, complementing the old M-M30 geometry assortment.



See page 14

D

CoroMill® 390 square shoulder milling cutter

### Lightweight shoulder milling cutter

Inch version cutters to be used together with Silent Tools™ damped adaptors for long overhang machining in demanding applications



See page 15

E

CoroMill® Plura

### Heavy duty milling

From 10–25 mm (.625–.750") First choice for heavy-duty operations in ISO P and ISO M.



See page 16

F

CoroMill® 316

### Grade GC1730

Grade GC1730 replaces the existing GC1030 grade  
First choice for ISO P and ISO M materials



See chapter B

G

H



## Drilling



CoroDrill® DS20

### Indexable insert drill

Extended assortment with new drill diameters and insert size

See page 39



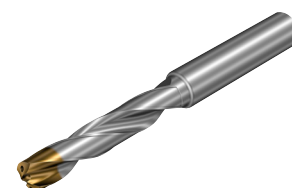
B

CoroDrill® 860-GM

### Solid carbide drill

A high-performance drilling solution for short holes in most materials. The drill offers robust process security, high hole integrity and excellent tool life and is ideal for general engineering and automotive applications.

See page 42



C

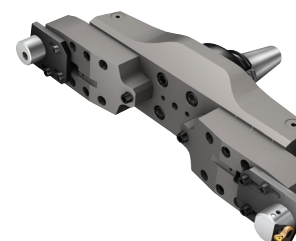
## Boring

CoroBore 826

### CoroBore® XL

New CoroBore® 826 fine boring heads with high precision nozzles

See page 76



D

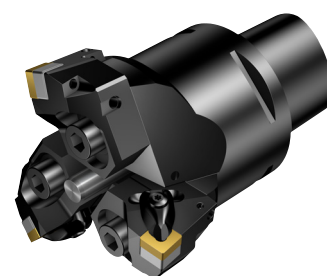
E

CoroBore® BR30

### Extended assortment

Larger diameters now available.

See page 75



F

## Tooling systems

CoroChuck™ 930

### Extended assortment with new slender and pencil dimensions

Designed for all applications and components where accessibility and high performance are required

See chapter E



G

H



# General turning

ENG

B

## CoroTurn® Prime

Inserts 5

## CoroTurn® TR

External tools 6-8

## CoroTurn® 107

External tools 9-12

C

For complete assortment, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

D

E

F

G

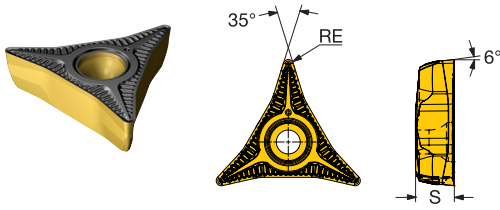
H



# CoroTurn® Prime insert for turning

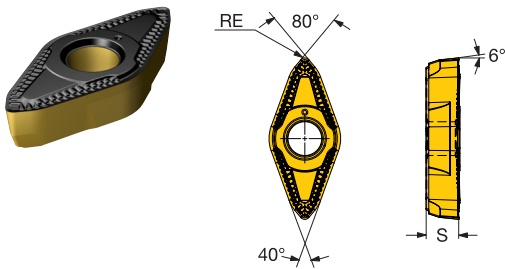


## A-type insert



				P		
Finishing	L3WX	SSC	S	RE	ISO CODE	4325
		CP-A	6.00	0.79	CP-A1108-L3WX	*
		.236	.031			

## B-type insert



				M			
Medium	H3	SSC	S	REEQ	RE	ISO CODE	2025
		CP-B	5.00	0.8	0.79	CP-B1108-H3	*
		.197	.031	.031			

SSC = To correspond with SSC on holder.

# CoroTurn® TR cutting unit for turning

Screw clamp design

Coromant Capto® - Internal coolant supply

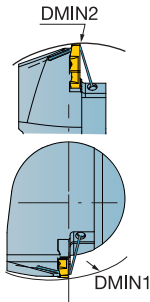


ENG

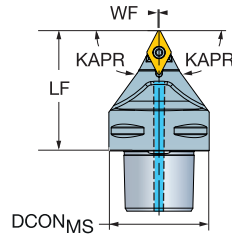
B



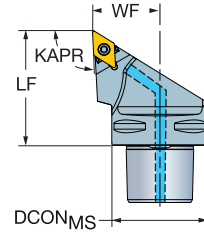
KAPR  
PSIR



Cx-TR-D13NCN..C  
62.5°  
27.5°



Cx-TR-D13JCR/L..C  
93.0°  
-3.0°



C



TR-DC

D

CNC	CZC <sub>MS</sub>	DMIN <sub>1</sub>	DMIN <sub>2</sub>	RMPX	CNCS	Ordering code	Dimensions, mm, inch						MID		
							DCON <sub>MS</sub>	LF	WF	BAR PSI	NM	KG			
	13	C4	251.0	150.0	27°	3	C4-TR-D13JCR/L-27050C	40	50.0	27.0	150	3.0	0.37	TR-DC1308	
			9.882	5.906					1.575	1.969	1.063	2175			
			249.0	175.0	27°	3	C5-TR-D13JCR/L-35060C	50	60.0	35.0	150	3.0	0.69	TR-DC1308	
			9.803	6.890					1.969	2.362	1.378	2175			
			253.0	240.0	27°	3	C6-TR-D13JCR/L-45065C	63	65.0	45.0	150	3.0	1.39	TR-DC1308	
9.961	9.449					2.480	2.559	1.772	2175						
	13	C4	253.0	250.0	27°	3	C8-TR-D13JCR/L-55080C	80	80.0	55.0	150	3.0	2.54	TR-DC1308	
			9.961	9.843					3.150	3.150	2.165	2175			
			140.0	57°	3	C4-TR-D13NCN-00050C	40	50.0	0.5	150	3.0	0.32	TR-DC1308		
			5.512						1.575	1.969	.020	2175			
			165.0	57°	3	C5-TR-D13NCN-00060C	50	60.0	0.5	150	3.0	0.62	TR-DC1308		
6.496						1.969	2.362	.020	2175						
	13	C4	190.0	57°	3	C6-TR-D13NCN-00065C	63	65.0	0.5	150	3.0	1.06	TR-DC1308		
			7.480						2.480	2.559	.020	2175			

N = Neutral, R = Right hand, L = Left hand

F

Spare parts			
Insert screw	Bottom plug M4	Coolant nozzle	Bits insert screw
5513 020-01	3213 010-256	5691 026-03	5680 084-15

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

H



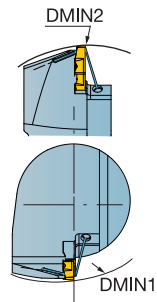
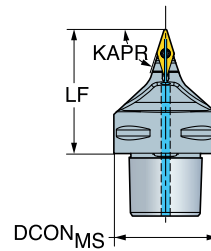
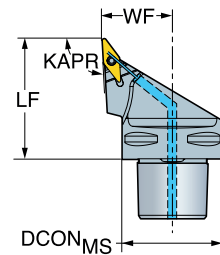
# CoroTurn® TR cutting unit for turning

Screw clamp design

Coromant Capto® - Internal coolant supply



TR-VB

KAPR  
PSIRCx-TR-V13VBN..C  
72.5°  
17.5°Cx-TR-V13JBR/L..C  
93.0°  
-3.0°

		CZC <sub>MS</sub>	DMIN <sub>1</sub>	DMIN <sub>2</sub>	RMPX	CNCS	Ordering code	Dimensions, mm, inch						MIID	
								DCON <sub>MS</sub>	LF	WF	BAR PSI	NM	KG		
	13	C4	253.0	140.0	50°	3	C4-TR-V13JBR/L-27050C	40	50.0	27.0	150	2.0	0.34	TR-VB1308	
			9.961	5.512					1.575	1.969	1.063	2175			
			228.0	165.0	50°	3	C5-TR-V13JBR/L-35060C	50	60.0	35.0	150	2.0	0.68	TR-VB1308	
			8.976	6.496					1.969	2.362	1.378	2175			
	13	C6	232.0	190.0	50°	3	C6-TR-V13JBR/L-45065C	63	65.0	45.0	150	2.0	1.13	TR-VB1308	
			9.134	7.480					2.480	2.559	1.772	2175			
			233.0	250.0	50°	3	C8-TR-V13JBR/L-55080C	80	80.0	55.0	150	2.0	2.44	TR-VB1308	
			9.173	9.843					3.150	3.150	2.165	2175			
	13	C4	140.0	70°	3	C4-TR-V13VBN-00050C	40	50.0	0.5	150	2.0	0.29	TR-VB1308		
			5.512						1.575	1.969	.020	2175			
			165.0	70°	3	C5-TR-V13VBN-00060C	50	60.0	0.5	150	2.0	0.58	TR-VB1308		
			6.496						1.969	2.362	.020	2175			
	13	C6	190.0	70°	3	C6-TR-V13VBN-00065C	63	65.0	0.5	150	2.0	1.00	TR-VB1308		
			7.480						2.480	2.559	.020	2175			

N = Neutral, R = Right hand, L = Left hand

Spare parts			
Insert screw	Bottom plug M4	Coolant nozzle	Bits insert screw
5513 020-64	3213 010-256	5691 026-03	5680 084-21

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

97



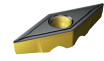
100



# CoroTurn® TR cutting unit for turning

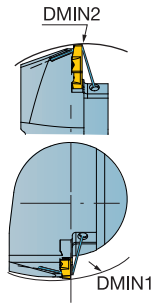
Screw clamp design

Coromant Capto® - Internal coolant supply

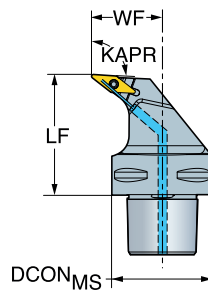


TR-VB

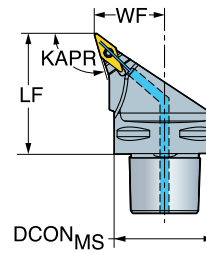
KAPR



Cx-TR-V13UBR/L..C  
93.0°



Cx-TR-V13HBR/L..C  
107.5°



		Dimensions, mm, inch											MID	
		CZC <sub>MS</sub>	DMIN <sub>1</sub>	DMIN <sub>2</sub>	RMPX	CNSC	Ordering code	DCON <sub>MS</sub>	LF	WF	BAR PSI	NM		KG
	13	C5	99.0	165.0	35°	3	C5-TR-V13HBR/L-35060C	50	60.0	35.0	150	2.0	0.64	TR-VB1308
			3.898	6.496				1.969	2.362	1.378	2175			
		C6	150.0	190.0	35°	3	C6-TR-V13HBR/L-45065C	63	65.0	45.0	150	2.0	1.15	TR-VB1308
			5.906	7.480				2.480	2.559	1.772	2175			
		C8	133.0	250.0	35°	3	C8-TR-V13HBR/L-55080C	80	80.0	55.0	150	2.0	2.46	TR-VB1308
		5.236	9.843				3.150	3.150	2.165	2175				
	C4	95.0	140.0	35°	3	C4-TR-V13HBR/L-27050C	40	50.0	27.0	150	2.0	0.35	TR-VB1308	
		3.740	5.512				1.575	1.969	1.063	2175				
	13	C5	67.0	165.0	50°	3	C5-TR-V13UBR/L-35060C	50	60.0	35.0	150	2.0	0.71	TR-VB1308
			2.638	6.496				1.969	2.362	1.378	2175			
		C6	118.0	190.0	50°	3	C6-TR-V13UBR/L-45065C	63	65.0	45.0	150	2.0	1.24	TR-VB1308
			4.646	7.480				2.480	2.559	1.772	2175			
		C8	100.0	250.0	50°	3	C8-TR-V13UBR/L-55080C	80	80.0	55.0	150	2.0	2.61	TR-VB1308
		3.937	9.843				3.150	3.150	2.165	2175				
	C4	54.0	140.0	50°	3	C4-TR-V13UBR/L-27050C	40	50.0	27.0	150	2.0	0.38	TR-VB1308	
		2.126	5.512				1.575	1.969	1.063	2175				

N = Neutral, R = Right hand, L = Left hand

Spare parts

Insert screw	Bottom plug M4	Coolant nozzle	Bits insert screw
5513 020-64	3213 010-256	5691 026-03	5680 084-21

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

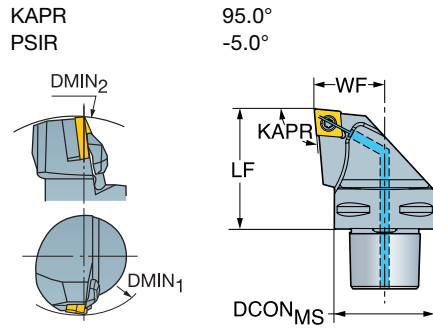


# CoroTurn® 107 cutting unit for turning



Screw clamp design

Coromant Capto® - Precision coolant supply



- CCMT, CCGT  
CCGX, CCET
- CCMW

			CZC <sub>MS</sub>	DMIN <sub>1</sub>	DMIN <sub>2</sub>	CNSC	Ordering code	Dimensions, mm, inch						MIID
								DCON <sub>MS</sub>	LF	WF				
	09	3/8	C3	265.0	700.0	3	<b>C3-SCLCR/L-22040-09C</b>	32	40.0	22.0	150	3.0	0.20	CCMT 09 T3 08
	C4	272.0	600.0	3	3	<b>C4-SCLCR/L-27050-09C</b>	40	50.0	27.0	150	3.0	0.43	CCMT 09 T3 08	
	12	1/2	C4	210.0	600.0	3	<b>C4-SCLCR/L-27050-12C</b>	40	50.0	27.0	150	3.0	0.44	CCMT 12 04 08
C5	204.0	550.0	3	3	<b>C5-SCLCR/L-35060-12C</b>	50	60.0	35.0	150	3.0	0.77	CCMT 12 04 08		
C6	208.0	800.0	3	<b>C6-SCLCR/L-45065-12C</b>	63	65.0	45.0	150	3.0	1.34	CCMT 12 04 08			

R = Right hand, L = Left hand

Spare parts				
		CZC <sub>MS</sub>	Insert screw	Nozzle
09	3/8	C3-C5	5513 020-09	5691 026-13
12	1/2	C4-C5	5513 020-17	5691 026-13

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



A

# CoroTurn® 107 cutting unit for turning



Screw clamp design

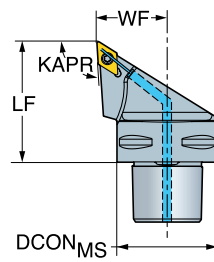
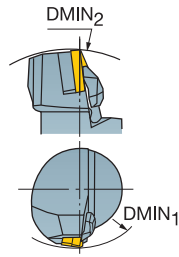
Coromant Capto® - Precision coolant supply

B



KAPR  
PSIR

93.0°  
-3.0°



C

- DCMT, DCMX  
DCGT, DCGX, DCET
- DCMW

D

								Dimensions, mm, inch							
		CZC <sub>MS</sub>	DMIN <sub>1</sub>	DMIN <sub>2</sub>	RMPX	CNSC	Ordering code	DCON <sub>MS</sub>	LF	WF				MIID	
	11	3/8	C3	244.0	135.0	27°	3	<b>C3-SDJCR/L-22040-11C</b>	32	40.0	22.0	150	3.0	0.19	DCMT 11 T3 08
				9.606	5.315				1.260	1.575	.866	2175			
			C4	246.0	140.0	27°	3	<b>C4-SDJCR/L-27050-11C</b>	40	50.0	27.0	150	3.0	0.38	DCMT 11 T3 08
				9.685	5.512				1.575	1.969	1.063	2175			
			C5	250.0	165.0	27°	3	<b>C5-SDJCR/L-35060-11C</b>	50	60.0	35.0	150	3.0	0.70	DCMT 11 T3 08
				9.843	6.496				1.969	2.362	1.378	2175			
		C6	250.0	190.0	27°	3	<b>C6-SDJCR/L-45065-11C</b>	63	65.0	45.0	150	3.0	1.19	DCMT 11 T3 08	
			9.843	7.480				2.480	2.559	1.772	2175				

R = Right hand, L = Left hand

E

Spare parts

Insert screw	Shim screw	Shim	Bottom plug M4	Coolant nozzle	Bits insert screw
5513 020-01	5512 090-01	5322 263-01	3213 010-256	5691 026-03	5680 084-15

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

F

G

H

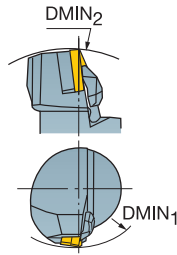
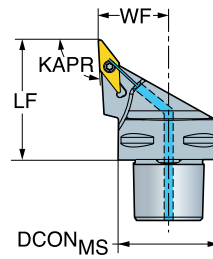


# CoroTurn® 107 cutting unit for turning



Screw clamp design

Coromant Capto® - Precision coolant supply

KAPR  
PSIRCx-SVJBR/L..C  
93.0°  
-3.0°

- VBMT, VBGT  
VCGX,  
VCGT, VCET
- VBMT, VCMW

							Ordering code	Dimensions, mm, inch						MIID	
								DCON <sub>MS</sub>	LF	WF	BAR PSI	NM	KG		
	11	1/4	C3	368.0	116.0	50°	3	C3-SVJBR/L-2204011B1C	32	40.0	22.0	150	0.9	0.18	VBMT 11 03 04
				14.488	4.567			1.260	1.575	.866	2175				
		C4	434.0	140.0	50°	3	C4-SVJBL-2705011B1C	40	50.0	27.0	150	0.9	0.36	VBMT 11 03 04	
			17.087	5.512			1.575	1.969	1.063	2175					
	C4	434.0	140.0	50°	3	C4-SVJBR-2705011B1C	40	50.0	27.0	150	3.0	0.36	VBMT 11 03 04		
		17.087	5.512			1.575	1.969	1.063	2175						
	16	3/8	C4	270.0	140.0	50°	3	C4-SVJBR/L-27050-16C	40	50.0	27.0	150	3.0	0.33	VBMT 16 04 08
				10.630	5.512			1.575	1.969	1.063	2175				
C5		270.0	165.0	50°	3	C5-SVJBR/L-35060-16C	50	60.0	35.0	150	3.0	0.63	VBMT 16 04 08		
		10.630	6.496			1.969	2.362	1.378	2175						
C6	270.0	190.0	50°	3	C6-SVJBR/L-45065-16C	63	65.0	45.0	150	3.0	1.14	VBMT 16 04 08			
	10.630	7.480			2.480	2.559	1.772	2175							
C8	272.0	248.0	50°	3	C8-SVJBR/L-55080-16C	80	80.0	55.0	150	3.0	2.40	VBMT 16 04 08			
	10.709	9.764			3.150	3.150	2.165	2175							

R = Right hand, L = Left hand

Spare parts						
MIID	Insert screw	Shim screw	Shim	Bottom plug M4	Coolant nozzle	Bits insert screw
VBMT 11	5513 020-03	-	-	3213 010-256	5691 026-03	5680 084-15
VBMT 16	5513 020-01	5512 090-01	5322 270-01	3213 010-256	5691 026-03	5680 084-15

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

97



100

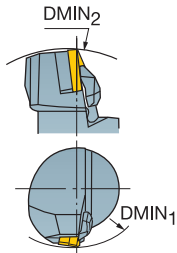
# CoroTurn® 107 cutting unit for turning

Screw clamp design

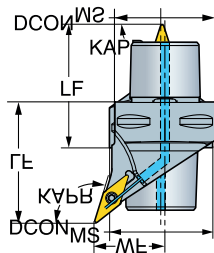
Coromant Capto® - Internal coolant supply



KAPR  
PSIR



Cx-SVBN..C  
72.5°  
17.5°



- VBMT, VBG T  
VCGX,  
VCGT, VCET
- VB MW, VCMW

									Dimensions, mm, inch							
				CZC <sub>MS</sub>	DMIN <sub>1</sub>	DMIN <sub>2</sub>	RMPX	CNSC	Ordering code	DCON <sub>MS</sub>	LF	WF				MIID
	16	3/8	C4		124.0	140.0	35°	3	<b>C4-SVHBR/L-27050-16C</b>	40	50.0	27.0	150	3.0	0.35	VBMT 16 04 08
					4.882	5.512				1.575	1.969	1.063	2175			
			C5		124.0	165.0	35°	3	<b>C5-SVHBR/L-35060-16C</b>	50	60.0	35.0	150	3.0	0.63	VBMT 16 04 08
					4.882	6.496				1.969	2.362	1.378	2175			
			C6		134.0	190.0	35°	3	<b>C6-SVHBR/L-45065-16C</b>	63	65.0	45.0	150	3.0	1.14	VBMT 16 04 08
					5.276	7.480				2.480	2.559	1.772	2175			
		16	3/8	C5		165.0	70°	3	<b>C4-SVBN-00055-16C</b>	50	60.0	0.6	150	3.0	0.31	VBMT 16 04 08
						6.496				1.969	2.362	.024	2175			
			C5		165.0	70°	3	<b>C5-SVBN-00060-16C</b>	50	60.0	0.6	150	3.0	0.55	VBMT 16 04 08	
					6.496				1.969	2.362	.024	2175				
			C6		190.0	70°	3	<b>C6-SVBN-00065-16C</b>	63	65.0	0.6	150	3.0	0.97	VBMT 16 04 08	
					7.480				2.480	2.559	.024	2175				

B1 = For insert with thickness 03 = 3.18 mm (2 = 1/8").

N = Neutral, R = Right hand, L = Left hand

Spare parts

Insert screw	Shim screw	Shim	Bottom plug M4	Coolant nozzle	Bits insert screw
5513 020-01	5512 090-01	5322 270-01	3213 010-256	5691 026-03	5680 084-15

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)





# Milling

## High-feed milling tools

CoroMill® 415 14

## Shoulder milling tools

CoroMill® 390 15

## Optimized solid milling tools

CoroMill® Plura solid carbide end mill for heavy duty milling	16-21
CoroMill® 316 solid carbide head for high chip load milling	22
CoroMill® 316 solid carbide head for roughing with chip breaker	23
CoroMill® 316 solid carbide head for profiling	24-25
CoroMill® 316 solid carbide head for finishing	26-27
CoroMill® 316 solid carbide head for chamfer milling	28-30

**Cutting data** 31-36

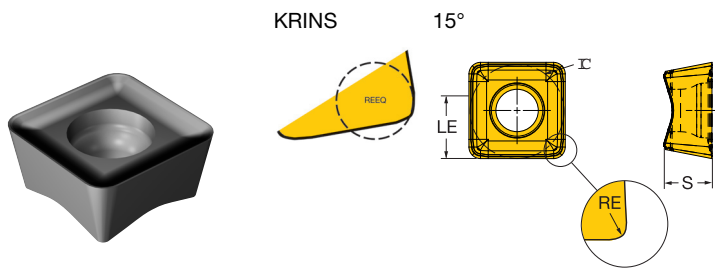
For complete assortment, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

# CoroMill® 415 insert for milling



ENG

B



C

	RE	Ordering code	Material								Dimensions, mm					
			P	M				S	H			IC	LE	S	REEQ	
			1130	1040	1130	S30T	S40T	1130	S30T	S40T	1010	1130				
Medium	05 .047	415N-05 02 12E-M30	★	★	☆	☆	☆	☆	★	☆	☆	☆	5.0	3.0	2.21	2.00
	05 .047	415N-05 02 12M-M30	★	★	☆	☆	☆	☆	★	☆	★	☆	5.0	3.0	2.21	2.00
	07 .079	415N-07 03 20E-M30	★	★	☆	☆	☆	☆	★	☆	☆	☆	7.0	3.0	3.07	2.20
	07 .079	415N-07 03 20M-M30	★	★	☆	☆	☆	☆	★	☆	★	☆	7.0	3.0	3.07	2.80
													.276	.118	.121	.110

D

415N-05 02 12M-M30 increases DC by 1.0 mm and reduces DCX by 0.26 mm and LF by 0.13 mm  
 415N-07 03 20M-M30 increases DC by 1.7 mm and reduces DCX by 0.44 mm and LF by 0.22 mm  
 (In comparison to using the tool with MIID)

E

F

G

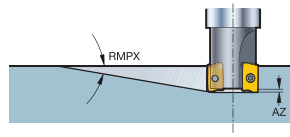
H



# CoroMill® 390 square shoulder milling cutter

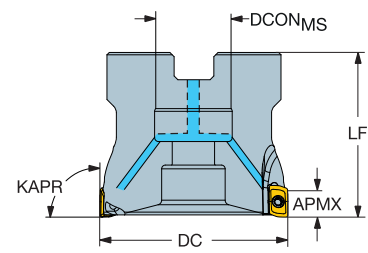
Arbor - Internal coolant supply

Lightweight shoulder milling cutter



KAPR

90°



## Inch version

										Dimensions, inch							
DC	CZC <sub>MS</sub>	APM <sub>EFW</sub>	APM <sub>FFW</sub>	RMPX	AZ	CNSC	Ordering code			DCON <sub>MS</sub>	ISO	LF	FT/ LBS	LBS	RPMX	CICT	MIID
2.000	11	3/4	.217	.394	1°	.039	1	3	RA390-051R19LW-11L	.750	A	1.181	.8	0.15	10000	3	R390-11..
2.000	11	3/4	.217	.394	1°	.039	1	4	RA390-051R19LW-11M	.750	A	1.181	.8	0.15	10000	4	R390-11..

Spare parts			
DC	Insert screw	Screw	
2.000	11	5513 020-35	3213 030-606

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



97



100

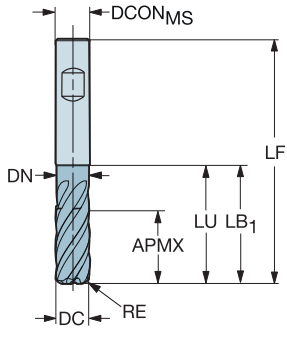


# CoroMill® Plura solid carbide end mill for heavy duty milling



For steel

FHA 38°  
 BSG COROMANT  
 TCDC h10  
 TCDCON h6



**Metric version**

							P K		Dimensions, mm			
DC	CZC <sub>MS</sub>	APMX	RE	LU	ZEFP	Ordering code	1730	1730	DCON <sub>MS</sub>	LF	DN	LB <sub>1</sub>
10.0	10	22.0	0.50	30.0	5	2F342-1000-050-PD	★	☆	10.0	72.0	9.5	30.0
	10	22.0	1.00	30.0	5	2F342-1000-100-PD	★	☆	10.0	72.0	9.5	30.0
	10	22.0	2.00	30.0	5	2F342-1000-200-PD	★	☆	10.0	72.0	9.5	30.0
12.0	12	26.0	0.50	36.0	5	2F342-1200-050-PD	★	☆	12.0	83.0	11.4	36.0
	12	26.0	1.00	36.0	5	2F342-1200-100-PD	★	☆	12.0	83.0	11.4	36.0
	12	26.0	2.00	36.0	5	2F342-1200-200-PD	★	☆	12.0	83.0	11.4	36.0
16.0	16	34.0	0.50	42.0	5	2F342-1600-050-PD	★	☆	16.0	92.0	15.2	42.0
	16	34.0	1.00	42.0	5	2F342-1600-100-PD	★	☆	16.0	92.0	15.2	42.0
	16	34.0	2.00	42.0	5	2F342-1600-200-PD	★	☆	16.0	92.0	15.2	42.0
20.0	20	42.0	1.00	52.0	5	2F342-2000-100-PD	★	☆	20.0	104.0	19.0	52.0
	20	42.0	2.00	52.0	5	2F342-2000-200-PD	★	☆	20.0	104.0	19.0	52.0

**Inch version**

							P K		Dimensions, inch			
DC	CZC <sub>MS</sub>	APMX	RE	LU	ZEFP	Ordering code	1730	1730	DCON <sub>MS</sub>	LF	DN	LB <sub>1</sub>
.625	5/8	1.315	.030	1.625	5	2F342-1588-076-PD	★	☆	.625	3.500	.594	1.626
	5/8	1.315	.060	1.625	5	2F342-1588-152-PD	★	☆	.625	3.500	.594	1.626
.750	3/4	1.626	.030	1.937	5	2F342-1905-076-PD	★	☆	.750	4.000	.713	1.937
	3/4	1.626	.060	1.937	5	2F342-1905-152-PD	★	☆	.750	4.000	.713	1.937

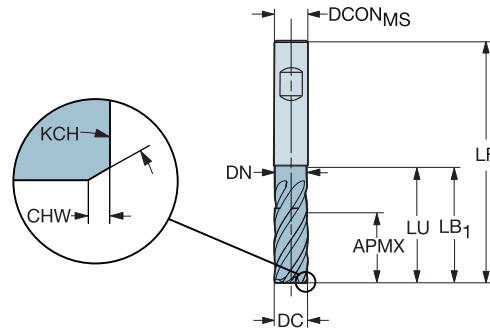


# CoroMill® Plura solid carbide end mill for heavy duty milling

For steel



FHA 38°  
 BSG COROMANT  
 TCDC h10  
 TCDCON h6

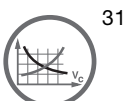


## Metric version

							P	K	Dimensions, mm				
DC	CZC <sub>MS</sub>	APMX	CHW	KCH	LU	ZEFP	Ordering code	1730	1730	DCON <sub>MS</sub>	LF	DN	LB <sub>1</sub>
10.0	10	22.0	0.15	45°	30.0	5	2N342-1000-PD	★	☆	10.0	72.0	9.5	30.0
12.0	12	26.0	0.15	45°	36.0	5	2N342-1200-PD	★	☆	12.0	83.0	11.4	36.0
16.0	16	34.0	0.25	45°	42.0	5	2N342-1600-PD	★	☆	16.0	92.0	15.2	42.0
20.0	20	42.0	0.25	45°	52.0	5	2N342-2000-PD	★	☆	20.0	104.0	19.0	52.0
25.0	25	52.0	0.25	45°	63.0	5	2N342-2500-PD	★	☆	25.0	121.0	24.0	63.0

## Inch version

							P	K	Dimensions, inch				
DC	CZC <sub>MS</sub>	APMX	CHW	KCH	LU	ZEFP	Ordering code	1730	1730	DCON <sub>MS</sub>	LF	DN	LB <sub>1</sub>
.625	5/8	1.315	.010	45°	1.625	5	2N342-1588-PD	★	☆	.625	3.500	.594	1.625
.750	3/4	1.626	.010	45°	1.937	5	2N342-1905-PD	★	☆	.750	4.000	.713	1.937

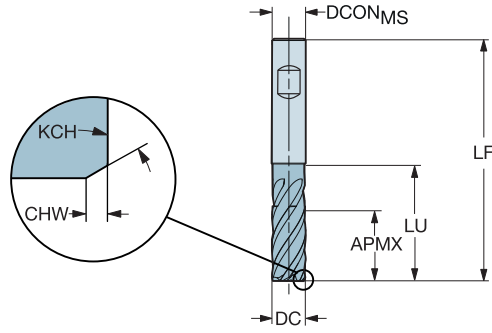
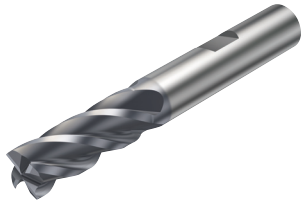


# CoroMill® Plura solid carbide end mill for heavy duty milling



For steel

FHA 42°  
 BSG COROMANT  
 TCDC h10  
 TCDCON h6



## Metric version

								P	K	Dimensions, mm	
DC	CZC <sub>MS</sub>	APMX	CHW	KCH	LU	ZAFP	Ordering code	1730	1730	DCON <sub>MS</sub>	LF
10.0	10	22.0	0.15	45°	22.0	4	2P342-1000-PB	★	☆	10.0	72.0
12.0	12	26.0	0.15	45°	26.0	4	2P342-1200-PB	★	☆	12.0	83.0
16.0	16	34.0	0.25	45°	34.0	4	2P342-1600-PB	★	☆	16.0	97.0
20.0	20	42.0	0.25	45°	42.0	4	2P342-2000-PB	★	☆	20.0	109.6
25.0	25	52.0	0.25	45°	52.0	4	2P342-2500-PB	★	☆	25.0	129.5

## Inch version

								P	K	Dimensions, inch	
DC	CZC <sub>MS</sub>	APMX	CHW	KCH	LU	ZAFP	Ordering code	1730	1730	DCON <sub>MS</sub>	LF
.625	5/8	1.313	.010	45°	1.313	4	2P342-1588-PB	★	☆	.625	3.500
.750	3/4	1.625	.010	45°	1.625	4	2P342-1905-PB	★	☆	.750	4.315

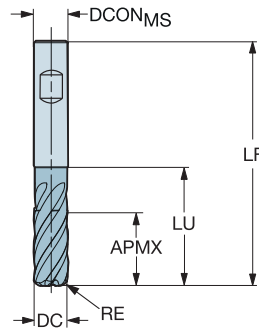
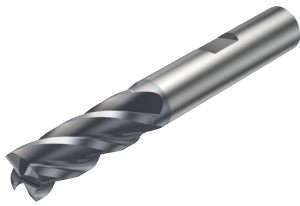


# CoroMill® Plura solid carbide end mill for heavy duty milling

For steel



FHA 42°  
 BSG COROMANT  
 TCDC h10  
 TCDCON h6

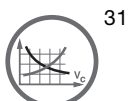


## Metric version

							P K		Dimensions, mm	
DC	CZC <sub>MS</sub>	APMX	RE	LU	ZEFP	Ordering code	1730	1730	DCON <sub>MS</sub>	LF
10.0	10	22.0	0.50	22.0	4	2S342-1000-050-PB	★	☆	10.0	72.0
	10	22.0	1.00	22.0	4	2S342-1000-100-PB	★	☆	10.0	72.0
	10	22.0	2.00	22.0	4	2S342-1000-200-PB	★	☆	10.0	72.0
12.0	12	26.0	0.50	26.0	4	2S342-1200-050-PB	★	☆	12.0	83.0
	12	26.0	1.00	26.0	4	2S342-1200-100-PB	★	☆	12.0	83.0
	12	26.0	2.00	26.0	4	2S342-1200-200-PB	★	☆	12.0	83.0
16.0	16	34.0	0.50	34.0	4	2S342-1600-050-PB	★	☆	16.0	97.0
	16	34.0	1.00	34.0	4	2S342-1600-100-PB	★	☆	16.0	97.0
	16	34.0	2.00	34.0	4	2S342-1600-200-PB	★	☆	16.0	97.0
20.0	20	42.0	1.00	42.0	4	2S342-2000-100-PB	★	☆	20.0	109.6
	20	42.0	2.00	42.0	4	2S342-2000-200-PB	★	☆	20.0	109.6

## Inch version

							P K		Dimensions, inch	
DC	CZC <sub>MS</sub>	APMX	RE	LU	ZEFP	Ordering code	1730	1730	DCON <sub>MS</sub>	LF
.625	5/8	1.313	.030	1.313	4	2S342-1588-076-PB	★	☆	.625	3.500
	5/8	1.315	.060	1.315	4	2S342-1588-152-PB	★	☆	.625	3.500
.750	3/4	1.625	.030	1.625	4	2S342-1905-076-PB	★	☆	.750	4.315
	3/4	1.625	.060	1.625	4	2S342-1905-152-PB	★	☆	.750	4.315

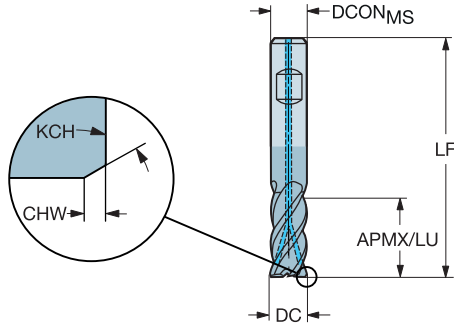
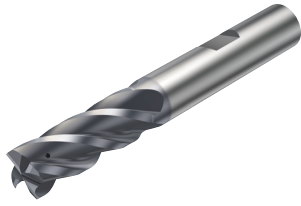


# CoroMill® Plura solid carbide end mill for heavy duty milling



For stainless steel

FHA 38°  
 BSG COROMANT  
 TCDC h10  
 TCDCON h6



**Metric version**

									M	S	Dimensions, mm	
DC	CZC <sub>MS</sub>	APMX	CHW	KCH	LU	CXSC	ZEFP	Ordering code	1740	1740	DCON <sub>MS</sub>	LF
10.0	10	22.0	0.15	45°	22.0	3	4	2P342-1000-CMB	★	☆	10.0	72.0
12.0	12	26.0	0.15	45°	26.0	3	4	2P342-1200-CMB	★	☆	12.0	83.0
16.0	16	34.0	0.25	45°	34.0	3	4	2P342-1600-CMB	★	☆	16.0	97.0
20.0	20	42.0	0.25	45°	42.0	3	4	2P342-2000-CMB	★	☆	20.0	109.6
25.0	25	52.0	0.25	45°	52.0	3	4	2P342-2500-CMB	★	☆	25.0	129.5

E

F

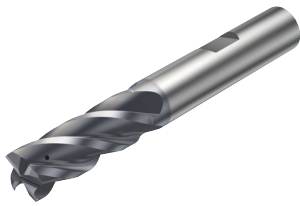
G

H



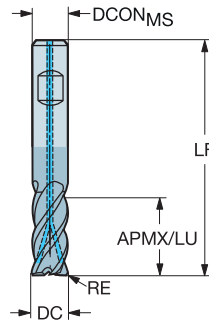
# CoroMill® Plura solid carbide end mill for heavy duty milling

For stainless steel



BSG  
TCDC  
TCDCON

COROMANT  
h10  
h6

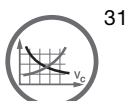


## Metric version

DC	CZC <sub>MS</sub>	APMX	RE	LU	CNSC	CXSC	ZEFP	FHA	Ordering code	M S		Dimensions, mm	
										1740	1740	DCON <sub>MS</sub>	LF
10.0	10	22.0	0.50	22.0	1	4	4	38°	2S342-1000-050CMB	★	☆	10.0	72.0
	10	22.0	1.00	22.0	1	4	4	38°	2S342-1000-100CMB	★	☆	10.0	72.0
	10	22.0	1.50	22.0	1	4	4	38°	2S342-1000-150CMB	★	☆	10.0	72.0
	10	22.0	2.00	22.0	1	4	4	38°	2S342-1000-200CMB	★	☆	10.0	72.0
	10	22.0	3.00	22.0	1	4	4	38°	2S342-1000-300CMB	★	☆	10.0	72.0
12.0	12	26.0	0.50	26.0	1	4	4	38°	2S342-1200-050CMB	★	☆	12.0	83.0
	12	26.0	1.00	26.0	1	4	4	38°	2S342-1200-100CMB	★	☆	12.0	83.0
	12	26.0	1.50	26.0	1	4	4	38°	2S342-1200-150CMB	★	☆	12.0	83.0
	12	26.0	2.00	26.0	1	4	4	38°	2S342-1200-200CMB	★	☆	12.0	83.0
	12	26.0	3.00	26.0	1	4	4	38°	2S342-1200-300CMB	★	☆	12.0	83.0
16.0	16	34.0	0.50	34.0	1	4	4	38°	2S342-1600-050CMB	★	☆	16.0	97.0
	16	34.0	1.00	34.0	1	4	4	38°	2S342-1600-100CMB	★	☆	16.0	97.0
	16	34.0	2.00	34.0	1	4	4	42°	2S342-1600-200CMB	★	☆	16.0	97.0
	16	34.0	3.00	34.0	1	4	4	38°	2S342-1600-300CMB	★	☆	16.0	97.0
	16	34.0	4.00	34.0	1	4	4	38°	2S342-1600-400CMB	★	☆	16.0	97.0
20.0	16	34.0	5.00	34.0	1	4	4	38°	2S342-1600-500CMB	★	☆	16.0	97.0
	20	42.0	1.00	42.0	1	4	4	38°	2S342-2000-100CMB	★	☆	20.0	109.6
	20	42.0	2.00	42.0	1	4	4	38°	2S342-2000-200CMB	★	☆	20.0	109.6
	20	42.0	3.00	42.0	1	4	4	38°	2S342-2000-300CMB	★	☆	20.0	109.6
	20	42.0	4.00	42.0	1	4	4	38°	2S342-2000-400CMB	★	☆	20.0	109.6
20	42.0	5.00	42.0	1	4	4	38°	2S342-2000-500CMB	★	☆	20.0	109.6	
20	42.0	6.35	42.0	1	4	4	38°	2S342-2000-635CMB	★	☆	20.0	109.6	

## Inch version

DC	CZC <sub>MS</sub>	APMX	RE	LU	CNSC	CXSC	ZEFP	FHA	Ordering code	M S		Dimensions, inch	
										1740	1740	DCON <sub>MS</sub>	LF
.625	5/8	1.313	.030	1.313	1	4	4	38°	2S342-1588-076CMB	★	☆	.625	3.780
	5/8	1.313	.060	1.313	1	4	4	38°	2S342-1588-152CMB	★	☆	.625	3.780
	5/8	1.313	.090	1.313	1	4	4	38°	2S342-1588-229CMB	★	☆	.625	3.780
	5/8	1.313	.120	1.313	1	4	4	38°	2S342-1588-305CMB	★	☆	.625	3.780
.750	3/4	1.625	.030	1.625	1	4	4	38°	2S342-1905-076CMB	★	☆	.750	4.315
	3/4	1.625	.060	1.625	1	4	4	38°	2S342-1905-152CMB	★	☆	.750	4.315
	3/4	1.625	.090	1.625	1	4	4	38°	2S342-1905-229CMB	★	☆	.750	4.315
	3/4	1.625	.120	1.625	1	4	4	38°	2S342-1905-305CMB	★	☆	.750	4.315
3/4	1.625	.190	1.625	1	4	4	38°	2S342-1905-483CMB	★	☆	.750	4.315	



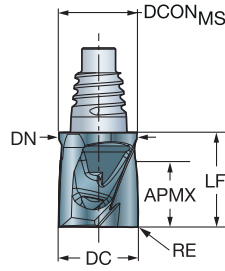
# CoroMill® 316 solid carbide head for high chip load milling



For multi-material with hardness ≤ 48 HRc

FHA  
BSG  
TCDC

10°  
COROMANT  
h10



Metric version

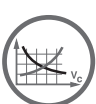
						P	M	K	S	Dimensions, mm		
DC	CZC <sub>MS</sub>	APMX	RE	ZEFP	Ordering code	1730	1730	1730	1730	DCON <sub>MS</sub>	LF	DN
10.0	E10	8.0	0.50	2	316-10SM210-10005P	★	★	☆	☆	9.7	11.8	9.7
	E10	8.0	0.80	2	316-10SM210-10008P	★	★	☆	☆	9.7	11.8	9.7
	E10	8.0	1.00	2	316-10SM210-10010P	★	★	☆	☆	9.7	11.8	9.7
12.0	E12	10.0	0.50	2	316-12SM210-12005P	★	★	☆	☆	11.7	14.0	11.7
	E12	10.0	0.80	2	316-12SM210-12008P	★	★	☆	☆	11.7	14.0	11.7
16.0	E16	13.0	0.50	2	316-16SM210-16005P	★	★	☆	☆	15.5	18.1	15.5
	E16	13.0	0.80	2	316-16SM210-16008P	★	★	☆	☆	15.5	18.1	15.5
	E16	13.0	1.00	2	316-16SM210-16010P	★	★	☆	☆	15.5	18.1	15.5
	E16	13.0	3.00	2	316-16SM210-16030P	★	★	☆	☆	15.5	18.1	15.5

E

F

G

H



32



37



97



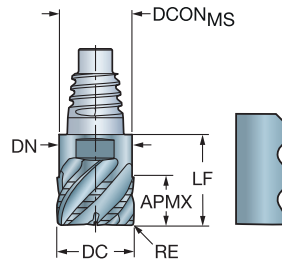
# CoroMill® 316 solid carbide head for roughing with chip breaker

For multi-material with hardness ≤ 48 HRC



FHA  
BSG  
TCDC

45°  
COROMANT  
h12



## Metric version

DC	CZC <sub>MS</sub>	APMX	RE	ZEFP	Ordering code	Material			Dimensions, mm			
						P	M	K	S	DCON <sub>MS</sub>	LF	DN
10.0	E10	5.5	0.40	4	316-10SM440-10004K	★	★	☆	☆	9.7	12.4	9.7
	E10	5.5	0.40	5	316-10SM545-10004K	★	★	☆	☆	9.7	12.4	9.7
12.0	E12	6.5	0.40	5	316-12SM545-12004K	★	★	☆	☆	11.7	14.5	11.7
	E12	6.5	0.40	4	316-12SM440-12004K	★	★	☆	☆	11.7	14.5	11.7
16.0	E16	8.5	0.40	6	316-16SM645-16004K	★	★	☆	☆	15.5	18.7	15.5
	E16	8.5	0.40	4	316-16SM440-16004K	★	★	☆	☆	15.5	18.7	15.5
20.0	E20	11.0	0.40	6	316-20SM645-20004K	★	★	☆	☆	19.3	21.3	19.3
25.0	E25	13.5	0.40	8	316-25SM845-25004K	★	★	☆	☆	24.2	25.6	24.2

## Inch version

DC	CZC <sub>MS</sub>	APMX	RE	ZEFP	Ordering code	Material			Dimensions, inch			
						P	M	K	S	DCON <sub>MS</sub>	LF	DN
.375	E10	.209	.016	4	A316-10SM440-03704K	★	★	☆	☆	.364	.488	.364
.500	E12	.276	.016	4	A316-12SM440-05004K	★	★	☆	☆	.484	.575	.484
	E12	.276	.062	4	A316-12SM440-05015K	★	★	☆	☆	.484	.575	.484
.625	E16	.335	.062	4	A316-16SM440-06215K	★	★	☆	☆	.610	.736	.610
.750	E20	.413	.015	4	A316-20SM440-07504K	★	★	☆	☆	.728	.839	.728
	E20	.413	.016	6	A316-20SM645-07504K	★	★	☆	☆	.728	.839	.728
1.000	E25	.551	.016	8	A316-25SM845-10004K	★	★	☆	☆	.965	1.008	.965



33



37



97



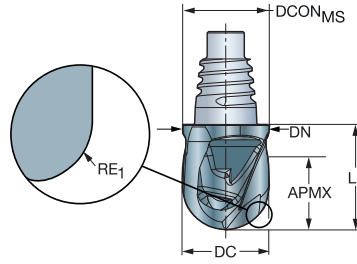
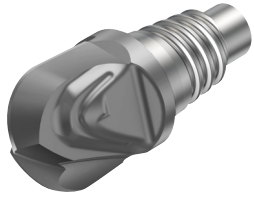
# CoroMill® 316 solid carbide head for profiling

For multi-material with hardness ≤ 48 HRc



BSG  
TCDC  
PSIR

COROMANT  
h9  
0°

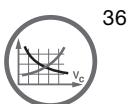


Metric version

DC	CZC <sub>MS</sub>	APMX	RE <sub>1</sub>	ZEFP	FHA	Ordering code	P	M	K	S	Dimensions, mm		
							1730	1730	1730	1730	DCON <sub>MS</sub>	LF	DN
10.0	E10	8.0	5.00	2	10°	316-10BM210-10050G	★	★	☆	☆	9.7	11.8	9.7
12.0	E12	10.0	6.00	2	10°	316-12BM210-12060G	★	★	☆	☆	11.7	14.0	11.7
16.0	E16	13.0	8.00	2	10°	316-16BM210-16080G	★	★	☆	☆	15.5	18.1	15.5

Inch version

DC	CZC <sub>MS</sub>	APMX	RE <sub>1</sub>	ZEFP	FHA	Ordering code	P	M	K	S	Dimensions, inch		
							1730	1730	1730	1730	DCON <sub>MS</sub>	LF	DN
.375	E10	.315	.188	2	10°	A316-10BM210-03750G	★	★	☆	☆	.364	.465	.382
.500	E12	.413	.250	2	10°	A316-12BM210-05060G	★	★	☆	☆	.484	.551	.461
.625	E16	.512	.313	2	10°	A316-16BM210-06280G	★	★	☆	☆	.610	.713	.610



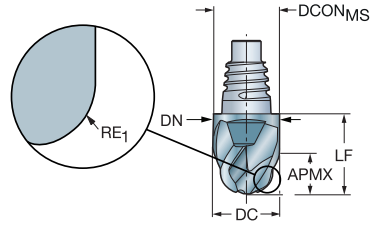
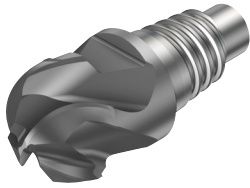
# CoroMill® 316 solid carbide head for profiling

For multi-material with hardness ≤ 48 HRC



BSG  
TDCD  
PSIR

COROMANT  
h9  
0°

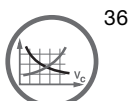


## Metric version

DC	CZC <sub>MS</sub>	APMX	RE <sub>1</sub>	ZFP	FHA	Ordering code	P M K S			Dimensions, mm			
							1730	1730	1730	DCON <sub>MS</sub>	LF	DN	
10.0	E10	5.5	5.00	4	40°	316-10BM440-10050G	★	★	☆	☆	9.7	12.4	9.7
12.0	E12	6.5	6.00	4	40°	316-12BM440-12060G	★	★	☆	☆	11.7	14.5	11.7
16.0	E16	8.5	8.00	4	40°	316-16BM440-16080G	★	★	☆	☆	15.5	18.7	15.5
20.0	E20	11.0	10.00	2	40°	316-20BM240-200AG	★	★	☆	☆	19.3	21.3	19.3
	E20	11.0	10.00	4	40°	316-20BM440-200AG	★	★	☆	☆	19.3	21.3	19.3
25.0	E25	13.5	12.50	4	40°	316-25BM440-250DG	★	★	☆	☆	24.2	25.6	24.2

## Inch version

DC	CZC <sub>MS</sub>	APMX	RE <sub>1</sub>	ZFP	FHA	Ordering code	P M K S			Dimensions, inch			
							1730	1730	1730	DCON <sub>MS</sub>	LF	DN	
.375	E10	.209	.188	4	40°	A316-10BM440-03750G	★	★	☆	☆	.364	.488	.364
.500	E12	.276	.250	4	40°	A316-12BM440-05060G	★	★	☆	☆	.484	.575	.484
.625	E16	.335	.313	4	40°	A316-16BM440-06280G	★	★	☆	☆	.610	.736	.610
.750	E20	.413	.375	4	40°	A316-20BM440-075AG	★	★	☆	☆	.728	.839	.728
1.000	E25	.551	.500	4	40°	A316-25BM440-100CG	★	★	☆	☆	.965	1.008	.965



# CoroMill® 316 solid carbide head for finishing

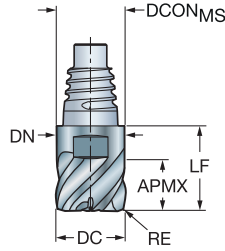
For multi-material with hardness ≤ 48 HRc



ENG

FHA  
BSG  
TCDC

50°  
COROMANT  
h9

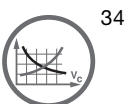


## Metric version

						P	M	K	S	Dimensions, mm		
DC	CZC <sub>MS</sub>	APMX	RE	ZEFP	Ordering code	1730	1730	1730	1730	DCON <sub>MS</sub>	LF	DN
10.0	E10	5.5	1.00	6	316-10FM650-10010L	★	★	☆	☆	9.7	12.4	9.7
12.0	E12	6.5	1.00	6	316-12FM650-12010L	★	★	☆	☆	11.7	14.5	11.7
16.0	E16	8.5	1.50	6	316-16FM650-16015L	★	★	☆	☆	15.5	18.7	15.5
20.0	E20	11.0	1.50	8	316-20FM850-20015L	★	★	☆	☆	19.3	21.3	19.3
25.0	E25	13.5	1.00	8	316-25FM850-25010L	★	★	☆	☆	24.2	25.6	24.2

## Inch version

						P	M	K	S	Dimensions, inch		
DC	CZC <sub>MS</sub>	APMX	RE	ZEFP	Ordering code	1730	1730	1730	1730	DCON <sub>MS</sub>	LF	DN
.375	E10	.209	.015	6	A316-10FM650-03704L	★	★	☆	☆	.364	.488	.364
	E10	.209	.031	6	A316-10FM650-03708L	★	★	☆	☆	.364	.488	.364
	E10	.209	.062	6	A316-10FM650-03715L	★	★	☆	☆	.364	.488	.364
.500	E12	.276	.015	6	A316-12FM650-05004L	★	★	☆	☆	.484	.575	.484
	E12	.276	.062	6	A316-12FM650-05015L	★	★	☆	☆	.484	.575	.484
.625	E16	.335	.031	6	A316-16FM650-06208L	★	★	☆	☆	.610	.736	.610
	E16	.335	.031	8	A316-16FM850-06208L	★	★	☆	☆	.610	.736	.610
.750	E20	.413	.031	8	A316-20FM850-07508L	★	★	☆	☆	.728	.839	.728
	E20	.413	.031	10	A316-20FMA50-07508L	★	★	☆	☆	.728	.839	.728
1.000	E25	.551	.062	10	A316-25FMA50-10015L	★	★	☆	☆	.965	1.008	.965
	E25	.551	.062	12	A316-25FMC50-10015L	★	★	☆	☆	.965	1.008	.965



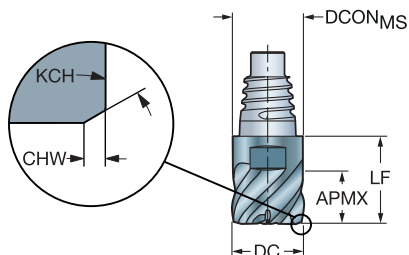
# CoroMill® 316 solid carbide head for finishing

For multi-material with hardness ≤ 48 HRc



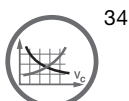
FHA  
BSG  
TCDC

50°  
COROMANT  
h10



## Metric version

DC	CZC <sub>MS</sub>	APMX	CHW	KCH	ZFP	Ordering code	P	M	K	S	Dimensions, mm		
							1730	1730	1730	1730	DCON <sub>MS</sub>	LF	DN
10.0	E10	5.5	0.10	45°	6	316-10FM650-10000L	★	★	☆	☆	9.7	12.4	9.7
12.0	E12	6.5	0.10	45°	6	316-12FM650-12000L	★	★	☆	☆	11.7	14.5	11.7
16.0	E16	8.5	0.15	45°	6	316-16FM650-16000L	★	★	☆	☆	15.5	18.7	15.5
20.0	E20	11.0	0.15	45°	8	316-20FM850-20000L	★	★	☆	☆	19.3	21.3	19.3



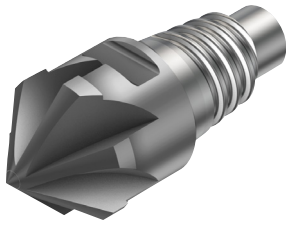
# CoroMill® 316 solid carbide head for chamfer milling

For multi-material with hardness ≤ 48 HRc



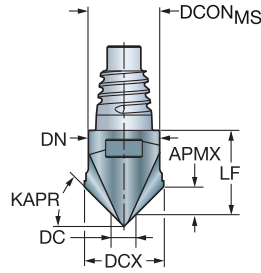
ENG

B

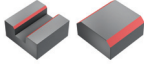


BSG

COROMANT



C



**Metric version**

KAPR	CZC <sub>MS</sub>	APMX	ZEFP	Ordering code	P M K S				Dimensions, mm				
					1730	1730	1730	1730	DCON <sub>MS</sub>	DC	DCX	LF	DN
15°	E12	1.20	6	316-12CM600-12015G	★	★	☆	☆	11.70	3.00	12.0	14.50	11.7
30°		2.60	6	316-12CM600-12030G	★	★	☆	☆	11.70	3.00	12.0	13.60	11.7
45°	E10	4.25	4	316-10CM400-10045G	★	★	☆	☆	9.70	1.50	10.0	11.66	9.7
45°	E12	4.50	6	316-12CM600-12045G	★	★	☆	☆	11.70	3.00	12.0	13.00	11.7
45°	E16	6.00	8	316-16CM800-16045G	★	★	☆	☆	15.50	4.00	16.0	16.70	15.5
60°	E10	5.60	4	316-10CM400-10060G	★	★	☆	☆	9.70	3.50	10.0	12.40	9.7
60°	E12	6.50	6	316-12CM600-12060G	★	★	☆	☆	11.70	4.50	12.0	14.50	11.7

D

**Inch version**

KAPR	CZC <sub>MS</sub>	APMX	ZEFP	Ordering code	P M K S				Dimensions, inch				
					1730	1730	1730	1730	DCON <sub>MS</sub>	DC	DCX	LF	DN
30°	E10	.073	4	A316-10CM400-03730G	★	★	☆	☆	.364	.118	.375	.454	.364
30°	E12	.110	6	A316-12CM600-05030G	★	★	☆	☆	.484	.118	.500	.541	.484
30°	E16	.146	8	A316-16CM800-06230G	★	★	☆	☆	.610	.118	.625	.702	.610
45°	E10	.128	4	A316-10CM400-03745G	★	★	☆	☆	.364	.118	.375	.429	.364
45°	E12	.191	6	A316-12CM600-05045G	★	★	☆	☆	.484	.118	.500	.516	.484
45°	E16	.256	8	A316-16CM800-06245G	★	★	☆	☆	.610	.256	.625	.736	.610
49°	E12	.220	6	A316-12CM600-05049G	★	★	☆	☆	.484	.118	.500	.575	.484
49°	E16	.291	8	A316-16CM800-06249G	★	★	☆	☆	.610	.118	.625	.736	.610
60°	E10	.222	4	A316-10CM400-03760G	★	★	☆	☆	.364	.118	.375	.488	.364
60°	E12	.280	6	A316-12CM600-05060G	★	★	☆	☆	.484	.177	.500	.575	.484
60°	E16	.303	8	A316-16CM800-06260G	★	★	☆	☆	.610	.276	.625	.736	.610

F

G

H



35



37

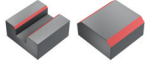
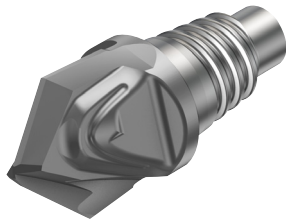


97



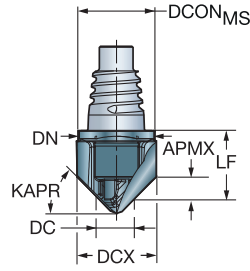
# CoroMill® 316 solid carbide head for chamfer milling

For multi-material with hardness ≤ 48 HRc



BSG

COROMANT

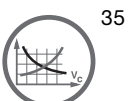


## Metric version

KAPR	CZC <sub>MS</sub>	APMX	ZEFP	Ordering code	P	M	K	S	Dimensions, mm				
					1730	1730	1730	1730	DCON <sub>MS</sub>	DC	DCX	LF	DN
15°	E12	1.33	2	316-12CM210-12015G	★	★	☆	☆	11.70	1.50	12.0	13.70	11.7
30°		3.03	2	316-12CM210-12030G	★	★	☆	☆	11.70	1.50	12.0	13.73	11.7
45°	E10	4.23	2	316-10CM210-10045G	★	★	☆	☆	9.70	1.50	10.0	11.53	9.7
45°	E12	5.23	2	316-12CM210-12045G	★	★	☆	☆	11.70	1.50	12.0	13.27	11.7
45°	E16	7.23	2	316-16CM210-16045G	★	★	☆	☆	15.50	1.50	16.0	17.83	15.5
60°	E10	7.50	2	316-10CM210-10060G	★	★	☆	☆	9.70	1.50	10.0	11.53	9.7
60°	E12	7.73	2	316-12CM210-12060G	★	★	☆	☆	11.70	1.50	12.0	13.27	11.7

## Inch version

KAPR	CZC <sub>MS</sub>	APMX	ZEFP	Ordering code	P	M	K	S	Dimensions, inch				
					1730	1730	1730	1730	DCON <sub>MS</sub>	DC	DCX	LF	DN
45°	E10	4.29	2	A316-10CM210-03745G	★	★	☆	☆	9.25	1.50	9.5	11.53	9.3
45°	E12	5.85	2	A316-12CM210-05045G	★	★	☆	☆	12.30	1.50	12.7	13.80	12.3
45°	E16	7.45	2	A316-16CM210-06245G	★	★	☆	☆	15.50	1.50	15.9	17.83	15.5



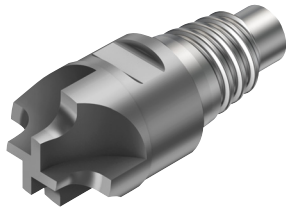
# CoroMill® 316 solid carbide head for chamfer milling

For multi-material with hardness ≤ 48 HRC



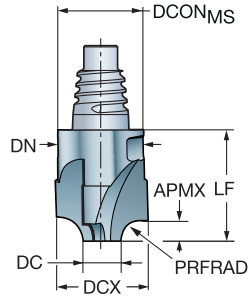
ENG

B



BSG

COROMANT



C



## Metric version

PRFRAD	CZC <sub>MS</sub>	APMX	ZEFP	Ordering code	P	M	K	S	Dimensions, mm				
					1730	1730	1730	1730	DCON <sub>MS</sub>	DC	DCX	LF	DN
1.5	E10	1.50	4	316-10UM400-10015G	★	★	☆	☆	9.70	5.00	10.0	12.40	9.7
3.0		3.00	4	316-10UM400-10030G	★	★	☆	☆	9.70	4.00	10.0	12.40	9.7
3.0	E12	3.00	4	316-12UM400-12030G	★	★	☆	☆	11.70	5.00	12.0	14.50	11.7
4.0		4.00	4	316-12UM400-12040G	★	★	☆	☆	11.70	4.00	12.0	14.50	11.7
4.0	E16	4.00	4	316-16UM400-16040G	★	★	☆	☆	15.50	6.00	16.0	18.70	15.5
5.0		5.00	4	316-16UM400-16050G	★	★	☆	☆	15.50	6.00	16.0	18.70	15.5
6.0	E20	6.00	4	316-20UM400-20060G	★	★	☆	☆	19.30	8.00	20.0	21.30	19.3
8.0	E25	8.00	4	316-25UM400-25080G	★	★	☆	☆	24.20	8.00	25.0	25.60	24.2

D

## Inch version

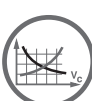
PRFRAD	CZC <sub>MS</sub>	APMX	ZEFP	Ordering code	P	M	K	S	Dimensions, inch				
					1730	1730	1730	1730	DCON <sub>MS</sub>	DC	DCX	LF	DN
.062	E10	.062	4	A316-10UM400-03715G	★	★	☆	☆	.364	.236	.375	.488	.364
.125		.125	4	A316-10UM400-03732G	★	★	☆	☆	.364	.118	.375	.488	.364
.188	E16	.188	4	A316-16UM400-06247G	★	★	☆	☆	.610	.236	.625	.736	.610
.250	E20	.250	4	A316-20UM400-07563G	★	★	☆	☆	.728	.236	.750	.839	.728

E

F

G

H



35



37

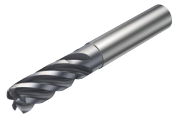


97



# Cutting speed recommendations

Optimized - CoroMill® Plura solid carbide end mill for heavy duty milling



		$a_e = 1.0 \times DC$			$a_e = 0.5 \times DC$			$a_e = 0.25 \times DC$					
		$a_p = 1.0 \times DC$			$a_p = 1.0 \times DC$			$a_p = 1.0 \times DC$					
ISO	MC No.	CMC	Material	HB	$f_z$	$v_c$ m/min	$v_c$ feet/min	$f_z$	$v_c$ m/min	$v_c$ feet/min	$f_z$	$v_c$ m/min	$v_c$ feet/min
P	P1.2.Z.AN	01.2	Unalloyed steel	190	D01	150	492	D02	180	590	D03	250	820
	P2.2.Z.AN	02.2	Low-alloyed steel	240	D04	120	394	D02	145	475	D03	200	656
	P3.0.Z.HT	03.21	High alloyed steel	380	D04	80	262	D02	95	311	D03	135	442
M	P5.0.Z.AN	05.11	Ferritic/martensitic stainless steel	200	D04	115	377	D02	140	459	D03	195	639
	M1.0.Z.AQ	05.21	Austenitic stainless steel	200	D04	80	262	D05	100	328	D06	140	459
	M3.2.Z.AQ	05.51	Duplex (austenitic/ferritic) stainless steel	260	D04	80	262	D08	95	311	D09	135	442
K	K1.1.C.NS	07.2	Malleable cast iron	200	D01	150	492	D02	180	590	D03	250	820
	K2.1.C.UT	08.2	Grey cast iron	180	D01	150	492	D02	180	590	D03	250	820
	K3.2.C.UT	09.2	Nodular cast iron	215	D01	160	525	D02	190	623	D03	270	885
S	S2.0.Z.AG	20.22	Nickel based super alloys	350	D07	20	148	D08	25	180	D09	32	246
	S4.2.Z.AN	23.22	Titanium based alloys	320	D07	40	262	D08	50	311	D09	60	442

For optimized cutting data see CoroPlus® ToolGuide.

## Feed recommendations

mm/tooth  
inch/tooth

DC	2.000	3.000	4.000	6.000	6.350	7.938	8.000	9.525	10.000	12.000	12.700	14.000	15.875	16.000	19.050	20.000	25.000
$f_z$	0.079	0.118	0.157	0.236	0.250	0.313	0.315	0.375	0.394	0.472	0.500	0.551	0.625	0.630	0.750	0.787	0.984
D01	0.020 0.0008	0.024 0.0009	0.028 0.0011	0.035 0.0014	0.036 0.0014	0.042 0.0017	0.043 0.0017	0.048 0.0019	0.050 0.0020	0.057 0.0022	0.059 0.0023	0.063 0.0025	0.070 0.0027	0.070 0.0028	0.080 0.0032	0.083 0.0033	0.100 0.0039
D02	0.024 0.0009	0.030 0.0012	0.036 0.0014	0.047 0.0019	0.049 0.0019	0.058 0.0023	0.059 0.0023	0.067 0.0026	0.070 0.0028	0.080 0.0031	0.084 0.0033	0.090 0.0035	0.099 0.0039	0.100 0.0039	0.115 0.0045	0.120 0.0047	0.145 0.0057
D03	0.028 0.0011	0.035 0.0014	0.041 0.0016	0.054 0.0021	0.056 0.0022	0.067 0.0026	0.067 0.0026	0.077 0.0030	0.080 0.0031	0.093 0.0037	0.098 0.0039	0.107 0.0042	0.119 0.0047	0.120 0.0047	0.140 0.0055	0.147 0.0058	0.180 0.0071
D04	0.020 0.0008	0.023 0.0009	0.025 0.0010	0.030 0.0012	0.031 0.0012	0.035 0.0014	0.035 0.0014	0.039 0.0015	0.040 0.0016	0.047 0.0018	0.049 0.0019	0.053 0.0021	0.060 0.0023	0.060 0.0024	0.070 0.0028	0.073 0.0029	0.090 0.0035
D05	0.020 0.0008	0.023 0.0009	0.025 0.0010	0.037 0.0015	0.040 0.0016	0.051 0.0020	0.052 0.0020	0.063 0.0025	0.067 0.0026	0.076 0.0030	0.079 0.0031	0.084 0.0033	0.093 0.0037	0.093 0.0037	0.107 0.0042	0.111 0.0044	0.133 0.0052
D06	0.020 0.0008	0.023 0.0009	0.026 0.0010	0.044 0.0017	0.047 0.0019	0.061 0.0024	0.062 0.0024	0.076 0.0030	0.080 0.0031	0.090 0.0035	0.094 0.0037	0.100 0.0039	0.109 0.0043	0.110 0.0043	0.125 0.0049	0.130 0.0051	0.200 0.0079
D07	0.020 0.0008	0.020 0.0008	0.020 0.0008	0.020 0.0008	0.021 0.0008	0.027 0.0011	0.028 0.0011	0.033 0.0013	0.035 0.0014	0.038 0.0015	0.040 0.0016	0.042 0.0016	0.045 0.0018	0.045 0.0018	0.050 0.0020	0.052 0.0020	0.060 0.0024
D08	0.024 0.0009	0.026 0.0010	0.029 0.0011	0.033 0.0013	0.034 0.0013	0.037 0.0015	0.038 0.0015	0.041 0.0016	0.042 0.0017	0.048 0.0019	0.050 0.0020	0.054 0.0021	0.060 0.0023	0.060 0.0024	0.069 0.0027	0.072 0.0028	0.087 0.0034
D09	0.030 0.0012	0.033 0.0013	0.035 0.0014	0.040 0.0016	0.041 0.0016	0.045 0.0018	0.045 0.0018	0.049 0.0019	0.050 0.0020	0.070 0.0028	0.077 0.0030	0.091 0.0036	0.110 0.0043	0.111 0.0044	0.142 0.0056	0.152 0.0060	0.203 0.0080



# Cutting speed recommendations

Optimized - CoroMill® 316 solid carbide head for high chip load milling



		$a_e = 1.0 \times DC$			$a_e = 0.5 \times DC$			$a_e = 0.1 \times DC$					
		$a_p = 0.5 \times DC$			$a_p = 0.5 \times DC$			$a_p = 0.75 \times DC$					
ISO	MC No.	CMC	Material	HB	$f_z$	$v_c$ m/min	$v_c$ feet/min	$f_z$	$v_c$ m/min	$v_c$ feet/min	$f_z$	$v_c$ m/min	$v_c$ feet/min
P	P1.2.Z.AN	01.2	Unalloyed steel	190	O01	145	476	O02	195	640	O03	290	951
	P2.2.Z.AN	02.2	Low-alloyed steel	240	O01	110	361	O02	150	492	O03	225	738
	P3.0.Z.HT	03.21	High alloyed steel	380	O01	55	180	O02	75	246	O03	115	377
M	P5.0.Z.AN	05.11	Ferritic/martensitic stainless steel	200	O01	75	246	O02	100	328	O03	150	492
	M1.0.Z.AQ	05.21	Austenitic stainless steel	200	O06	60	197	O05	85	279	O04	125	410
	M3.2.Z.AQ	05.51	Duplex (austenitic/ferritic) stainless steel	260	O06	75	246	O05	100	328	O04	150	492
K	K1.1.C.NS	07.2	Malleable cast iron	200	O01	140	459	O02	185	607	O03	280	919
	K2.1.C.UT	08.2	Grey cast iron	180	O01	75	246	O02	105	344	O03	155	509
	K3.2.C.UT	09.2	Nodular cast iron	215	O01	110	361	O02	150	492	O03	220	722
S	S1.0.U.AG	20.12	Iron based superalloys	280	O06	20	66	O05	25	82	O04	40	131
	S2.0.Z.AG	20.22	Nickel based super alloys	350	O06	15	49	O05	25	82	O04	35	115
	S4.2.Z.AN	23.22	Titanium based alloys	320	O06	25	82	O05	35	115	O04	50	164

For optimized cutting data see CoroPlus® ToolGuide.

## Feed recommendations

mm/tooth  
inch/tooth

DC	10.000	12.000	16.000
$f_z$	0.394	0.472	0.630
O01	0.070	0.080	0.110
	0.0028	0.0031	0.0043
O02	0.120	0.120	0.140
	0.0047	0.0047	0.0065
O03	0.140	0.140	0.140
	0.0065	0.0065	0.0065
O04	0.120	0.120	0.120
	0.0047	0.0047	0.0047
O05	0.075	0.090	0.120
	0.0030	0.0035	0.0047
O06	0.050	0.060	0.070
	0.0020	0.0024	0.0028



# Cutting speed recommendations

Optimized - CoroMill® 316 solid carbide head for roughing with chip breaker



$a_e = 1.0 \times DC$	$a_e = 0.5 \times DC$	$a_e = 0.1 \times DC$											
$a_p = 0.5 \times DC$	$a_p = 1.0 \times DC$	$a_p = 1.5 \times DC$											
ISO	MC No.	CMC	Material	HB	$f_z$	$v_c$ m/min	$v_c$ feet/min	$f_z$	$v_c$ m/min	$v_c$ feet/min	$f_z$	$v_c$ m/min	$v_c$ feet/min
P	P1.2.Z.AN	01.2	Unalloyed steel	190	L01	170	558	L02	220	722	L03	315	1033
	P2.2.Z.AN	02.2	Low-alloyed steel	240	L01	120	394	L02	160	525	L03	230	755
	P3.0.Z.HT	03.21	High alloyed steel	380	L01	80	262	L02	100	328	L03	140	459
M	P5.0.Z.AN	05.11	Ferritic/martensitic stainless steel	200	L01	50	164	L02	65	213	L03	95	312
	M1.0.Z.AQ	05.21	Austenitic stainless steel	200	L04	60	197	L05	75	246	L06	115	377
	M3.2.Z.AQ	05.51	Duplex (austenitic/ferritic) stainless steel	260	L04	50	164	L05	65	213	L06	95	312
K	K1.1.C.NS	07.2	Malleable cast iron	200	L01	130	427	L02	170	558	L03	245	804
	K2.1.C.UT	08.2	Grey cast iron	180	L01	130	427	L02	170	558	L03	245	804
	K3.2.C.UT	09.2	Nodular cast iron	215	L01	115	377	L02	155	509	L03	220	722
N	N1.2.Z.AG	30.12	Aluminium based alloys	100	L08	1270	4167	L09	1610	5282	L07	2150	7054
	N1.3.C.UT	30.21	Aluminium based alloys	75	L08	310	1017	L09	380	1247	L07	540	1772
	N1.4.C.NS	30.42	Aluminium based alloys	130	L08	110	361	L09	150	492	L07	220	722
	N3.2.C.UT	33.2	Copper and copper alloys	90	L08	170	558	L09	230	755	L07	320	1050
S	S1.0.U.AG	20.12	Iron based superalloys	280	L04	20	66	L05	30	98	L06	50	164
	S2.0.Z.AG	20.22	Nickel based superalloys	350	L04	20	66	L05	30	98	L06	50	164
	S4.2.Z.AN	23.22	Titanium based alloys	320	L04	50	164	L05	80	262	L06	130	427

For optimized cutting data see CoroPlus® ToolGuide.

## Feed recommendations

mm/tooth  
inch/tooth

DC	6	8	9.525	10	12	12.7	14	15.875	16	18	20	25	25.4
$f_z$	0.236	0.315	0.375	0.394	0.472	0.500	0.551	0.625	0.630	0.709	0.787	0.984	1.000
L01	0.030 0.0012	0.050 0.0020	0.060 0.0024	0.060 0.0024	0.070 0.0028	0.070 0.0028	0.080 0.0031	0.090 0.0035	0.090 0.0035	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.100 0.0039
L02	0.040 0.0016	0.070 0.0028	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.120 0.0047	0.120 0.0047	0.120 0.0047	0.140 0.0055	0.160 0.0063	0.160 0.0063
L03	0.070 0.0028	0.100 0.0039	0.120 0.0047	0.120 0.0047	0.120 0.0047	0.120 0.0047	0.120 0.0047	0.120 0.0047	0.120 0.0047	0.150 0.0059	0.200 0.0079	0.200 0.0079	0.200 0.0079
L04	0.020 0.0008	0.040 0.0016	0.050 0.0020	0.050 0.0020	0.060 0.0024	0.060 0.0024	0.060 0.0024	0.070 0.0028	0.070 0.0028	0.080 0.0031	0.080 0.0031	0.080 0.0031	0.080 0.0031
L05	0.040 0.0016	0.060 0.0024	0.080 0.0031	0.080 0.0031	0.080 0.0031	0.080 0.0031	0.080 0.0031	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.110 0.0043	0.130 0.0051	0.130 0.0051
L06	0.060 0.0024	0.080 0.0031	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.100 0.0039	0.120 0.0047	0.120 0.0047	0.160 0.0063	0.160 0.0063	0.160 0.0063
L07	0.150 0.0059	0.200 0.0079	0.260 0.0102	0.260 0.0102	0.260 0.0102	0.260 0.0102	0.260 0.0102	0.260 0.0102	0.260 0.0102	0.330 0.0130	0.440 0.0173	0.440 0.0173	0.440 0.0173
L08	0.070 0.0028	0.110 0.0043	0.130 0.0051	0.130 0.0051	0.150 0.0059	0.150 0.0059	0.180 0.0071	0.200 0.0079	0.200 0.0079	0.220 0.0087	0.220 0.0087	0.220 0.0087	0.220 0.0087
L09	0.100 0.0039	0.160 0.0063	0.220 0.0087	0.220 0.0087	0.220 0.0087	0.220 0.0087	0.220 0.0087	0.260 0.0102	0.260 0.0102	0.260 0.0102	0.310 0.0122	0.350 0.0138	0.350 0.0138

# Cutting speed recommendations

Optimized - CoroMill® 316 solid carbide head for finishing



<b>a<sub>0</sub> = 0.1 x DC</b>	<b>a<sub>0</sub> = 0.05 x DC</b>									
<b>a<sub>p</sub> = 1.0 x DC</b>	<b>a<sub>p</sub> = 1.5 x DC</b>									
ISO	MC No.	CMC	Material	HB	f <sub>z</sub>	v <sub>c</sub> m/min	v <sub>c</sub> feet/min	f <sub>z</sub>	v <sub>c</sub> m/min	v <sub>c</sub> feet/min
P	P1.2.Z.AN	01.2	Unalloyed steel	190	J01	280	919	J02	330	1083
	P2.2.Z.AN	02.2	Low-alloyed steel	240	J01	205	673	J02	240	787
	P3.0.Z.HT	03.21	High alloyed steel	380	J01	120	394	J02	140	459
M	P5.0.Z.AN	05.11	Ferritic/martensitic stainless steel	200	J01	80	262	J02	95	312
	M1.0.Z.AQ	05.21	Austenitic stainless steel	200	J03	100	328	J04	115	377
	M3.2.Z.AQ	05.51	Duplex (austenitic/ferritic) stainless steel	260	J03	80	262	J04	95	312
K	K1.1.C.NS	07.2	Malleable cast iron	200	J01	220	722	J04	255	837
	K2.1.C.UT	08.2	Grey cast iron	180	J01	220	722	J02	255	837
	K3.2.C.UT	09.2	Nodular cast iron	215	J01	140	459	J02	165	541
S	S1.0.U.AG	20.12	Iron based superalloys	280	J03	50	164	J04	60	197
	S2.0.Z.AG	20.22	Nickel based super alloys	350	J03	50	164	J04	60	197
	S4.2.Z.AN	23.22	Titanium based alloys	320	J03	80	262	J04	95	312
H	H1.1.Z.HA	04.1	Steel - Hardness level 50	50HRC	J03	120	394	J04	140	459
	H1.2.Z.HA	04.1	Steel - Hardness level 55	55HRC	J03	120	394	J04	140	459
	H1.3.Z.HA	04.1	Steel - Hardness level 60	60HRC	J03	70	230	J04	80	262

For optimized cutting data see CoroPlus® ToolGuide.

## Feed recommendations

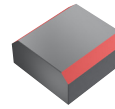
mm/tooth

inch/tooth

DC	3.000	4.000	6.000	6.350	7.938	8.000	9.525	10.000	12.000	12.700	14.000	15.875	16.000	18.000	19.050	20.000	25.000	25.400
f <sub>z</sub>	0.118	0.157	0.236	0.250	0.313	0.315	0.375	0.394	0.472	0.500	0.551	0.625	0.630	0.709	0.750	0.787	0.984	1.000
J01	0.040	0.050	0.070	0.070	0.100	0.100	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.150	0.180	0.200	0.200	0.200
J02	0.050	0.060	0.080	0.080	0.120	0.120	0.150	0.150	0.150	0.150	0.160	0.160	0.160	0.180	0.200	0.200	0.250	0.250
J03	0.030	0.040	0.060	0.060	0.080	0.080	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.120	0.120	0.140	0.160	0.160
J04	0.040	0.050	0.060	0.060	0.100	0.100	0.120	0.120	0.120	0.120	0.120	0.140	0.140	0.150	0.160	0.160	0.200	0.200

# Cutting speed recommendations

Optimized - CoroMill® 316 solid carbide head for chamfer milling



$$a_e = 0.1 \times DC$$

$$a_p = 0.1 \times DC$$

ISO	MC No.	CMC	Material	HB	$f_z$	$v_c$ m/min	$v_c$ feet/min
P	P1.2.Z.AN	01.2	Unalloyed steel	190	C01	320	1050
	P2.2.Z.AN	02.2	Low-alloyed steel	240	C01	220	722
	P3.0.Z.HT	03.21	High alloyed steel	380	C01	130	427
M	P5.0.Z.AN	05.11	Ferritic/martensitic stainless steel	200	C01	90	295
	M1.0.Z.AQ	05.21	Austenitic stainless steel	200	C02	110	361
	M3.2.Z.AQ	05.51	Duplex (austenitic/ferritic) stainless steel	260	C02	70	230
K	K1.1.C.NS	07.2	Malleable cast iron	200	C01	240	787
	K2.1.C.UT	08.2	Grey cast iron	180	C01	240	787
	K3.2.C.UT	09.2	Nodular cast iron	215	C01	215	705
N	N1.2.Z.AG	30.12	Aluminium based alloys	100	C03	2300	7546
	N1.3.C.UT	30.21	Aluminium based alloys	75	C03	370	1214
	N1.4.C.NS	30.42	Aluminium based alloys	130	C03	240	787
	N3.2.C.UT	33.2	Copper and copper alloys	90	C03	680	2231
S	S1.0.U.AG	20.12	Iron based superalloys	280	C02	50	164
	S2.0.Z.AG	20.22	Nickel based super alloys	350	C02	50	164
	S4.2.Z.AN	23.22	Titanium based alloys	320	C02	90	295
H	H1.1.Z.HA	04.1	Steel - Hardness level 50	50HRC	C02	70	230

For optimized cutting data see CoroPlus® ToolGuide.

## Feed recommendations

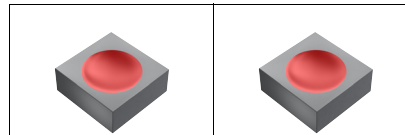
mm/tooth

inch/tooth

DC	1	2	3	4	6	6.35	8	9.525	10	12	12.7	14	15.875	16	20
$f_z$	0.039	0.079	0.118	0.157	0.236	0.250	0.315	0.375	0.394	0.472	0.500	0.551	0.625	0.630	0.787
C01	0.020	0.030	0.040	0.050	0.070	0.070	0.100	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.200
	0.0008	0.0012	0.0016	0.0020	0.0028	0.0028	0.0039	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0047	0.0079
C02	0.020	0.020	0.030	0.040	0.060	0.060	0.080	0.100	0.100	0.100	0.100	0.100	0.100	0.120	0.160
	0.0008	0.0008	0.0012	0.0016	0.0024	0.0024	0.0031	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0047	0.0063
C03	0.040	0.070	0.070	0.110	0.150	0.150	0.200	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.440
	0.0016	0.0028	0.0028	0.0043	0.0059	0.0059	0.0079	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102	0.0173

# Cutting speed recommendations

Optimized - CoroMill® 316 solid carbide head for profiling



$a_e = 0.05 \times DC$        $a_e = 0.01 \times DC$

ISO	MC No.	CMC	Material	HB	$a_e = 0.05 \times DC$			$a_e = 0.01 \times DC$		
					$f_z$	$v_c$ m/min	$v_c$ feet/min	$f_z$	$v_c$ m/min	$v_c$ feet/min
P	P1.2.Z.AN	01.2	Unalloyed steel	190	N01	300	984	N04	360	1181
	P2.2.Z.AN	02.2	Low-alloyed steel	240	N01	220	722	N04	265	869
	P3.0.Z.HT	03.21	High alloyed steel	380	N01	130	427	N04	150	492
M	P5.0.Z.AN	05.11	Ferritic/martensitic stainless steel	200	N01	90	295	N05	100	328
	M1.0.Z.AQ	05.21	Austenitic stainless steel	200	N02	110	361	N05	130	427
	M3.2.Z.AQ	05.51	Duplex (austenitic/ferritic) stainless steel	260	N02	90	295	N04	100	328
K	K1.1.C.NS	07.2	Malleable cast iron	200	N01	240	787	N04	290	951
	K2.1.C.UT	08.2	Grey cast iron	180	N01	240	787	N04	290	951
	K3.2.C.UT	09.2	Nodular cast iron	215	N01	215	705	N04	255	837
N	N1.2.Z.AG	30.12	Aluminium based alloys	100	N03	1765	5791	N06	1765	5791
	N1.3.C.UT	30.21	Aluminium based alloys	75	N03	755	2477	N06	910	2986
	N1.4.C.NS	30.42	Aluminium based alloys	130	N03	280	919	N06	335	1099
	N3.2.C.UT	33.2	Copper and copper alloys	90	N03	505	1657	N06	615	2018
S	S1.0.U.AG	20.12	Iron based superalloys	280	N02	50	164	N05	70	230
	S2.0.Z.AG	20.22	Nickel based superalloys	350	N02	50	164	N05	70	230
	S4.2.Z.AN	23.22	Titanium based alloys	320	N02	100	328	N05	130	427
H	H1.1.Z.HA	04.1	Steel - Hardness level 50	50HRC	N02	145	476	N05	175	574
	H1.2.Z.HA	04.1	Steel - Hardness level 55	55HRC	N02	145	476	N05	175	574
	H1.3.Z.HA	04.1	Steel - Hardness level 60	60HRC	N02	85	279	N05	100	328
O	O7.0.S.UT		Graphite		N03	800	2625	N06	850	2789

For optimized cutting data see CoroPlus® ToolGuide.

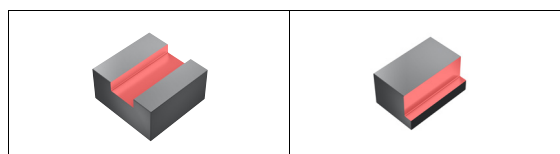
## Feed recommendations

mm/tooth  
inch/tooth

DC	1.000	2.000	3.000	4.000	6.000	6.350	7.938	8.000	9.525	10.000	12.000	12.700	16.000	20.000	25.000	25.400
$f_z$	0.039	0.079	0.118	0.157	0.236	0.250	0.313	0.315	0.375	0.394	0.472	0.500	0.630	0.787	0.984	1.000
N01	0.020	0.030	0.050	0.060	0.080	0.080	0.120	0.120	0.150	0.150	0.150	0.150	0.160	0.020	0.025	0.025
N02	0.0008	0.0012	0.0020	0.0024	0.0031	0.0031	0.0047	0.0047	0.0059	0.0059	0.0059	0.0059	0.0063	0.0079	0.0098	0.0098
N03	0.020	0.030	0.040	0.050	0.060	0.060	0.100	0.100	0.120	0.120	0.120	0.120	0.140	0.016	0.020	0.020
N04	0.0008	0.0012	0.0016	0.0020	0.0024	0.0024	0.0039	0.0039	0.0047	0.0047	0.0047	0.0047	0.0055	0.0063	0.0079	0.0098
N05	0.060	0.080	0.100	0.130	0.180	0.180	0.260	0.260	0.330	0.330	0.330	0.330	0.380	0.440	0.500	0.500
N06	0.0024	0.0031	0.0039	0.0051	0.0071	0.0071	0.0102	0.0102	0.0130	0.0130	0.0130	0.0130	0.0150	0.0173	0.0197	0.0197
N01	0.030	0.050	0.080	0.100	0.120	0.120	0.150	0.150	0.200	0.200	0.200	0.200	0.200	0.250	0.250	0.250
N02	0.0012	0.0020	0.0031	0.0039	0.0047	0.0047	0.0059	0.0059	0.0079	0.0079	0.0079	0.0079	0.0079	0.0098	0.0098	0.0098
N03	0.020	0.040	0.065	0.080	0.100	0.100	0.120	0.120	0.160	0.160	0.160	0.160	0.160	0.200	0.200	0.200
N04	0.0008	0.0016	0.0026	0.0031	0.0039	0.0039	0.0047	0.0047	0.0063	0.0063	0.0063	0.0063	0.0063	0.0079	0.0079	0.0079
N05	0.070	0.110	0.175	0.220	0.260	0.260	0.330	0.330	0.440	0.440	0.440	0.440	0.440	0.500	0.500	0.500
N06	0.0028	0.0043	0.0069	0.0087	0.0102	0.0102	0.0130	0.0130	0.0173	0.0173	0.0173	0.0173	0.0173	0.0197	0.0197	0.0197

## Optimized - CoroMill® Plura solid carbide end mill for edging applications

For composite materials



$a_p \times a_e > DC$

$a_p \times a_e > DC$

	$f_z$ mm/tooth*	$v_c$ m/min	$f_z$ mm/tooth*	$v_c$ m/min
2P460	0.03	100	0.08	200
2P350	0.03	130	0.03	280
2P050	0.06	100	0.05	200

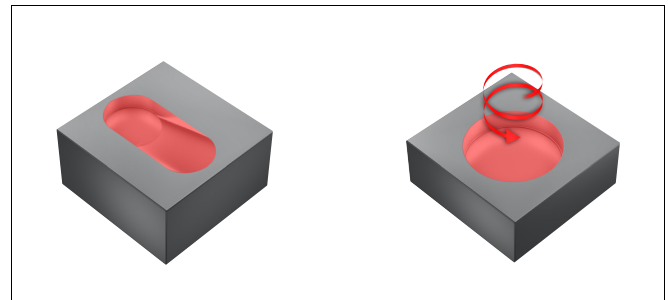
Feed is same for all diameters.

# Maximum ramping angle

CoroMill® Plura - Optimized

CoroMill® Plura - Versatile

CoroMill® 316



Number of teeth (ZEFP)

ISO	Material	≤2	3	4	5	≥6
P	Steel (Hardness <300 HB)	9	7	5	5	≤4
	Steel (Hardness >300 HB)	7	5	4	3	≤3
M	Stainless steel	5	5	5	4	≤4
K	Cast iron	10	10	8	6	≤5
N	Non-ferrous metals	15	12	10	10	≤10
S	Super alloys and titanium	5	5	4	4	≤3
H	Hard materials	2	2	1.5	1.5	≤1.5
O	Non ISO	15	12	10	10	≤10

## Grades for milling

	P	M	K	N	S	H	O	Wet	Dry	Description
1610	+					++		✗	✓	Ultra fine substrate and CIL coating. Suitable for finishing and semi-finishing in ISO H (and hard ISO P) materials. Not suitable for large $a_e$ . For stable conditions.
1620	+	++	+		+	+		✓	✓	Versatile grade similar to 1630. Works in most materials. High wear resistance. Is stronger in ISO S and ISO M compared to 1630.
1630	++	+	++		+		+	✓	✓	Versatile grade similar to 1620. Works in most materials. Is stronger in ISO P and ISO K compared to 1620. Dry machining is preferred.
1640	+	++	+		++			✓	✓	Very tough grade for high chip loads (large $a_e$ ). Works in most materials. Works well in wet conditions. Suitable for unstable conditions.
H10F				++			+	✓	✗	Uncoated grade for machining ISO N and some ISO O (e.g. thermoplastics) materials.
N20C				+			++	✓	✓	Diamond coated grade for graphite and composites as well as ISO N with high (roughly >9%) silicon content.
1700						++		✗	✓	Very hard grade for working in ISO H materials.
1710					++			✓	✗	Hard, wear resistant fine-grained substrate. New coating with adhesion reducing properties. Specific grade for Nickel-based alloys.
1730	++	+	++		+			✓	✓	Next generation 1730 grade. Versatile grade that is tougher and more all-round compared to 1630. Dry machining is preferred.
1740	+	++	+		++			✓	✓	Next generation 1740 grade. New sub micron substrate and TiAlN coating for increased toughness and wider application area compared to 1640. Excellent in wet conditions.
1745					++			✓	✗	Tough sub-micron grain-sized substrate with new silicon coating. Grade dedicated to Titanium alloys.
P10	+	+	+		+	+		✓	✓	Only one Tool Style has this grade. Long ball nose cutter. Grade is very similar to 1620.

B

**Indexable drills**

CoroDrill® DS20 39-41

**Optimized solid drilling tools**

CoroDrill® 860 solid carbide drill 42-50

**Cutting data** 51-73

C

For complete assortment, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

D

E

F

G

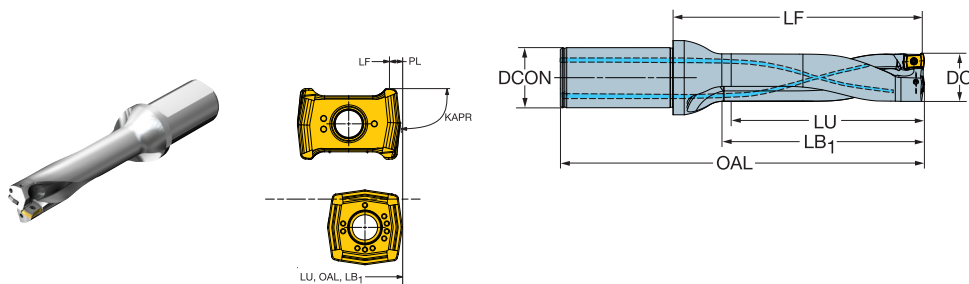
H



# CoroDrill® DS20 indexable insert drill

Cylindrical shank with flat according to ISO 9766

Internal coolant supply



## Metric design

							Dimensions, mm									
DC	LU	CZC <sub>MS</sub>	ADJLX	TCHAL	TCHAU	Ordering code	DCON <sub>MS</sub>	LF	OAL	LB <sub>1</sub>	PL	KAPR	BAR	KG	RPMX	
28.00	112.00	32	2.12	0.00	0.33	DS20-D2800L32-04	32.00	140.16	201.00	116.00	0.83	81°	10	0.743	13000	
	140.00	32	2.12	0.00	0.33	DS20-D2800L32-05	32.00	168.16	229.00	144.00	0.83	81°	10	0.809	8000	
	168.00	32	2.12	-0.10	0.40	DS20-D2800L32-06	32.00	196.16	257.00	172.00	0.83	81°	10	0.874	6000	
	196.00	32	2.12	-0.10	0.40	DS20-D2800L32-07	32.00	224.16	285.00	200.00	0.83	81°	10	0.939	4000	
29.00	116.00	32	1.84	0.00	0.33	DS20-D2900L32-04	32.00	144.16	205.00	120.00	0.83	81°	10	0.773	12000	
	145.00	32	1.84	0.00	0.33	DS20-D2900L32-05	32.00	173.16	234.00	149.00	0.83	81°	10	0.846	8000	
	174.00	32	1.84	-0.10	0.40	DS20-D2900L32-06	32.00	202.16	263.00	178.00	0.83	81°	10	0.918	5000	
	203.00	32	1.84	-0.10	0.40	DS20-D2900L32-07	32.00	231.16	292.00	207.00	0.83	81°	10	0.991	4000	
30.00	120.00	32	1.56	0.00	0.33	DS20-D3000L32-04	32.00	148.16	209.00	124.00	0.83	81°	10	0.805	12000	
	150.00	32	1.56	0.00	0.33	DS20-D3000L32-05	32.00	178.16	239.00	154.00	0.83	81°	10	0.885	8000	
	180.00	32	1.56	-0.10	0.40	DS20-D3000L32-06	32.00	208.16	269.00	184.00	0.83	81°	10	0.966	5000	
	210.00	32	1.56	-0.10	0.40	DS20-D3000L32-07	32.00	238.16	299.00	214.00	0.83	81°	10	1.046	4000	
31.00	124.00	40	1.28	0.00	0.35	DS20-D3100L40-04	40.00	158.16	229.00	128.00	0.83	81°	10	1.250	12000	
	155.00	40	1.28	0.00	0.35	DS20-D3100L40-05	40.00	189.16	260.00	159.00	0.83	81°	10	1.339	7000	
	186.00	40	1.28	-0.10	0.40	DS20-D3100L40-06	40.00	220.16	291.00	190.00	0.83	81°	10	1.428	5000	
	217.00	40	1.28	-0.10	0.40	DS20-D3100L40-07	40.00	251.16	322.00	221.00	0.83	81°	10	1.516	4000	
32.00	128.00	40	1.00	0.00	0.35	DS20-D3200L40-04	40.00	162.16	233.00	132.00	0.83	81°	10	1.286	11000	
	160.00	40	1.00	0.00	0.35	DS20-D3200L40-05	40.00	194.16	265.00	164.00	0.83	81°	10	1.384	7000	
	192.00	40	1.00	-0.10	0.40	DS20-D3200L40-06	40.00	226.16	297.00	196.00	0.83	81°	10	1.481	5000	
	224.00	40	1.00	-0.10	0.40	DS20-D3200L40-07	40.00	258.16	329.00	228.00	0.83	81°	10	1.579	3000	
33.00	132.00	40	0.72	0.00	0.35	DS20-D3300L40-04	40.00	165.16	236.00	136.00	0.83	81°	10	1.313	11000	
	165.00	40	0.72	0.00	0.35	DS20-D3300L40-05	40.00	198.16	269.00	169.00	0.83	81°	10	1.420	7000	
	198.00	40	0.72	-0.10	0.40	DS20-D3300L40-06	40.00	231.16	302.00	202.00	0.83	81°	10	1.527	5000	
	231.00	40	0.72	-0.10	0.40	DS20-D3300L40-07	40.00	264.16	335.00	235.00	0.83	81°	10	1.634	3000	

## Inch design

							Dimensions, inch									
DC	LU	CZC <sub>MS</sub>	ADJLX	TCHAL	TCHAU	Ordering code	DCON <sub>MS</sub>	LF	OAL	LB <sub>1</sub>	PL	KAPR	PSI	LBS	RPMX	
1.125	4.500	1 1/4	.077	.000	.013	DS20-D2858LX31-04	1.250	5.587	7.982	4.642	.033	81°	145	1.660	13000	
	5.625	1 1/4	.077	.000	.013	DS20-D2858LX31-05	1.250	6.712	9.107	5.767	.033	81°	145	1.814	8000	
	6.750	1 1/4	.077	-.004	.016	DS20-D2858LX31-06	1.250	7.837	10.232	6.892	.033	81°	145	1.966	5000	
	7.875	1 1/4	.077	-.004	.016	DS20-D2858LX31-07	1.250	8.962	11.357	8.017	.033	81°	145	2.120	4000	
1.187	4.748	1 1/4	.059	.000	.013	DS20-D3015LX31-04	1.250	5.830	8.225	4.890	.033	81°	145	1.768	12000	
	5.935	1 1/4	.059	.000	.013	DS20-D3015LX31-05	1.250	7.017	9.412	6.077	.033	81°	145	1.948	8000	
	7.122	1 1/4	.059	-.004	.016	DS20-D3015LX31-06	1.250	8.204	10.599	7.264	.033	81°	145	2.127	5000	
	8.309	1 1/4	.059	-.004	.016	DS20-D3015LX31-07	1.250	9.391	11.786	8.451	.033	81°	145	2.308	4000	
1.250	5.000	1 1/2	.042	.000	.014	DS20-D3175LX38-04	1.500	6.292	9.081	5.142	.033	81°	145	2.680	11000	
	6.250	1 1/2	.042	.000	.014	DS20-D3175LX38-05	1.500	7.542	10.331	6.392	.033	81°	145	2.890	7000	
	7.500	1 1/2	.042	-.004	.016	DS20-D3175LX38-06	1.500	8.792	11.581	7.642	.033	81°	145	3.101	5000	
	8.750	1 1/2	.042	-.004	.016	DS20-D3175LX38-07	1.500	10.042	12.831	8.892	.033	81°	145	3.311	3000	

Spare parts
Insert screw
5513 020-57

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



41



97



100

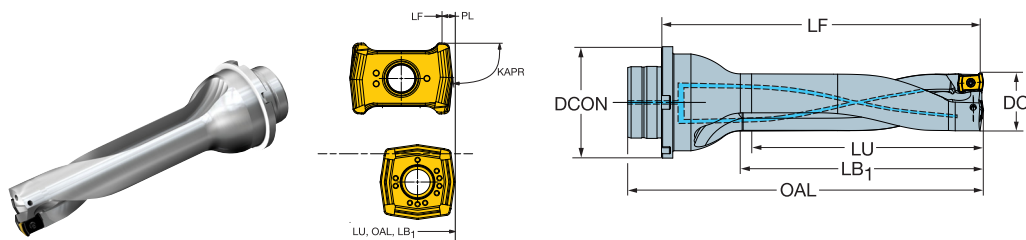


# CoroDrill® DS20 indexable insert drill



Modular drill interface  
Internal coolant supply

B



C

Dimensions, mm															
DC	LU	CZC <sub>MS</sub>	ADJLX	TCHAL	TCHAU	Ordering code	DCON <sub>MS</sub>	LF	OAL	LB <sub>1</sub>	PL	KAPR	BAR	KG	RPMX
28.00	112.00	MDI-32	2.12	0.00	0.33	DS20-D2800DM32-04	32.00	150.16	166.00	116.00	0.83	81°	10	0.705	13000
	196.00	MDI-32	2.12	-0.10	0.40	DS20-D2800DM32-07	32.00	234.16	250.00	200.00	0.83	81°	10	0.901	4000
28.57	114.30	MDI-32	1.95	0.00	0.33	DS20-D2858DM32-04	32.00	151.82	167.65	117.90	0.83	81°	10	0.718	13000
	200.02	MDI-32	1.95	-0.10	0.40	DS20-D2858DM32-07	32.00	237.54	253.37	203.63	0.83	81°	10	0.927	4000
29.00	116.00	MDI-32	1.84	0.00	0.33	DS20-D2900DM32-04	32.00	154.16	170.00	120.00	0.83	81°	10	0.734	12000
	203.00	MDI-32	1.84	-0.10	0.40	DS20-D2900DM32-07	32.00	241.16	257.00	207.00	0.83	81°	10	0.952	4000
30.00	120.00	MDI-32	1.56	0.00	0.33	DS20-D3000DM32-04	32.00	158.16	174.00	124.00	0.83	81°	10	0.766	12000
	210.00	MDI-32	1.56	-0.10	0.40	DS20-D3000DM32-07	32.00	248.16	264.00	214.00	0.83	81°	10	1.008	4000
30.14	120.59	MDI-32	1.51	0.00	0.33	DS20-D3015DM32-04	32.00	157.99	173.82	124.20	0.83	81°	10	0.767	12000
	211.04	MDI-32	1.51	-0.10	0.40	DS20-D3015DM32-07	32.00	248.44	264.27	214.65	0.83	81°	10	1.012	4000
31.00	124.00	MDI-32	1.28	0.00	0.35	DS20-D3100DM32-04	32.00	164.16	180.00	128.00	0.83	81°	10	0.818	12000
	217.00	MDI-32	1.28	-0.10	0.40	DS20-D3100DM32-07	32.00	256.16	272.00	221.00	0.83	81°	10	1.075	4000
31.75	127.00	MDI-32	1.07	0.00	0.35	DS20-D3175DM32-04	32.00	166.27	182.10	130.60	0.83	81°	10	0.839	11000
	222.25	MDI-32	1.07	-0.10	0.40	DS20-D3175DM32-07	32.00	261.49	277.33	225.85	0.83	81°	10	1.125	3000
32.00	128.00	MDI-40	1.00	0.00	0.35	DS20-D3200DM40-04	40.00	175.16	191.00	132.00	0.83	81°	10	1.260	11000
	224.00	MDI-40	1.00	-0.10	0.40	DS20-D3200DM40-07	40.00	271.16	287.00	228.00	0.83	81°	10	1.553	3000
33.00	132.00	MDI-40	0.72	0.00	0.35	DS20-D3300DM40-04	40.00	179.16	195.00	136.00	0.83	81°	10	1.299	11000
	231.00	MDI-40	0.72	-0.10	0.40	DS20-D3300DM40-07	40.00	278.16	294.00	235.00	0.83	81°	10	1.620	3000

D

E

Spare parts
Insert screw
5513 020-57

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

F

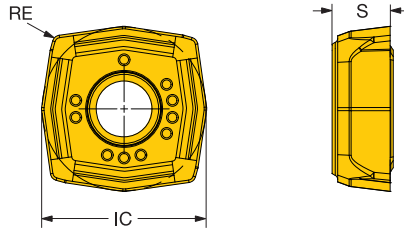
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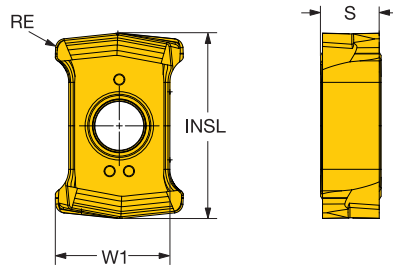
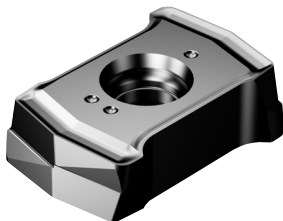
# CoroDrill® DS20 insert for drilling

Central insert



INSUC	Ordering code	P	M	K	N	S	H	Dimensions, mm		
		1344	1144	1344	HT3A	1344	HT3A	1344	S	RE
04C	C DS20-0407-C-L5	★	★	★	★	★	★	3.20	0.35	11.1
								.126	.014	.436
C	DS20-0407-C-M7	★	★				★	3.20	0.35	11.1
								.126	.014	.436

## Peripheral insert



INSUC	Ordering code	P	M	K	N	S	H	Dimensions, mm											
		4324	4334	4344	2044	4334	4344	4324	4334	4344	HT3A	2044	4344	HT3A	4334	4344	S	RE	W1
P	DS20-0407-P-H5W	★	★	★	★	★	★										4.25	0.70	9.2
																	.167	.028	.366
P	DS20-0407-P-L5W	★	★	★	★	★					★	★					4.25	0.70	9.2
																	.167	.028	.366
04P	P DS20-0407-P-L6W		★			★							★		★		4.25	0.70	9.2
																	.167	.028	.366
P	DS20-0407-P-M7W	★	★	★			★	★						★	★		4.25	0.70	9.2
																	.167	.028	.366
P	DS20-0407-P-S5W					★			★	★		★	★				4.25	0.70	9.2
																	.167	.028	.366



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CoroDrill® 860 solid carbide drill

For multi-materials  
Internal coolant supply



TCHA H9  
SIG 140°

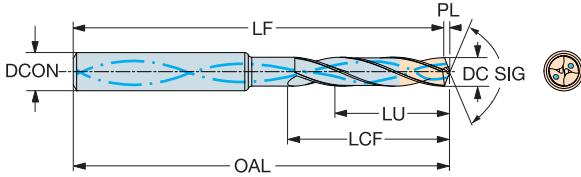
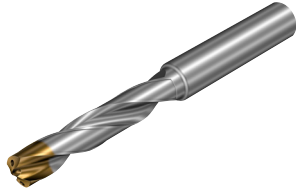


Table with columns for material grades (P, M, K, N, S, H), dimensions (DC, LU, ULDR, CZC, etc.), and ordering codes. Includes a 'Dimensions, mm, inch' section.



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100



101

A

B

C

D

E

F

G

H



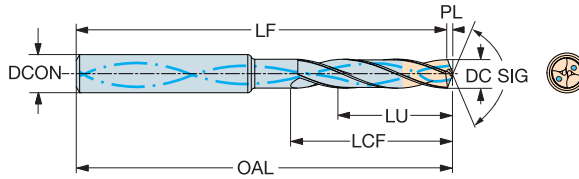
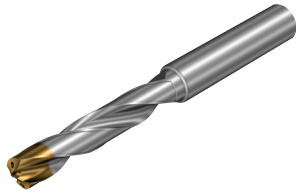
# CoroDrill® 860 solid carbide drill

For multi-materials

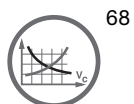
Internal coolant supply



TCHA H9  
SIG 140°



							P	M	K	N	S	H	Dimensions, mm, inch										
							X/BM	X/BM	X/BM	X/BM	X/BM	X/BM		DCON <sub>MS</sub>	DCON <sub>MS</sub> *	OAL	OAL*	LF	LF*	LCF	LCF*	PL	PL*
DC	DC*	LU	LU*	ULDR	CZC <sub>MS</sub>	Ordering code																	
12.50	.492	39.4	1.551	3	14	860.1-1250-039A1-GM	★	★	★	★	★	★	14.0	.551	107	4.213	104.9	4.130	60	2.362	2.3	.090	
12.50	.492	56.4	2.220	5	14	860.1-1250-056A1-GM	★	★	★	★	★	★	14.0	.551	124	4.882	121.9	4.799	77	3.032	2.3	.090	
12.50	.492	102.3	4.028	8	14	860.1-1250-102A1-GM	★	★	★	★	★	★	14.0	.551	202	7.953	157.9	6.217	151	5.945	2.3	.090	
12.70	.500	39.2	1.543	3	14	860.1-1270-039A1-GM	★	★	★	★	★	★	14.0	.551	107	4.213	104.8	4.126	60	2.362	2.3	.091	
12.70	.500	56.2	2.213	5	14	860.1-1270-056A1-GM	★	★	★	★	★	★	14.0	.551	124	4.882	121.8	4.795	77	3.032	2.3	.091	
12.70	.500	103.9	4.091	8	14	860.1-1270-103A1-GM	★	★	★	★	★	★	14.0	.551	202	7.953	157.8	6.213	151	5.945	2.3	.091	
12.80	.504	104.7	4.122	8	14	860.1-1280-104A1-GM	★	★	★	★	★	★	14.0	.551	202	7.953	157.8	6.213	151	5.945	2.3	.092	
13.00	.512	39.0	1.535	3	14	860.1-1300-038A1-GM	★	★	★	★	★	★	14.0	.551	107	4.213	104.8	4.126	60	2.362	2.4	.093	
13.00	.512	56.0	2.205	5	14	860.1-1300-055A1-GM	★	★	★	★	★	★	14.0	.551	124	4.882	121.8	4.795	77	3.032	2.4	.093	
13.00	.512	106.4	4.189	8	14	860.1-1300-106A1-GM	★	★	★	★	★	★	14.0	.551	202	7.953	157.8	6.213	151	5.945	2.4	.093	
13.10	.516	55.9	2.201	5	14	860.1-1310-055A1-GM	★	★	★	★	★	★	14.0	.551	124	4.882	121.7	4.791	77	3.032	2.4	.094	
13.25	.522	38.8	1.528	3	14	860.1-1325-038A1-GM	★	★	★	★	★	★	14.0	.551	107	4.213	104.7	4.122	60	2.362	2.4	.095	
13.30	.524	38.8	1.528	3	14	860.1-1330-036A1-GM	★	★	★	★	★	★	14.0	.551	107	4.213	104.6	4.118	60	2.362	2.4	.095	
13.50	.531	38.6	1.520	3	14	860.1-1350-038A1-GM	★	★	★	★	★	★	14.0	.551	107	4.213	104.7	4.122	60	2.362	2.5	.097	
13.50	.531	55.6	2.189	5	14	860.1-1350-055A1-GM	★	★	★	★	★	★	14.0	.551	124	4.882	121.7	4.791	77	3.032	2.5	.097	
13.50	.531	110.5	4.350	8	14	860.1-1350-110A1-GM	★	★	★	★	★	★	14.0	.551	202	7.953	157.7	6.209	151	5.945	2.5	.097	
13.75	.541	38.4	1.512	3	14	860.1-1375-038A1-GM	★	★	★	★	★	★	14.0	.551	107	4.213	104.6	4.118	60	2.362	2.5	.099	
13.80	.543	112.9	4.445	8	14	860.1-1380-112A1-GM	★	★	★	★	★	★	14.0	.551	202	7.953	157.6	6.205	151	5.945	2.5	.099	
14.00	.551	38.2	1.504	3	14	860.1-1400-038A1-GM	★	★	★	★	★	★	14.0	.551	107	4.213	104.6	4.118	60	2.362	2.5	.100	
14.00	.551	55.2	2.173	3	16	860.1-1400-055A1-GM	★	★	★	★	★	★	16.0	.630	124	4.882	157.6	6.205	77	3.032	2.5	.100	
14.00	.551	114.5	4.508	8	14	860.1-1400-114A1-GM	★	★	★	★	★	★	14.0	.551	202	7.953	104.6	4.118	151	5.945	2.5	.100	
14.25	.561	42.4	1.669	3	16	860.1-1425-042A1-GM	★	★	★	★	★	★	16.0	.630	115	4.528	112.5	4.429	65	2.559	2.6	.102	
14.25	.561	60.4	2.378	5	16	860.1-1425-060A1-GM	★	★	★	★	★	★	16.0	.630	133	5.236	112.5	4.429	83	3.268	2.6	.102	
14.29	.563	42.4	1.669	3	16	860.1-1429-042A1-GM	★	★	★	★	★	★	16.0	.630	115	4.528	112.5	4.429	65	2.559	2.6	.102	
14.50	.571	42.2	1.661	3	16	860.1-1450-042A1-GM	★	★	★	★	★	★	16.0	.630	115	4.528	112.5	4.429	65	2.559	2.6	.104	
14.50	.571	60.2	2.370	5	16	860.1-1450-060A1-GM	★	★	★	★	★	★	16.0	.630	133	5.236	112.5	4.429	83	3.268	2.6	.104	
15.00	.591	41.8	1.646	3	16	860.1-1500-041A1-GM	★	★	★	★	★	★	16.0	.630	115	4.528	112.4	4.425	65	2.559	2.7	.107	
15.00	.591	59.8	2.354	3	16	860.1-1500-059A1-GM	★	★	★	★	★	★	16.0	.630	133	5.236	130.4	5.134	83	3.268	2.7	.107	
15.50	.610	41.4	1.630	3	16	860.1-1550-041A1-GM	★	★	★	★	★	★	16.0	.630	115	4.528	112.3	4.421	65	2.559	2.8	.111	
15.87	.625	41.1	1.618	3	16	860.1-1587-041A1-GM	★	★	★	★	★	★	16.0	.630	115	4.528	112.3	4.421	65	2.559	2.9	.114	
15.87	.625	59.1	2.327	3	16	860.1-1587-059A1-GM	★	★	★	★	★	★	16.0	.630	133	5.236	130.3	5.130	83	3.268	2.9	.114	
16.00	.630	41.0	1.614	3	16	860.1-1600-041A1-GM	★	★	★	★	★	★	16.0	.630	115	4.528	112.2	4.417	65	2.559	2.9	.115	
16.00	.630	59.0	2.323	3	6	860.1-1600-059A1-GM	★	★	★	★	★	★	6.0	.236	133	5.236	112.2	4.417	83	3.268	2.9	.115	
16.00	.630	130.9	5.154	8	16	860.1-1600-130A1-GM	★	★	★	★	★	★	16.0	.630	227	8.937	130.2	5.126	172	6.772	2.9	.115	









# CoroDrill® 860 solid carbide drill

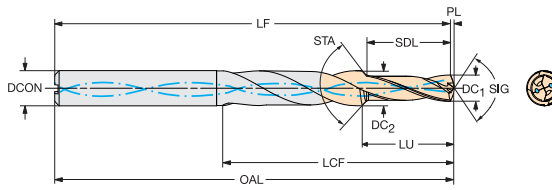
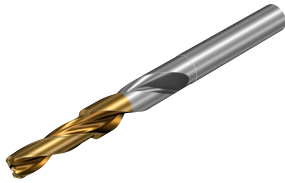
For multi-materials

Internal coolant supply



ENG

TCHA H9  
SIG 140°



## Step and chamfer drill

											P	M	K	N	S	H	Dimensions, mm, inch									
DC <sub>1</sub>	DC <sub>1</sub> *	DC <sub>2</sub>	DC <sub>2</sub> *	SDL	SDL*	STA	LU	LU*	CZC <sub>MS</sub>	Ordering code	X1BM	X1BM	X1BM	X1BM	X1BM	DCON <sub>MS</sub>	DCON <sub>MS</sub> *	OAL	OAL*	LF	LF*	LCF	LCF*	PL	PL*	
3.35	.132	4.50	.177	10.10	.398	90°	11.3	.445	6	860.2-0335-011A1-GM	★	☆	★	☆	★	6.0	.236	66	2.598	61.4	2.417	19	.748	0.6	.024	
3.40	.134	4.60	.181	10.20	.402	90°	11.4	.449	6	860.2-0340-011A1-GM	★	☆	★	☆	★	6.0	.236	66	2.598	65.4	2.575	19	.748	0.6	.024	
4.25	.167	5.70	.224	12.80	.504	90°	14.3	.563	6	860.2-0425-014A1-GM	★	☆	★	☆	★	6.0	.236	66	2.598	65.3	2.571	23	.906	0.7	.028	
4.30	.169	5.80	.228	13.00	.512	90°	14.5	.571	6	860.2-0430-014A1-GM	★	☆	★	☆	★	6.0	.236	66	2.598	65.3	2.571	23	.906	0.7	.028	
4.65	.183	5.90	.232	14.00	.551	90°	15.5	.610	6	860.2-0465-015A1-GM	★	☆	★	☆	★	6.0	.236	66	2.598	65.2	2.567	23	.906	0.8	.031	
5.00	.197	6.80	.268	15.00	.591	90°	16.8	.661	8	860.2-0500-016A1-GM	★	☆	★	☆	★	8.0	.315	79	3.110	78.2	3.079	28	1.102	0.8	.031	
5.10	.201	6.90	.272	15.30	.602	90°	17.1	.673	8	860.2-0510-017A1-GM	★	☆	★	☆	★	8.0	.315	79	3.110	78.1	3.075	28	1.102	0.9	.035	
5.50	.217	7.40	.291	16.60	.654	90°	18.6	.732	8	860.2-0550-018A1-GM	★	☆	★	☆	★	8.0	.315	79	3.110	78.1	3.075	28	1.102	0.9	.035	
5.55	.219	7.50	.295	16.70	.657	90°	18.7	.736	8	860.2-0555-018A1-GM	★	☆	★	☆	★	8.0	.315	79	3.110	78.1	3.075	28	1.102	0.9	.035	
6.60	.260	8.90	.350	19.90	.783	90°	22.3	.878	10	860.2-0660-022A1-GM	★	☆	★	☆	★	10.0	.394	89	3.504	87.9	3.461	37	1.457	1.1	.043	
6.75	.266	9.10	.358	20.30	.799	90°	22.7	.894	10	860.2-0675-022A1-GM	★	☆	★	☆	★	10.0	.394	89	3.504	87.8	3.457	37	1.457	1.2	.047	
6.85	.270	9.20	.362	20.60	.811	90°	23.0	.906	10	860.2-0685-023A1-GM	★	☆	★	☆	★	10.0	.394	89	3.504	87.8	3.457	37	1.457	1.2	.047	
6.90	.272	9.30	.366	20.70	.815	90°	23.2	.913	10	860.2-0690-023A1-GM	★	☆	★	☆	★	10.0	.394	89	3.504	87.8	3.457	37	1.457	1.2	.047	
7.00	.276	9.50	.374	21.10	.831	90°	23.6	.929	10	860.2-0700-023A1-GM	★	☆	★	☆	★	10.0	.394	89	3.504	87.8	3.457	37	1.457	1.2	.047	
7.40	.291	9.80	.386	22.20	.874	90°	24.7	.972	10	860.2-0740-024A1-GM	★	☆	★	☆	★	10.0	.394	89	3.504	87.7	3.453	37	1.457	1.3	.051	
8.00	.315	10.80	.425	24.00	.945	90°	26.9	1.059	12	860.2-0800-026A1-GM	★	☆	★	☆	★	12.0	.472	102	4.016	100.6	3.961	42	1.654	1.4	.055	
8.50	.335	11.50	.453	25.50	1.004	90°	28.5	1.122	12	860.2-0850-028A1-GM	★	☆	★	☆	★	12.0	.472	102	4.016	100.5	3.957	42	1.654	1.5	.059	
8.60	.339	11.60	.457	25.80	1.016	90°	28.9	1.138	12	860.2-0860-028A1-GM	★	☆	★	☆	★	12.0	.472	102	4.016	100.5	3.957	42	1.654	1.5	.059	
8.70	.343	11.70	.461	26.10	1.028	90°	29.2	1.150	12	860.2-0870-029A1-GM	★	☆	★	☆	★	12.0	.472	102	4.016	100.5	3.957	42	1.654	1.5	.059	
9.00	.354	11.80	.465	27.00	1.063	90°	30.0	1.181	12	860.2-0900-030A1-GM	★	☆	★	☆	★	12.0	.472	102	4.016	100.5	3.957	42	1.654	1.5	.059	
10.25	.404	13.80	.543	30.80	1.213	90°	34.4	1.354	14	860.2-1025-034A1-GM	★	☆	★	☆	★	14.0	.551	107	4.213	105.2	4.142	52	2.047	1.8	.071	
10.30	.406	13.80	.543	31.00	1.220	90°	34.6	1.362	14	860.2-1030-034A1-GM	★	☆	★	☆	★	14.0	.551	107	4.213	105.2	4.142	52	2.047	1.8	.071	
10.40	.409	13.80	.543	31.20	1.228	90°	34.8	1.370	14	860.2-1040-034A1-GM	★	☆	★	☆	★	14.0	.551	107	4.213	105.2	4.142	52	2.047	1.8	.071	
10.50	.413	13.80	.543	31.60	1.244	90°	35.2	1.386	14	860.2-1050-035A1-GM	★	☆	★	☆	★	14.0	.551	107	4.213	105.2	4.142	52	2.047	1.8	.071	
12.00	.472	15.80	.622	36.00	1.417	90°	40.1	1.579	16	860.2-1200-040A1-GM	★	☆	★	☆	★	16.0	.630	115	4.528	112.9	4.445	59	2.323	2.1	.083	
14.00	.551	18.90	.744	42.10	1.657	90°	47.1	1.854	20	860.2-1400-047A1-GM	★	☆	★	☆	★	20.0	.787	131	5.157	128.6	5.063	78	3.071	2.4	.094	



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## Selecting your cutting data



Chip formation and chip evacuation are critical issues in drilling and depend on the workpiece material, choice of drill/insert geometry, coolant pressure/volume and cutting data. Chip jamming can cause radial movement of the drill and consequently affect hole quality, drill life and reliability or drill/insert breakages.

Chip formation is acceptable when the chips can be evacuated from the drill without disturbance. The best way to identify this is to listen during drilling. A consistent sound means that chip evacuation is good, but an interrupted sound indicates chip jamming. Check the feed force or power monitor. If there are irregularities, chip jamming could be the reason. Look at the chips: if they are long and bent, instead of curled, chip jamming has occurred. Look at the hole: if chip jamming has occurred, an uneven surface will be visible

### Effects of cutting speed – $v_c$

#### Cutting speed that is too high:

Rapid flank wear  
Plastic deformation  
Poor hole quality and bad hole tolerance

#### Cutting speed that is too low:

Built-up edge  
Bad chip evacuation  
Longer time in cut

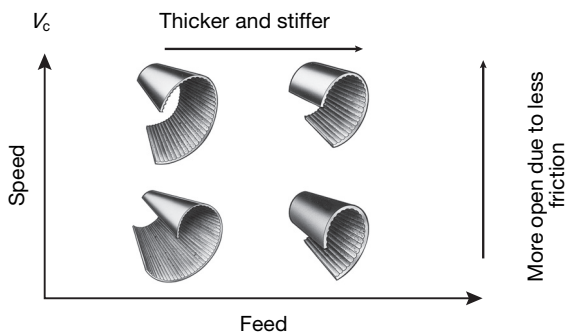
### Effects of feed – $f_n$

#### High feed rate:

Harder chip breaking  
Less time in cut  
Less tool wear but increased risk for drill breakages  
Reduced hole quality

#### Low feed rate:

Preferable for long-chipping materials  
Quality improvement  
Accelerated tool wear  
Longer time in cut



## Achieving good hole quality

### Chip evacuation

Make sure chip evacuation is satisfactory. Chip jamming affects hole quality and reliability/tool life. Drill/insert geometry and cutting data are crucial.

### Stability, tool set-up

Use the shortest possible drill. Use a rigid and accurate tool holder with minimum run-out. Make sure the machine spindle is in good condition and is well-aligned. Ensure that the component is fixed and stable. Establish correct feed rates for irregular, angular surfaces and cross holes.

### Tool life

Check insert wear and establish a predetermined tool life program. The most effective way to supervise drilling is by using a feed force monitor.

### Maintenance

Change the insert-clamping screw regularly. Clean the tip seat before changing the insert, and make sure to use a torque wrench. Don't exceed maximum wear before regrinding solid carbide drills.

### Drilling deep holes with CoroDrill® DS20

If best possible hole quality is needed when drilling 6-7xD holes with CoroDrill DS20, it is important to utilize a reduced feed rate at the entry (first 1-2 mm) (.039-.787 inch) and exit (last 5 mm) (.197 inch).



CoroDrill® DS20



4-5xD

Metric values

ISO	MC No.	Material	HB	Grade	Cutting speed recommendations			Drill diameter	Drill length 4xD					Drill length 5xD							
									-S5W	-L5W	-L6W	-M7W	-H5W	-S5W	-L5W	-L6W	-M7W	-H5W			
					4-5xD				Recommended start value at middle of feed range												
P	P3.0.Z.HT	High alloy steel Hardened and tempered	380	4324	80	165	210	15.00-18.00	-	-	0.06-0.14	<b>0.06-0.16</b>	-	-	-	0.06-0.12	<b>0.06-0.14</b>	-			
				4344	75	140	175	18.01-22.00	-	-	0.06-0.16	<b>0.06-0.18</b>	-	-	-	0.06-0.14	<b>0.06-0.15</b>	-			
				4344	70	110	130	22.01-27.00	-	-	0.06-0.2	<b>0.06-0.22</b>	-	-	-	0.06-0.17	<b>0.06-0.19</b>	-			
		P5.0.Z.AN	Ferritic/martensitic  Annealed	200	4334	115	185	225	15.00-18.00	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12	0.05-0.11	<b>0.05-0.11</b>	0.05-0.11	-	0.05-0.1		
					4344	115	155	175	18.01-22.00	0.05-0.14	<b>0.05-0.14</b>	0.05-0.14	-	0.05-0.13	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11		
					2044	115	150	165	22.01-27.00	0.05-0.15	<b>0.05-0.15</b>	0.05-0.15	-	0.05-0.14	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12		
	P5.0.Z.HT	Ferritic/martensitic  Hardened and tempered	330	4334	75	135	170	15.00-18.00	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12	0.05-0.11	<b>0.05-0.11</b>	0.05-0.11	-	0.05-0.1			
				4344	70	115	140	18.01-22.00	0.05-0.14	<b>0.05-0.14</b>	0.05-0.14	-	0.05-0.13	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11			
				2044	70	115	140	22.01-27.00	0.05-0.15	<b>0.05-0.15</b>	0.05-0.15	-	0.05-0.14	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12			
				M1.0.Z.AQ	Austenitic stainless steel  Annealed/quenched	200	4334	115	185	225	15.00-18.00	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11	0.05-0.11	<b>0.05-0.11</b>	0.05-0.11	-	0.05-0.1
							4344	115	165	190	18.01-22.00	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11
							2044	115	155	180	22.01-27.00	0.05-0.14	<b>0.05-0.14</b>	0.05-0.14	-	0.05-0.13	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12
M1.1.Z.AQ	Austenitic stainless steel  Machinability improved	200	4334				115	195	240	15.00-18.00	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11	0.05-0.11	<b>0.05-0.11</b>	0.05-0.11	-	0.05-0.1	
			4344	115	175	210	18.01-22.00	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11				
			2044	115	170	200	22.01-27.00	0.05-0.14	<b>0.05-0.14</b>	0.05-0.14	-	0.05-0.13	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12				
			M2.0.Z.AQ	Super austenitic  Annealed/quenched	200	4334	80	125	150	15.00-18.00	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11	0.05-0.11	<b>0.05-0.11</b>	0.05-0.11	-	0.05-0.1	
4344	80	110				125	18.01-22.00	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11				
2044	80	110				125	22.01-27.00	0.05-0.14	<b>0.05-0.14</b>	0.05-0.14	-	0.05-0.13	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12				
M3.1.Z.AQ	Duplex stainless steel >60% ferrite (N<0.10%)	230				4334	85	125	145	15.00-18.00	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11	0.05-0.11	<b>0.05-0.11</b>	0.05-0.11	-	0.05-0.1	
			4344	85	115	130	18.01-22.00	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11				
			2044	85	110	125	22.01-27.00	0.05-0.14	<b>0.05-0.14</b>	0.05-0.14	-	0.05-0.13	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12				
			M3.2.Z.AQ	Duplex stainless steel <60% ferrite (N>0.10%)	260	4334	75	105	120	15.00-18.00	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11	0.05-0.11	<b>0.05-0.11</b>	0.05-0.11	-	0.05-0.1	
4344	75	100				115	18.01-22.00	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12	0.05-0.12	<b>0.05-0.12</b>	0.05-0.12	-	0.05-0.11				
2044	75	100				115	22.01-27.00	0.05-0.14	<b>0.05-0.14</b>	0.05-0.14	-	0.05-0.13	0.05-0.13	<b>0.05-0.13</b>	0.05-0.13	-	0.05-0.12				
S	S2.0.Z.AN S2.0.Z.AG S2.0.Z.NS	Heat resistant super Ni based				350	4334	20	40	50	15.00-18.00	0.04-0.08	<b>0.04-0.08</b>	0.04-0.08	-	-	0.04-0.07	<b>0.04-0.07</b>	0.04-0.07	-	
			4344	20	40		50	18.01-22.00	0.04-0.09	<b>0.04-0.09</b>	0.04-0.09	-	-	0.04-0.08	<b>0.04-0.08</b>	0.04-0.08	-				
			2044	20	40		50	22.01-27.00	0.04-0.1	<b>0.04-0.1</b>	0.04-0.1	-	-	0.04-0.09	<b>0.04-0.09</b>	0.04-0.09	-				
			S4.2.Z.AN S4.3.Z.AG	Heat resistant super Ti based	330		H13A	40	90	120	15.00-18.00	<b>0.06-0.14</b>	0.06-0.14	0.06-0.14	-	-	<b>0.06-0.12</b>	0.06-0.12	0.06-0.12	-	
							4344	40	90	120	18.01-22.00	<b>0.06-0.15</b>	0.06-0.15	0.06-0.15	-	-	<b>0.06-0.13</b>	0.06-0.13	0.06-0.13	-	
							2044	40	90	120	22.01-27.00	<b>0.06-0.16</b>	0.06-0.16	0.06-0.16	-	-	<b>0.06-0.14</b>	0.06-0.14	0.06-0.14	-	
	S4.0.Z.AG	Heat resistant super Ti based				330	4334	40	90	120	15.00-18.00	<b>0.08-0.17</b>	0.08-0.17	0.08-0.17	-	-	<b>0.08-0.14</b>	0.08-0.14	0.08-0.14	-	
			4344	40	90		120	18.01-22.00	<b>0.08-0.18</b>	0.08-0.18	0.08-0.18	-	-	<b>0.08-0.15</b>	0.08-0.15	0.08-0.15	-				
			2044	40	90		120	22.01-27.00	<b>0.1-0.18</b>	0.1-0.18	0.1-0.18	-	-	<b>0.1-0.15</b>	0.1-0.15	0.1-0.15	-				
			S4.1.Z.AG	Heat resistant super Ti based	330		4334	40	90	120	15.00-18.00	<b>0.1-0.18</b>	0.1-0.18	0.1-0.18	-	-	<b>0.1-0.15</b>	0.1-0.15	0.1-0.15	-	
	4344	40				90	120	18.01-22.00	<b>0.1-0.18</b>	0.1-0.18	0.1-0.18	-	-	<b>0.1-0.15</b>	0.1-0.15	0.1-0.15	-				

B

C

D

E

F

G

H

# CoroDrill® DS20



4-5xD

Metric values

ISO	MC No.	Material	HB	Grade	Cutting speed recommendations			Drill diameter	Drill length 4xD					Drill length 5xD				
					-S5W	-L5W	-L6W		-M7W	-H5W	-S5W	-L5W	-L6W	-M7W	-H5W			
K	K1.1.C.NS	Malleable cast iron Low tensile strength	200	4324	140	210	245	15.00-18.00	-	0.08-0.15	0.08-0.15	<b>0.08-0.2</b>	-	-	0.08-0.13	0.08-0.13	<b>0.08-0.17</b>	-
				4334	110	170	200	18.01-22.00	-	0.08-0.18	0.08-0.18	<b>0.08-0.23</b>	-	-	0.08-0.15	0.08-0.15	<b>0.08-0.2</b>	-
				4344	180	165	155	22.01-27.00	-	0.08-0.21	0.08-0.21	<b>0.08-0.26</b>	-	-	0.08-0.18	0.08-0.18	<b>0.08-0.22</b>	-
								27.01-33.00	-	0.1-0.24	0.1-0.24	<b>0.1-0.29</b>	-	-	0.1-0.2	0.1-0.2	<b>0.1-0.25</b>	-
								33.01-40.00	-	0.1-0.27	0.1-0.27	<b>0.1-0.32</b>	-	-	0.1-0.23	0.1-0.23	<b>0.1-0.27</b>	-
								40.01-52.00	-	0.12-0.27	0.12-0.27	<b>0.12-0.32</b>	-	-	0.12-0.23	0.12-0.23	<b>0.12-0.27</b>	-
								52.01-65.00	-	0.12-0.27	0.12-0.27	<b>0.12-0.32</b>	-	-	0.12-0.23	0.12-0.23	<b>0.12-0.27</b>	-
	K2.1.C.UT	Grey cast iron Low tensile strength	180	4324	210	285	325	15.00-18.00	-	0.08-0.15	0.08-0.15	<b>0.08-0.2</b>	-	-	0.08-0.13	0.08-0.13	<b>0.08-0.17</b>	-
				4334	170	235	270	18.01-22.00	-	0.08-0.18	0.08-0.18	<b>0.08-0.23</b>	-	-	0.08-0.15	0.08-0.15	<b>0.08-0.2</b>	-
				4344	130	180	205	22.01-27.00	-	0.08-0.21	0.08-0.21	<b>0.08-0.26</b>	-	-	0.08-0.18	0.08-0.18	<b>0.08-0.22</b>	-
								27.01-33.00	-	0.1-0.24	0.1-0.24	<b>0.1-0.29</b>	-	-	0.1-0.2	0.1-0.2	<b>0.1-0.25</b>	-
								33.01-40.00	-	0.1-0.27	0.1-0.27	<b>0.1-0.32</b>	-	-	0.1-0.23	0.1-0.23	<b>0.1-0.27</b>	-
								40.01-52.00	-	0.12-0.27	0.12-0.27	<b>0.12-0.32</b>	-	-	0.12-0.23	0.12-0.23	<b>0.12-0.27</b>	-
								52.01-65.00	-	0.12-0.27	0.12-0.27	<b>0.12-0.32</b>	-	-	0.12-0.23	0.12-0.23	<b>0.12-0.27</b>	-
	K2.2.C.UT	Grey cast iron High tensile strength	245	4324	125	205	245	15.00-18.00	-	0.08-0.13	0.08-0.13	<b>0.08-0.18</b>	-	-	0.08-0.11	0.08-0.11	<b>0.08-0.15</b>	-
				4334	100	160	195	18.01-22.00	-	0.08-0.16	0.08-0.16	<b>0.08-0.21</b>	-	-	0.08-0.14	0.08-0.14	<b>0.08-0.18</b>	-
				4344	75	125	150	22.01-27.00	-	0.08-0.19	0.08-0.19	<b>0.08-0.24</b>	-	-	0.08-0.16	0.08-0.16	<b>0.08-0.2</b>	-
								27.01-33.00	-	0.1-0.22	0.1-0.22	<b>0.1-0.27</b>	-	-	0.1-0.19	0.1-0.19	<b>0.1-0.23</b>	-
								33.01-40.00	-	0.1-0.25	0.1-0.25	<b>0.1-0.3</b>	-	-	0.1-0.21	0.1-0.21	<b>0.1-0.26</b>	-
								40.01-52.00	-	0.12-0.25	0.12-0.25	<b>0.12-0.3</b>	-	-	0.12-0.21	0.12-0.21	<b>0.12-0.26</b>	-
								52.01-65.00	-	0.12-0.25	0.12-0.25	<b>0.12-0.3</b>	-	-	0.12-0.21	0.12-0.21	<b>0.12-0.26</b>	-
	K3.1.C.UT	Nodular cast iron Ferritic	155	4324	125	190	225	15.00-18.00	-	0.08-0.13	0.08-0.13	<b>0.08-0.18</b>	-	-	0.08-0.11	0.08-0.11	<b>0.08-0.15</b>	-
				4334	100	155	185	18.01-22.00	-	0.08-0.16	0.08-0.16	<b>0.08-0.21</b>	-	-	0.08-0.14	0.08-0.14	<b>0.08-0.18</b>	-
				4344	80	120	145	22.01-27.00	-	0.08-0.19	0.08-0.19	<b>0.08-0.24</b>	-	-	0.08-0.16	0.08-0.16	<b>0.08-0.2</b>	-
							27.01-33.00	-	0.1-0.22	0.1-0.22	<b>0.1-0.27</b>	-	-	0.1-0.19	0.1-0.19	<b>0.1-0.23</b>	-	
							33.01-40.00	-	0.1-0.25	0.1-0.25	<b>0.1-0.3</b>	-	-	0.1-0.21	0.1-0.21	<b>0.1-0.26</b>	-	
							40.01-52.00	-	0.12-0.25	0.12-0.25	<b>0.12-0.3</b>	-	-	0.12-0.21	0.12-0.21	<b>0.12-0.26</b>	-	
							52.01-65.00	-	0.12-0.25	0.12-0.25	<b>0.12-0.3</b>	-	-	0.12-0.21	0.12-0.21	<b>0.12-0.26</b>	-	
K3.3.C.UT	Nodular cast iron Pearlitic	265	4324	110	175	210	15.00-18.00	-	0.08-0.13	0.08-0.13	<b>0.08-0.18</b>	-	-	0.08-0.11	0.08-0.11	<b>0.08-0.15</b>	-	
			4334	90	145	175	18.01-22.00	-	0.08-0.16	0.08-0.16	<b>0.08-0.21</b>	-	-	0.08-0.14	0.08-0.14	<b>0.08-0.18</b>	-	
			4344	70	110	130	22.01-27.00	-	0.08-0.19	0.08-0.19	<b>0.08-0.24</b>	-	-	0.08-0.16	0.08-0.16	<b>0.08-0.2</b>	-	
							27.01-33.00	-	0.1-0.22	0.1-0.22	<b>0.1-0.27</b>	-	-	0.1-0.19	0.1-0.19	<b>0.1-0.23</b>	-	
							33.01-40.00	-	0.1-0.25	0.1-0.25	<b>0.1-0.3</b>	-	-	0.1-0.21	0.1-0.21	<b>0.1-0.26</b>	-	
							40.01-52.00	-	0.12-0.25	0.12-0.25	<b>0.12-0.3</b>	-	-	0.12-0.21	0.12-0.21	<b>0.12-0.26</b>	-	
							52.01-65.00	-	0.12-0.25	0.12-0.25	<b>0.12-0.3</b>	-	-	0.12-0.21	0.12-0.21	<b>0.12-0.26</b>	-	
K4.2.C.UT	Compacted graphite iron High tensile strength	230	4324	130	210	250	15.00-18.00	-	0.08-0.13	0.08-0.13	<b>0.08-0.18</b>	-	-	0.08-0.11	0.08-0.11	<b>0.08-0.15</b>	-	
			4334	110	170	200	18.01-22.00	-	0.08-0.16	0.08-0.16	<b>0.08-0.21</b>	-	-	0.08-0.14	0.08-0.14	<b>0.08-0.18</b>	-	
			4344	85	125	150	22.01-27.00	-	0.08-0.19	0.08-0.19	<b>0.08-0.24</b>	-	-	0.08-0.16	0.08-0.16	<b>0.08-0.2</b>	-	
							27.01-33.00	-	0.1-0.22	0.1-0.22	<b>0.1-0.27</b>	-	-	0.1-0.19	0.1-0.19	<b>0.1-0.23</b>	-	
							33.01-40.00	-	0.1-0.25	0.1-0.25	<b>0.1-0.3</b>	-	-	0.1-0.21	0.1-0.21	<b>0.1-0.26</b>	-	
							40.01-52.00	-	0.12-0.25	0.12-0.25	<b>0.12-0.3</b>	-	-	0.12-0.21	0.12-0.21	<b>0.12-0.26</b>	-	
							52.01-65.00	-	0.12-0.25	0.12-0.25	<b>0.12-0.3</b>	-	-	0.12-0.21	0.12-0.21	<b>0.12-0.26</b>	-	
H	H1.3.Z.HA	Extra hard steels Hardened and tempered	60	4324	30	65	85	15.00-18.00	-	0.06-0.13	<b>0.06-0.13</b>	0.06-0.13	-	-	0.06-0.11	<b>0.06-0.11</b>	0.06-0.11	-
				4334	30	65	85	18.01-22.00	-	0.06-0.14	<b>0.06-0.14</b>	0.06-0.14	-	-	0.06-0.12	<b>0.06-0.12</b>	0.06-0.12	-
				4344	30	65	85	22.01-27.00	-	0.06-0.15	<b>0.06-0.15</b>	0.06-0.15	-	-	0.06-0.13	<b>0.06-0.13</b>	0.06-0.13	-
								27.01-33.00	-	0.08-0.16	<b>0.08-0.16</b>	0.08-0.16	-	-	0.08-0.14	<b>0.08-0.14</b>	0.08-0.14	-
								33.01-40.00	-	0.08-0.18	<b>0.08-0.18</b>	0.08-0.18	-	-	0.08-0.15	<b>0.08-0.15</b>	0.08-0.15	-
								40.01-52.00	-	0.1-0.18	<b>0.1-0.18</b>	0.1-0.18	-	-	0.1-0.15	<b>0.1-0.15</b>	0.1-0.15	-
								52.01-65.00	-	0.1-0.18	<b>0.1-0.18</b>	0.1-0.18	-	-	0.1-0.15	<b>0.1-0.15</b>	0.1-0.15	-

## CoroDrill® DS20

4-5xD

Metric values



ISO	MC No.	Material	HB	Grade	Cutting speed recommendations			Drill diameter	Drill length 4xD					Drill length 5xD				
									-S5W	-L5W	-L6W	-M7W	-H5W	-S5W	-L5W	-L6W	-M7W	-H5W
N	N1.2.Z.AG	Aluminium based alloys AlSi alloys, Si ≤ 1%	100	H13A 4344	4-5xD			15.00-18.00 18.01-22.00 22.01-27.00 27.01-33.00 33.01-40.00 40.01-52.00 52.01-65.00	0.06-0.16	0.06-0.16	0.06-0.16	-	-	0.06-0.14	0.06-0.14	0.06-0.14	-	-
					300	365	400		0.06-0.18	0.06-0.18	0.06-0.18	-	-	0.06-0.15	0.06-0.15	0.06-0.15	-	-
					300	365	400		0.06-0.2	0.06-0.2	0.06-0.2	-	-	0.06-0.17	0.06-0.17	0.06-0.17	-	-
									0.08-0.22	0.08-0.22	0.08-0.22	-	-	0.08-0.19	0.08-0.19	0.08-0.19	-	-
									0.08-0.25	0.08-0.25	0.08-0.25	-	-	0.08-0.21	0.08-0.21	0.08-0.21	-	-
									0.1-0.25	0.1-0.25	0.1-0.25	-	-	0.1-0.21	0.1-0.21	0.1-0.21	-	-
	N1.3.C.UT	Aluminium based alloys AlSi cast alloys (1% < Si >	75	H13A 4344	250	350	400	15.00-18.00	0.06-0.14	0.06-0.14	0.06-0.14	-	-	0.06-0.12	0.06-0.12	0.06-0.12	-	-
					250	350	400	18.01-22.00	0.06-0.16	0.06-0.16	0.06-0.16	-	-	0.06-0.14	0.06-0.14	0.06-0.14	-	-
								22.01-27.00	0.06-0.18	0.06-0.18	0.06-0.18	-	-	0.06-0.15	0.06-0.15	0.06-0.15	-	-
								27.01-33.00	0.08-0.2	0.08-0.2	0.08-0.2	-	-	0.08-0.17	0.08-0.17	0.08-0.17	-	-
								33.01-40.00	0.08-0.22	0.08-0.22	0.08-0.22	-	-	0.08-0.19	0.08-0.19	0.08-0.19	-	-
								40.01-52.00	0.1-0.22	0.1-0.22	0.1-0.22	-	-	0.1-0.19	0.1-0.19	0.1-0.19	-	-
	N1.3.C.AG	Aluminium based alloys AlSi cast and aged alloys	90	H13A 4344	250	315	350	15.00-18.00	0.06-0.14	0.06-0.14	0.06-0.14	-	-	0.06-0.12	0.06-0.12	0.06-0.12	-	-
					250	315	350	18.01-22.00	0.06-0.16	0.06-0.16	0.06-0.16	-	-	0.06-0.14	0.06-0.14	0.06-0.14	-	-
								22.01-27.00	0.06-0.18	0.06-0.18	0.06-0.18	-	-	0.06-0.15	0.06-0.15	0.06-0.15	-	-
								27.01-33.00	0.08-0.2	0.08-0.2	0.08-0.2	-	-	0.08-0.17	0.08-0.17	0.08-0.17	-	-
								33.01-40.00	0.08-0.22	0.08-0.22	0.08-0.22	-	-	0.08-0.19	0.08-0.19	0.08-0.19	-	-
								40.01-52.00	0.1-0.22	0.1-0.22	0.1-0.22	-	-	0.1-0.19	0.1-0.19	0.1-0.19	-	-
	N3.3.U.UT	Copper based alloys Free cutting copper	110	H13A 4344	250	350	400	15.00-18.00	0.06-0.16	0.06-0.16	0.06-0.16	-	-	0.06-0.14	0.06-0.14	0.06-0.14	-	-
					250	350	400	18.01-22.00	0.06-0.18	0.06-0.18	0.06-0.18	-	-	0.06-0.15	0.06-0.15	0.06-0.15	-	-
								22.01-27.00	0.06-0.2	0.06-0.2	0.06-0.2	-	-	0.06-0.17	0.06-0.17	0.06-0.17	-	-
								27.01-33.00	0.08-0.22	0.08-0.22	0.08-0.22	-	-	0.08-0.19	0.08-0.19	0.08-0.19	-	-
								33.01-40.00	0.08-0.25	0.08-0.25	0.08-0.25	-	-	0.08-0.21	0.08-0.21	0.08-0.21	-	-
								40.01-52.00	0.1-0.25	0.1-0.25	0.1-0.25	-	-	0.1-0.21	0.1-0.21	0.1-0.21	-	-
N3.2.C.UT	Copper based alloys Leaded brass and	90	H13A 4344	180	220	240	15.00-18.00	0.06-0.16	0.06-0.16	0.06-0.16	-	-	0.06-0.14	0.06-0.14	0.06-0.14	-	-	
				180	220	240	18.01-22.00	0.06-0.18	0.06-0.18	0.06-0.18	-	-	0.06-0.15	0.06-0.15	0.06-0.15	-	-	
							22.01-27.00	0.06-0.2	0.06-0.2	0.06-0.2	-	-	0.06-0.17	0.06-0.17	0.06-0.17	-	-	
							27.01-33.00	0.08-0.22	0.08-0.22	0.08-0.22	-	-	0.08-0.19	0.08-0.19	0.08-0.19	-	-	
							33.01-40.00	0.08-0.25	0.08-0.25	0.08-0.25	-	-	0.08-0.21	0.08-0.21	0.08-0.21	-	-	
							40.01-52.00	0.1-0.25	0.1-0.25	0.1-0.25	-	-	0.1-0.21	0.1-0.21	0.1-0.21	-	-	
			52.01-65.00	0.1-0.25	0.1-0.25	0.1-0.25	-	-	0.1-0.21	0.1-0.21	0.1-0.21	-	-					

B

C

D

E

F

G

H







# CoroDrill® DS20



6-7xD

Metric values

ISO	MC No.	Material	HB	Grade	Cutting speed recommendations			Drill diameter	Drill length 6xD					Drill length 7xD				
					-S5W	-L5W	-L6W		-M7W	-H5W	-S5W	-L5W	-L6W	-M7W	-H5W			
K	K1.1.C.NS	Malleable cast iron Low tensile strength	200	4324	140	190	220	15.00-18.00	-	0.08-0.1	0.08-0.1	<b>0.08-0.13</b>	-	-	0.08-0.08	0.08-0.08	<b>0.08-0.11</b>	-
				4334	110	155	180	18.01-22.00	-	0.08-0.12	0.08-0.12	<b>0.08-0.15</b>	-	-	0.08-0.1	0.08-0.1	<b>0.08-0.13</b>	-
				4344	180	150	140	22.01-27.00	-	0.08-0.14	0.08-0.14	<b>0.08-0.17</b>	-	-	0.08-0.12	0.08-0.12	<b>0.08-0.14</b>	-
								27.01-33.00	-	0.1-0.16	0.1-0.16	<b>0.1-0.19</b>	-	-	0.1-0.13	0.1-0.13	<b>0.1-0.16</b>	-
								33.01-40.00	-	0.1-0.18	0.1-0.18	<b>0.1-0.21</b>	-	-	0.1-0.15	0.1-0.15	<b>0.1-0.18</b>	-
								40.01-52.00	-	0.12-0.18	0.12-0.18	<b>0.12-0.21</b>	-	-	0.12-0.15	0.12-0.15	<b>0.12-0.18</b>	-
								52.01-65.00	-	0.12-0.18	0.12-0.18	<b>0.12-0.21</b>	-	-	0.12-0.15	0.12-0.15	<b>0.12-0.18</b>	-
	K2.1.C.UT	Grey cast iron Low tensile strength	180	4324	210	255	295	15.00-18.00	-	0.08-0.1	0.08-0.1	<b>0.08-0.13</b>	-	-	0.08-0.08	0.08-0.08	<b>0.08-0.11</b>	-
				4334	170	210	245	18.01-22.00	-	0.08-0.12	0.08-0.12	<b>0.08-0.15</b>	-	-	0.08-0.1	0.08-0.1	<b>0.08-0.13</b>	-
				4344	130	160	185	22.01-27.00	-	0.08-0.14	0.08-0.14	<b>0.08-0.17</b>	-	-	0.08-0.12	0.08-0.12	<b>0.08-0.14</b>	-
								27.01-33.00	-	0.1-0.16	0.1-0.16	<b>0.1-0.19</b>	-	-	0.1-0.13	0.1-0.13	<b>0.1-0.16</b>	-
								33.01-40.00	-	0.1-0.18	0.1-0.18	<b>0.1-0.21</b>	-	-	0.1-0.15	0.1-0.15	<b>0.1-0.18</b>	-
								40.01-52.00	-	0.12-0.18	0.12-0.18	<b>0.12-0.21</b>	-	-	0.12-0.15	0.12-0.15	<b>0.12-0.18</b>	-
								52.01-65.00	-	0.12-0.18	0.12-0.18	<b>0.12-0.21</b>	-	-	0.12-0.15	0.12-0.15	<b>0.12-0.18</b>	-
	K2.2.C.UT	Grey cast iron High tensile strength	245	4324	125	185	220	15.00-18.00	-	0.08-0.08	0.08-0.08	<b>0.08-0.12</b>	-	-	0.08-0.07	0.08-0.07	<b>0.08-0.1</b>	-
				4334	100	145	175	18.01-22.00	-	0.08-0.1	0.08-0.1	<b>0.08-0.14</b>	-	-	0.08-0.09	0.08-0.09	<b>0.08-0.12</b>	-
				4344	75	115	135	22.01-27.00	-	0.08-0.12	0.08-0.12	<b>0.08-0.16</b>	-	-	0.08-0.1	0.08-0.1	<b>0.08-0.13</b>	-
								27.01-33.00	-	0.1-0.14	0.1-0.14	<b>0.1-0.18</b>	-	-	0.1-0.12	0.1-0.12	<b>0.1-0.15</b>	-
								33.01-40.00	-	0.1-0.16	0.1-0.16	<b>0.1-0.2</b>	-	-	0.1-0.14	0.1-0.14	<b>0.1-0.17</b>	-
								40.01-52.00	-	0.12-0.16	0.12-0.16	<b>0.12-0.2</b>	-	-	0.12-0.14	0.12-0.14	<b>0.12-0.17</b>	-
								52.01-65.00	-	0.12-0.16	0.12-0.16	<b>0.12-0.2</b>	-	-	0.12-0.14	0.12-0.14	<b>0.12-0.17</b>	-
	K3.1.C.UT	Nodular cast iron Ferritic	155	4324	125	170	205	15.00-18.00	-	0.08-0.08	0.08-0.08	<b>0.08-0.12</b>	-	-	0.08-0.07	0.08-0.07	<b>0.08-0.1</b>	-
				4334	100	140	165	18.01-22.00	-	0.08-0.1	0.08-0.1	<b>0.08-0.14</b>	-	-	0.08-0.09	0.08-0.09	<b>0.08-0.12</b>	-
				4344	80	110	130	22.01-27.00	-	0.08-0.12	0.08-0.12	<b>0.08-0.16</b>	-	-	0.08-0.1	0.08-0.1	<b>0.08-0.13</b>	-
							27.01-33.00	-	0.1-0.14	0.1-0.14	<b>0.1-0.18</b>	-	-	0.1-0.12	0.1-0.12	<b>0.1-0.15</b>	-	
							33.01-40.00	-	0.1-0.16	0.1-0.16	<b>0.1-0.2</b>	-	-	0.1-0.14	0.1-0.14	<b>0.1-0.17</b>	-	
							40.01-52.00	-	0.12-0.16	0.12-0.16	<b>0.12-0.2</b>	-	-	0.12-0.14	0.12-0.14	<b>0.12-0.17</b>	-	
							52.01-65.00	-	0.12-0.16	0.12-0.16	<b>0.12-0.2</b>	-	-	0.12-0.14	0.12-0.14	<b>0.12-0.17</b>	-	
K3.3.C.UT	Nodular cast iron Pearlitic	265	4324	110	160	190	15.00-18.00	-	0.08-0.08	0.08-0.08	<b>0.08-0.12</b>	-	-	0.08-0.07	0.08-0.07	<b>0.08-0.1</b>	-	
			4334	90	130	160	18.01-22.00	-	0.08-0.1	0.08-0.1	<b>0.08-0.14</b>	-	-	0.08-0.09	0.08-0.09	<b>0.08-0.12</b>	-	
			4344	70	100	115	22.01-27.00	-	0.08-0.12	0.08-0.12	<b>0.08-0.16</b>	-	-	0.08-0.1	0.08-0.1	<b>0.08-0.13</b>	-	
							27.01-33.00	-	0.1-0.14	0.1-0.14	<b>0.1-0.18</b>	-	-	0.1-0.12	0.1-0.12	<b>0.1-0.15</b>	-	
							33.01-40.00	-	0.1-0.16	0.1-0.16	<b>0.1-0.2</b>	-	-	0.1-0.14	0.1-0.14	<b>0.1-0.17</b>	-	
							40.01-52.00	-	0.12-0.16	0.12-0.16	<b>0.12-0.2</b>	-	-	0.12-0.14	0.12-0.14	<b>0.12-0.17</b>	-	
							52.01-65.00	-	0.12-0.16	0.12-0.16	<b>0.12-0.2</b>	-	-	0.12-0.14	0.12-0.14	<b>0.12-0.17</b>	-	
K4.2.C.UT	Compacted graphite iron High tensile strength	230	4324	130	190	225	15.00-18.00	-	0.08-0.08	0.08-0.08	<b>0.08-0.12</b>	-	-	0.08-0.07	0.08-0.07	<b>0.08-0.1</b>	-	
			4334	110	155	180	18.01-22.00	-	0.08-0.1	0.08-0.1	<b>0.08-0.14</b>	-	-	0.08-0.09	0.08-0.09	<b>0.08-0.12</b>	-	
			4344	85	115	135	22.01-27.00	-	0.08-0.12	0.08-0.12	<b>0.08-0.16</b>	-	-	0.08-0.1	0.08-0.1	<b>0.08-0.13</b>	-	
							27.01-33.00	-	0.1-0.14	0.1-0.14	<b>0.1-0.18</b>	-	-	0.1-0.12	0.1-0.12	<b>0.1-0.15</b>	-	
							33.01-40.00	-	0.1-0.16	0.1-0.16	<b>0.1-0.2</b>	-	-	0.1-0.14	0.1-0.14	<b>0.1-0.17</b>	-	
							40.01-52.00	-	0.12-0.16	0.12-0.16	<b>0.12-0.2</b>	-	-	0.12-0.14	0.12-0.14	<b>0.12-0.17</b>	-	
							52.01-65.00	-	0.12-0.16	0.12-0.16	<b>0.12-0.2</b>	-	-	0.12-0.14	0.12-0.14	<b>0.12-0.17</b>	-	
H	H1.3.Z.HA	Extra hard steels Hardened and tempered	60	4324	30	60	75	15.00-18.00	-	0.06-0.08	0.06-0.08	<b>0.06-0.08</b>	-	-	0.06-0.07	0.06-0.07	<b>0.06-0.07</b>	-
				4334	30	60	75	18.01-22.00	-	0.06-0.09	0.06-0.09	<b>0.06-0.09</b>	-	-	0.06-0.08	0.06-0.08	<b>0.06-0.08</b>	-
				4344	30	60	75	22.01-27.00	-	0.06-0.1	0.06-0.1	<b>0.06-0.1</b>	-	-	0.06-0.08	0.06-0.08	<b>0.06-0.08</b>	-
								27.01-33.00	-	0.08-0.1	0.08-0.1	<b>0.08-0.1</b>	-	-	0.08-0.09	0.08-0.09	<b>0.08-0.09</b>	-
								33.01-40.00	-	0.08-0.12	0.08-0.12	<b>0.08-0.12</b>	-	-	0.08-0.1	0.08-0.1	<b>0.08-0.1</b>	-
								40.01-52.00	-	0.1-0.12	0.1-0.12	<b>0.1-0.12</b>	-	-	0.1-0.1	0.1-0.1	<b>0.1-0.1</b>	-
								52.01-65.00	-	0.1-0.12	0.1-0.12	<b>0.1-0.12</b>	-	-	0.1-0.1	0.1-0.1	<b>0.1-0.1</b>	-

## CoroDrill® DS20

6-7xD

Metric values



ISO	MC No.	Material	HB	Grade	Cutting speed recommendations			Drill diameter	Drill length 6xD					Drill length 7xD				
									-S5W	-L5W	-L6W	-M7W	-H5W	-S5W	-L5W	-L6W	-M7W	-H5W
N	N1.2.Z.AG	Aluminium based alloys AlSi alloys, Si ≤ 1%	100	H13A 4344	6-7xD			15.00-18.00 18.01-22.00 22.01-27.00 27.01-33.00 33.01-40.00 40.01-52.00 52.01-65.00	0.06-0.1	0.06-0.1	0.06-0.1	-	-	0.06-0.09	0.06-0.09	0.06-0.09	-	-
					0.06-0.12	0.06-0.12	0.06-0.12		-	-	0.06-0.1	0.06-0.1	0.06-0.1	-	-			
					0.06-0.13	0.06-0.13	0.06-0.13		-	-	0.06-0.11	0.06-0.11	0.06-0.11	-	-			
					0.08-0.14	0.08-0.14	0.08-0.14		-	-	0.08-0.12	0.08-0.12	0.08-0.12	-	-			
					0.08-0.16	0.08-0.16	0.08-0.16		-	-	0.08-0.14	0.08-0.14	0.08-0.14	-	-			
					0.1-0.16	0.1-0.16	0.1-0.16		-	-	0.1-0.14	0.1-0.14	0.1-0.14	-	-			
	N1.3.C.UT	Aluminium based alloys AlSi cast alloys (1% < Si >)	75	H13A 4344	250	315	360	15.00-18.00 18.01-22.00 22.01-27.00 27.01-33.00 33.01-40.00 40.01-52.00 52.01-65.00	0.06-0.09	0.06-0.09	0.06-0.09	-	-	0.06-0.08	0.06-0.08	0.06-0.08	-	-
					250	315	360		0.06-0.1	0.06-0.1	0.06-0.1	-	-	0.06-0.09	0.06-0.09	0.06-0.09	-	-
									0.06-0.12	0.06-0.12	0.06-0.12	-	-	0.06-0.1	0.06-0.1	0.06-0.1	-	-
									0.08-0.13	0.08-0.13	0.08-0.13	-	-	0.08-0.11	0.08-0.11	0.08-0.11	-	-
									0.08-0.14	0.08-0.14	0.08-0.14	-	-	0.08-0.12	0.08-0.12	0.08-0.12	-	-
									0.1-0.14	0.1-0.14	0.1-0.14	-	-	0.1-0.12	0.1-0.12	0.1-0.12	-	-
	N1.3.C.AG	Aluminium based alloys AlSi cast and aged alloys	90	H13A 4344	250	285	315	15.00-18.00 18.01-22.00 22.01-27.00 27.01-33.00 33.01-40.00 40.01-52.00 52.01-65.00	0.06-0.09	0.06-0.09	0.06-0.09	-	-	0.06-0.08	0.06-0.08	0.06-0.08	-	-
					250	285	315		0.06-0.1	0.06-0.1	0.06-0.1	-	-	0.06-0.1	0.06-0.1	0.06-0.1	-	-
									0.06-0.12	0.06-0.12	0.06-0.12	-	-	0.06-0.1	0.06-0.1	0.06-0.1	-	-
									0.08-0.13	0.08-0.13	0.08-0.13	-	-	0.08-0.11	0.08-0.11	0.08-0.11	-	-
									0.08-0.14	0.08-0.14	0.08-0.14	-	-	0.08-0.12	0.08-0.12	0.08-0.12	-	-
									0.1-0.14	0.1-0.14	0.1-0.14	-	-	0.1-0.12	0.1-0.12	0.1-0.12	-	-
	N3.3.U.UT	Copper based alloys Free cutting copper	110	H13A 4344	250	315	360	15.00-18.00 18.01-22.00 22.01-27.00 27.01-33.00 33.01-40.00 40.01-52.00 52.01-65.00	0.06-0.1	0.06-0.1	0.06-0.1	-	-	0.06-0.09	0.06-0.09	0.06-0.09	-	-
					250	315	360		0.06-0.12	0.06-0.12	0.06-0.12	-	-	0.06-0.1	0.06-0.1	0.06-0.1	-	-
									0.06-0.13	0.06-0.13	0.06-0.13	-	-	0.06-0.11	0.06-0.11	0.06-0.11	-	-
									0.08-0.14	0.08-0.14	0.08-0.14	-	-	0.08-0.12	0.08-0.12	0.08-0.12	-	-
									0.08-0.16	0.08-0.16	0.08-0.16	-	-	0.08-0.14	0.08-0.14	0.08-0.14	-	-
									0.1-0.16	0.1-0.16	0.1-0.16	-	-	0.1-0.14	0.1-0.14	0.1-0.14	-	-
N3.2.C.UT	Copper based alloys Leaded brass and	90	H13A 4344	180	200	215	15.00-18.00 18.01-22.00 22.01-27.00 27.01-33.00 33.01-40.00 40.01-52.00 52.01-65.00	0.06-0.1	0.06-0.1	0.06-0.1	-	-	0.06-0.09	0.06-0.09	0.06-0.09	-	-	
				180	200	215		0.06-0.12	0.06-0.12	0.06-0.12	-	-	0.06-0.1	0.06-0.1	0.06-0.1	-	-	
								0.06-0.13	0.06-0.13	0.06-0.13	-	-	0.06-0.11	0.06-0.11	0.06-0.11	-	-	
								0.08-0.14	0.08-0.14	0.08-0.14	-	-	0.08-0.12	0.08-0.12	0.08-0.12	-	-	
								0.08-0.16	0.08-0.16	0.08-0.16	-	-	0.08-0.14	0.08-0.14	0.08-0.14	-	-	
								0.1-0.16	0.1-0.16	0.1-0.16	-	-	0.1-0.14	0.1-0.14	0.1-0.14	-	-	

Feed at hole entry should be 75% of recommended feed rate. Feed at hole exit, use 0.05 mm/rev.

# CoroDrill® DS20

4-5xD

Inch values



ENG

ISO	MC No.	Material	HB	Grade	Cutting speed recommendations			Drill diameter	Drill length 4xD					Drill length 5xD					
					4-5xD	-SSW	-L5W		-L6W	-M7W	-H5W	-SSW	-L5W	-L6W	-M7W	-H5W			
																	Min.	Rec.	Max.
								$f_r$ inch/rev	$f_r$ inch/rev	$f_r$ inch/rev	$f_r$ inch/rev	$f_r$ inch/rev	$f_r$ inch/rev	$f_r$ inch/rev	$f_r$ inch/rev	$f_r$ inch/rev	$f_r$ inch/rev		
P	P1.0.ZAN	Unalloyed steel C=0.05-0.10%	110	4324	755	1115	1310	0.591-0.709	0.002-0.003	<b>0.002-0.003</b>	0.002-0.003	-	0.002-0.004	0.002-0.003	<b>0.002-0.003</b>	0.002-0.003	-	0.002-0.004	
					4334	690	935	1065	0.709-0.866	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	0.002-0.004	0.002-0.003	<b>0.002-0.003</b>	0.002-0.003	-	0.002-0.004
					4344	625	740	805	0.866-1.063	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	0.002-0.005	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	0.002-0.004
									1.063-1.299	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	0.002-0.005	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	0.002-0.005
									1.299-1.575	0.002-0.005	<b>0.002-0.005</b>	0.002-0.005	-	0.002-0.006	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	0.002-0.006
									1.575-2.047	0.002-0.005	<b>0.002-0.005</b>	0.002-0.005	-	0.002-0.006	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	0.002-0.006
					2.047-2.559	0.002-0.005	<b>0.002-0.005</b>	0.002-0.005	-	0.002-0.006	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	0.002-0.006				



# CoroDrill® DS20

4-5xD

Inch values



ENG

ISO	MC No.	Material	HB	Grade	Cutting speed recommendations				Drill diameter	Drill length 4xD					Drill length 5xD				
					4-5xD					-SSW	-L5W	-L6W	-M7W	-H5W	-SSW	-L5W	-L6W	-M7W	-H5W
					460	685	805	805		Recommended start value at middle of feed range					Recommended start value at middle of feed range				
K	K1.1.C.NS	Malleable cast iron Low tensile strength	200	4324	460	685	805	0.591-0.709	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-	
			4334	360	550	655	0.709-0.866	-	0.003-0.007	0.003-0.007	<b>0.003-0.009</b>	-	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-		
			4344	590	540	510	0.866-1.063	-	0.003-0.008	0.003-0.008	<b>0.003-0.01</b>	-	-	0.003-0.007	0.003-0.007	<b>0.003-0.009</b>	-		
		1.063-1.299	-	0.004-0.009	0.004-0.009	<b>0.004-0.011</b>	-	-	0.004-0.008	0.004-0.008	<b>0.004-0.01</b>	-							
		1.299-1.575	-	0.004-0.011	0.004-0.011	<b>0.004-0.013</b>	-	-	0.004-0.009	0.004-0.009	<b>0.004-0.011</b>	-							
		1.575-2.047	-	0.005-0.011	0.005-0.011	<b>0.005-0.013</b>	-	-	0.005-0.009	0.005-0.009	<b>0.005-0.011</b>	-							
	2.047-2.559	-	0.005-0.011	0.005-0.011	<b>0.005-0.013</b>	-	-	0.005-0.009	0.005-0.009	<b>0.005-0.011</b>	-								
	K2.1.C.UT	Grey cast iron Low tensile strength	180	4324	690	935	1065	0.591-0.709	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-	
			4334	560	770	885	0.709-0.866	-	0.003-0.007	0.003-0.007	<b>0.003-0.009</b>	-	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-		
			4344	425	585	670	0.866-1.063	-	0.003-0.008	0.003-0.008	<b>0.003-0.01</b>	-	-	0.003-0.007	0.003-0.007	<b>0.003-0.009</b>	-		
		1.063-1.299	-	0.004-0.009	0.004-0.009	<b>0.004-0.011</b>	-	-	0.004-0.008	0.004-0.008	<b>0.004-0.01</b>	-							
		1.299-1.575	-	0.004-0.011	0.004-0.011	<b>0.004-0.013</b>	-	-	0.004-0.009	0.004-0.009	<b>0.004-0.011</b>	-							
		1.575-2.047	-	0.005-0.011	0.005-0.011	<b>0.005-0.013</b>	-	-	0.005-0.009	0.005-0.009	<b>0.005-0.011</b>	-							
	2.047-2.559	-	0.005-0.011	0.005-0.011	<b>0.005-0.013</b>	-	-	0.005-0.009	0.005-0.009	<b>0.005-0.011</b>	-								
	K2.2.C.UT	Grey cast iron High tensile strength	245	4324	410	665	805	0.591-0.709	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.006</b>	-	
			4334	330	530	640	0.709-0.866	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-		
			4344	245	405	490	0.866-1.063	-	0.003-0.007	0.003-0.007	<b>0.003-0.009</b>	-	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-		
		1.063-1.299	-	0.004-0.009	0.004-0.009	<b>0.004-0.011</b>	-	-	0.004-0.007	0.004-0.007	<b>0.004-0.009</b>	-							
		1.299-1.575	-	0.004-0.01	0.004-0.01	<b>0.004-0.012</b>	-	-	0.004-0.008	0.004-0.008	<b>0.004-0.01</b>	-							
		1.575-2.047	-	0.005-0.01	0.005-0.01	<b>0.005-0.012</b>	-	-	0.005-0.008	0.005-0.008	<b>0.005-0.01</b>	-							
	2.047-2.559	-	0.005-0.01	0.005-0.01	<b>0.005-0.012</b>	-	-	0.005-0.008	0.005-0.008	<b>0.005-0.01</b>	-								
	K3.1.C.UT	Nodular cast iron Ferritic	155	4324	410	625	740	0.591-0.709	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.006</b>	-	
			4334	330	510	605	0.709-0.866	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-		
			4344	260	400	475	0.866-1.063	-	0.003-0.007	0.003-0.007	<b>0.003-0.009</b>	-	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-		
1.063-1.299		-	0.004-0.009	0.004-0.009	<b>0.004-0.011</b>	-	-	0.004-0.007	0.004-0.007	<b>0.004-0.009</b>	-								
1.299-1.575		-	0.004-0.01	0.004-0.01	<b>0.004-0.012</b>	-	-	0.004-0.008	0.004-0.008	<b>0.004-0.01</b>	-								
1.575-2.047		-	0.005-0.01	0.005-0.01	<b>0.005-0.012</b>	-	-	0.005-0.008	0.005-0.008	<b>0.005-0.01</b>	-								
2.047-2.559	-	0.005-0.01	0.005-0.01	<b>0.005-0.012</b>	-	-	0.005-0.008	0.005-0.008	<b>0.005-0.01</b>	-									
K3.3.C.UT	Nodular cast iron Ferritic	265	4324	360	575	690	0.591-0.709	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.006</b>	-		
		4334	295	475	575	0.709-0.866	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-			
		4344	230	355	425	0.866-1.063	-	0.003-0.007	0.003-0.007	<b>0.003-0.009</b>	-	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-			
	1.063-1.299	-	0.004-0.009	0.004-0.009	<b>0.004-0.011</b>	-	-	0.004-0.007	0.004-0.007	<b>0.004-0.009</b>	-								
	1.299-1.575	-	0.004-0.01	0.004-0.01	<b>0.004-0.012</b>	-	-	0.004-0.008	0.004-0.008	<b>0.004-0.01</b>	-								
	1.575-2.047	-	0.005-0.01	0.005-0.01	<b>0.005-0.012</b>	-	-	0.005-0.008	0.005-0.008	<b>0.005-0.01</b>	-								
2.047-2.559	-	0.005-0.01	0.005-0.01	<b>0.005-0.012</b>	-	-	0.005-0.008	0.005-0.008	<b>0.005-0.01</b>	-									
K4.2.C.UT	Compacted graphite iron High tensile strength	230	4324	425	680	820	0.591-0.709	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.006</b>	-		
		4334	360	550	655	0.709-0.866	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-			
		4344	280	415	490	0.866-1.063	-	0.003-0.007	0.003-0.007	<b>0.003-0.009</b>	-	-	0.003-0.006	0.003-0.006	<b>0.003-0.008</b>	-			
	1.063-1.299	-	0.004-0.009	0.004-0.009	<b>0.004-0.011</b>	-	-	0.004-0.007	0.004-0.007	<b>0.004-0.009</b>	-								
	1.299-1.575	-	0.004-0.01	0.004-0.01	<b>0.004-0.012</b>	-	-	0.004-0.008	0.004-0.008	<b>0.004-0.01</b>	-								
	1.575-2.047	-	0.005-0.01	0.005-0.01	<b>0.005-0.012</b>	-	-	0.005-0.008	0.005-0.008	<b>0.005-0.01</b>	-								
2.047-2.559	-	0.005-0.01	0.005-0.01	<b>0.005-0.012</b>	-	-	0.005-0.008	0.005-0.008	<b>0.005-0.01</b>	-									
H	H1.3.Z.HA	Extra hard steel Hardened and tempered	60	4324	100	215	280	0.591-0.709	-	0.002-0.005	<b>0.002-0.005</b>	0.002-0.005	-	-	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	
			4334	100	215	280	0.709-0.866	-	0.002-0.006	<b>0.002-0.006</b>	0.002-0.006	-	-	0.002-0.005	<b>0.002-0.005</b>	0.002-0.005	-		
			4344	100	215	280	0.866-1.063	-	0.002-0.006	<b>0.002-0.006</b>	0.002-0.006	-	-	0.002-0.005	<b>0.002-0.005</b>	0.002-0.005	-		
	1.063-1.299	-	0.003-0.006	<b>0.003-0.006</b>	0.003-0.006	-	-	0.003-0.005	<b>0.003-0.005</b>	0.003-0.005	-								
	1.299-1.575	-	0.003-0.007	<b>0.003-0.007</b>	0.003-0.007	-	-	0.003-0.006	<b>0.003-0.006</b>	0.003-0.006	-								
	1.575-2.047	-	0.004-0.007	<b>0.004-0.007</b>	0.004-0.007	-	-	0.004-0.006	<b>0.004-0.006</b>	0.004-0.006	-								
2.047-2.559	-	0.004-0.007	<b>0.004-0.007</b>	0.004-0.007	-	-	0.004-0.006	<b>0.004-0.006</b>	0.004-0.006	-									

## CoroDrill® DS20

4-5xD

Inch values



ISO	MC No.	Material	HB	Grade	Cutting speed recommendations			Drill diameter	Drill length 4xD					Drill length 5xD					
					985	1195	1310		-SSW	-LSW	-L6W	-M7W	-H5W	-SSW	-LSW	-L6W	-M7W	-H5W	
					4344	985	1195		Recommended start value at middle of feed range					Recommended start value at middle of feed range					
N	N1.2.Z.AG	Aluminium based alloys AISI alloys, Si ≤ 1%	100	H13A	985	1195	1310	0.591-0.709	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	
					4344	985	1195	1310	0.709-0.866	<b>0.002-0.007</b>	0.002-0.007	0.002-0.007	-	-	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-
									0.866-1.063	<b>0.002-0.008</b>	0.002-0.008	0.002-0.008	-	-	<b>0.002-0.007</b>	0.002-0.007	0.002-0.007	-	-
									1.063-1.299	<b>0.003-0.009</b>	0.003-0.009	0.003-0.009	-	-	<b>0.003-0.007</b>	0.003-0.007	0.003-0.007	-	-
									1.299-1.575	<b>0.003-0.01</b>	0.003-0.01	0.003-0.01	-	-	<b>0.003-0.008</b>	0.003-0.008	0.003-0.008	-	-
									1.575-2.047	<b>0.004-0.01</b>	0.004-0.01	0.004-0.01	-	-	<b>0.004-0.008</b>	0.004-0.008	0.004-0.008	-	-
									2.047-2.559	<b>0.004-0.01</b>	0.004-0.01	0.004-0.01	-	-	<b>0.004-0.008</b>	0.004-0.008	0.004-0.008	-	-
	N1.3.C.UT	Aluminium based alloys AISI alloys, Si ≤ 1%	75	H13A	820	1140	1310	0.591-0.709	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	
					4344	820	1140	1310	0.709-0.866	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-
									0.866-1.063	<b>0.002-0.007</b>	0.002-0.007	0.002-0.007	-	-	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-
									1.063-1.299	<b>0.003-0.008</b>	0.003-0.008	0.003-0.008	-	-	<b>0.003-0.007</b>	0.003-0.007	0.003-0.007	-	-
									1.299-1.575	<b>0.003-0.009</b>	0.003-0.009	0.003-0.009	-	-	<b>0.003-0.007</b>	0.003-0.007	0.003-0.007	-	-
									1.575-2.047	<b>0.004-0.009</b>	0.004-0.009	0.004-0.009	-	-	<b>0.004-0.007</b>	0.004-0.007	0.004-0.007	-	-
									2.047-2.559	<b>0.004-0.009</b>	0.004-0.009	0.004-0.009	-	-	<b>0.004-0.007</b>	0.004-0.007	0.004-0.007	-	-
	N1.3.C.AG	Aluminium based alloys AISI cast and aged alloys	90	H13A	820	1035	1150	0.591-0.709	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	
					4344	820	1035	1150	0.709-0.866	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-
									0.866-1.063	<b>0.002-0.007</b>	0.002-0.007	0.002-0.007	-	-	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-
									1.063-1.299	<b>0.003-0.008</b>	0.003-0.008	0.003-0.008	-	-	<b>0.003-0.007</b>	0.003-0.007	0.003-0.007	-	-
									1.299-1.575	<b>0.003-0.009</b>	0.003-0.009	0.003-0.009	-	-	<b>0.003-0.007</b>	0.003-0.007	0.003-0.007	-	-
									1.575-2.047	<b>0.004-0.009</b>	0.004-0.009	0.004-0.009	-	-	<b>0.004-0.007</b>	0.004-0.007	0.004-0.007	-	-
								2.047-2.559	<b>0.004-0.009</b>	0.004-0.009	0.004-0.009	-	-	<b>0.004-0.007</b>	0.004-0.007	0.004-0.007	-	-	
N3.3.U.UT	Copper based alloys Free cutting copper based	110	H13A	820	1140	1310	0.591-0.709	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-		
				4344	820	1140	1310	0.709-0.866	<b>0.002-0.007</b>	0.002-0.007	0.002-0.007	-	-	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	
								0.866-1.063	<b>0.002-0.008</b>	0.002-0.008	0.002-0.008	-	-	<b>0.002-0.007</b>	0.002-0.007	0.002-0.007	-	-	
								1.063-1.299	<b>0.003-0.009</b>	0.003-0.009	0.003-0.009	-	-	<b>0.003-0.007</b>	0.003-0.007	0.003-0.007	-	-	
								1.299-1.575	<b>0.003-0.01</b>	0.003-0.01	0.003-0.01	-	-	<b>0.003-0.008</b>	0.003-0.008	0.003-0.008	-	-	
								1.575-2.047	<b>0.004-0.01</b>	0.004-0.01	0.004-0.01	-	-	<b>0.004-0.008</b>	0.004-0.008	0.004-0.008	-	-	
								2.047-2.559	<b>0.004-0.01</b>	0.004-0.01	0.004-0.01	-	-	<b>0.004-0.008</b>	0.004-0.008	0.004-0.008	-	-	
N3.2.C.UT	Copper based alloys Leaded brass & bronzes (Pb)	90	H13A	590	715	785	0.591-0.709	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-		
				4344	590	715	785	0.709-0.866	<b>0.002-0.007</b>	0.002-0.007	0.002-0.007	-	-	<b>0.002-0.006</b>	0.002-0.006	0.002-0.006	-	-	
								0.866-1.063	<b>0.002-0.008</b>	0.002-0.008	0.002-0.008	-	-	<b>0.002-0.007</b>	0.002-0.007	0.002-0.007	-	-	
								1.063-1.299	<b>0.003-0.009</b>	0.003-0.009	0.003-0.009	-	-	<b>0.003-0.007</b>	0.003-0.007	0.003-0.007	-	-	
								1.299-1.575	<b>0.003-0.01</b>	0.003-0.01	0.003-0.01	-	-	<b>0.003-0.008</b>	0.003-0.008	0.003-0.008	-	-	
								1.575-2.047	<b>0.004-0.01</b>	0.004-0.01	0.004-0.01	-	-	<b>0.004-0.008</b>	0.004-0.008	0.004-0.008	-	-	
								2.047-2.559	<b>0.004-0.01</b>	0.004-0.01	0.004-0.01	-	-	<b>0.004-0.008</b>	0.004-0.008	0.004-0.008	-	-	







# CoroDrill® DS20

6-7xD

Inch values



ISO	MC No.	Material	HB	Grade	Cutting data recommendations				Drill diameter	Drill length 6xD					Drill length 7xD					
					6-7xD					-SSW	-L5W	-L6W	-M7W	-H5W	-SSW	-L5W	-L6W	-M7W	-H5W	
					Recommended start value at middle of feed range					Recommended start value at middle of feed range					Recommended start value at middle of feed range					
K	K1.1.C.NS	Malleable cast iron Low tensile strength	200	4324	460	615	725	0.591-0.709	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.004</b>	-		
				4334	360	495	590	0.709-0.866	-	0.003-0.005	0.003-0.005	<b>0.003-0.006</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-		
				4344	590	485	460	0.866-1.063	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-	-	0.003-0.005	0.003-0.005	<b>0.003-0.006</b>	-		
											-	0.004-0.006	0.004-0.006	<b>0.004-0.007</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-
											-	0.004-0.007	0.004-0.007	<b>0.004-0.008</b>	-	-	0.004-0.006	0.004-0.006	<b>0.004-0.007</b>	-
											-	0.005-0.007	0.005-0.007	<b>0.005-0.008</b>	-	-	0.005-0.006	0.005-0.006	<b>0.005-0.007</b>	-
	K2.1.C.UT	Grey cast iron Low tensile strength	180	4324	690	840	960	0.591-0.709	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.004</b>	-		
				4334	560	695	795	0.709-0.866	-	0.003-0.005	0.003-0.005	<b>0.003-0.006</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-		
				4344	425	525	605	0.866-1.063	-	0.003-0.005	0.003-0.005	<b>0.003-0.007</b>	-	-	0.003-0.005	0.003-0.005	<b>0.003-0.006</b>	-		
											-	0.004-0.006	0.004-0.006	<b>0.004-0.007</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-
											-	0.004-0.007	0.004-0.007	<b>0.004-0.008</b>	-	-	0.004-0.006	0.004-0.006	<b>0.004-0.007</b>	-
											-	0.005-0.007	0.005-0.007	<b>0.005-0.008</b>	-	-	0.005-0.006	0.005-0.006	<b>0.005-0.007</b>	-
	K2.2.C.UT	Grey cast iron High tensile strength	245	4324	410	600	725	0.591-0.709	-	0.003-0.003	0.003-0.003	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.004</b>	-		
				4334	330	475	575	0.709-0.866	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.005</b>	-		
				4344	245	365	440	0.866-1.063	-	0.003-0.005	0.003-0.005	<b>0.003-0.006</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-		
											-	0.004-0.006	0.004-0.006	<b>0.004-0.007</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-
											-	0.004-0.006	0.004-0.006	<b>0.004-0.008</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-
											-	0.005-0.006	0.005-0.006	<b>0.005-0.008</b>	-	-	0.005-0.005	0.005-0.005	<b>0.005-0.006</b>	-
	K3.1.C.UT	Nodular cast iron Ferritic	155	4324	410	565	665	0.591-0.709	-	0.003-0.003	0.003-0.003	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.004</b>	-		
				4334	330	460	545	0.709-0.866	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.005</b>	-		
				4344	260	360	430	0.866-1.063	-	0.003-0.005	0.003-0.005	<b>0.003-0.006</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-		
											-	0.004-0.006	0.004-0.006	<b>0.004-0.007</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-
											-	0.004-0.006	0.004-0.006	<b>0.004-0.008</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-
											-	0.005-0.006	0.005-0.006	<b>0.005-0.008</b>	-	-	0.005-0.005	0.005-0.005	<b>0.005-0.006</b>	-
K3.3.C.UT	Nodular cast iron Ferritic	265	4324	360	520	620	0.591-0.709	-	0.003-0.003	0.003-0.003	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.004</b>	-			
			4334	295	430	520	0.709-0.866	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.005</b>	-			
			4344	230	320	385	0.866-1.063	-	0.003-0.005	0.003-0.005	<b>0.003-0.006</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-			
										-	0.004-0.006	0.004-0.006	<b>0.004-0.007</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-	
										-	0.004-0.006	0.004-0.006	<b>0.004-0.008</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-	
										-	0.005-0.006	0.005-0.006	<b>0.005-0.008</b>	-	-	0.005-0.005	0.005-0.005	<b>0.005-0.006</b>	-	
K4.2.C.UT	Compacted graphite iron High tensile strength	230	4324	425	610	740	0.591-0.709	-	0.003-0.003	0.003-0.003	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.004</b>	-			
			4334	360	495	590	0.709-0.866	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-	-	0.003-0.003	0.003-0.003	<b>0.003-0.005</b>	-			
			4344	280	375	440	0.866-1.063	-	0.003-0.005	0.003-0.005	<b>0.003-0.006</b>	-	-	0.003-0.004	0.003-0.004	<b>0.003-0.005</b>	-			
										-	0.004-0.006	0.004-0.006	<b>0.004-0.007</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-	
										-	0.004-0.006	0.004-0.006	<b>0.004-0.008</b>	-	-	0.004-0.005	0.004-0.005	<b>0.004-0.006</b>	-	
										-	0.005-0.006	0.005-0.006	<b>0.005-0.008</b>	-	-	0.005-0.005	0.005-0.005	<b>0.005-0.006</b>	-	
H	H1.3.Z.HA Extra hard steel Hardened and tempered	60	4324	100	195	250	0.591-0.709	-	0.002-0.003	<b>0.002-0.003</b>	0.002-0.003	-	-	0.002-0.003	<b>0.002-0.003</b>	0.002-0.003	-			
			4334	100	195	250	0.709-0.866	-	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	-	0.002-0.003	<b>0.002-0.003</b>	0.002-0.003	-			
			4344	100	195	250	0.866-1.063	-	0.002-0.004	<b>0.002-0.004</b>	0.002-0.004	-	-	0.002-0.003	<b>0.002-0.003</b>	0.002-0.003	-			
										-	0.003-0.004	<b>0.003-0.004</b>	0.003-0.004	-	-	0.003-0.003	<b>0.003-0.003</b>	0.003-0.003	-	
										-	0.003-0.005	<b>0.003-0.005</b>	0.003-0.005	-	-	0.003-0.004	<b>0.003-0.004</b>	0.003-0.004	-	
										-	0.004-0.005	<b>0.004-0.005</b>	0.004-0.005	-	-	0.004-0.004	<b>0.004-0.004</b>	0.004-0.004	-	

## CoroDrill® DS20



6-7xD

Inch values

ISO	MC No.	Material	HB	Grade	Cutting data recommendations			Drill diameter	Drill length 6xD					Drill length 7xD				
					-SSW	-LSW	-L6W		-M7W	-H5W	-SSW	-LSW	-L6W	-M7W	-H5W			
					Recommended start value at middle of feed range					Recommended start value at middle of feed range								
N	N1.2.Z.AG	Aluminium based alloys AlSi alloys, Si ≤ 1%	100	H13A	985	1075	1180	0.591-0.709	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-	<b>0.002-0.003</b>	0.002-0.003	0.002-0.003	-	-
				4344	985	1075	1180	0.709-0.866	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-
					0.866-1.063	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-			
					1.063-1.299	<b>0.003-0.006</b>	0.003-0.006	0.003-0.006	-	-	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-			
					1.299-1.575	<b>0.003-0.006</b>	0.003-0.006	0.003-0.006	-	-	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-			
					1.575-2.047	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-			
		2.047-2.559	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-						
	N1.3.C.UT	Aluminium based alloys AlSi alloys, Si ≤ 1%	75	H13A	820	1025	1180	0.591-0.709	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-	<b>0.002-0.003</b>	0.002-0.003	0.002-0.003	-	-
				4344	820	1025	1180	0.709-0.866	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-	<b>0.002-0.003</b>	0.002-0.003	0.002-0.003	-	-
					0.866-1.063	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-			
					1.063-1.299	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-	<b>0.003-0.004</b>	0.003-0.004	0.003-0.004	-	-			
					1.299-1.575	<b>0.003-0.006</b>	0.003-0.006	0.003-0.006	-	-	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-			
					1.575-2.047	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-			
		2.047-2.559	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-						
	N1.3.C.AG	Aluminium based alloys AlSi cast and aged alloys	90	H13A	820	930	1035	0.591-0.709	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-	<b>0.002-0.003</b>	0.002-0.003	0.002-0.003	-	-
				4344	820	930	1035	0.709-0.866	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-	<b>0.002-0.003</b>	0.002-0.003	0.002-0.003	-	-
					0.866-1.063	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-			
					1.063-1.299	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-	<b>0.003-0.004</b>	0.003-0.004	0.003-0.004	-	-			
					1.299-1.575	<b>0.003-0.006</b>	0.003-0.006	0.003-0.006	-	-	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-			
					1.575-2.047	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-			
		2.047-2.559	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-						
	N3.3.U.UT	Copper based alloys Free cutting copper based	110	H13A	820	1025	1180	0.591-0.709	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-	<b>0.002-0.003</b>	0.002-0.003	0.002-0.003	-	-
				4344	820	1025	1180	0.709-0.866	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-
					0.866-1.063	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-			
				1.063-1.299	<b>0.003-0.006</b>	0.003-0.006	0.003-0.006	-	-	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-				
				1.299-1.575	<b>0.003-0.006</b>	0.003-0.006	0.003-0.006	-	-	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-				
				1.575-2.047	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-				
	2.047-2.559	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-							
N3.2.C.UT	Copper based alloys Leaded brass & bronzes (Pb)	90	H13A	590	645	705	0.591-0.709	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-	<b>0.002-0.003</b>	0.002-0.003	0.002-0.003	-	-	
			4344	590	645	705	0.709-0.866	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-	
				0.866-1.063	<b>0.002-0.005</b>	0.002-0.005	0.002-0.005	-	-	<b>0.002-0.004</b>	0.002-0.004	0.002-0.004	-	-				
				1.063-1.299	<b>0.003-0.006</b>	0.003-0.006	0.003-0.006	-	-	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-				
				1.299-1.575	<b>0.003-0.006</b>	0.003-0.006	0.003-0.006	-	-	<b>0.003-0.005</b>	0.003-0.005	0.003-0.005	-	-				
				1.575-2.047	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-				
	2.047-2.559	<b>0.004-0.006</b>	0.004-0.006	0.004-0.006	-	-	<b>0.004-0.005</b>	0.004-0.005	0.004-0.005	-	-							

Feed at hole entry should be 75% of recommended feed rate. Feed at hole exit, use 0.05 mm/rev.

# CoroDrill® 860-GM



## Metric values

ISO	Mc No.	Material	Hardness Brinell	Cutting speed, vc (m/min)
			HB	(min-start-max)
P	P1.1.Z.AN	<b>Unalloyed steel</b> C = 0.05-0.10%	125	120-145-170
	P1.1.Z.AN		125	120-145-170
	P1.2.Z.AN		150	100-125-150
	P1.3.Z.AN		170	100-125-150
	P1.3.Z.AN	<b>High carbon steel</b> Carbon tool steel	210	100-125-150
	P2.1.Z.AN	<b>Low alloy steel</b> Non hardened	175	100-125-150
	P2.5.Z.HT.1		275	80-100-120
	P2.5.Z.HT.2		350	60-80-100
	P3.0.Z.AN	<b>High alloy steel</b> Annealed	200	64-77-90
	P3.0.Z.HT.1		300	64-77-90
P1.5.C.UT	<b>Steel castings</b> Unalloyed steel	150	64-77-90	
P2.6.C.UT		200	64-77-90	
P2.6.C.UT	Low alloyed (alloying elements < 5%)	200	64-77-90	

## Inch values

ISO	Mc No.	Material	Hardness Brinell	Cutting speed (V <sub>c</sub> ) ft/min
			HB	(min-start-max)
P	P1.1.Z.AN	<b>Unalloyed steel</b> C = 0.05-0.10%	125	393 - 475 - 557
	P1.1.Z.AN		125	393 - 475 - 557
	P1.2.Z.AN		150	328 - 410 - 492
	P1.3.Z.AN		170	328 - 410 - 492
	P1.3.Z.AN	<b>High carbon steel</b> Carbon tool steel	210	328 - 410 - 492
	P2.1.Z.AN	<b>Low alloy steel</b> Non hardened	175	328 - 410 - 492
	P2.5.Z.HT.1		275	262 - 328 - 393
	P2.5.Z.HT.2		350	196 - 262 - 328
	P3.0.Z.AN	<b>High alloy steel</b> Annealed	200	209 - 252 - 295
	P3.0.Z.HT.1		300	209 - 252 - 295
P1.5.C.UT	<b>Steel castings</b> Unalloyed steel	150	209 - 252 - 295	
P2.6.C.UT		200	209 - 252 - 295	
P2.6.C.UT	Low alloyed (alloying elements < 5%)	200	209 - 252 - 295	

## Metric values

ISO	Mc No.	Material	Hardness Brinell	Cutting speed, vc (m/min)	
			HB	(min-start-max)	
M	M1.0.Z.AQ	<b>Stainless steel</b> Austenitic	200	30-38-46	
	M2.0.Z.AQ		200	28-36-44	
	M3.1.Z.AQ		230	28-35-42	
	M3.2.Z.AQ		260	26-31-35	
	M1.0.C.UT		200	28-36-44	
	M2.0.C.AQ		200	28-36-44	
	M3.1.C.AQ		230	24-30-36	
	M2.0.C.AQ		Super austenitic Ni>20%	200	28-36-44
	M3.1.C.AQ		Ferritic	230	24-30-36

## Inch values

ISO	Mc No.	Material	Hardness Brinell	Cutting speed (V <sub>c</sub> ) ft/min	
			HB	(min-start-max)	
M	M1.0.Z.AQ	<b>Stainless steel</b> Austenitic	200	98-125-151	
	M2.0.Z.AQ		200	92-118-144	
	M3.1.Z.AQ		230	92-115-138	
	M3.2.Z.AQ		260	85-102-115	
	M1.0.C.UT		200	92-118-144	
	M2.0.C.AQ		200	92-118-144	
	M3.1.C.AQ		230	79-98-118	
	M2.0.C.AQ		Super austenitic Ni>20%	200	92-118-144
	M3.1.C.AQ		Ferritic	230	79-98-118

## CoroDrill® 860-GM



## Metric values

Drill diameter, mm							
3	4	6	8	10	12	16	20
Feed ( $f_n$ ) mm/r (min-start-max)							
0.06-0.10-0.14	0.10-0.16-0.22	0.15-0.20-0.25	0.16-0.22-0.28	0.20-0.25-0.30	0.20-0.26-0.34	0.24-0.30-0.38	0.26-0.34-0.40
0.06-0.10-0.14	0.10-0.16-0.22	0.15-0.20-0.25	0.16-0.22-0.28	0.20-0.25-0.30	0.20-0.26-0.34	0.24-0.30-0.38	0.26-0.34-0.40
0.06-0.10-0.14	0.10-0.16-0.22	0.15-0.20-0.25	0.16-0.22-0.28	0.20-0.25-0.30	0.20-0.26-0.34	0.24-0.30-0.38	0.26-0.34-0.40
0.06-0.10-0.14	0.10-0.16-0.22	0.15-0.20-0.25	0.16-0.22-0.28	0.20-0.25-0.30	0.20-0.26-0.34	0.24-0.30-0.38	0.26-0.34-0.40
0.06-0.10-0.14	0.10-0.16-0.22	0.15-0.20-0.25	0.16-0.22-0.28	0.20-0.25-0.30	0.20-0.26-0.34	0.24-0.30-0.38	0.26-0.34-0.40
0.06-0.09-0.12	0.08-0.11-0.14	0.10-0.14-0.18	0.12-0.17-0.23	0.14-0.21-0.28	0.17-0.24-0.31	0.20-0.27-0.34	0.23-0.30-0.37
0.06-0.09-0.12	0.08-0.11-0.14	0.10-0.14-0.18	0.12-0.17-0.23	0.14-0.21-0.28	0.17-0.24-0.31	0.20-0.27-0.34	0.23-0.30-0.37
0.06-0.10-0.14	0.10-0.16-0.22	0.15-0.20-0.25	0.16-0.22-0.28	0.20-0.25-0.30	0.20-0.26-0.34	0.24-0.30-0.38	0.26-0.34-0.40
0.06-0.09-0.12	0.08-0.11-0.14	0.10-0.14-0.18	0.12-0.17-0.23	0.14-0.21-0.28	0.17-0.24-0.31	0.20-0.27-0.34	0.23-0.30-0.37
0.06-0.10-0.14	0.10-0.16-0.22	0.15-0.20-0.25	0.16-0.22-0.28	0.20-0.25-0.30	0.20-0.26-0.34	0.24-0.30-0.38	0.26-0.34-0.40
0.06-0.10-0.14	0.10-0.16-0.22	0.15-0.20-0.25	0.16-0.22-0.28	0.20-0.25-0.30	0.20-0.26-0.34	0.24-0.30-0.38	0.26-0.34-0.40

## Inch values

Drill diameter, inch							
0.1181	0.1575	0.2362	0.315	0.3937	0.4724	0.6299	0.7874
Feed ( $f_n$ ) inch/r (min-start-max)							
.0023-.0039-.0055	.0039-.0062-.0086	.0059-.0078-.0098	.0062-.0086-.0110	.0078-.0098-.0118	.0078-.0102-.0133	.0094-.0118-.0149	.0090-.0118-.0145
.0023-.0039-.0055	.0039-.0062-.0086	.0059-.0078-.0098	.0062-.0086-.0110	.0078-.0098-.0118	.0078-.0102-.0133	.0094-.0118-.0149	.0090-.0118-.0145
.0023-.0039-.0055	.0039-.0062-.0086	.0059-.0078-.0098	.0062-.0086-.0110	.0078-.0098-.0118	.0078-.0102-.0133	.0094-.0118-.0149	.0090-.0118-.0145
.0023-.0039-.0055	.0039-.0062-.0086	.0059-.0078-.0098	.0062-.0086-.0110	.0078-.0098-.0118	.0078-.0102-.0133	.0094-.0118-.0149	.0090-.0118-.0145
.0023-.0039-.0055	.0039-.0062-.0086	.0059-.0078-.0098	.0062-.0086-.0110	.0078-.0098-.0118	.0078-.0102-.0133	.0094-.0118-.0149	.0090-.0118-.0145
.0023-.0035-.0047	.0031-.0043-.0055	.0039-.0055-.0070	.0047-.0066-.0090	.0055-.0082-.0110	.0066-.0094-.0122	.0078-.0106-.0133	.0090-.0118-.0145
.0023-.0035-.0047	.0031-.0043-.0055	.0039-.0055-.0070	.0047-.0066-.0090	.0055-.0082-.0110	.0066-.0094-.0122	.0078-.0106-.0133	.0090-.0118-.0145
.0023-.0039-.0055	.0039-.0062-.0086	.0059-.0078-.0098	.0062-.0086-.0110	.0078-.0098-.0118	.0078-.0102-.0133	.0094-.0118-.0149	.0102-.0133-.0157
.0023-.0035-.0047	.0031-.0043-.0055	.0039-.0055-.0070	.0047-.0066-.0090	.0055-.0082-.0110	.0066-.0094-.0122	.0078-.0106-.0133	.0090-.0118-.0145
.0023-.0039-.0055	.0039-.0062-.0086	.0059-.0078-.0098	.0062-.0086-.0110	.0078-.0098-.0118	.0078-.0102-.0133	.0094-.0118-.0149	.0102-.0133-.0157
.0023-.0039-.0055	.0039-.0062-.0086	.0059-.0078-.0098	.0062-.0086-.0110	.0078-.0098-.0118	.0078-.0102-.0133	.0094-.0118-.0149	.0102-.0133-.0157

## Metric values

Drill diameter, mm							
3	4	6	8	10	12	16	20
Feed ( $f_n$ ) mm/r (min-start-max)							
0.08-0.10-0.12	0.10-0.12-0.14	0.11-0.15-0.17	0.18-0.20-0.22	0.24-0.28-0.32	0.24-0.28-0.32	0.28-0.32-0.36	0.30-0.34-0.38
0.08-0.10-0.12	0.10-0.12-0.14	0.13-0.15-0.17	0.18-0.20-0.22	0.24-0.28-0.32	0.24-0.28-0.32	0.28-0.32-0.36	0.30-0.34-0.38
0.06-0.07-0.09	0.06-0.08-0.10	0.09-0.11-0.13	0.11-0.14-0.17	0.14-0.17-0.20	0.16-0.20-0.24	0.21-0.23-0.25	0.22-0.24-0.26
0.06-0.07-0.09	0.06-0.08-0.10	0.09-0.11-0.13	0.11-0.14-0.17	0.14-0.17-0.20	0.16-0.20-0.24	0.21-0.23-0.25	0.22-0.24-0.26
0.08-0.10-0.12	0.10-0.12-0.14	0.13-0.15-0.17	0.18-0.20-0.22	0.24-0.28-0.32	0.24-0.28-0.32	0.28-0.32-0.36	0.30-0.34-0.38
0.08-0.10-0.12	0.10-0.12-0.14	0.13-0.15-0.17	0.18-0.20-0.22	0.24-0.28-0.32	0.24-0.28-0.32	0.28-0.32-0.36	0.30-0.34-0.38
0.05-0.07-0.09	0.06-0.08-0.10	0.09-0.11-0.13	0.11-0.14-0.17	0.14-0.17-0.20	0.16-0.20-0.24	0.21-0.23-0.25	0.22-0.24-0.26

## Inch values

Drill diameter, inch							
0.1181	0.1575	0.2362	0.315	0.3937	0.4724	0.6299	0.7874
Feed $f_n$ inch/r (min-start-max)							
.0031-.0039-.0047	.0039-.0047-.0055	.0043-.0059-.0067	.0071-.0079-.0087	.0094-.0110-.0126	.0094-.0110-.0126	.0110-.0126-.0142	.0118-.0134-.0150
.0031-.0039-.0047	.0039-.0047-.0055	.0051-.0059-.0067	.0071-.0079-.0087	.0094-.0110-.0126	.0094-.0110-.0126	.0110-.0126-.0142	.0118-.0134-.0150
.0024-.0028-.0035	.0024-.0031-.0039	.0035-.0043-.0051	.0043-.0055-.0067	.0055-.0067-.0079	.0063-.0079-.0094	.0083-.0091-.0098	.0087-.0094-.0102
.0024-.0028-.0035	.0024-.0031-.0039	.0035-.0043-.0051	.0043-.0055-.0067	.0055-.0067-.0079	.0063-.0079-.0094	.0083-.0091-.0098	.0087-.0094-.0102
.0031-.0039-.0047	.0039-.0047-.0055	.0051-.0059-.0067	.0071-.0079-.0087	.0094-.0110-.0126	.0094-.0110-.0126	.0110-.0126-.0142	.0118-.0134-.0150
.0031-.0039-.0047	.0039-.0047-.0055	.0051-.0059-.0067	.0071-.0079-.0087	.0094-.0110-.0126	.0094-.0110-.0126	.0110-.0126-.0142	.0118-.0134-.0150
.0020-.0028-.0035	.0024-.0031-.0039	.0035-.0043-.0051	.0043-.0055-.0067	.0055-.0067-.0079	.0063-.0079-.0094	.0083-.0091-.0098	.0087-.0094-.0102

# CoroDrill® 860-GM



## Metric values

ISO	MC No.	Material	Hardness Brinell HB	Cutting speed, vc (m/min)
K	K1.1.C.NS	<b>Malleable iron</b>	200	(min-start-max) 80-100-120
		Ferritic Pearlitic		
	K2.1.C.UT K2.2.C.UT K2.3.C.UT	<b>Grey cast iron</b>	180 245 175	100-120-140 80-100-120 100-120-140
		Low tensile strength		
		High tensile strength		
	K3.1.C.UT K3.2.C.UT K3.3.C.UT K3.5.C.UT K5.1.C.UT	<b>Nodular cast iron</b>	155 215 265 190 300	100-120-140 80-100-120 100-120-140 100-120-140 60-80-100
		Ferritic		
		Perlitic		
		Perlitic		
		Perlitic ADI		

## Inch values

ISO	MC No.	Material	Hardness Brinell HB	Cutting speed (V <sub>c</sub> ) ft/min
K	K1.1.C.NS	<b>Malleable iron</b>	200	(min-start-max) 262-328-393
		Ferritic Pearlitic		
	K2.1.C.UT K2.2.C.UT K2.3.C.UT	<b>Grey cast iron</b>	180 245 175	328-393-459 262-328-393 328-393-459
		Low tensile strength		
		High tensile strength		
	K3.1.C.UT K3.2.C.UT K3.3.C.UT K3.5.C.UT K5.1.C.UT	<b>Nodular cast iron</b>	155 215 265 190 300	328-393-459 262-328-393 328-393-459 328-393-459 196-262-328
		Ferritic		
		Perlitic		
		Perlitic		
		Perlitic ADI		

## Metric values

ISO	MC No.	Material	Hardness Brinell HB	Cutting speed, vc (m/min)
S	S2.0.Z.AN S2.0.Z.AG S2.0.C.NS	<b>Heat resistant super alloys – Nickel base</b>	250 350 320	(min-start-max) 15-20-25 10-15-20 10-15-20
		Annealed or solution treated		
		Aged or solution treated and aged		
	S4.1.Z.UT S4.2.Z.AN S4.3.Z.AG	<b>Titanium alloys</b>	200 180 245	40-50-60 40-50-60 30-40-50
		Austenitic		
		Annealed Alloys in aged condition		

## Inch values

ISO	MC No.	Material	Hardness Brinell HB	Cutting speed (V <sub>c</sub> ) ft/min
S	S2.0.Z.AN S2.0.Z.AG S2.0.C.NS	<b>Heat resistant super alloys – Nickel base</b>	250 350 320	(min-start-max) 49-65-82 32-49-65 32-49-65
		Annealed or solution treated		
		Aged or solution treated and aged		
	S4.1.Z.UT S4.2.Z.AN S4.3.Z.AG	<b>Titanium alloys</b>	200 180 245	131-164-196 131-164-196 98-131-164
		Austenitic		
		Annealed Alloys in aged condition		

## CoroDrill® 860-GM



## Metric values

Drill diameter, mm							
3	4	6	8	10	12	16	20
Feed ( $f_n$ ) mm/r (min-start-max)							
0.08-0.10-0.12	0.10-0.12-0.14	0.12-0.16-0.18	0.16-0.20-0.24	0.20-0.25-0.30	0.22-0.28-0.33	0.25-0.32-0.38	0.27-0.34-0.40
0.10-0.15-0.20	0.14-0.18-0.23	0.16-0.22-0.27	0.20-0.26-0.312	0.26-0.33-0.40	0.30-0.38-0.45	0.34-0.43-0.51	0.36-0.45-0.54
0.08-0.10-0.12	0.10-0.12-0.14	0.12-0.16-0.18	0.16-0.20-0.24	0.20-0.25-0.30	0.22-0.28-0.33	0.25-0.32-0.38	0.27-0.34-0.40
0.10-0.15-0.20	0.14-0.18-0.23	0.16-0.22-0.27	0.20-0.26-0.31	0.26-0.33-0.40	0.30-0.38-0.45	0.34-0.43-0.51	0.36-0.45-0.54
0.10-0.13-0.15	0.12-0.15-0.18	0.16-0.20-0.24	0.20-0.26-0.31	0.26-0.33-0.40	0.30-0.38-0.45	0.34-0.43-0.51	0.36-0.45-0.54
0.08-0.12-0.16	0.12-0.15-0.18	0.14-0.18-0.20	0.18-0.23-0.28	0.20-0.27-0.34	0.24-0.30-0.36	0.25-0.32-0.38	0.27-0.34-0.40
0.08-0.12-0.16	0.12-0.15-0.18	0.14-0.18-0.20	0.18-0.23-0.28	0.20-0.27-0.34	0.24-0.30-0.36	0.25-0.32-0.38	0.27-0.34-0.40
0.10-0.13-0.15	0.12-0.15-0.18	0.16-0.20-0.24	0.20-0.26-0.31	0.26-0.33-0.40	0.30-0.38-0.45	0.34-0.43-0.51	0.36-0.45-0.54
0.08-0.12-0.16	0.12-0.15-0.18	0.14-0.18-0.20	0.18-0.23-0.28	0.20-0.27-0.34	0.24-0.30-0.36	0.25-0.32-0.38	0.27-0.34-0.40

## Inch values

Drill diameter, inch							
0.1181	0.1575	0.2362	0.315	0.3937	0.4724	0.6299	0.7874
Feed ( $f_n$ ) inch/r (min-start-max)							
.0031-.0039-.0047	.0039-.0047-.0055	.0047-.0062-.0071	.0062-.0078-.0094	.0078-.0098-.0118	.0086-.0110-.0129	.0098-.0125-.0149	.0160-.0133-.0157
.0039-.0059-.0078	.0055-.0070-.0090	.0062-.0086-.0106	.0078-.0102-.0122	.0102-.0129-.0157	.0118-.0149-.0177	.0133-.0169-.0200	.0141-.0177-.0213
.0031-.0039-.0047	.0039-.0047-.0055	.0047-.0062-.0071	.0062-.0078-.0094	.0078-.0098-.0118	.0086-.0110-.0129	.0098-.0125-.0149	.0160-.0133-.0157
.0039-.0059-.0078	.0055-.0070-.0090	.0062-.0086-.0106	.0078-.0102-.0122	.0102-.0129-.0157	.0118-.0149-.0177	.0133-.0169-.0200	.0141-.0177-.0213
.0039-.0051-.0059	.0047-.0059-.0070	.0062-.0078-.0094	.0078-.0102-.0122	.0102-.0129-.0157	.0118-.0149-.0177	.0133-.0169-.0200	.0141-.0177-.0213
.0031-.0047-.0062	.0047-.0059-.0070	.0055-.0070-.0078	.0070-.0090-.0110	.0078-.0106-.0133	.0094-.0128-.0141	.0098-.0125-.0149	.0160-.0133-.0157
.0039-.0051-.0059	.0047-.0059-.0070	.0062-.0078-.0094	.0078-.0102-.0122	.0102-.0129-.0157	.0118-.0149-.0177	.0133-.0169-.0200	.0141-.0177-.0213
.0031-.0047-.0062	.0047-.0059-.0070	.0055-.0070-.0078	.0070-.0090-.0110	.0078-.0106-.0133	.0094-.0128-.0141	.0098-.0125-.0149	.0160-.0133-.0157

## Metric values

Drill diameter, mm							
3	4	6	8	10	12	16	20
Feed ( $f_n$ ) mm/r (min-start-max)							
0.06-0.08-0.10	0.06-0.08-0.10	0.06-0.08-0.10	0.08-0.10-0.12	0.08-0.10-0.12	0.10-0.12-0.15	0.10-0.12-0.15	0.10-0.12-0.15
0.06-0.08-0.10	0.06-0.08-0.10	0.06-0.08-0.10	0.08-0.10-0.12	0.08-0.10-0.12	0.10-0.12-0.15	0.10-0.12-0.15	0.10-0.12-0.15
0.06-0.08-0.10	0.06-0.08-0.10	0.06-0.08-0.10	0.08-0.10-0.12	0.08-0.10-0.12	0.10-0.12-0.15	0.10-0.12-0.15	0.10-0.12-0.15
0.06-0.08-0.12	0.06-0.08-0.12	0.06-0.08-0.12	0.08-0.12-0.16	0.10-0.14-0.16	0.12-0.16-0.20	0.16-0.20-0.24	0.20-0.25-0.30
0.06-0.08-0.12	0.06-0.08-0.12	0.06-0.08-0.12	0.08-0.12-0.16	0.10-0.14-0.16	0.12-0.16-0.20	0.16-0.20-0.24	0.20-0.25-0.30
0.06-0.08-0.12	0.06-0.08-0.12	0.06-0.08-0.12	0.08-0.12-0.16	0.10-0.14-0.16	0.12-0.16-0.20	0.16-0.20-0.24	0.20-0.25-0.30

## Inch values

Drill diameter, inch							
0.1181	0.1575	0.2362	0.315	0.3937	0.4724	0.6299	0.7874
Feed ( $f_n$ ) inch/r (min-start-max)							
.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0039-.0047	.0039-.0047-.0059	.0039-.0047-.0059	.0039-.0047-.0059
.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0039-.0047	.0039-.0047-.0059	.0039-.0047-.0059	.0039-.0047-.0059
.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0039-.0047	.0039-.0047-.0059	.0039-.0047-.0059	.0039-.0047-.0059
.0023-.0031-.0051	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0047-.0062	.0039-.0055-.0062	.0047-.0062-.0078	.0062-.0078-.0094	.0078-.0098-.0118
.0023-.0031-.0051	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0047-.0062	.0039-.0055-.0062	.0047-.0062-.0078	.0062-.0078-.0094	.0078-.0098-.0118
.0023-.0031-.0051	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0047-.0062	.0039-.0055-.0062	.0047-.0062-.0078	.0062-.0078-.0094	.0078-.0098-.0118



# CoroDrill® 860-GM



## Metric values

ISO	MC No.	Material	Hardness Brinell HB	Cutting speed, vc (m/min)
N	N1.2.Z.UT	<b>Aluminium based alloys</b> Commercial pure	60	(min-start-max) 170-225-280
	N1.2.Z.AG	<b>AlSi alloys, Si ≤ 1%</b>	100	170-225-280
	N1.3.C.UT	Cast, non-aging	75	170-225-280
	N1.3.C.AG	Cast or cast and aged	90	160-200-240
	N1.4.C.NS	AlSi cast alloys, Si ≥ 13%	130	120-150-180
	N3.3.U.UT	<b>Copper based alloys</b> Free cutting alloys (Pb > 1%)	110	110-140-170
	N3.1.U.UT	Non-lead copper alloys (incl. electrolytic copper)	100	100-125-150

## Inch values

ISO	MC No.	Material	Hardness Brinell HB	Cutting speed (Vc) ft/min
N	N1.2.Z.UT	<b>Aluminium based alloys</b> Commercial pure	60	(min-start-max) 557-738-918
	N1.2.Z.AG	<b>AlSi alloys, Si ≤ 1%</b>	100	557-738-918
	N1.3.C.UT	Cast, non-aging	75	557-738-918
	N1.3.C.AG	Cast or cast and aged	90	524-656-787
	N1.4.C.NS	AlSi cast alloys, Si ≥ 13%	130	393-492-590
	N3.3.U.UT	<b>Copper based alloys</b> Free cutting alloys (Pb > 1%)	110	360-459-557
	N3.1.U.UT	Non-lead copper alloys (incl. electrolytic copper)	100	328-410-492

## Metric values

ISO	MC No.	Material	Hardness Brinell HB	Cutting speed, vc (m/min)
H	H1.3.Z.HA	<b>Extra hard steel</b> Hardened and tempered	47-60 HRC	(min-start-max) 15-20-25
	H1.3.Z.HA		47-60 HRC	15-20-25
	H1.1.Z.HA	Hardened and tempered	50 HRC	15-20-25
	H2.0.C.UT.4	Chilled cast iron	64HRC	12-15-18

## Inch values

ISO	MC No.	Material	Hardness Brinell HB	Cutting speed (Vc) ft/min
H	H1.3.Z.HA	<b>Extra hard steel</b> Hardened and tempered	47-60 HRC	(min-start-max) 49-65-82
	H1.3.Z.HA		47-60 HRC	49-65-82
	H1.1.Z.HA	Hardened and tempered	50 HRC	49-65-82
	H2.0.C.UT.4	Chilled cast iron	64HRC	39-49-59

## CoroDrill® 860-GM



## Metric values

Drill diameter, mm							
3	4	6	8	10	12	16	20
Feed ( $f_n$ ) mm/r (min-start-max)							
0.10-0.13-0.15	0.12-0.15-0.18	0.16-0.20-0.24	0.20-0.26-0.30	0.26-0.33-0.39	0.22-0.28-0.33	0.25-0.32-0.38	0.27-0.34-0.40
0.10-0.13-0.15	0.12-0.15-0.18	0.16-0.20-0.24	0.20-0.26-0.30	0.26-0.33-0.39	0.22-0.28-0.33	0.25-0.32-0.38	0.27-0.34-0.40
0.10-0.13-0.15	0.12-0.15-0.18	0.16-0.20-0.24	0.20-0.26-0.31	0.26-0.33-0.40	0.30-0.38-0.45	0.34-0.43-0.51	0.36-0.45-0.54
0.08-0.10-0.12	0.10-0.12-0.14	0.12-0.16-0.18	0.16-0.20-0.24	0.20-0.25-0.30	0.22-0.28-0.33	0.25-0.32-0.38	0.27-0.34-0.40
0.10-0.13-0.15	0.10-0.12-0.14	0.16-0.20-0.24	0.20-0.26-0.31	0.26-0.33-0.40	0.30-0.38-0.45	0.34-0.43-0.51	0.36-0.45-0.54
0.10-0.13-0.15	0.12-0.15-0.18	0.16-0.20-0.24	0.20-0.26-0.31	0.26-0.33-0.40	0.30-0.38-0.45	0.34-0.43-0.51	0.36-0.45-0.54
0.08-0.10-0.12	0.10-0.12-0.14	0.12-0.16-0.18	0.16-0.20-0.24	0.20-0.25-0.30	0.22-0.28-0.33	0.25-0.32-0.38	0.27-0.34-0.40

## Inch values

Drill diameter, inch							
0.1181	0.1575	0.2362	0.315	0.3937	0.4724	0.6299	0.7874
Feed ( $f_n$ ) inch/r (min-start-max)							
.0039-.0051-.0060	.0047-.0059-.0070	.0062-.0078-.0094	.0078-.0102-.0122	.0102-.0129-.0153	.0086-.0110-.0129	.0098-.0125-.0149	.0106-.0133-.0157
.0039-.0051-.0060	.0047-.0059-.0070	.0062-.0078-.0094	.0078-.0102-.0122	.0102-.0129-.0153	.0086-.0110-.0129	.0098-.0125-.0149	.0106-.0133-.0157
.0039-.0051-.0060	.0047-.0059-.0070	.0062-.0078-.0094	.0078-.0102-.0122	.0102-.0129-.0167	.0118-.0149-.0178	.0134-.0169-.0201	.0141-.0177-.0212
.0031-.0039-.0048	.0039-.0047-.0055	.0047-.0062-.0070	.0062-.0078-.0094	.0078-.0098-.0118	.0086-.0110-.0129	.0098-.0125-.0149	.0106-.0133-.0157
.0039-.0051-.0060	.0047-.0059-.0070	.0062-.0078-.0094	.0078-.0102-.0122	.0102-.0129-.0167	.0118-.0149-.0178	.0134-.0169-.0201	.0141-.0177-.0212
.0039-.0051-.0060	.0047-.0059-.0070	.0062-.0078-.0094	.0078-.0102-.0122	.0102-.0129-.0167	.0118-.0149-.0178	.0134-.0169-.0201	.0141-.0177-.0212
.0031-.0039-.0048	.0039-.0047-.0055	.0047-.0062-.0070	.0062-.0078-.0094	.0078-.0098-.0118	.0086-.0110-.0129	.0098-.0125-.0149	.0106-.0133-.0157

## Metric values

Drill diameter, mm							
3	4	6	8	10	12	16	20
Feed ( $f_n$ ) mm/r (min-start-max)							
0.06-0.08-0.10	0.06-0.08-0.10	0.06-0.08-0.10	0.08-0.10-0.12	0.10-0.12-0.15	0.12-0.15-0.18	0.12-0.15-0.18	0.12-0.15-0.18
0.06-0.08-0.10	0.06-0.08-0.10	0.06-0.08-0.10	0.08-0.10-0.12	0.10-0.11-0.13	0.10-0.11-0.13	0.12-0.13-0.15	0.12-0.13-0.15
0.06-0.08-0.10	0.06-0.08-0.10	0.06-0.08-0.10	0.08-0.10-0.12	0.10-0.12-0.15	0.12-0.15-0.18	0.12-0.15-0.18	0.12-0.15-0.18
0.06-0.08-0.10	0.06-0.08-0.10	0.06-0.08-0.10	0.08-0.10-0.12	0.10-0.11-0.13	0.10-0.11-0.13	0.12-0.13-0.15	0.12-0.13-0.15

## Inch values

Drill diameter, inch							
0.1181	0.1575	0.2362	0.315	0.3937	0.4724	0.6299	0.7874
Feed ( $f_n$ ) inch/r (min-start-max)							
.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0039-.0047	.0039-.0047-.0059	.0047-.0059-.0070	.0047-.0059-.0070	.0047-.0059-.0070
.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0039-.0047	.0039-.0043-.0051	.0039-.0043-.0051	.0047-.0051-.0059	.0047-.0051-.0059
.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0039-.0047	.0039-.0047-.0059	.0047-.0059-.0070	.0047-.0059-.0070	.0047-.0059-.0070
.0023-.0031-.0039	.0023-.0031-.0039	.0023-.0031-.0039	.0031-.0039-.0047	.0039-.0043-.0051	.0039-.0043-.0051	.0047-.0051-.0059	.0047-.0051-.0059



B

**Rough boring**

CoroBore® BR30 75

**Fine boring**

CoroBore® 826 XL 76-81

For complete assortment, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

C

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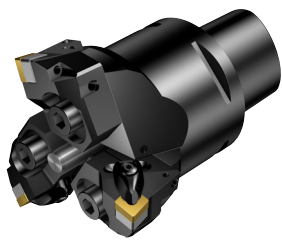
# CoroBore® BR30 three-edge rough boring tool

Coromant Capto® - Internal coolant supply

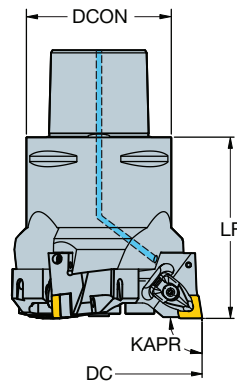


KAPR

90°



- CNMM
- CNMG
- CNMA, CNGA



							Dimensions, mm, inch						
DCN	DCX			CZC <sub>MS</sub>	CNSC	Ordering code	DCON <sub>MS</sub>	ADJL <sub>RDL</sub>	LF			CICT	MIID
106.00	122.00	12	1/2	C8	3	BR30-122CN12F-C8	80.00	8.00	100.00	70	4.190	3	CNMG 12 04 08
4.173	4.803						3.150	.315	3.937	1015			
121.00	137.00	12	1/2	C8	3	BR30-137CN12F-C8	80.00	8.00	100.00	70	4.340	3	CNMG 12 04 08
4.764	5.394						3.150	.315	3.937	1015			
136.00	152.00	12	1/2	C8	3	BR30-152CN12F-C8	80.00	8.00	100.00	70	4.820	3	CNMG 12 04 08
5.354	5.984						3.150	.315	3.937	1015			
151.00	167.00	12	1/2	C8	3	BR30-167CN12F-C8	80.00	8.00	100.00	70	4.970	3	CNMG 12 04 08
5.945	6.575						3.150	.315	3.937	1015			

For boring tool components, accessories and spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

For inserts, see Turning tools catalogue

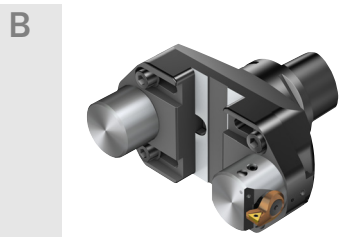


# CoroBore® 826 XL fine boring tool

Coromant Capto® - High precision coolant supply

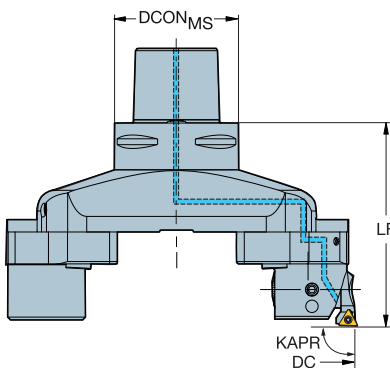
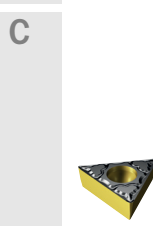
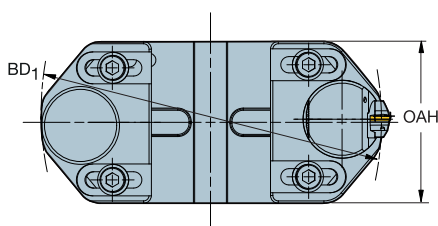
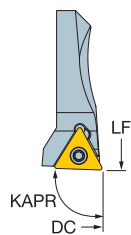


ENG



KAPR  
STDNO

92°  
ISO26623-1



- D
- TCMT, TCMX, TCGT, TCGX, TCEX
  - TCMW

						Dimensions, mm, inch										
DCN	DCX			CZC <sub>MS</sub>	CNSC	Ordering code	DCON <sub>MS</sub>	ADJLX <sub>RDL</sub>	LF	OAH	BD <sub>1</sub>			CICT	MIID	
154.35	207.65	11	1/4	C6	3	826-207TC11-C6HP	63.00	26.65	125.00	104.00	145.00	70	3.560	1	TCMT 11 03 04	
6.077	8.175						2.480	1.049	4.921	4.094	5.709	1015				
154.35	207.65	11	1/4	C8	3	826-207TC11-C8HP	80.00	26.65	137.00	104.00	145.00	70	6.430	1	TCMT 11 03 04	
6.077	8.175						3.150	1.049	5.394	4.094	5.709	1015				
204.35	257.65	11	1/4	C6	3	826-257TC11-C6HP	63.00	26.65	125.00	104.00	195.00	70	3.880	1	TCMT 11 03 04	
8.045	10.144						2.480	1.049	4.921	4.094	7.677	1015				
204.35	257.65	11	1/4	C8	3	826-257TC11-C8HP	80.00	26.65	137.00	104.00	195.00	70	7.630	1	TCMT 11 03 04	
8.045	10.144						3.150	1.049	5.394	4.094	7.677	1015				
254.35	307.65	11	1/4	C6	3	826-307TC11-C6HP	63.00	26.65	125.00	104.00	245.00	70	4.240	1	TCMT 11 03 04	
10.014	12.112						2.480	1.049	4.921	4.094	9.646	1015				
254.35	307.65	11	1/4	C8	3	826-307TC11-C8HP	80.00	26.65	137.00	104.00	245.00	70	8.720	1	TCMT 11 03 04	
10.014	12.112						3.150	1.049	5.394	4.094	9.646	1015				

Diameters are valid when frontboring.

Backboring is not recommended with CoroBore® 826

For boring tool components, accessories and spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

For inserts, see Turning tools catalogue

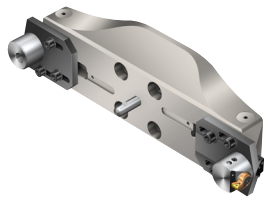
G

H



# CoroBore® 826 XL fine boring tool

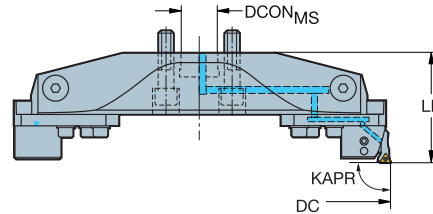
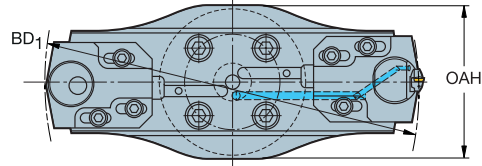
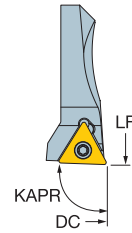
Arbor - High precision coolant supply



- TCMT, TCMX, TCGT, TCGX
- TCEX
- TCMW

KAPR

92°



Dimensions, mm, inch

DCN	DCX			CZC <sub>MS</sub>	CNSC	Ordering code	DCON <sub>MS</sub>	ADJLX <sub>RDL</sub>	LF	OAH	BD <sub>1</sub>			CICT	MIID
304.35	387.65	11	1/4	40X	1	826-387TC11HP	40.00	41.65	121.00	164.00	295.00	70	8.870	1	TCMT 11 03 04
11.982	15.262						1.575	1.640	4.764	6.457	11.614	1015			
384.35	467.65	11	1/4	40X	1	826-467TC11HP	40.00	41.65	126.00	164.00	375.00	70	10.400	1	TCMT 11 03 04
15.132	18.411						1.575	1.640	4.961	6.457	14.764	1015			
464.35	547.65	11	1/4	40X	1	826-547TC11HP	40.00	41.65	131.00	164.00	455.00	70	12.340	1	TCMT 11 03 04
18.282	21.561						1.575	1.640	5.157	6.457	17.913	1015			

Diameters are valid when frontboring.

Backboring is not recommended with CoroBore® 826

Use with 40X CoroBore XL holders only. To be ordered separately. See Rotating tools catalogue

In case of direct flange to the machine spindle, use centering plug, see Rotating tools catalogue

For boring tool components, accessories and spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

For inserts, see Turning tools catalogue

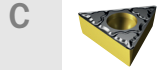
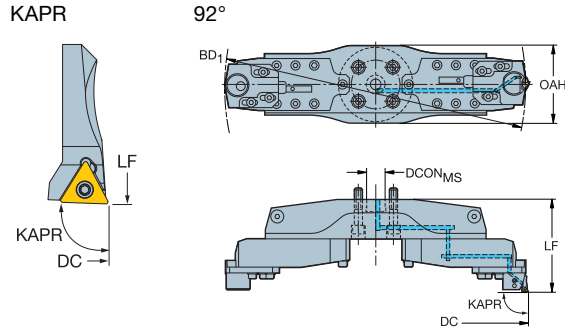
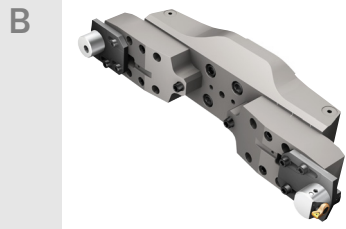


# CoroBore® 826 XL fine boring tool



Arbor - High precision coolant supply

With bridge extension



- TCMT, TCMX, TCGT, TCGX, TCEX
- TCMW

D

						Dimensions, mm, inch									
DCN	DCX			CZC <sub>MS</sub>	CNSC	Ordering code	DCON <sub>MS</sub>	ADJLY <sub>FDL</sub>	LF	OAH	BD <sub>1</sub>			CICT	MIID
544.35	787.65	11	1/4	40X	1	826-787TC11HP	40.00	121.65	205.00	164.00	535.00	70	24.430	1	TCMT 11 03 04
21.431	31.010						1.575	4.789	8.071	6.457	21.063	1015			
784.35	1027.65	11	1/4	40X	1	826-1027TC11HP	40.00	121.65	225.00	164.00	775.00	70	35.060	1	TCMT 11 03 04
30.880	40.459						1.575	4.789	8.858	6.457	30.512	1015			
1024.35	1267.65	11	1/4	40X	1	826-1267TC11HP	40.00	121.65	225.00	164.00	1015.0	70	44.110	1	TCMT 11 03 04
40.329	49.908						1.575	4.789	8.858	6.457	39.961	1015			

Diameters are valid when frontboring.

E Backboring is not recommended with CoroBore® 826  
 Use with 40X CoroBore XL holders only. To be ordered separately. See Rotating tools catalogue  
 In case of direct flange to the machine spindle, use centering plug, see Rotating tools catalogue  
 For boring tool components, accessories and spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)  
 For inserts, see Turning tools catalogue

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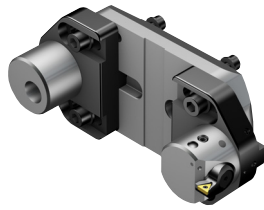
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# CoroBore® 826 XL fine boring tool

Arbor - High precision coolant supply

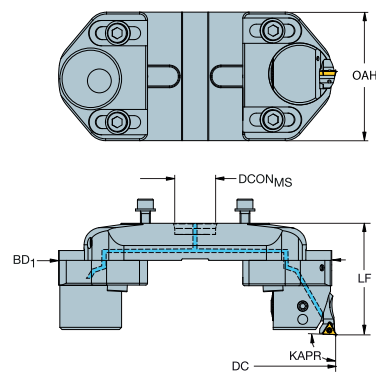
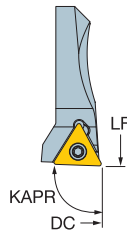
Dedicated for Silent Tools boring



- TCMT, TCMX, TCGT, TCGX
- TCEX
- TCMW

KAPR

92°



						Dimensions, mm, inch									
DCN	DCX			CZC <sub>MS</sub>	CNSC	Ordering code	DCON <sub>MS</sub>	ADJLX <sub>FDL</sub>	LF	OAH	BD <sub>1</sub>			CICT	MIID
154.35	207.65	11	1/4	33	1	826D-207TC11HP	33.00	26.65	97.00	104.00	145.00	70	2.770	1	TCMT 11 03 04
6.077	8.175						1.299	1.049	3.819	4.094	5.709	1015			
204.35	257.65	11	1/4	33	1	826D-257TC11HP	33.00	26.65	97.00	104.00	195.00	70	3.110	1	TCMT 11 03 04
8.045	10.144						1.299	1.049	3.819	4.094	7.677	1015			
254.35	307.65	11	1/4	33	1	826D-307TC11HP	33.00	26.65	97.00	104.00	245.00	70	3.470	1	TCMT 11 03 04
10.014	12.112						1.299	1.049	3.819	4.094	9.646	1015			

Diameters are valid when frontboring.

Backboring is not recommended with CoroBore® 826

These light weight assemblies are dedicated for use with damped boring adaptors. Damped adaptors are bought separately, see Rotating tools catalogue

For boring tool components, accessories and spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

For inserts, see Turning tools catalogue



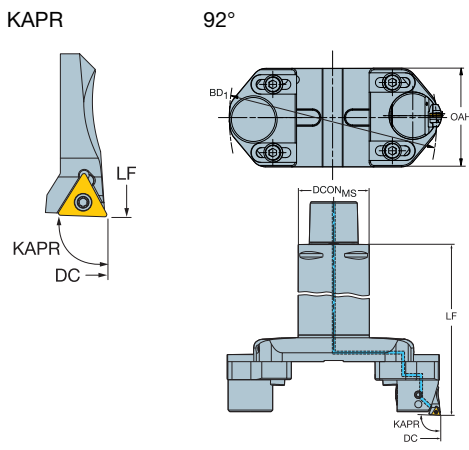
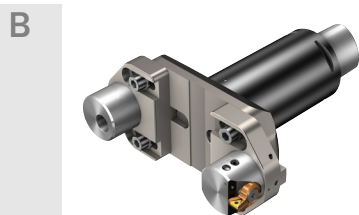


# CoroBore® 826 XL lightweight fine boring tool

Coromant Capto® - High precision coolant supply



ENG



- TCMT, TCMX, TCGT, TCGX, TCEX
- TCMW

D

		Dimensions, mm, inch													
DCN	DCX			CZC <sub>MS</sub>	CNSC	Ordering code	DCON <sub>MS</sub>	ADJLX <sub>ADL</sub>	LF	OAH	BD <sub>1</sub>			CICT	MIID
154.35	207.65	11	1/4	C8	3	826L-207TC11-C8HP	80.00	26.65	237.00	104.00	145.00	70	6.300	1	TCMT 11 03 04
6.077	8.175						3.150	1.049	9.331	4.094	5.709	1015			
204.35	257.65	11	1/4	C8	3	826L-257TC11-C8HP	80.00	26.65	237.00	104.00	195.00	70	6.660	1	TCMT 11 03 04
8.045	10.144						3.150	1.049	9.331	4.094	7.677	1015			
254.35	307.65	11	1/4	C8	3	826L-307TC11-C8HP	80.00	26.65	237.00	104.00	245.00	70	7.030	1	TCMT 11 03 04
10.014	12.112						3.150	1.049	9.331	4.094	9.646	1015			

Backboring is not recommended with CoroBore® 826  
 Diameters are valid when frontboring.

For boring tool components, accessories and spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)  
 For inserts, see Turning tools catalogue

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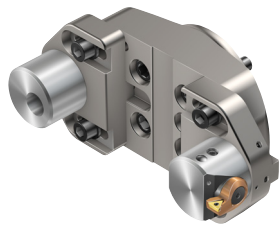
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# CoroBore® 826 XL lightweight fine boring tool

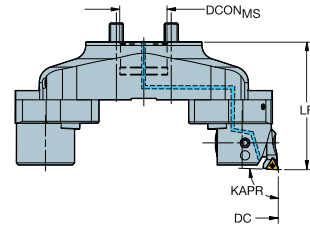
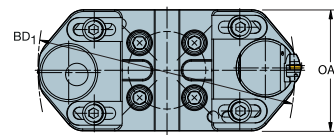
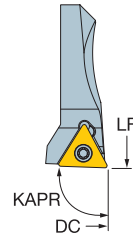
Arbor - High precision coolant supply



- TCMT, TCMX, TCGT, TCGX, TCEX
- TCMW

KAPR

92°



		Dimensions, mm, inch														
DCN	DCX			CZC <sub>MS</sub>	CNSC	Ordering code	DCON <sub>MS</sub>	ISO	ADJLX <sub>RDL</sub>	LF	OAH	BD <sub>1</sub>			CICT	MIID
154.35	207.65	11	1/4	40S	1	826L-207TC11HP	40.00	C	26.65	117.00	104.00	145.00	70	3.310	1	TCMT 11 03 04
6.077	8.175						1.575		1.049	4.606	4.094	5.709	1015			
204.35	257.65	11	1/4	40S	1	826L-257TC11HP	40.00	C	26.65	117.00	104.00	195.00	70	3.650	1	TCMT 11 03 04
8.045	10.144						1.575		1.049	4.606	4.094	7.677	1015			
254.35	307.65	11	1/4	40S	1	826L-307TC11HP	40.00	C	26.65	117.00	104.00	245.00	70	4.320	1	TCMT 11 03 04
10.014	12.112						1.575		1.049	4.606	4.094	9.646	1015			

Use with 40S facemill holders, for example: C8-391.05-40 060M. To be ordered separately.

Backboring is not recommended with CoroBore® 826

Diameters are valid when frontboring.

For boring tool components, accessories and spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

For inserts, see Turning tools catalogue





# Rotating tool adaptors

## Adaptors

<b>Coromant Capto®</b>	83-84
<b>HSK</b>	85-86
<b>BIG-PLUS ISO</b>	87
<b>BIG-PLUS MAS-BT</b>	88-89
<b>BIG-PLUS CAT V</b>	90
<b>ISO 7388-1</b>	91
<b>MAS-BT</b>	92-93
<b>CAT-V</b>	94

## Coromant Capto® to CoroChuck™ 930

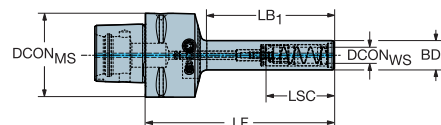
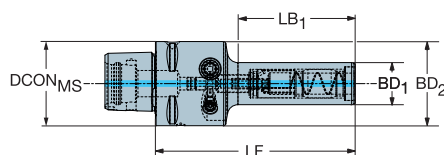
Pencil design



DSGN

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		Dimensions, mm, inch																	
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	DSGN	Ordering code	DCON <sub>MS</sub>	DCON <sub>WS</sub>	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	LB <sub>3</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BAR PSI	NM	KG	RPMX
C4	8	3	1	2	930-C4-P-08-085	40.0	8.0	37	85.0	45.8	85.0		17.5	40.0		80	8.0	0.45	39000
					930-C4-P-10-095	1.575	.315	1.457	3.346	1.803	3.346		.689	1.575		1160			
	10	3	1	2	930-C4-P-10-095	40.0	10.0	41	95.0	55.8	95.0		20.0	40.0		80	8.0	0.50	39000
					930-C4-P-10-135	1.575	.394	1.614	3.740	2.197	3.740		.787	1.575		1160			
C5	8	3	1	5	930-C5-P-08-088	50.0	8.0	37	88.0	45.8	64.9	88.0	17.5	40.0	50.0	80	8.0	0.65	28000
					930-C5-P-10-098	1.969	.315	1.457	3.465	1.803	2.555	3.465	.689	1.575	1.969	1160			
	10	3	1	5	930-C5-P-10-098	50.0	10.0	41	98.0	55.8	74.9	98.0	20.0	40.0	50.0	80	8.0	0.70	28000
					930-C5-P-10-138	1.969	.394	1.614	3.858	2.197	2.949	3.858	.787	1.575	1.969	1160			
C6	8	3	1	5	930-C6-P-08-091	63.0	8.0	37	91.0	45.8	64.9	91.0	17.5	40.0	63.0	80	8.0	1.00	20000
					930-C6-P-10-102	2.480	.315	1.457	3.583	1.803	2.555	3.583	.689	1.575	2.480	1160			
	10	3	1	5	930-C6-P-10-102	63.0	10.0	41	102.0	55.8	75.0	102.0	20.0	40.0	63.0	80	8.0	1.07	20000
					930-C6-P-10-142	2.480	.394	1.614	4.016	2.197	2.953	4.016	.787	1.575	2.480	1160			
						63.0	10.0	41	142.0	95.8	115.0	142.0	20.0	40.0	63.0	80	8.0	1.16	20000
						2.480	.394	1.614	5.591	3.772	4.528	5.591	.787	1.575	2.480	1160			

For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

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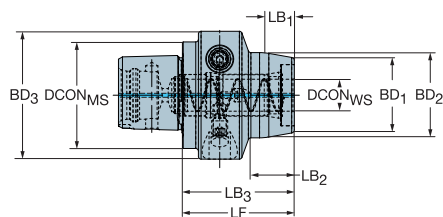
# Coromant Capto® to CoroChuck™ 930



For driven tool holders

Segment clamping and manual tool change only

B



C

Dimensions, mm, inch

CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>MS</sub>	DCON <sub>WS</sub>	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BHTA <sub>1</sub>	BAR PSI	NM	KG	RPMX
C3	6	3	1	930-C3-T-06-036	32.0	6.0	37	36.0	9.3	12.8	22.0	26.0	42.0	12°	80	8.0	0.26	10000
				930-C3-T-08-036	32.0	8.0	37	36.0	9.3	12.8	24.0	28.0	44.0	12°	80	8.0	0.28	10000
	10	3	1	930-C3-T-10-038	32.0	10.0	41	38.0	11.3	14.8	26.0	30.0	46.0	10°	80	8.0	0.31	10000
				930-C3-T-10-038	1.260	.394	1.614	1.496	.445	.583	1.024	1.181	1.811	1160				
C4	6	3	1	930-C4-T-06-036	40.0	6.0	37	36.0	9.3	12.8	22.0	26.0	42.0	12°	80	8.0	0.33	10000
				930-C4-T-08-036	40.0	8.0	37	36.0	9.3	12.8	24.0	28.0	44.0	12°	80	8.0	0.34	10000
	10	3	1	930-C4-T-10-038	40.0	10.0	41	38.0	11.3	14.8	26.0	30.0	46.0	10°	80	8.0	0.37	10000
				930-C4-T-10-038	1.575	.394	1.614	1.496	.445	.583	1.024	1.181	1.811	1160				
C5	6	3	1	930-C5-T-06-036	50.0	6.0	37	36.0	9.3	12.8	22.0	26.0	50.0	12°	80	8.0	0.49	10000
				930-C5-T-08-036	50.0	8.0	37	36.0	9.3	12.8	24.0	28.0	50.0	12°	80	8.0	0.50	10000
	10	3	1	930-C5-T-10-038	50.0	10.0	41	38.0	11.3	14.8	26.0	30.0	50.0	10°	80	8.0	0.51	10000
				930-C5-T-10-038	1.969	.394	1.614	1.496	.445	.583	1.024	1.181	1.969	1160				

For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

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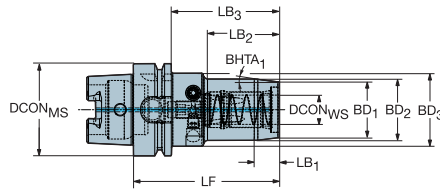


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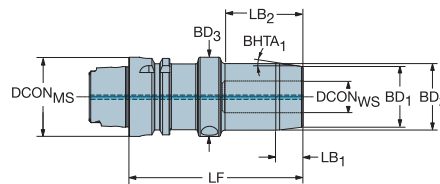
# HSK to CoroChuck™ 930

Slender design

Machine side interface HSK A/C



				Dimensions, mm, inch																
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>MS</sub>	DCON <sub>WS</sub>	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	LB <sub>3</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BD <sub>4</sub>	BHTA <sub>1</sub>	BAR PSI	NM	KG	RPMX
40.0	6	1	1	930-HA04-S-06-070	40.0	6.0	37	70.0	11.3	33.2	50.0	22.0	26.0	32.0	40.0	10°	80	8.0	0.40	30000
					1.575	.236	1.457	2.756	.445	1.307	1.969	.866	1.024	1.260	1.575		1160			
8	1	1	1	930-HA04-S-08-070	40.0	8.0	37	70.0	11.3	35.3	50.0	24.0	28.0	32.0	40.0	10°	80	8.0	0.42	30000
					1.575	.315	1.457	2.756	.445	1.390	1.969	.945	1.102	1.260	1.575		1160			
10	1	1	1	930-HA04-S-10-075	40.0	10.0	41	75.0	11.3	39.6	55.0	26.0	30.0	32.0	40.0	10°	80	8.0	0.46	30000
					1.575	.394	1.614	2.953	.445	1.559	2.165	1.024	1.181	1.260	1.575		1160			
12	1	1	1	930-HA04-S-12-080	40.0	12.0	46	80.0	11.3	41.0	60.0	28.0	32.0	33.5	40.0	10°	80	8.0	0.51	30000
					1.575	.472	1.811	3.150	.445	1.614	2.362	1.102	1.260	1.319	1.575		1160			
50.0	6	1	1	930-HA05-S-06-074	50.0	6.0	37	74.0	11.3	30.2	48.0	22.0	26.0	40.0	50.0	10°	80	8.0	0.64	25000
					1.969	.236	1.457	2.913	.445	1.189	1.890	.866	1.024	1.575	1.969		1160			
8	1	1	1	930-HA05-S-08-074	50.0	8.0	37	74.0	11.3	30.2	48.0	24.0	28.0	40.0	50.0	10°	80	8.0	0.65	25000
					1.969	.315	1.457	2.913	.445	1.189	1.890	.945	1.102	1.575	1.969		1160			
10	1	1	1	930-HA05-S-10-080	50.0	10.0	41	80.0	11.3	34.2	54.0	26.0	30.0	40.0	50.0	10°	80	8.0	0.71	25000
					1.969	.394	1.614	3.150	.445	1.346	2.126	1.024	1.181	1.575	1.969		1160			
12	1	1	1	930-HA05-S-12-085	50.0	12.0	46	85.0	11.3	38.2	59.0	28.0	32.0	40.0	50.0	10°	80	8.0	0.75	25000
					1.969	.472	1.811	3.346	.445	1.504	2.323	1.102	1.260	1.575	1.969		1160			



				Dimensions, mm, inch															
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>MS</sub>	DCON <sub>WS</sub>	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BHTA <sub>1</sub>	BAR PSI	NM	KG	RPMX		
50.0	20	1	1	930-HA05-S-20-090	50.0	20.0	51	90.0	16.0	64.0	37.6	41.5	7°	80	8.0	0.89	25000		
					1.969	.787	2.008	3.543	.630	2.520	1.480	1.634		1160					

For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

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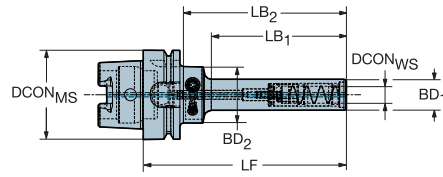
# HSK to CoroChuck™ 930



Pencil design

Machine side interface HSK A/C

B



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Dimensions, mm, inch

CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>MS</sub>	DCON <sub>WS</sub>	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BAR PSI	NM	KG	RPMX
63.0	8	1	1	930-HA06-P-08-094	63.0	8.0	37	94.0	45.8	65.5	17.5	40.0	80	8.0	0.87	20000
					2.480	.315	1.457	3.701	1.803	2.579	.689	1.575	1160			
	10	1	1	930-HA06-P-10-104	63.0	10.0	41	104.0	55.8	75.5	20.0	40.0	80	8.0	0.91	20000
					2.480	.394	1.614	4.094	2.197	2.972	.787	1.575	1160			
	10	1	1	930-HA06-P-10-144	63.0	10.0	41	144.0	95.8	115.5	20.0	40.0	80	8.0	1.01	20000
					2.480	.394	1.614	5.669	3.772	4.547	.787	1.575	1160			

For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

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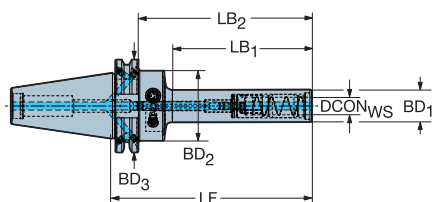
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# BIG-PLUS ISO to CoroChuck™ 930

Machine side interface compatible with ISO 7388-1 and DIN 69871-ADB



## Pencil design

				Dimensions, mm, inch													
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>WS</sub>	CRKS	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BAR PSI	NM	KG	RPMX
40.0	8	7	1	930-IB40-P-08-088	8.0	M16	37	88.0	45.8	66.5	17.5	40.0	63.5	80	8.0	1.06	18000
					.315		1.457	3.465	1.803	2.618	.689	1.575	2.500	1160			
	10	7	1	930-IB40-P-10-098	10.0	M16	41	98.0	55.8	76.5	20.0	40.0	63.5	80	8.0	1.10	18000
					.394		1.614	3.858	2.197	3.012	.787	1.575	2.500	1160			
	10	7	1	930-IB40-P-10-138	10.0	M16	41	138.0	95.8	116.5	20.0	40.0	63.5	80	8.0	1.20	18000
					.394		1.614	5.433	3.772	4.587	.787	1.575	2.500	1160			

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For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



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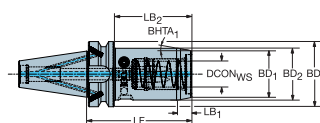
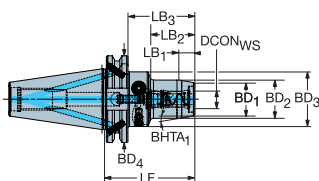
**BIG-PLUS MAS-BT to CoroChuck™ 930**

Machine side interface compatible with MAS-BT 403 and JIS B 6339

DSGN

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Slender design

C

		Dimensions, mm, inch																				
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	DSGN	Ordering code	DCON <sub>WS</sub>	CRKS	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	LB <sub>3</sub>	LB <sub>4</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BD <sub>4</sub>	BHTA <sub>1</sub>	BAR PSI	NM	KG	RPMX
30.0	6	1	1	6	930-BB30-S-06-048	6.0	M12	37	48.0	9.3	12.8	48.0		22.0	26.0	46.0		12°	80	8.0	0.56	25000
						.236		1.457	1.890	.366	.504	1.890		.866	1.024	1.811			1160			
	8	1	1	6	930-BB30-S-08-048	8.0	M12	37	48.0	9.3	12.8	48.0		24.0	28.0	46.0		12°	80	8.0	0.57	25000
						.315		1.457	1.890	.366	.504	1.890		.945	1.102	1.811			1160			
	10	1	1	6	930-BB30-S-10-048	10.0	M12	41	48.0	9.3	13.8	48.0		26.0	30.0	46.0		12°	80	8.0	0.56	25000
						.394		1.614	1.890	.366	.543	1.890		1.024	1.181	1.811			1160			
	12	1	1	10	930-BB30-S-12-082	12.0	M12	46	82.0	11.3	38.2	60.0	82.0	28.0	32.0	40.0	46	10°	80	8.0	0.76	25000
						.472		1.811	3.228	.445	1.504	2.362	3.228	1.102	1.260	1.575	1.811		1160			
	20	1	1	6	930-BB30-S-20-088	20.0	M12	51	88.0	16.0	66.0	88.0		38.0	42.0	46.0		7°	80	8.0	0.94	25000
						.787		2.008	3.465	.630	2.598	3.465		1.496	1.654	1.811			1160			

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For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

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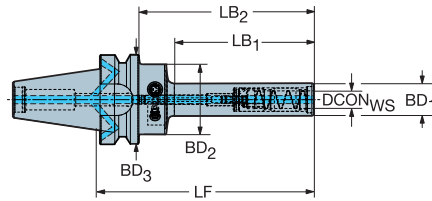
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# BIG-PLUS MAS-BT to CoroChuck™ 930

Machine side interface compatible with MAS-BT 403 and JIS B 6339



## Pencil design

				Dimensions, mm, inch													
CZC <sub>MIS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>WS</sub>	CRKS	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BAR PSI	NM	KG	RPMX
30.0	8	1	1	930-BB30-P-08-088	8.0	M12	37	88.0	45.8	66.0	17.5	40.0	46.0	80	8.0	0.60	25000
					.315		1.457	3.465	1.803	2.598	.689	1.575	1.811	1160			
	10	1	1	930-BB30-P-10-098	10.0	M12	41	98.0	55.8	76.0	20.0	40.0	46.0	80	8.0	0.64	25000
					.394		1.614	3.858	2.197	2.992	.787	1.575	1.811	1160			
	10	1	1	930-BB30-P-10-138	10.0	M12	41	138.0	95.8	116.0	20.0	40.0	46.0	80	8.0	0.74	25000
					.394		1.614	5.433	3.772	4.567	.787	1.575	1.811	1160			
40.0	8	7	1	930-BB40-P-08-095	8.0	M16	37	95.0	45.8	65.5	17.5	40.0	63.0	80	8.0	1.21	18000
					.315		1.457	3.740	1.803	2.579	.689	1.575	2.480	1160			
	10	7	1	930-BB40-P-10-105	10.0	M16	41	105.0	55.8	75.5	20.0	40.0	63.0	80	8.0	1.25	18000
					.394		1.614	4.134	2.197	2.972	.787	1.575	2.480	1160			
	10	7	1	930-BB40-P-10-145	10.0	M16	41	145.0	95.8	115.5	20.0	40.0	63.0	80	8.0	1.35	18000
					.394		1.614	5.709	3.772	4.547	.787	1.575	2.480	1160			

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For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



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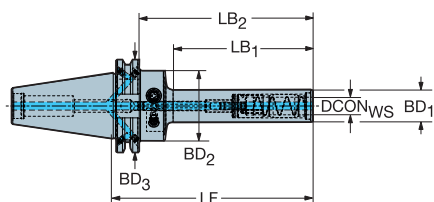
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**BIG-PLUS CAT-V to CoroChuck™ 930**

Machine side interface compatible with ASME B5.50-2009

Pencil design

B



Metric bore

C

				Dimensions, mm, inch													
CZC <sub>MS</sub>	CZC <sub>VS</sub>	CNSC	CXSC	Ordering code	DCON <sub>WS</sub>	CRKS	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BAR PSI	NM	KG	RPMX
40.0	8	7	1	930-VB40-P-08-088	8.0	5/8"-11	37	88.0	45.8	66.5	17.5	40.0	63.5	80	8.0	1.07	18000
					.315		1.457	3.465	1.803	2.618	.689	1.575	2.500	1160			
	10	7	1	930-VB40-P-10-098	10.0	5/8"-11	41	98.0	55.8	76.5	20.0	40.0	63.5	80	8.0	1.11	18000
					.394		1.614	3.858	2.197	3.012	.787	1.575	2.500	1160			
	10	7	1	930-VB40-P-10-138	10.0	5/8"-11	41	138.0	95.8	116.5	20.0	40.0	63.5	80	8.0	1.21	18000
					.394		1.614	5.433	3.772	4.587	.787	1.575	2.500	1160			

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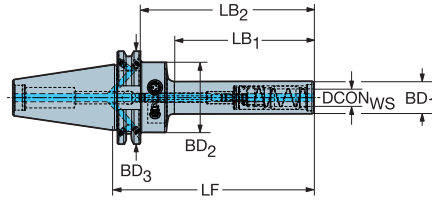
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# ISO 7388-1 to CoroChuck™ 930

Machine side interface compatible with DIN 69871-ADB



## Pencil design

				Dimensions, mm, inch													
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>WS</sub>	CRKS	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BAR PSI	NM	KG	RPMX
40.0	8	7	1	930-I40-P-08-088	8.0	M16	37	88.0	45.8	66.5	17.5	40.0	63.5	80	8.0	1.04	18000
					.315		1.457	3.465	1.803	2.618	.689	1.575	2.500	1160			
	10	7	1	930-I40-P-10-098	10.0	M16	41	98.0	55.8	76.5	20.0	40.0	63.5	80	8.0	1.09	18000
					.394		1.614	3.858	2.197	3.012	.787	1.575	2.500	1160			
	10	7	1	930-I40-P-10-138	10.0	M16	41	138.0	95.8	116.5	20.0	40.0	63.5	80	8.0	1.18	18000
					.394		1.614	5.433	3.772	4.587	.787	1.575	2.500	1160			

For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



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# MAS-BT 403 to CoroChuck™ 930

Machine side interface compatible with JIS B 6339

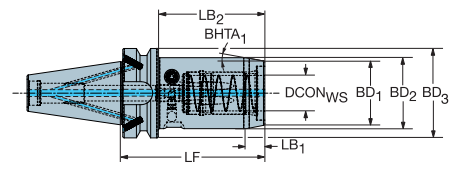
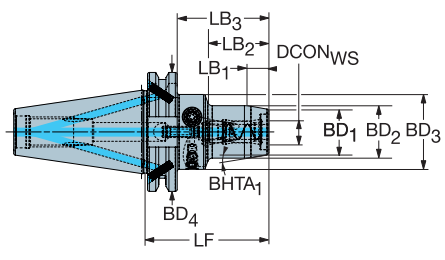


DSGN

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B



C Slender design

					Dimensions, mm, inch																		
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	DSGN	Ordering code	DCON <sub>WS</sub>	CRKS	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	LB <sub>3</sub>	LB <sub>4</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BD <sub>4</sub>	BHTA <sub>1</sub>	BAR PSI	NM	KG	RPMX	
30.0	6	1	1	6	930-B30-S-06-048	6.0	M12	37	48.0	9.3	12.8	48.0		22.0	26.0	46.0		12°	80	8.0	0.55	25000	
						.236		1.457	1.890	.366	.504	1.890		.866	1.024	1.811			1160				
	8	1	1	6	930-B30-S-08-048	8.0	M12	37	48.0	9.3	12.8	48.0		24.0	28.0	46.0		12°	80	8.0	0.56	25000	
						.315		1.457	1.890	.366	.504	1.890		.945	1.102	1.811			1160				
	10	1	1	6	930-B30-S-10-048	10.0	M12	41	48.0	9.3	13.8	48.0		26.0	30.0	46.0		12°	80	8.0	0.55	25000	
						.394		1.614	1.890	.366	.543	1.890		1.024	1.181	1.811			1160				
	12	1	1	10	930-B30-S-12-082	12.0	M12	46	82.0	11.3	38.2	60.0	82.0	28.0	32.0	40.0	46	10°	80	8.0	0.75	25000	
						.472		1.811	3.228	.445	1.504	2.362	3.228	1.102	1.260	1.575	1.811		1160				
	20	1	1	6	930-B30-S-20-088	20.0	M12	51	88.0	16.0	66.0	88.0		38.0	42.0	46.0		7°	80	8.0	0.93	25000	
						.787		2.008	3.465	.630	2.598	3.465		1.496	1.654	1.811			1160				

For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

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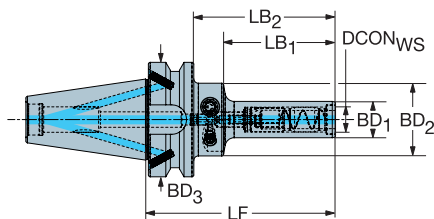
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# MAS-BT 403 to CoroChuck™ 930

Machine side interface compatible with JIS B 6339

Pencil design



B

C

		Dimensions, mm, inch															
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>WS</sub>	CRKS	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	$\frac{\text{BAR}}{\text{PSI}}$	NM	KG	RPMX
30.0	8	1	1	930-B30-P-08-088	8.0	M12	37	88.0	45.8	66.0	17.5	40.0	46.0	80	8.0	0.59	25000
					.315	1.457	3.465	1.803	2.598	.689	1.575	1.811	1160				
				10	1	1	930-B30-P-10-098	10.0	M12	41	98.0	55.8	76.0	20.0	40.0	46.0	80
10	1	1	1	930-B30-P-10-138	10.0	M12	41	138.0	95.8	116.0	20.0	40.0	46.0	80	8.0	0.73	25000
					.394	1.614	5.433	3.772	4.567	.787	1.575	1.811	1160				
				40.0	8	7	1	930-B40-P-08-095	8.0	M16	37	95.0	45.8	65.5	17.5	40.0	63.0
10	7	1	1	930-B40-P-10-105	10.0	M16	41	105.0	55.8	75.5	20.0	40.0	63.0	80	8.0	1.24	18000
					.315	1.457	3.740	1.803	2.579	.689	1.575	2.480	1160				
					.394	1.614	4.134	2.197	2.972	.787	1.575	2.480	1160				
10	7	1	1	930-B40-P-10-145	10.0	M16	41	145.0	95.8	115.5	20.0	40.0	63.0	80	8.0	1.34	18000
					.394		1.614	5.709	3.772	4.547	.787	1.575	2.480	1160			

For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

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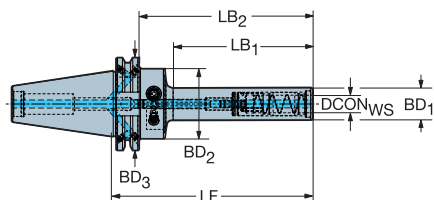
# CAT-V to CoroChuck™ 930



Pencil design

Machine side interface ASME B5.50-2009

B



C

Dimensions, mm, inch

GZC <sub>MS</sub>	CZC <sub>MS</sub>	CNSC	CXSC	Ordering code	DCON <sub>MS</sub>	CRKS	LSC	LF	LB <sub>1</sub>	LB <sub>2</sub>	BD <sub>1</sub>	BD <sub>2</sub>	BD <sub>3</sub>	BAR PSI	NM	KG	RPMX
40.0	8	7	1	930-V40-P-08-088	8.0	5/8"-11	37	88.0	45.8	66.5	17.5	40.0	63.5	80	8.0	1.05	18000
					.315		1.457	3.465	1.803	2.618	.689	1.575	2.500	1160			
	10	7	1	930-V40-P-10-098	10.0	5/8"-11	41	98.0	55.8	76.5	20.0	40.0	63.5	80	8.0	1.09	18000
					.394		1.614	3.858	2.197	3.012	.787	1.575	2.500	1160			
	10	7	1	930-V40-P-10-138	10.0	5/8"-11	41	138.0	95.8	116.5	20.0	40.0	63.5	80	8.0	1.19	18000
					.394		1.614	5.433	3.772	4.587	.787	1.575	2.500	1160			

For spare parts, visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

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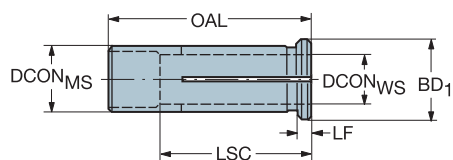


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# Cylindrical sleeves

Precision coolant supply



## Inch version

				Dimensions, inch									
CZC <sub>MS</sub>	CZC <sub>WS</sub>	CNSC	CXSC	Ordering code	DCON <sub>MS</sub>	DCON <sub>WS</sub>	LSC	OAL	LF	PSI	LBS		
12	1/8	1	4	A393.CF-12 02 40	.472	.125	1.574	1.732	.157	1160	.079		
	3/16	1	4	A393.CF-12 03 40	.472	.187	1.574	1.732	.157	1160	.066		

For extractors for cylindrical collets, see Rotating tools catalogue



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# General information



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**ISO 13399 is an international standard that strives to simplify the exchange of data for cutting tools. You will notice a slight difference through the new parameters and descriptions of each tool.**

For the first time ever, there is a standardized way of describing product data regarding cutting tools. When all tools in the industry share the same parameters and definitions, communicating tool information becomes very straightforward.

### What does this mean to you?

Basically, it means that your systems can talk to ours, as they all speak the same language. Download product data from our web site and use it directly in your CAD/CAM software to assemble tools that you use in production. No need to look for information in catalogues and interpret data from one system to another. Imagine how much time this will save you!

Short name	Preferred Name
ADJLN	Minimum adjustment limit
ADJLX	Maximum adjustment limit
ADJRG	Adjustment range
ALP	Clearance angle axial
AN	Clearance angle major
ANN	Clearance angle minor
APMX	Depth of cut maximum
APMX_EFW	Depth of cut maximum - end feed
APMX_FFW	Depth of cut maximum - side feed
AZ	Maximum plunge depth
B	Shank width
BAWS	Body angle workpiece side
BAMS	Body angle machine side
BBD	Balanced by design
BBR	Balanced by rotational test
BCH	Corner chamfer length
BD	Body diameter
BHTA	Body half taper angle
BN	Face land width
BS	Wiper edge length
BSG	Basic standard group
BSR	Wiper edge radius
CBMD	Chip breaker manufacturer
CDX	Cutting depth maximum
CEMR	Cutting edge major radius
CF	Spot chamfer
CHBA	Chamfer body angle
CHBL	Chamfer body length
CHW	Corner chamfer width
CICT	Cutting item count
CICT <sub>BALL</sub>	Cutting item count - Ball nose insert
CICT <sub>E</sub>	Cutting item count - end position
CICT <sub>P</sub>	Cutting item count - peripheral position
CICT <sub>S</sub>	Cutting item count - side position
CICT <sub>SP</sub>	Cutting item count - Shank protection insert
CICT <sub>T</sub>	Cutting item count - total
CND	Coolant entry diameter
CNSC	Coolant entry style code
CNT	Coolant entry thread size
COATING	Coating
CP	Max coolant pressure
CRKS	Connection retention knob thread size
CRNT	Coolant radial entry thread size
CTPT	Operation type
CUTDIA	Work piece parting diameter maximum
CW	Cutting width
CWN	Minimum cutting width
CWTOLL	Cutting width lower tolerance
CWTOLU	Cutting width upper tolerance
CWX	Cutting width maximum
CXSC	Coolant exit style code
CZC	Connection size code
CZC <sub>MS</sub>	Connection size code machine side
CZC <sub>WS</sub>	Connection size code workpiece side
D1	Fixing hole diameter
DAH	Diameter access hole
DAXIN	Axial groove inside diameter minimum
DAXN	Minimum axial groove outside diameter



DAXX	Axial groove outside diameter maximum
DBC	Diameter bolt circle
DC	Cutting diameter
DCB	Connection bore diameter
DCBN	Connection bore diameter minimum
DCBX	Connection bore diameter maximum
DCF	Cutting diameter face contact
DCIN	Cutting diameter internal
DCN	Cutting diameter minimum
DCON	Connection diameter
DCON <sub>MS</sub>	Connection diameter machine side
DCON <sub>WS</sub>	Connection diameter workpiece side
DCONN <sub>WS</sub>	Connection diameter minimum workpiece side
DCONX <sub>WS</sub>	Connection diameter maximum workpiece side
DCPS	Data chip provision size
DCSF <sub>MS</sub>	Contact surface diameter machine side
DCSF <sub>WS</sub>	Contact surface diameter workpiece side
DCX	Cutting diameter maximum
DHUB	Hub diameter
DIX	Tool changer interference diameter maximum
DMIN	Minimum bore diameter
DMM	Shank diameter
DN	Neck diameter
DRVCT	Drive count
DSGN	Design
EPSR	Insert included angle
FHA	Flute helix angle
FLGT	Flange thickness
FTDZ	For thread diameter size
GB	Face land angle
H	Shank height
HA	Thread height theoretical
HB	Thread height difference
HBH	Head bottom offset height
HC	Thread height actual
HF	Functional height
HRY	Lowest point from reference plain
HSUP	Support height
HTB	Body height
HTH	Height
IC	Inscribed circle diameter
INSL	Insert length
INSUC	Insert usage code
IZC	Insert size code
KAPR	Tool cutting edge angle
KAPR_EFW	Tool cutting edge angle - end feed
KCH	Corner chamfer
KRINS	Major cutting edge angle
KWW	Keyway width
L	Cutting edge length
LAMS	Inclination angle
LB	Body length
LCF	Length chip flute
LCOX	Cut off length maximum
LE	Cutting edge effective length
LF	Functional length
LFN	Minimum functional length
LH	Head length
LPR	Protruding length
LS	Shank length
LSC	Clamping length
LSCN	Clamping length minimum
LSCS	Distance to clamping start
LSCX	Clamping length maximum
LSD	Dead shank length
LU	Usable length (max. recommended)
LU_BFW	Usable length - back facing
LUX	Usable length maximum
MHD	Mounting hole distance
MIID	Master insert identification
MIID <sub>E</sub>	Master insert identification - end position
MIID <sub>S</sub>	Master insert identification - side position
MIID <sub>C</sub>	Master insert identification - central position
MIID <sub>P</sub>	Master insert identification - peripheral position
MIID <sub>I</sub>	Master insert identification - intermediate position
MMCC	Code for preset torque
MMCX	Max. cutting torque
NOF	Flute count
NT	Tooth count
OAH	Overall height
OAL	Overall length
OAW	Overall width
OH	Overhang recommended
OHN	Overhang minimum



OHX	Overhang maximum
ORDCODE	Ordercode
PCL	Peripheral cylindrical length
PDX	Profile distance ex
PDY	Profile distance ey
PHD	Premachined hole diameter
PHDX	Maximum premachined hole diameter
PL	Point length
PNA	Profile included angle
PRFRAD	Profile radius
PRSPC	Profile specification
PSIR	Tool lead angle
PSIRL	Cutting edge angle major left hand
PSIRR	Cutting edge angle major right hand
PSW	Premachined slot width
RADH	Radial body height
RADW	Radial body width
RAR	Right hand relief angle
RE	Corner radius
REEQ	Corner radius equivalent
REL	Corner radius left
RER	Corner radius right
RETOLL	Corner radius lower tolerance
RETOLU	Corner radius upper tolerance
RGL	Regrind length
RMPX	Maximum ramping angle
RPMX	Rotational speed maximum
S	Insert thickness
SDL	Step diameter length
SIG	Point angle
SPTL	Splitline
SSC	Insert seat size code
SSC <sub>E</sub>	Insert seat size code - end position
SSC <sub>P</sub>	Insert seat size code - peripheral position
SSC <sub>S</sub>	Insert seat size code - side position
STA	Step included angle
STDNO	Standard number
SUBSTRATE	Substrate
TCDC	Tolerance class cutting diameter
TCDCON	Connection diameter tolerance
TCDMM	Shank diameter tolerance
TCHA	Achievable hole tolerance
TCHAL	Achievable hole tolerance lower
TCHAU	Achievable hole tolerance upper
TCT	Tolerance class tool
TCTR	Thread tolerance class
TD	Thread diameter
TDZ	Thread diameter size
TFLA	Tap floating length ahead
TFLB	Tap floating length behind
TG	Taper gradient
THBTP	Thread back taper property
THCA	Thread helix correction angle
THCHT	Threading chamfer type
THFT	Form type
THFTS	Thread form standard series
THL	Thread length
THUB	Hub thickness
TP	Thread pitch
TPI	Threads per inch
TPIN	Threads per inch minimum
TPIX	Threads per inch maximum
TPN	Thread pitch minimum
TPT	Thread profile type
TPX	Maximum thread pitch
TRMAX	Tap range max
TQ	Torque
TSYC	Tool style code
TPP	Thread type
ULDR	Usable length diameter ratio
VCX	Maximum cutting speed
W1	Insert width
WB	Body width
WF	Functional width
WFCIRP	Width to cutting item reference point
WSC	Clamping width
WT	Weight of item
ZADJ	Insert adjustable count
ZEFF	Face effective cutting edge count
ZEFP	Peripheral effective cutting edge count (ZEFP)
ZWX	Maximum number of Wiper inserts

**CNSC**

## Coolant entry style code

Code	Description	Image
0	Without coolant	
1	Axial concentric entry	
2	Radial entry	
3	Axial concentric and radial entry	
4	Axial concentric entry on circle	
5	Radial entry before adaptor	
6	Decentral over flange	
7	Decentral over flange and axial	
8	Decentral over slots on the shank	

**CXSC**

## Coolant exit style code

Code	Description	Image
0	No coolant exit	
1	Axial concentric exit	
2	Radial exit	
3	Axial inclined exit	
4	Axial concentric on circle	
5	Axial inclined exit with nozzle, adjustable	
6	Decentral exit with nozzle, adjustable	
7	Decentral over slots on the shank	
8	Axial or decentral with nozzle, adjustable	



# Reconditioning

We offer more than just traditional "regrinding". With our reconditioning service we guarantee repeated original performance of your tools to reduce your cost per application.

## Our offer

**100%**

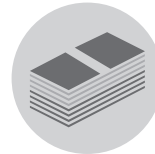
### Reliability

Our specialists are available for you with support and know-how.

**x3**

### Original performance

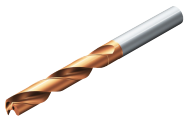
The original tool quality is guaranteed - up to three times.

**50%**

### Savings

With reconditioning you can reduce your tool costs up to 50%.

## Products in service

**Drilling****Milling****Reaming**

As indicated by the reconditioning symbol on family and product pages.

## Additional information



### Reconditioning box

The box can be ordered in two sizes:

- Small (300 x 200 x 138mm)

Article number: 6949557

- Medium (400 x 300 x 138mm)

Article number: 6949558

All Sandvik Coromant tool types can be shipped in same box.



### Reconditioning service

- Prior to reconditioning, an inspection will determine if your tool can be reconditioned.

Non-reconditionable tools will be returned

- A laser mark on the tool shank indicates each reconditioning service performed

- The tools are delivered back in original packaging



### What happens with your tools?

- Complete geometry restoration

- Drill length is reduced

- End mill diameter and length are reduced (Minimum diameter is about 0.9xDc)

- Reamer diameter tolerance is maintained

For prices contact your local Sandvik Coromant representative.



# Safety information in connection with grinding of cemented carbide

## Material composition

Most metal products contain tungsten carbide and cobalt. Other substances that may be present in hard metal are titanium carbide, tantalum carbide, niobium carbide, chromium carbide, molybdenum carbide or vanadium carbide. Some grades contain titanium carbonitride and/or nickel.

## Routes of exposure

Grinding or heating of hard metal blanks or hard metal products will produce products that give off dangerous dust and fumes. Avoiding ingestion and contact with skin or eyes is very important.

## Acute toxicity

Intake of the aforementioned substances is toxic. Inhalation may cause irritation and inflammation of the airways. Significantly higher acute inhalation toxicity has been reported during simultaneous inhalation of cobalt and tungsten carbide compared to inhalation of cobalt alone.

Skin contact can cause irritation and rash. Sensitive individuals may even experience an allergic reaction.

## Chronic toxicity

Repeated inhalation of aerosols containing cobalt may cause obstruction of the airways. Prolonged exposure to increased concentrations may cause lung fibrosis or lung cancer. Epidemiological studies indicate that workers previously exposed to high concentrations of tungsten carbide/cobalt carried an increased risk of developing lung cancer.

Cobalt and nickel are potent skin sensitizers. Repeated or prolonged contact can cause irritation and sensitization.

## Risk phrases

Toxic: danger of serious damage to health by prolonged exposure through inhalation

Toxic when inhaled

Limited evidence of a carcinogenic effect.

May cause sensitization by inhalation and skin contact

## Preventive measures

Avoid formation and inhalation of dust. Use adequate local exhaust ventilation to keep personal exposure well below nationally authorised limits.

If ventilation is not available or adequate, use respirators appropriately approved for the purpose.

Use safety goggles or glasses with side shields when necessary.

Avoid repeated skin contact. Wear suitable gloves. Wash skin thoroughly after handling.

Use suitable protective clothing. Launder clothing if needed.

Do not eat, drink or smoke in the working area. Wash skin thoroughly before eating, drinking or smoking.





# For the sake of the environment

Get into the Sandvik Coromant Recycling Concept (CRC) now!

The Sandvik Coromant Recycling Concept (CRC) is a comprehensive service for used carbide inserts and solid carbide tools offered by Sandvik Coromant to all its customers. In the light of increasing consumption of non-renewable raw materials, the economic management of dwindling resources is a duty owed by all manufacturers. Sandvik Coromant is playing its part by offering to collect used carbide inserts and solid carbide tools and recycle them in the most environmentally friendly way. All used carbide inserts are collected in the collection box at the workplace. When the collection box is sufficiently full, its contents are transferred to the transport box. The full transport box is then sent to the nearest Sandvik Coromant office or to your Sandvik Coromant dealer who can also give you more information.



## The benefits of the CRC speak for themselves

- A worldwide ISO and OHSAS certified recycling system.
- Open to all Sandvik Coromant customers.
- Simple procedure with collection and transport boxes.
- Less waste, easing the burden on the environment.
- Better utilisation of resources.
- Other manufacturers' carbide inserts are also accepted.

Order collection boxes for each lathe, milling machine, drill or for your machining centre. We recommend one collection box for inserts and one separate box for solid carbide tools for each cutting workplace.

For detailed instructions on how to sell your used cemented carbide, please visit [www.sandvik.coromant.com](http://www.sandvik.coromant.com) and select your market.

Collection box:	Order numbers
Transport box for solid carbide tools (plywood):	91617
Transport box inserts (plywood):	92994
	92995



A



ENG

B

C

D

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