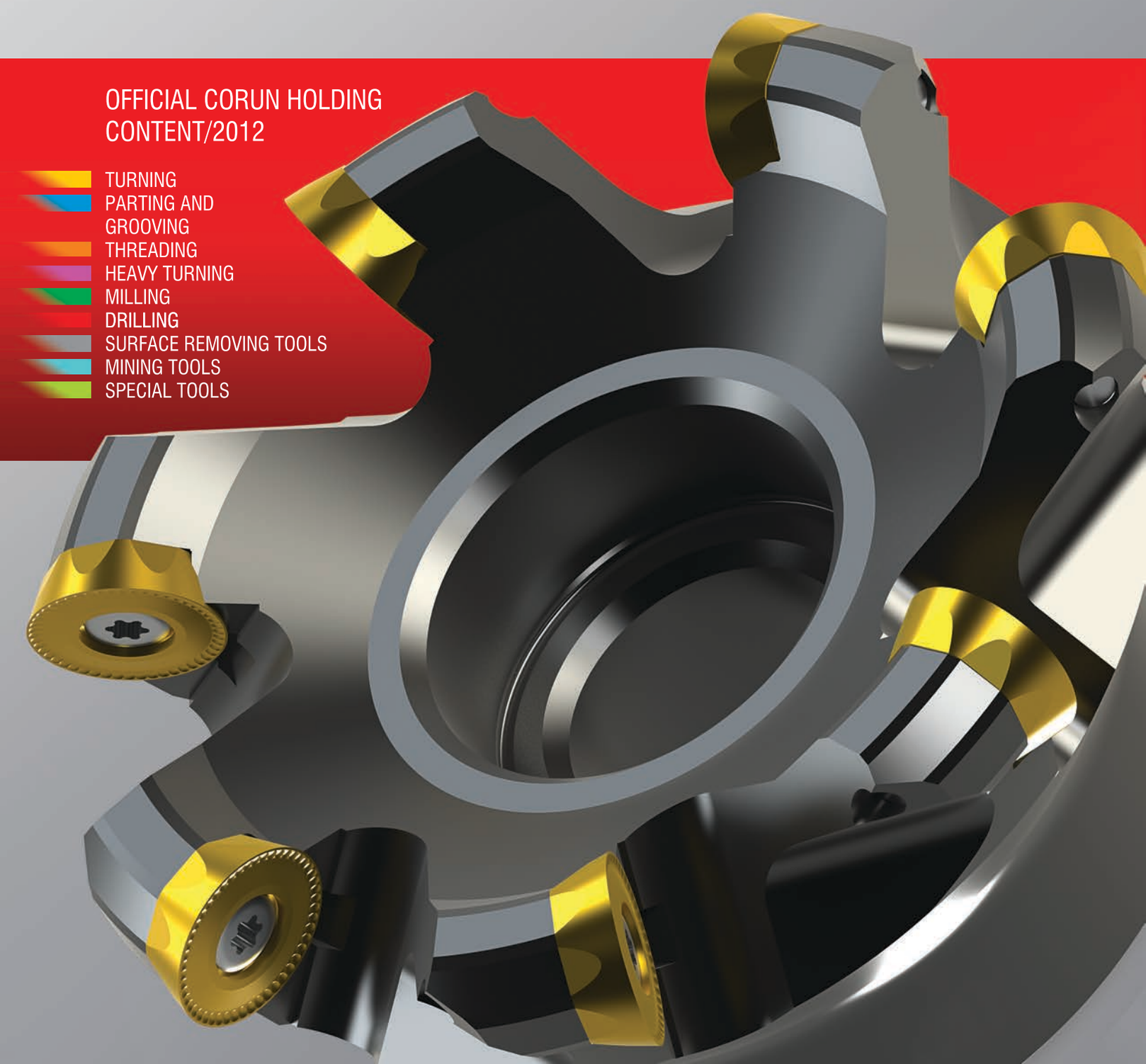
CORUN

CATALOGUE/2012

THE COMPLETE RANGE OF PRODUCTS

OFFICIAL CORUN HOLDING
CONTENT/2012

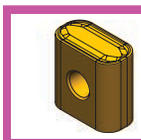
- TURNING
- PARTING AND GROOVING
- THREADING
- HEAVY TURNING
- MILLING
- DRILLING
- SURFACE REMOVING TOOLS
- MINING TOOLS
- SPECIAL TOOLS



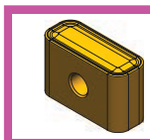
D.a S-MAX P and S-MAX U inserts

S-MAX P | S-MAX U

LNUX-CD
D.a2

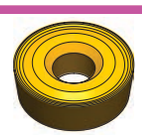


LNUX-22
D.a2

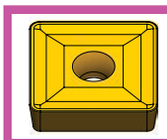


LNUX-23
D.a2

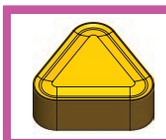
RCGM
D.a2



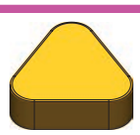
RCMM
D.a3



SCMT
D.a3



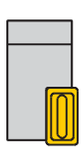
TNUF
D.a4



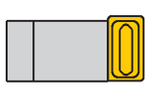
TR-...
D.a4

HEAVY TURNING

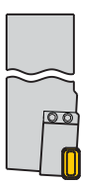
D.b S-MAX P toolholders for railway wheel re - turning



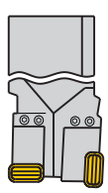
R/L175.32
D.b1



R/L177.32
D.b1



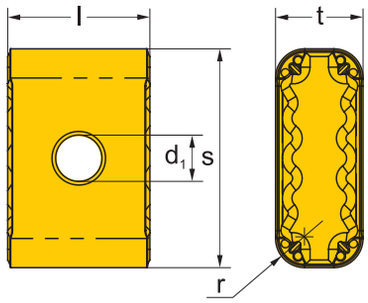
-5047M
D.b1



-5050M
D.b1

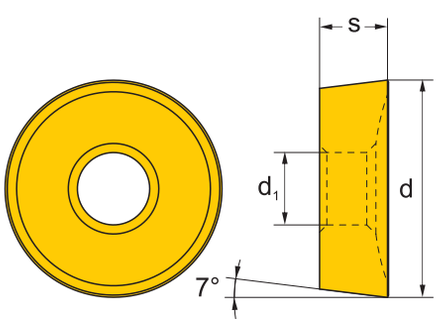
D.a S-MAX P and S-MAX U inserts

S-MAX P | S-MAX U



Dimensions	s	l	t	d_1	r	
19	19.05	19.05	10	6.35	4.00	
30	30.00	19.05	12	6.35	4.00	

	S-MAX P		Ordering code	P				M				K			
				CVD				CVD				CVD			-
				P15	P15	P25	P35	M15	M25	M25	M35	K15	K15	K25	K20
				3C15	4C15	4C25	4C35	2C15	2C25	4C25	4C35	3C15	4C15	4C25	K13A
Finishing		19	LNUX 191940-CD	◐		●	◐		◐	●	◐	●		◐	
		30	LNUX 301940-CD	◐		●	◐		◐	●	◐	●		◐	
Roughing		19	LNUX 191940-22	◐		●	◐		◐	●	◐	●		◐	
		30	LNUX 301940-23	◐		●	◐		◐	●	◐	●		◐	



Dimensions	S	d_1	s			
30	30.00	10.00	9.52			

	S-MAX P		Ordering code	P				M				K			
				CVD				CVD				CVD			-
				P15	P15	P25	P35	M15	M25	M25	M35	K15	K15	K25	K20
				3C15	4C15	4C25	4C35	2C15	2C25	4C25	4C35	3C15	4C15	4C25	K13A
Roughing		30	RCGM 301000	◐		●	◐		◐	●	◐	●		●	◐

●First choice ◐Second choice

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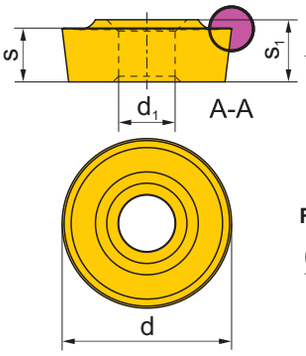
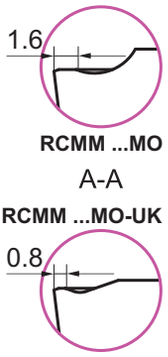
D.a S-MAX P and S-MAX U inserts

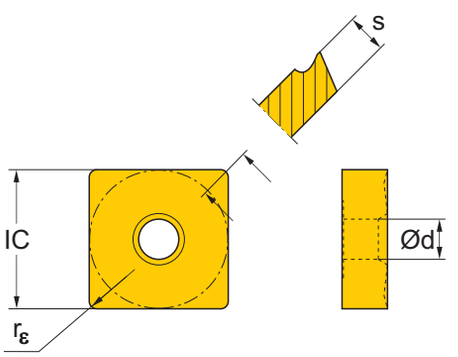
S-MAX P | S-MAX U





Dimensions	d	d_1	s	s_1		
30	30.00	10.00	9.52	11.0		
	30.00	10.00	9.52	10.1		

	P				M				K			
	CVD				CVD				CVD			-
	P15	P15	P25	P35	M15	M25	M25	M35	K15	K15	K25	K20
S-MAX P	3C15	4C15	4C25	4C35	2C15	2C25	4C25	4C35	3C15	4C15	4C25	K13A
Roughing												
30 RCMM 3009MO			●	◐		●	◐		●	◐	◐	
30 RCMM 3009MO-UK			●	◐		●	◐		●	◐	◐	



Dimensions	IC	s	r_ε	Ød	
38	38.1	9.525	3.2	9.2	

	P				M				K			
	CVD				CVD				CVD			-
	P15	P15	P25	P35	M15	M25	M25	M35	K15	K15	K25	K20
S-MAX U	3C15	4C15	4C25	4C35	2C15	2C25	4C25	4C35	3C15	4C15	4C25	K13A
Roughing												
38 SCMT 380932			●	◐		●	◐		●		◐	
38 SCMT 380932-TS			●	◐		●	◐		●		◐	
38 SCMT 380932-HR			●	◐		●	◐		●		◐	

●First choice ◐Second choice

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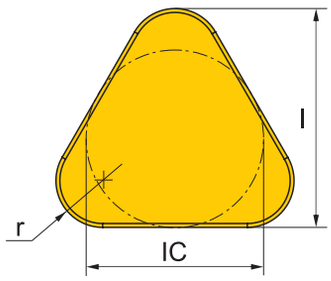
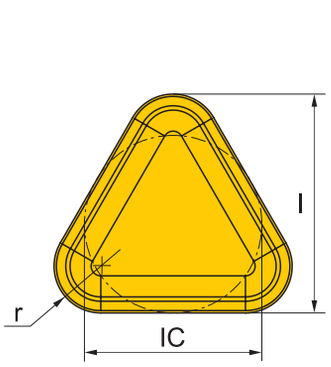
D.a S-MAX P and S-MAX U inserts

S-MAX P | S-MAX U



Dimensions	IC	I	R	H		
38	22.725	22.088	6.00	11.0		

			P				M				K			
			CVD				CVD				CVD			-
			P15	P15	P25	P35	M15	M25	M25	M35	K15	K15	K25	K20
	S-MAX P		3C15	4C15	4C25	4C35	2C15	2C25	4C25	4C35	3C15	4C15	4C25	K13A
		Ordering code												
Roughing		**38 TR-87-07-00 WP30**	◐		●		◐		●		●		◐	◐



Dimensions	IC	I	R	H		
38	22.725	22.088	6.00	11.0		

			P				M				K			
			CVD				CVD				CVD			-
			P15	P15	P25	P35	M15	M25	M25	M35	K15	K15	K25	K20
	S-MAX P		3C15	4C15	4C25	4C35	2C15	2C25	4C25	4C35	3C15	4C15	4C25	K13A
		Ordering code												
Roughing		**38 TNUF 381060**	◐		●	◐	◐	◐	●		●		◐	◐

●First choice ◐Second choice

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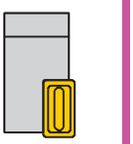
D.b S-MAX P toolholders for railway wheel re - turning

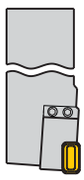


R/L175.32

D.b1

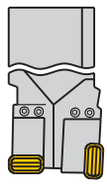
R/L177.32

D.b1



-5047M

D.b1



-5050M

D.b1

D.b S-MAX P toolholders for railway wheel re - turning

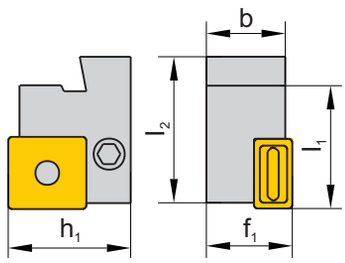
S-MAX P
Units


LNUX 191940-22

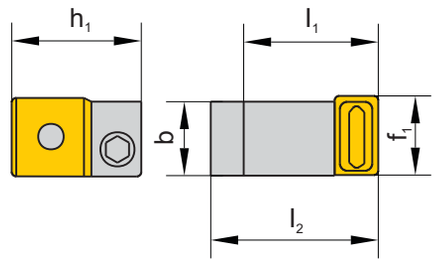

LNUX 301940-23


LNUX 191940-CD

R/L175.32



R/L177.32



	Ordering code	Dimensions (mm)					Inserts to use
		h_1	b	l_1	l_2	f_1	
19	R/L175.32-3223-19	32	22.6	42.2	35	23	LNUX 19...
	R/L175.32-3223-19-1	32	21.6	42.2	35	23	
30	R/L175.32-3223-30	32	22.6	42.2	35	23	LNUX 30...
19	R/L177.32-3219-19	32	18.6	19.1	42.2	35	LNUX 19...

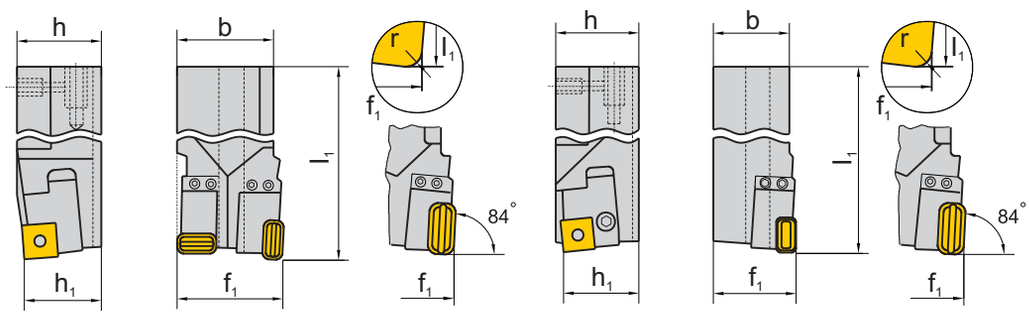
S-MAX P
Toolholder

...-5050M

...-5047M

R/L175.32-...

R/L177.32-...



Ordering code	Dimensions (mm)						Units to be used	
	h_1	h	b	l_1	f_1	r	**175.32-...**	**177.32-...**
R/L175.32-5050M	45	45	50	150	50	4.0	175.32-3223-19	177.32-3223-19
							175.32-3223-30	-
R/L175.32-5050M-1	45	45	50	150	49	4.0	175.32-3223-19-1	177.32-3223-19
R/L175.32-5047M	50	44	47	275	44	4.0	175.32-3223-19	-
							175.32-3223-30	-

D.c Cutting speed recommendations for heavy turning

ISO	Material	Specific cutting force k_c 0.4 N/mm²	Hardness Brinell HB	WEAR RESISTANCE 3C15	4C15	4C25
				h_{ex}, mm ≈ feed f_n, mm/r		
				0.5-1.5-2.5	0.5-1.5-2.5	0.5-1.5-2.5
				Cutting speed (V_c), m/min		
Steel	**Unalloyed steel**					
	C = 0.1 - 0.25%	2000	125	90-50-30	90-50-30	85-45-25
	C = 0.25 - 0.55%	2100	150	70-40-25	70-40-25	65-35-20
	C = 0.55 - 0.80%	2200	170	60-30-20	60-30-20	50-25-15
	Low - alloyed steel					
	(alloying elements < 5%)					
	Non - hardened	2150	180	60-30-20	60-30-20	55-25-20
	Ball bearing steel	2300	210	50-25-20	50-25-20	45-25-20
P	Hardened and tempered	2550	275	45-25-15	45-25-15	40-20-15
	Hardened and tempered	2850	350	40-20-15	40-20-15	40-20-15
	High - alloy steel					
	(alloying elements < 5%)					
	Annealed	2500	200	80-60-40	80-60-40	70-55-35
	Hardened tool steel	3900	325	60-40-20	60-40-20	55-35-20
	Steel casting					
	Unalloyed	200	180	60-40-30	60-40-30	55-35-25
	Low - alloy (alloying elements ⩽ 5%)	2100	200	45-25-20	45-25-20	40-20-15
	High - alloy (alloying elements > 5%)	2650	225	35-25-15	35-25-15	30-20-15

ISO	Material	Specific cutting force k_c 0.4 N/mm²	Hardness Brinell HB	WEAR RESISTANCE 2C15	2C25	4C25
				h_{ex}, mm ≈ feed f_n, mm/r		
				0.5-1.5-2.5	0.5-1.5-2.5	0.5-1.5-2.5
				Cutting speed (V_c), m/min		
Stainless steel	**Ferritic / martensitic**					
	Bars / forged					
	Non - hardened	2300	200			
	PH - hardened	3550	330			
	Hardened	2850	330			
	Austenitic					
	Bars / forged					
	Austenitic	2300	180			
	PH - hardened	3550	330			
	Super austenitic	2950	200			
	Austenitic - ferritic (Duplex)					
	Bars / forged					
	Non - veldable ⩾ 0.05%C	2550	230			
M	Weldable < 0.05%C	3050	260			
	Ferritic / martensitic					
	Cast					
	Non - hardened	2100	200			
	PH - hardened	3150	330			
	Hardened	2650	330			
	Austenitic					
	Cast					
	Austenitic	2200	180	60-40-25	60-40-25	50-35-20
	PH - hardened	3150	330			
	Super austenitic	2700	200			
	Austenitic - ferritic (Duplex)					
	Cast					
	Non - veldable ⩾ 0.05%C	2250	230			
	Weldable < 0.05%C	2750	260			

ISO	Material	Specific cutting force k_c 0.4 N/mm²	Hardness Brinell HB	WEAR RESISTANCE 3C15	4C15	4C25
				h_{ex}, mm ≈ feed f_n, mm/r		
				0.5-1.5-2.5	0.5-1.5-2.5	0.5-1.5-2.5
				Cutting speed (V_c), m/min		
Cast iron	**Malleable cast iron**					
	Ferritic (short chipping)	940	130	70-40-25	70-40-25	60-35-25
	Pearlitic (long chipping)	1100	230	60-30-20	60-30-20	50-30-15
	Grey cast iron					
K	Low tensile strenght	1100	180	70-40-25	70-40-25	60-35-25
	High tensile strenght	1150	220	60-30-15	60-30-15	50-30-15
	Nodular SG iron					
	Ferritic	1050	160	70-40-25	70-40-25	60-35-25
	Pearlitic	1750	250	60-35-20	60-35-20	50-30-15
	Martensitic	2700	380	15	15	

D.c Cutting speed recommendations for heavy turning

TOUGHNESS									
4C35									
0.5-1.5-2.5									
80-40-20									
60-30-20									
45-20-15									
50-25-15									
50-30-20									
35-20-10									
35-20-10									
65-50-30									
50-30-20									
50-30-20									
35-25-15									
30-20-10									

TOUGHNESS									
4C35									
0.5-1.5-2.5									
45-30-15									

TOUGHNESS									
K13A									
0.5-1.5-2.5									
50-30-20									
40-25-15									
50-30-20									
40-25-15									
50-30-20									
40-25-15									

D.c First choice grade recommendations

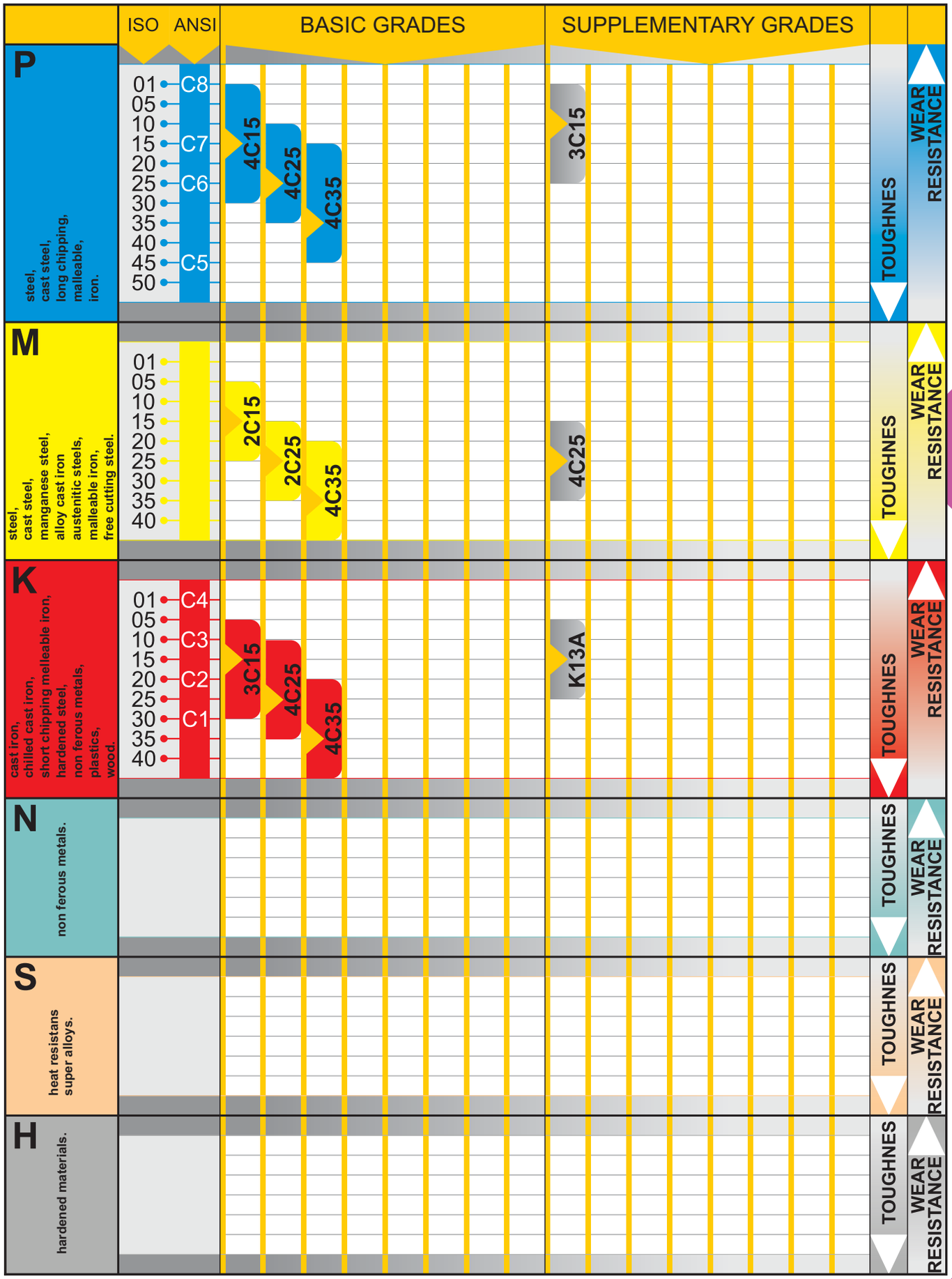
ISO	Material	TYPES OF MACHINING											
		FINISHING				MEDIUM				ROUGHING			
		a_p	f_n	V_c	GRADE	a_p	f_n	V_c	GRADE	a_p	f_n	V_c	GRADE
		mm	mm/r	m/min	-	mm	mm/r	m/min	-	mm	mm/r	m/min	-
Steel	**Unalloyed steel**												
	C = 0.1 - 0.25%	0.50	0.30	70	3C15	3.00	1.00	25	4C25	5.00	1.50	15	4C25
	C = 0.25 - 0.55%	0.50	0.30	50	3C15	3.00	1.00	15	4C25	5.00	1.50	10	4C25
	C = 0.55 - 0.80%	0.50	0.30	40	3C15	3.00	1.00	15	4C25	5.00	1.50	10	4C25
	Low - alloyed steel												
	(alloying elements < 5%)												
	Non - hardened	0.50	0.30	40	3C15	3.00	1.00	15	4C25	5.00	1.50	10	4C25
	Ball bearing steel	0.50	0.30	30	3C15	3.00	1.00	15	4C25	5.00	1.50	10	4C25
P	Hardened and tempered	0.50	0.30	25	3C15	3.00	1.00	13	4C25	5.00	1.50	8	4C25
	Hardened and tempered	0.50	0.30	20	3C15	3.00	1.00	13	4C25	5.00	1.50	8	4C25
	High - alloy steel												
	(alloying elements < 5%)												
	Annealed	0.50	0.30	60	3C15	3.00	1.00	30	4C25	5.00	1.50	15	4C25
	Hardened tool steel	0.50	0.30	40	3C15	3.00	1.00	15	4C25	5.00	1.50	10	4C25
	Steel casting												
	Unalloyed	0.50	0.30	40	3C15	3.00	1.00	15	4C25	5.00	1.50	12	4C25
	Low - alloy (alloying elements ⩽ 5%)	0.50	0.30	25	3C15	3.00	1.00	10	4C25	5.00	1.50	8	4C25
	High - alloy (alloying elements > 5%)	0.50	0.30	15	3C15	3.00	1.00	10	4C25	5.00	1.50	8	4C25

ISO	Material	TYPES OF MACHINING											
		FINISHING				MEDIUM				ROUGHING			
		a_p	f_n	V_c	GRADE	a_p	f_n	V_c	GRADE	a_p	f_n	V_c	GRADE
		mm	mm/r	m/min	-	mm	mm/r	m/min	-	mm	mm/r	m/min	-
Stainless steel	**Ferritic / martensitic**												
	Bars / forged												
	Non - hardened												
	PH - hardened												
	Hardened												
	Austenitic												
	Bars / forged												
	Austenitic												
	PH - hardened												
	Super austenitic												
	Austenitic - ferritic (Duplex)												
	Bars / forged												
	Non - veldable ⩾ 0.05%C												
M	Weldable < 0.05%C												
	Ferritic / martensitic												
	Cast												
	Non - hardened												
	PH - hardened												
	Hardened												
	Austenitic												
	Cast												
	Austenitic	0.50	0.30	40	4C25	3.00	1.00	20	4C25	5.00	1.50	15	4C25
	PH - hardened												
	Super austenitic												
	Austenitic - ferritic (Duplex)												
	Cast												
	Non - veldable ⩾ 0.05%C												
	Weldable < 0.05%C												

ISO	Material	TYPES OF MACHINING											
		FINISHING				MEDIUM				ROUGHING			
		a_p	f_n	V_c	GRADE	a_p	f_n	V_c	GRADE	a_p	f_n	V_c	GRADE
		mm	mm/r	m/min	-	mm	mm/r	m/min	-	mm	mm/r	m/min	-
Cast iron	**Malleable cast iron**												
	Ferritic (short chipping)	0.50	0.30	50	3C15	3.00	1.00	30	3C15	5.00	1.50	25	4C25
	Pearlitic (long chipping)	0.50	0.30	40	3C15	3.00	1.00	20	3C15	5.00	1.50	15	4C25
	Grey cast iron												
K	Low tensile strenght	0.50	0.30	50	3C15	3.00	1.00	30	3C15	5.00	1.50	25	4C25
	High tensile strenght	0.50	0.30	40	3C15	3.00	1.00	20	3C15	5.00	1.50	15	4C25
	Nodular SG iron												
	Ferritic	0.50	0.30	50	3C15	3.00	1.00	30	3C15	5.00	1.50	25	4C25
	Pearlitic	0.50	0.30	50	3C15	3.00	1.00	20	3C15	5.00	1.50	15	4C25
	Martensitic	0.50	0.30	10	3C15	3.00	1.00	8	3C15	5.00	1.50	25	4C25

D.c Technical information - grades for heavy turning inserts

ISO



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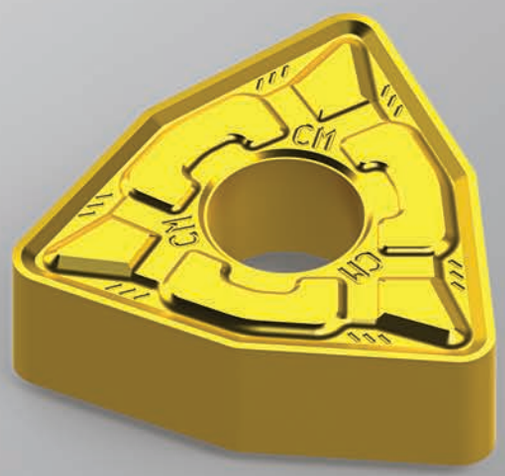


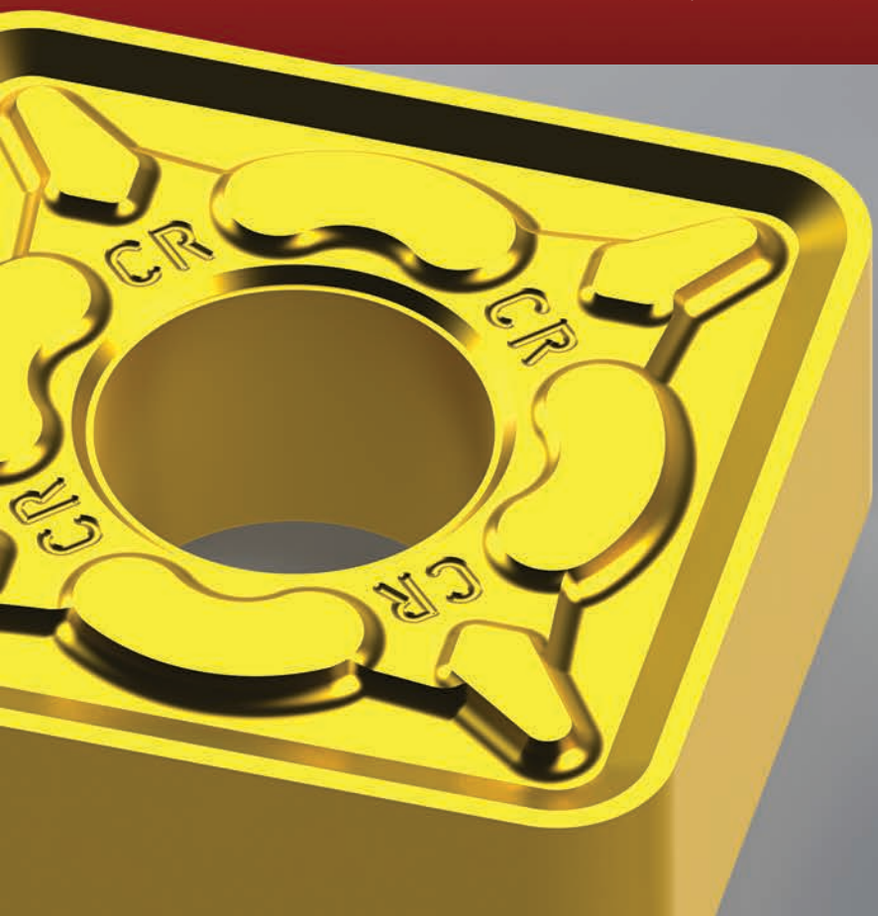
ABOUT COMPANY

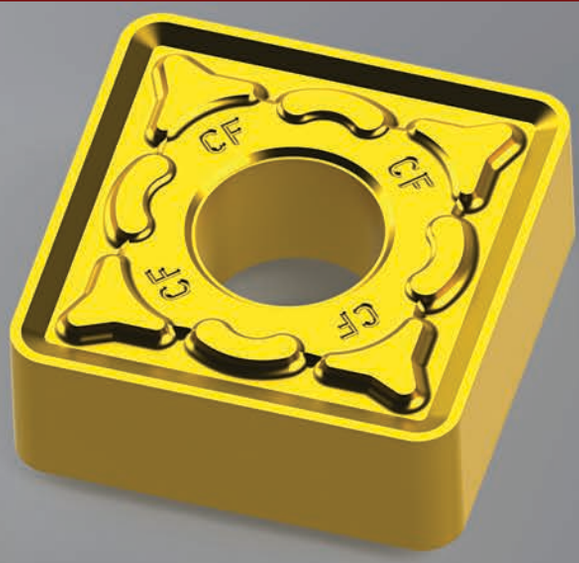
CORUN HOLDING d.o.o. Užice, Serbia is factory for production of cemented carbide indexable inserts, toolholders, milling cutters and other special cutting tools based on cemented carbide.

Also, we produce tools for road and mining industry (picks for asphalt removing, cutters for canal digging, mining drill for deep hole drilling), as well as tools for cold heading and forming (cemented carbide dies for forging, pulling, squeamishing - all with corresponding pins).

CORUN HOLDING d.o.o has their own development and construction bureau, so we have a opportunity to give our customers complete technological answers for all problems in cutting industry.

One of the main target of **CORUN HOLDING** d.o.o. company is to be available all the time for our customers worldwide and to respond on all of Yours requests as soon as possible in order to make the best solutions together.





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