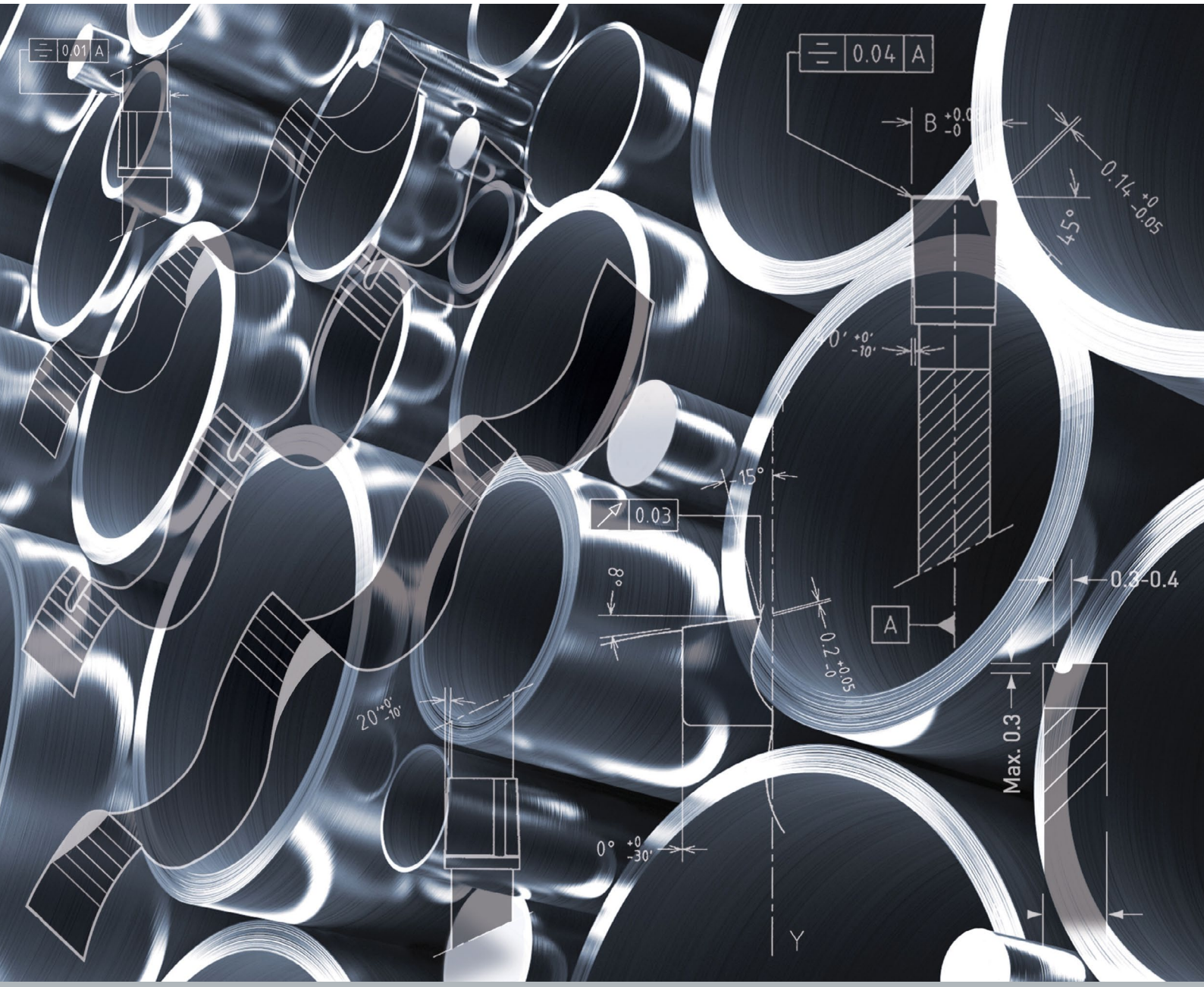
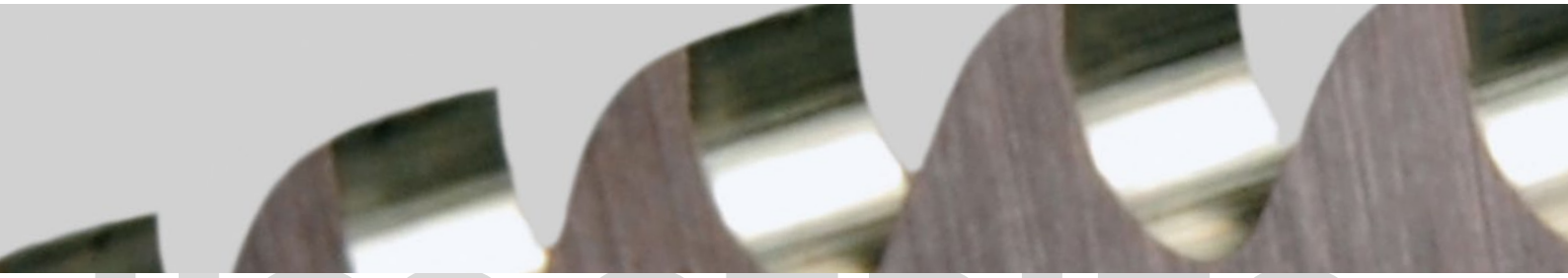
KINKELDER®
the cutting experts



KINKELDER

Standard products and technical specifications

Standard range HSS saw blades
Bore and pinhole combinations
Number of teeth and tooth pitches
Tooth forms
Segmental saw blades
Product Application Matrixes



HSS SERIES

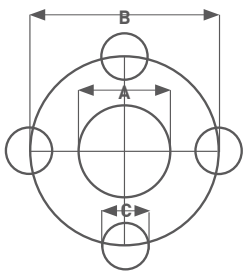
Standard range HSS saw blades

Diameter (mm)	Kerf (mm)				Weight (kg)			
160	1,2	1,6	2,0		0,20	0,30	0,35	
175	1,2	1,6	2,0		0,25	0,35	0,40	
200	1,2	1,6	1,8	2,0	0,30	0,40	0,40	0,5
210	2,0				0,50			
225	1,2	1,6	2,0		0,40	0,50	0,60	
250	1,6	2,0	2,5	3,0	0,60	0,70	0,90	1,1
275	1,6	2,0	2,5	3,0	0,70	0,80	1,10	1,3
300	1,6	2,0	2,5	3,0	0,80	1,00	1,30	1,6
315	2,0	2,5	3,0		1,10	1,40	1,70	
325	2,0	2,5	3,0		1,20	1,50	1,80	
350	2,0	2,5	3,0	3,5	1,50	1,80	2,00	2,3
370	2,5	3,0	3,5		2,00	2,50	3,00	
400	2,5	3,0	3,5	4,0	2,50	3,00	3,50	4,0
425	3,0	3,5	4,0		3,00	3,50	4,00	
450	3,0	3,5	4,0		3,50	4,00	4,50	
500	3,0	3,5	4,0	5,0	4,00	5,00	5,50	6,9
525	3,5	4,0			5,50	5,70		
550	3,0	4,0	5,0		5,00	6,50	7,90	
570	4,0	5,0			6,80	0,72		
600	4,0	5,0			7,00	8,40		
630	4,0	5,0			7,50	8,60		

For more information regarding Power 2000, Power Integral and Supreme saw blades, please contact your Kinkelder distributor.

BORE AND PINHOLE COMBINATIONS

Bore Ø (mm)	Pinhole combinations (mm)		
32	2/8,5/45	2/12/64	4/9/50
32 (Power / Supreme)	2/8,5/45	2/11/63	
40	2/8,5/55	4/12/64	
	2/15/80	2/15/100	4/12/64
50	4/15/80	4/15/85	
50 (Power / Supreme)	4/15/80		
80	4/23/120		



A Borehole
B PCD
C Pinholes

HSS SERIES

Standard range HSS saw blades

NUMBER OF TEETH AND TOOTH PITCHES (T IN MM)

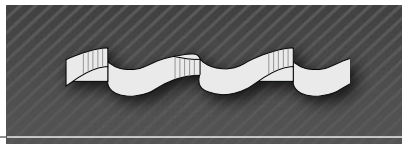
(mm)	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	T 14	T 16	T 18
175	180	140	110	90		64							
200	200	160	128	100		72							
210	210	160	130	110		84							
225	220	180	150	120		90	80						
250	240	200	160	128	110	100		80		64			
275	280	220	180	144	120	110	96	84	78	72			
300	320	240	200	160	140	120	110	100	90	80			
315	320	250	200	160	140	120	110	100	90	80	72		
325	320	250	200	170	150	130	110	100		90			
350	350	280	220	180	160	140	120	110		90	80		
370		300	220	190	160	140	120	110	100	90	80	70	
400		320	250	200	180	160	140	128		100	90	80	70
425		350	260	220	180	160	140	130	120	110	100	80	70
450			280	240		180		140		120	100	90	80
500			310	260		200		160		130	110	100	90
525			330	270		210		164		140	120	104	90
550			340	280		220		170		140	120	110	100
570			360	300		220		180		150	130	110	100
600				320		240		190		160	130	120	100
630				320		240		190		160	130	120	100

Other diameters available on request

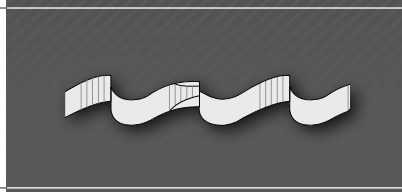
GEOMETRIE

Tooth forms

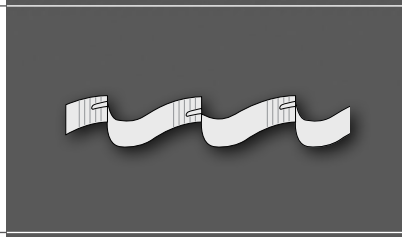
BW All teeth of tooth form 'BW' are beveled alternatively. It is most suitable for cutting light gauge tubes and sections made of steel or non-ferrous metals. Tooth pitch 4mm or smaller.



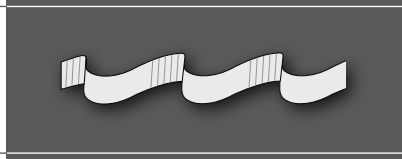
HZ The 'HZ' tooth form is most suitable for cutting solids and thick walled tubes. The roughening tooth is bevelled on both sides and is between 0,2 and 0,3 mm higher than the square finishing tooth. Tooth pitch higher than 4mm.



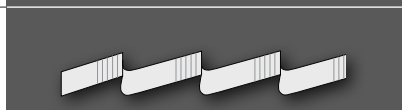
CB The Chipbreaker tooth form is most effective for tube and profile cutting, particularly with PVD coated blades. It minimizes burr formation even at high cutting rates. It requires a stronger motor and allows the highest speeds. At high speeds the tube walls should not be too thin.

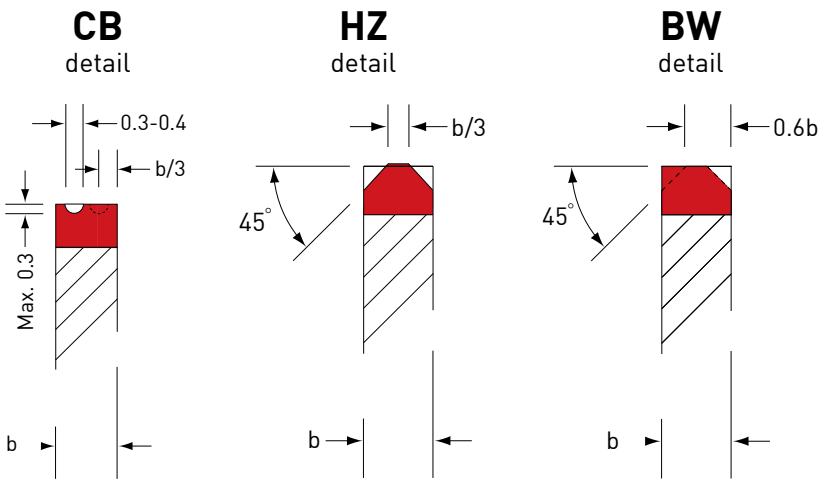


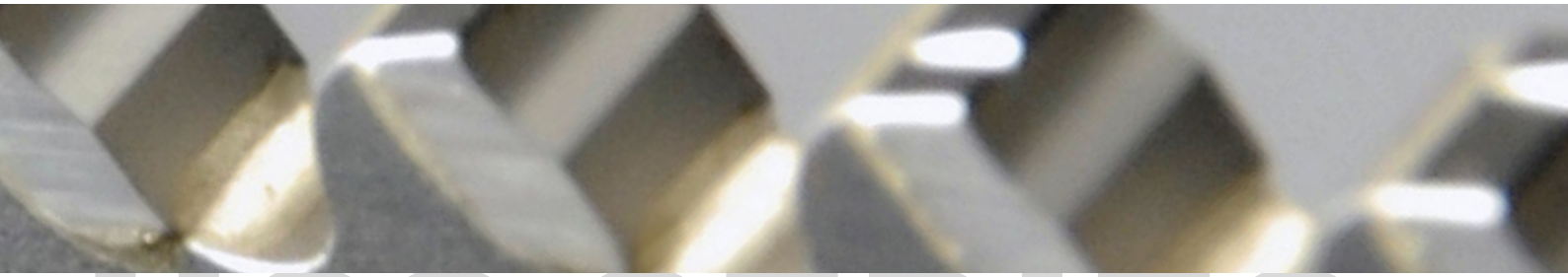
B Tooth form 'B' is used for cutting very thin walled pipes and profiles. It is best applied for thin saw blades.



A 'A' geometry is used for machining work, such as slotting, with thin saw blades.







HSS SERIES

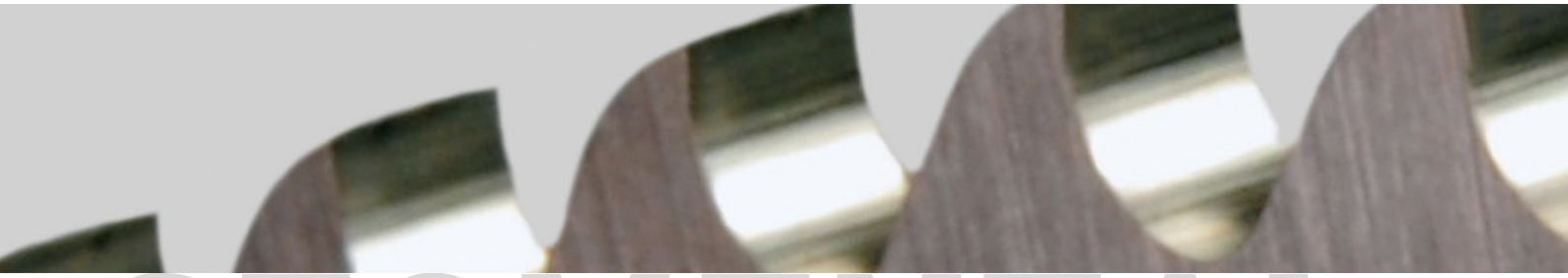
Application Matrix HSS saw blades

TOOTH PITCH RECOMMENDATION (MM)

D (mm)	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
Round	5	7	9	10	11	12	13	14	15	16	17	17	18	19	20
Square	5	7	9	10	11	12	13	14	15	16	17	17	18	19	20
Thick walled tube	5	7	7	8	9	9	9	10	10	10	11	11	11	11	11
Thin walled tube	4	5	6	6	7	7	7	8	8	8	9	9	9	9	9
RSJ								13	13	13	13	13	14	14	15
Channel			13	13	14	14	14	14	14	14	14	15	16	16	16

SPEED RECOMMENDATION (M/MIN)

Material type	Structural steels	Special steels	Stain-less	Cast Steel	Cast Iron	Non-ferrous			
						Copper	Brass	Bronze	Aluminum
Round	30-60	20-40	5-30	15-30	10-40	200-400	350-600	25-125	80-1800
Square	30-60	20-40	5-30	15-30	10-40	200-400	350-600	25-125	80-1800
Thick walled tube	40-80	20-50	5-40	15-30	10-50	200-500	350-750	25-125	125-1800
Thin walled tube	50-120	25-80	10-50			350-650	400-900		250-1800
RSJ	48-80	20-50	10-40						
Channel	30-60	20-50	10-40						80-1800



SEGMENTAL

Segmental saw blades

Segmental circular saw blades consist of a chrome vanadium steel body, with hardened toothed segments riveted to the periphery. This construction makes it possible to repair a segmental saw blade after heavy tooth or segment damage, by simply replacing one or more segments.

Kinkelder produces segmental circular saw blades in diameters from 250 mm to 1610 mm. For our standard range, please see the table on the following page.

Standard specifications			
Material	**Tooth forms**	**Cutting/ clearance angle**	**Hardness**
M 2 = DIN 1.3343	HZ, BW	18 ° / 8 °	63 - 65 HRC
M 35 = DIN 1.3243 (5% Cobalt)			

The Kinkelder production range also includes saw blades with non-standard dimensions, such as different bores, pinholes, tooth pitches and tooth forms.

Standard range Segmental saw blades

Diameter mm	No. of segm.	Thick-ness mm	Bore-hole mm	Pinhole combinations			Weight kg	Approx. tooth pitch dependent on the number of teeth per segment						
								3	4	5	6	8	10	12
275	12	3,0	32	2/8,5/45	4/9/50	2/12/64	1,0	24,0	17,9	14,4	12,0	9,0	7,2	6,0
275	12	3,0	40	2/8,5/55	4/12/64		1,0	24,0	17,9	14,4	12,0	9,0	7,2	6,0
300	14	3,6	32	2/8,5/45	4/9/50	2/12/64	1,5	22,4	16,8	13,5	11,2	8,4	6,7	5,6
300	14	3,6	40	2/8,5/55	4/12/64		1,5	22,4	16,8	13,5	11,2	8,4	6,7	5,6
315	14	3,6	32	2/8,5/45	4/9/50	2/12/64	1,5	23,5	17,7	14,1	11,8	8,8	7,1	5,9
315	14	3,6	40	2/8,5/55	2/12/64		1,5	23,5	17,7	14,1	11,8	8,8	7,1	5,9
315	14	3,6	50	4/15/80	4/15/85		1,5	23,5	17,7	14,1	11,8	8,8	7,1	5,9
360	16	3,6	40	2/8,5/55	4/12/64		2,0	23,5	17,7	14,1	11,8	8,8	7,1	5,9
360	16	3,6	50	4/15/80	4/15/85		2,0	23,5	17,7	14,1	11,8	8,8	7,1	5,9
370	16	3,6	50	4/15/80	4/15/85		2,5	24,2	18,2	14,5	12,1	9,0	7,3	6,1
400	16	4,0	40	2/15/80	4/12/64		3,0	26,2	19,6	15,7	13,1	9,8	7,9	6,5
400	16	4,0	50	4/15/80	4/15/85		3,0	26,2	19,6	15,7	13,1	9,8	7,9	6,5
400	16	4,0	60	4/16/90	4/23/96		3,0	26,2	19,6	15,7	13,1	9,8	7,9	6,5
400	16	5,0	50	4/15/80	4/15/85		3,5	26,2	19,6	15,7	13,1	9,8	7,9	6,5
425	18	4,0	40	2/15/80	4/12/64		3,5	24,7	18,5	14,8	12,5	9,3	7,4	6,2
425	18	4,0	50	4/15/80	4/15/85		3,5	24,7	18,5	14,8	12,5	9,3	7,4	6,2
450	18	4,0	50	4/15/80	4/18/100		4,0	26,1	19,6	15,7	13,1	9,8	7,9	6,5
460	18	5,0	40	4/12/64	2/15/80	2/15/100	4,5	26,7	20,1	16,0	13,4	10,0	8,0	6,7
460	18	5,0	50	4/15/80	4/15/85		4,5	26,7	20,1	16,0	13,4	10,0	8,0	6,7
460	18	5,0	60	4/18/100	4/16/90	4/23/96	4,5	26,7	20,1	16,0	13,4	10,0	8,0	6,7
510	18	5,7	50	4/15/80	4/18/100		6,5	29,7	22,2	17,8	14,8	11,1	8,9	7,4
560	18	5,0	50	4/18/100			7,0	32,6	24,4	19,5	16,3	12,2	9,8	8,1
560	18	5,0	80	8/22/142			7,0	32,6	24,4	19,5	16,3	12,2	9,8	8,1
630	20	5,0	80	4/22/120	4/27/160		9,0	33,0	25,0	19,8	16,5	12,4	9,9	8,2
630	20	6,0	80	4/22/120	4/27/160		9,0	33,0	25,0	19,8	16,5	12,4	9,9	8,2
660	20	6,0	80	8/22/142	4/22/120	4/27/160	12,0	34,5	26,0	20,7	17,3	13,0	10,4	8,6
710	24	6,2	80	4/22/120	4/27/160		14,0	31,0	23,2	18,6	15,5	11,6	9,3	7,7
760	24	6,3	80	4/22/120	4/27/160		16,0	33,1	24,9	19,8	16,6	12,4	9,9	8,3
810	24	6,8	80	4/22/120	4/27/160		20,0	35,3	26,5	21,2	17,7	13,2	10,6	8,8
860	24	6,5	80	4/22/120	4/27/160		21,0	37,5	28,1	22,5	18,8	14,1	11,3	9,4
910	30	7,0	80	4/22/120	4/27/160		26,0	31,8	23,8	19,0	15,8	11,9	9,5	7,9
910	30	7,0	100	8/27/186			26,0	31,8	23,8	19,0	15,8	11,9	9,5	7,9
960	30	7,0	80	4/22/120	4/27/160		29,0	33,5	25,1	20,1	16,7	12,6	10,0	8,4
1010	30	8,0	100	4/30/200	4/30/250		38,0	29,4	22,0	17,6	14,7	11,0	8,8	7,3
1110	36	8,0	100	4/30/200	4/30/250		48,0	32,2	24,2	19,4	16,1	12,1	9,7	8,1
1250	36	9,0	100	4/30/200	4/30/250		68,0	36,3	27,2	21,8	18,1	13,6	10,9	9,1
1310	36	9,0	100	4/30/200	4/30/250		75,0	38,0	28,6	22,8	19,0	14,3	11,4	9,5
1320	36	9,0	100	4/30/200	4/30/250		77,0	38,4	28,8	23,0	19,2	14,4	11,5	9,6
1410	36	9,0	100	4/30/200	4/30/250		87,0	41,0	30,7	24,6	20,5	15,4	12,3	10,2
1430	36	9,5	100	4/30/200	4/30/250		93,0	41,6	31,2	24,9	20,8	15,6	12,5	10,4
1510	36	9,0	100	4/30/200	4/30/250		116,0	43,9	32,9	26,3	22,0	16,5	31,2	10,9
1610	40	11,0	100	4/33/250	4/33/315		130,0	42,1	31,6	28,1	23,4	17,6	14,4	11,7

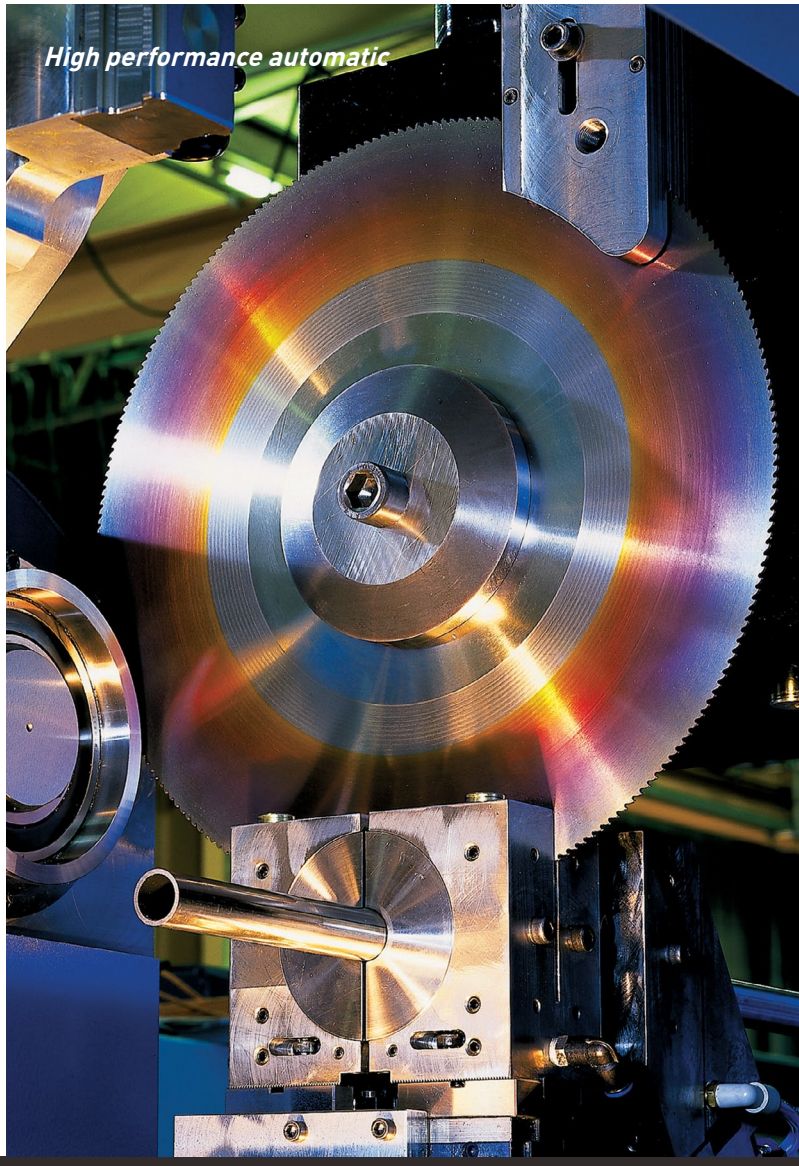
Other borehole/pinhole combinations available on request

Product Application Matrixes

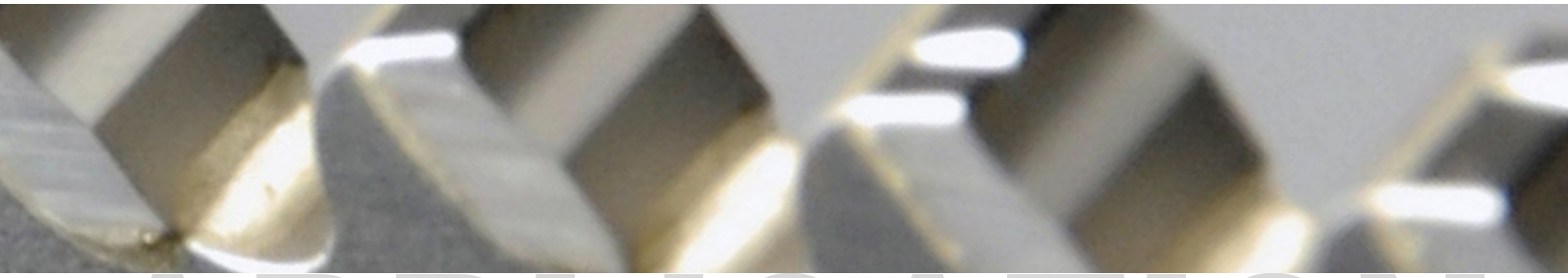
The following matrixes will offer you a helpful tool in determining the most suitable saw blade for your specific application, whether you are cutting thin walled (stainless) steel tubes, tubes or solid material on manual, semi-automatic or high performance automatic machines.

Semi-automatic

Automatic



High performance automatic



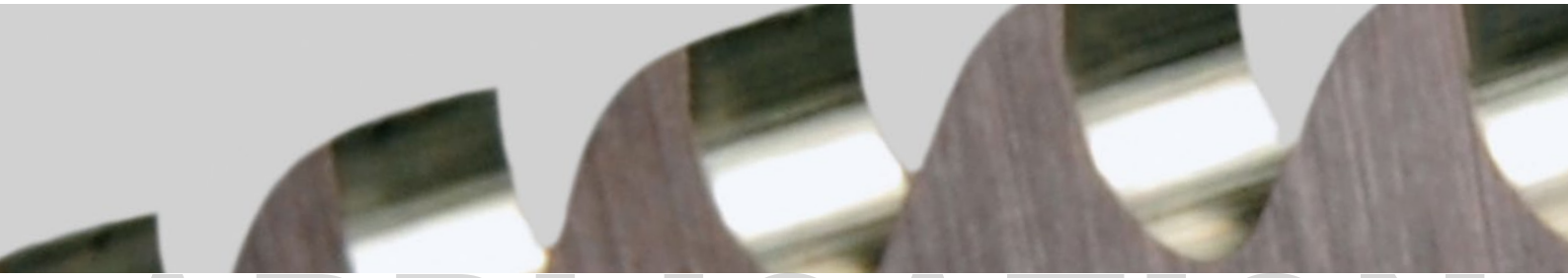
APPLICATION

Product Application Matrix for solids

SOLIDS

1	Best product
2	Second best product
3	Working alternative

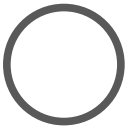
	High output / high quality automatic machines						Other automatic or semi-automatic machines						Manual					
	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel
HSS saw blades																		
ALPHA																		
SOLAR													1	2		1	1	
EC 3000													3	3				
PULSAR													3					
PERFORMANCE 3000																		
FUSION																		
SUPREME 3000														1				
POWER 2000																		
POWER INTEGRAL																		
TCT saw blades																		
CX SERIES 1	2	1	1	3			2	1	1	3								
CX SERIES 3																		
CX SERIES 4																		
CX SERIES 5																		
CX SERIES 6 (+)				2	1	1				2	1	1						
CX SERIES 6 (-)				1	2					1	2							
CX SERIES 7	1						1											
Champion TH																		
Champion SL	3						3											



APPLICATION

Product Application Matrix for thin walled tubes

THIN WALLED TUBES



1	Best product
2	Second best product
3	Working alternative

	High output / high quality automatic machines						Other automatic or semi-automatic machines						Manual					
	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel
HSS saw blades																		
ALPHA													3					
SOLAR													3					
EC 3000				2	3			2		2	3		2	2		3	3	
PULSAR	3			2	3		2	3		3	3		3			2	2	
PERFORMANCE 3000	3			3	3		3											
FUSION	3			3				1							1			
SUPREME 5000	1	3																
POWER 2000	2			1	2	3	1	3		1	1		1	1		1	1	1
POWER INTEGRAL																		
TCT saw blades																		
CX SERIES 1																		
CX SERIES 3	3	3	3															
CX SERIES 4				1	1	1				1		1						
CX SERIES 5	2	1	1				3	1	1									
CX SERIES 6 (+)																		
CX SERIES 6 (-)																		
CX SERIES 7																		
Champion TH	3	2	2															
Champion SL																		

APPLICATION

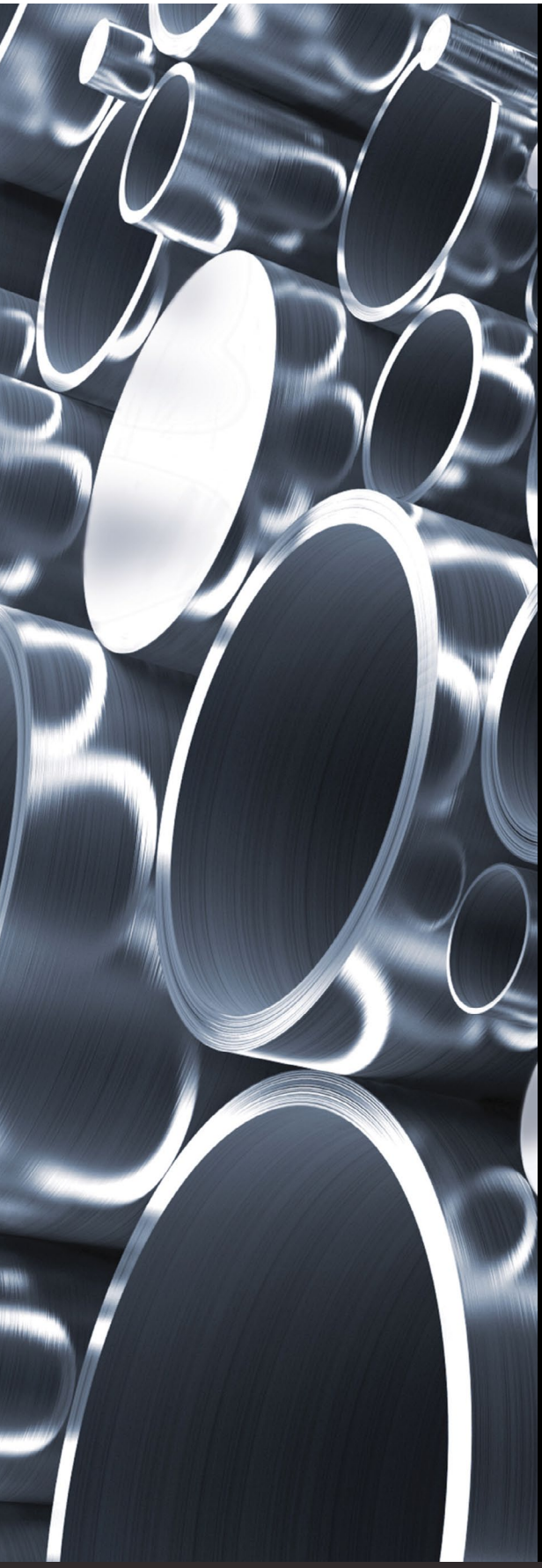
Product Application Matrix for tubes

TUBES

1	Best product
2	Second best product
3	Working alternative

	High output / high quality automatic machines						Other automatic or semi-automatic machines						Manual					
	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel	Steel < 800 N/mm²	Steel 800 - 1200 N/mm²	Steel > 1200 N/mm²	Stainless steel 300 series	Stainless steel 400 series	Duplex stainless steel
HSS saw blades																		
ALPHA													3					
SOLAR							2						3	3				
EC 3000				3	3		2	3		2	2		1	1		1	1	
PULSAR				3	2		2			3	3		3	3		3	3	
PERFORMANCE 3000																		
FUSION							1	2		2	2			2		2		
SUPREME 3000	2																	
POWER 2000				2	1					1	1		2	3			2	
POWER INTEGRAL																		
TCT saw blades																		
CX SERIES 1																		
CX SERIES 3	2	2	2															
CX SERIES 4				1	1	1						1						
CX SERIES 5	2	3					3	1	1									
CX SERIES 6 (+)																		
CX SERIES 6 (-)																		
CX SERIES 7																		
Champion TH	1	1	1															
Champion SL																		

KINKELDER®
the cutting experts



Kinkelder BV
Corporate Headquarters

Nijverheidsstraat 2
(Industrial Area Zuidspoor)
NL-6905 DL Zevenaar

P.O. Box 242
NL-6900 AE Zevenaar
The Netherlands

T: +31 (0)316 58 22 00
F: +31 (0)316 58 22 17
info@kinkelder.nl
www.kinkelder.com

Kinkelder Belgium N.V./S.A.
Sint-Pieters-Leeuw, Belgium
T: +32 (0)2 465 64 42
info@kinkelder.be
www.kinkelder.be

KR Saws Ltd.
Coventry, United Kingdom
T: +44 (0)24 7661 0907
sales@krsaws.co.uk
www.krsaws.co.uk

Kinkelder France SA
Orchies, France
T: +33 (320) 71 02 12
sales@kinkelder.fr
www.kinkelder.com/fr

Kinkelder France
Messein, France
T: +33 (383) 539713
info@kinkelder.fr
www.kinkelder.com/fr

AMV Service
Le Chambon Feugerolles, France
T: +33 (477) 405229
info@amvservice.com
www.amvservice.com

Sepio spol s.r.o.
Zborovice, Czech Republic
T: +420 (0)57 366 91 35
sepio@sepio.cz
www.sepio.cz

Kinkelder Cutting Technology Co., Ltd.
Suzhou City, China
T: +86 (0)512 693 68 780
info@kinkelder.com.cn
www.kinkelder.com/cn

Saws International
USA Headquarters
Machesney Park (IL), USA
T: +1 (815) 965 6900
info@sawsinternational.com
www.sawsinternational.com

Kinkelder Saw Inc.
Canton (MI), USA
T: +1 (734) 453 1199
info@kinksaw.com
www.kinkelder.com

Kinkelder Cutting Solutions Inc.
Louisville (KY), USA
T: +1 (502) 329 8244
cridge@kinkelderusa.com
www.kinkelder.com

Alabama Cutting Technologies
Pell City (AL), USA
T: +1 (205) 884 49 71
info@alcuttingtech.com
www.alcuttingtech.com

KTS Sägetechnik GmbH
Zülpich, Germany
T: +49 (2252) 835178-0
info@kts-saegetechnik.de
www.kts-saegetechnik.de

Grasche GmbH
Remscheid, Germany
T: +49 (0) 2191-5615-0
info@grasche.de
www.grasche.de