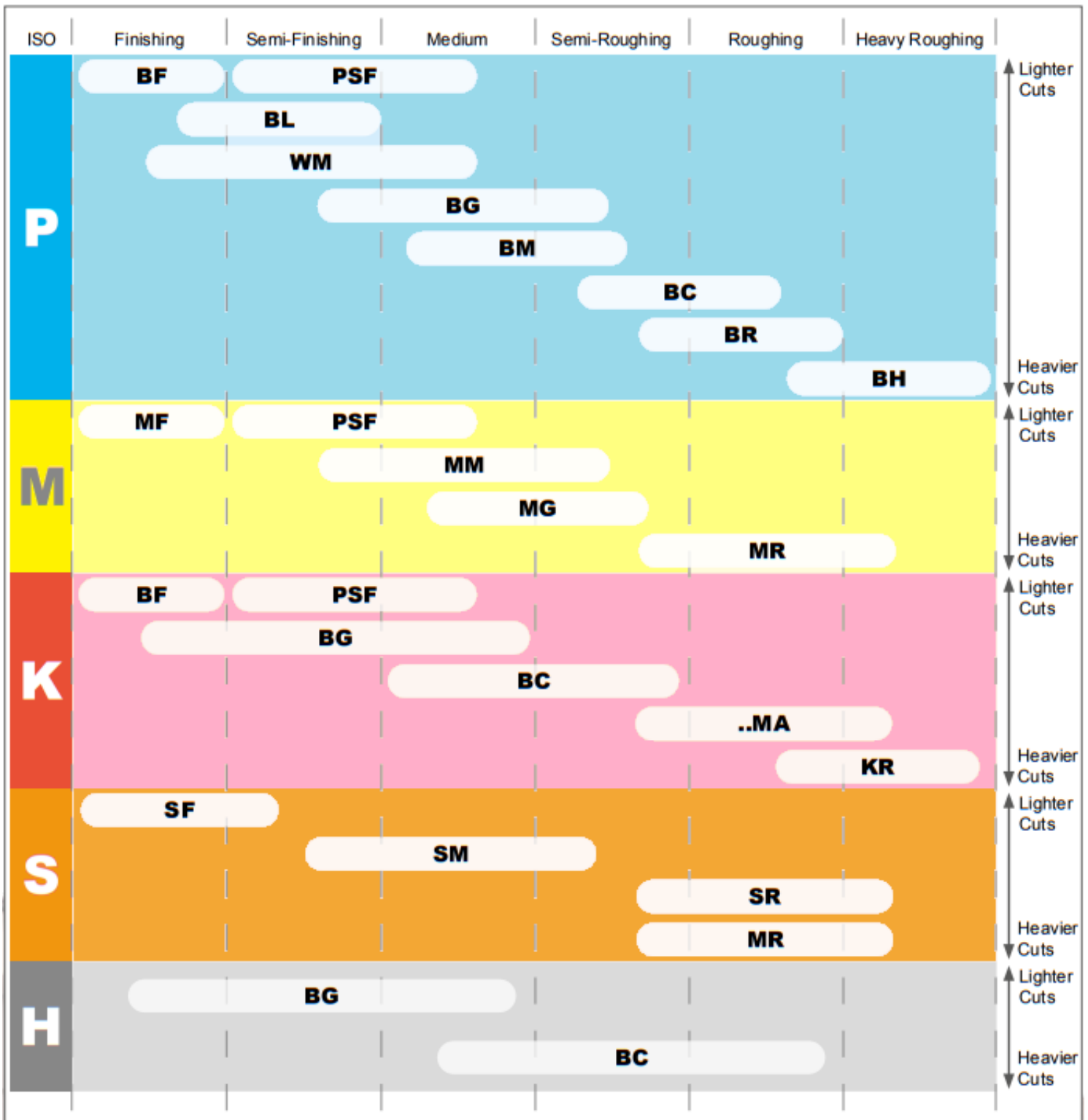

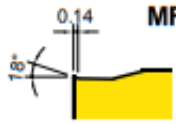
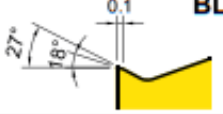
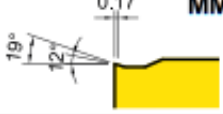
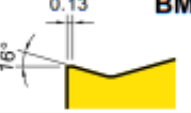

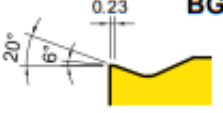
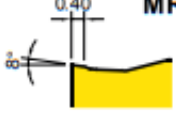
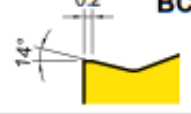
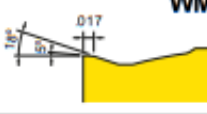
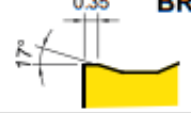
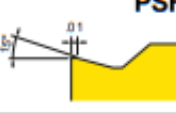
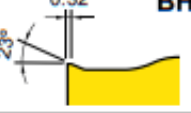
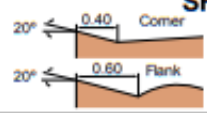

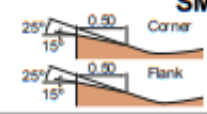

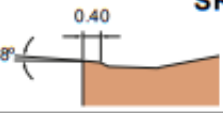


NEGATIVE CHIPBREAKER GUIDE



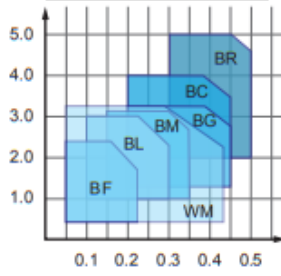
NEGATIVE CHIPBREAKER GUIDE

P	M	K	N	S	H	NEGATIVE		P	M	K	N	S	H	NEGATIVE	
●	○						BF Finishing	●							MF Finishing of stainless steel
●							BL Light cutting and sticky materials	●							MM Medium cutting of stainless steel
●							BM Medium cutting and unstable conditions	●							MG Medium to difficult conditions in stainless steel and HRSA
●	○	●			●		BG Medium cutting First choice	●							MR Roughing of stainless steel and scale/skin HRSA
●		●			●		BC Cast iron and medium roughing of steel	●	○						WM Wiper geometry for improved surface finish in steel
●		●					BR Roughing and interrupted cut	●	●	●					PSF Cermet chipbreaker for semi-finishing to semi-medium cuts
●		●					BH Heavy roughing								SF Finishing of clean HRSA material
		●					--MA Cast iron heavy roughing Flat insert type		○						SM Medium cutting of clean HRSA material
		●					KR Cast iron heavy roughing and interrupted cut		○						SR Roughing of clean HRSA material

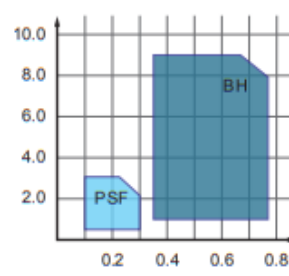
Chipbreaker Feeds & Depth of Cut Map

P
Steels

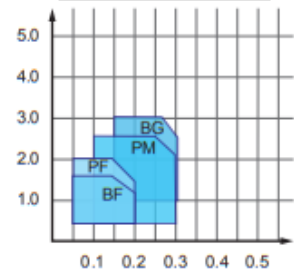
Negative Inserts



Negative - Cermet & Heavy

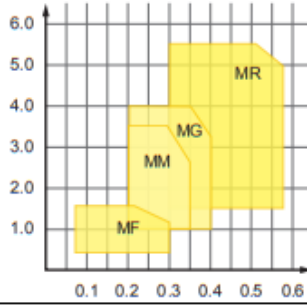


Positive Inserts

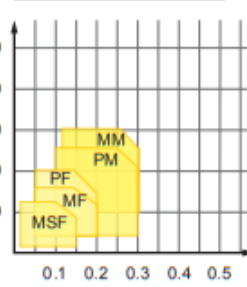


M
Stainless

Negative Inserts

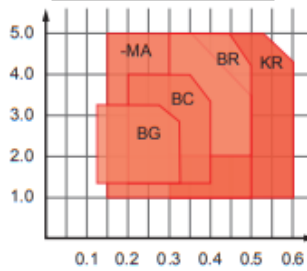


Positive Inserts

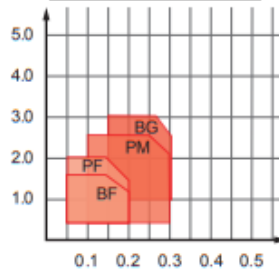


K
Cast Iron

Negative Inserts

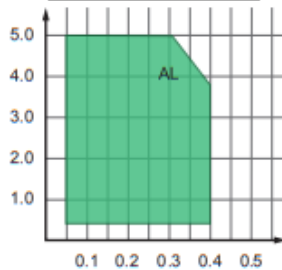


Positive Inserts



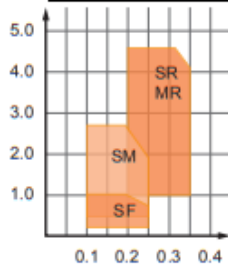
N
Non Ferrous

Positive Inserts

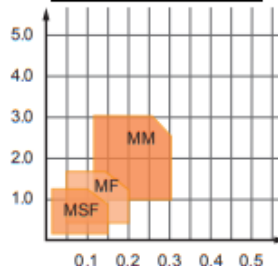


S
**Heat Resistant
Super Alloys**

Negative Inserts

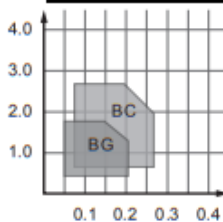


Positive Inserts

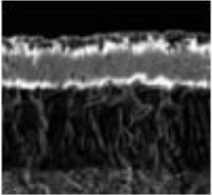
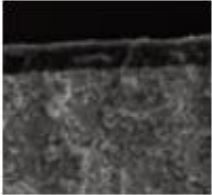
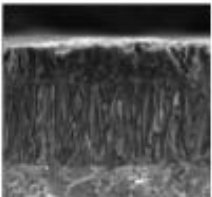
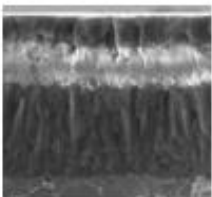
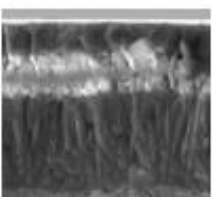
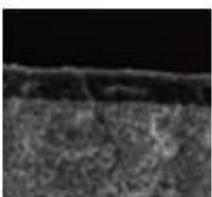
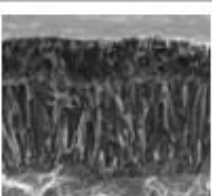
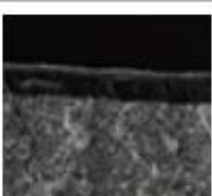
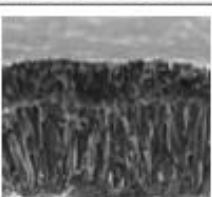
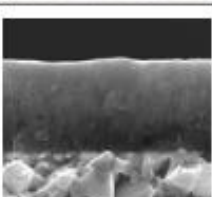
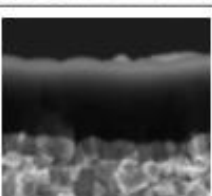

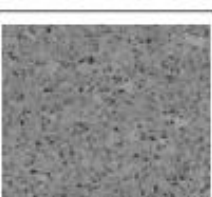
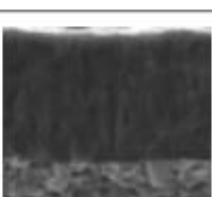


H
**Hardened
Steels**




Negative Inserts



INSERT GRADES

	<p>ET101C First choice for stable turning of cast iron</p> <p>K05 - K15</p> <p>CVD TiCN - Al₂O₃</p>		<p>P10 - P20</p> <p>M05 - M20</p> <p>S10 - S20</p> <p>PVD Coated</p>	ET21P Optimised grade for cutting of stainless steel at high cutting speeds.
	<p>P05 - P20</p> <p>K15 - K35</p> <p>CVD TiCN - Al₂O₃</p> <p>H05 - H10</p>		<p>M15 - M35</p>	ET225C Optimised grade for cutting of stainless steel high speeds and feed rate CVD Coated
	<p>P10 - P25</p> <p>Balanced grade for continuous cutting of steels.</p> <p>CVD TiCN - Al₂O₃</p>		<p>M20 - M35</p>	ET23P First choice for stable turning of stainless steel. PVD Coated
	<p>P15 - P30</p> <p>Versatile grade for general turning of steels.</p> <p>CVD TiCN - Al₂O₃</p>		<p>M30 - M40</p> <p>S30 - S50</p>	ET24P Optimised grade for interrupted cutting of stainless steel and skin & scale cuts in HRSA. PVD Coated
	<p>P20 - P35</p> <p>M20 - M30</p> <p>CVD TiCN - Al₂O₃</p>		<p>M05 - M15</p> <p>S05 - S15</p>	ET41P Optimised grade for clean HRSA materials. PVD Coated
	<p>ET10D First choice for high speed turning of aluminium, and Si >10%</p> <p>N05 - N35</p> <p>TaC Diamond Coated</p>		<p>P10 - P20</p> <p>M10 - M20</p> <p>K10 - K20</p>	CT10U Cermet grade for finishing, semi-finishing and medium cutting Uncoated
	<p>ET10U Polished face for general turning of aluminium.</p> <p>N05 - N35</p> <p>Uncoated</p>		<p>P10 - P30</p> <p>M20 - M30</p> <p>K20 - K30</p> <p>H20 - H30</p>	ET801 Turning grade for mid and low cutting conditions in most steels, cast iron and some stainless steels PVD Coated

COATING

	Multi-layer CVD coated grades are finished with a special process to enable smoother chip flow.		Single layer PVD coated grades are designed to balance edge strength with extended tool life.		TaC Diamond coated inserts maintain sharp cutting edge due to coating thickness of ≤ 1 µm and highly polished face.
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