

APPLICATION CASES

-09 FACEMILLING

SECO Competitor

Material	Alloyed steel	
Cutter	220.53-0050-09-6A	45° lead Facemill
Insert	SEEX09T3AFTN-M08	Square insert
Grade	T350M	—
Cutting speed	172	196
Diameter	50	50
No. of teeth	6	4
Feed per tooth	0.145	0.08
Table feed	460	400
Depth of cut	1	1
Width of cut	40	40
Coolant	no	yes
Overhang	225	225
No. of parts	128	54
Comments	Smooth cutting Better surface	Some vibrations
Result	+150%	

-12 FACEMILLING

SECO Competitor

Material	Alloyed steel	
Cutter	220.53-0063-12-5A	45° lead Facemill
Insert	SEEX1204AFTN-ME12	Square insert
Grade	F40M	—
Cutting speed	160	126
Diameter	63	63
No. of teeth	5	5
Feed per tooth	0,2	0,15
Table feed	800	500
Depth of cut	3	3
Width of cut	50	50
Coolant	no	no
Overhang	200	200
No. of parts	6	4
Comments	Smooth cutting Better surface	Some vibrations
Result	+60%	

CONTACT & INFORMATION

SECO MACHINING NAVIGATOR:

Update catalogue 2010

ONLINE INFORMATION:

Complete Quattromill information:
<http://www.secotools.com/quattromill>

Seco Tools international website:
<http://www.secotools.com>

TOOLS

MILLING

QUATTROMILL®



**ECONOMY AND PERFORMANCE IN
FACE MILLING**

SECO

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SECO

THE FIRST CHOICE FOR FACE MILLING

QuattroMill® is more than a general-purpose facemill. It is the industry's first choice for the full range of face milling applications and materials. Its super positive geometry, up to 35° effective rake angle, maximizes your machine tool's capability, allowing you to get more productivity.

SIMPLICITY AND RELIABILITY

Strong, square inserts give you the confidence to tackle your challenging applications. Fewer spare parts and quick insert location make it easy. Add to that, the latest cutter body design and the highest level of precision manufacturing, and your face milling applications just got positively simple.

PRECISION AND PERFORMANCE

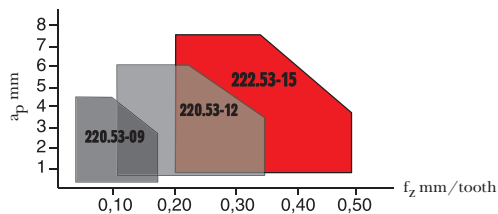
The QuattroMill insert grades and geometries permits super-positive, free cutting performance. And, behind it all, a simple philosophy – make it easy for the machine operator.

MAIN BENEFITS

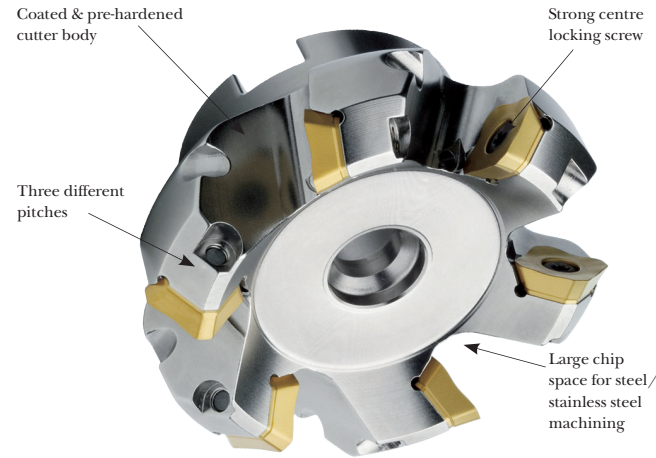
- Big range, cover all operations
- Low power consumption
- Excellent surface finish
- Long tool life
- Light cutting action
- Few spare parts, easy handling
- Both roughing and finishing with the same tool
- CBN inserts

QUATTROMILL RANGE

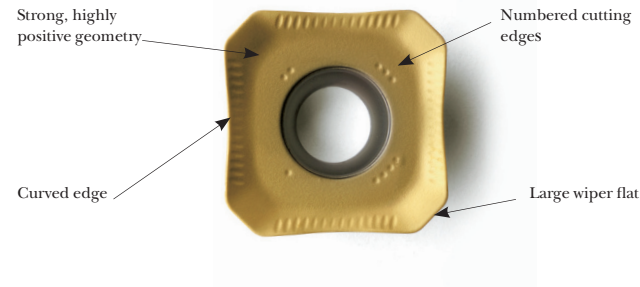
Cutter:	Diameter = 20 - 500mm
Pitch configuration:	Coarse, Normal, Close
Insert type and size:	SE.X... (4 edges/insert), 3 sizes (9, 12 and 15mm)
Depth of cut:	Max ap = 4,5 mm (insert size 09) Max ap = 6 mm (insert size 12) Max ap = 7,5 mm (insert size 15)



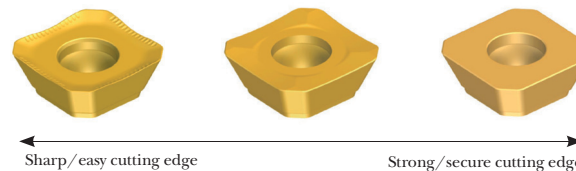
CUTTER FEATURES



INSERT FEATURES



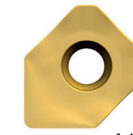
GEOMETRIES



SIZE	GEOMETRIES					
	-09	E04	ME06	ME07	M05	M08
-12	E08	ME11	ME12	M10	M14	MD18
-15	E10	ME15	M12	M17	M18	MD20

* More detailed information in Machining Navigator 2009

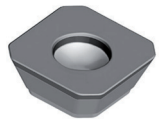
HIGH FEED WIPER



Standard square inserts produce very good surface finishes. For even better finishes, use the wiper insert. Or, for higher productivity, utilize the large flat on the wiper to increase the feed rate while maintaining the same high quality finish.

PCBN/PCD INSERTS

Full top PCBN inserts are also available for high productivity milling in hardened steel and cast iron. Brazed PCD inserts are available for SiAl alloy and bi metal machining.



GRADES

MP1500	Grade for medium rough milling under stable conditions at high cutting speeds
MP3000	Highly wear resistant optimized grade for milling in steel.
T350M	basic choice for difficult stainless steel and an alternative in difficult operations in steel
F15M	Hard and wear resistant grade for milling in aluminium and non-ferrous alloys.
F40M	First choice for milling with small feeds and/or low cutting speeds.
MK1500	Basic grade for milling cast iron and nodular cast iron.
MK2000	Complementary grade for difficult operations in cast iron and nodular cast iron.
MK3000	Optimization grade in soft to medium hard steel.
H15	Hard, wear resistant grade for milling in aluminium.
CBN200	PCBN grade for medium rough machining of hard steel and finishing of sintered iron.
PCD05	PCD grade for milling of medium and high Si Al-alloys, high surface finish requirements in titanium alloys.
PCD 20	PCD20 is the first choice grade for general purposes, Al-alloys, CFRP and titanium alloys.
PCD30M	Offers thermal stability when you have to machine a combination of materials like aluminium alloy and grey cast iron.

* More detailed information in Machining Navigator 2009