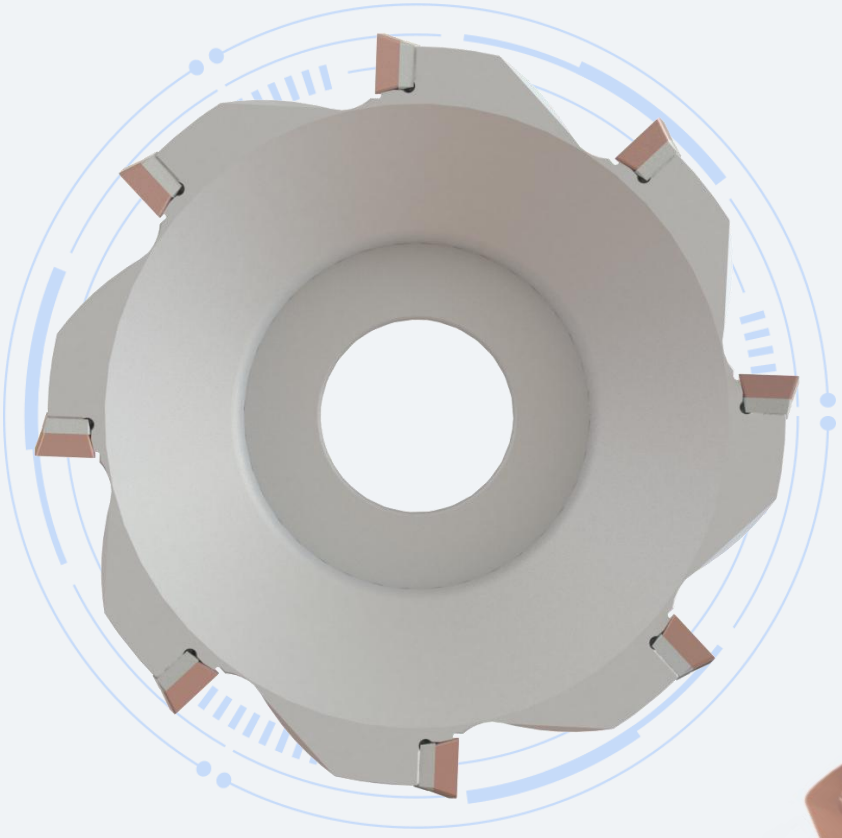
motherson

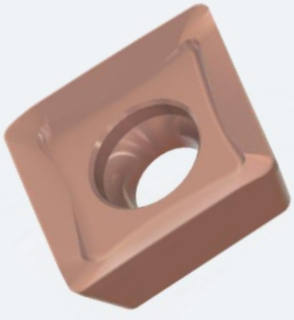
MSSM

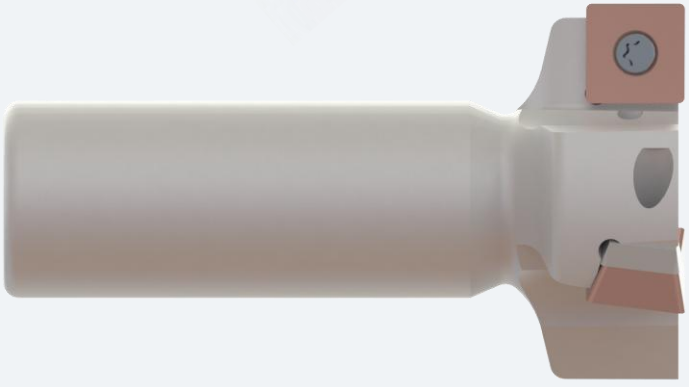
General Purpose Shoulder Milling for Steel

ISO
P



Smoothest Steel Machining with true 90° entering Angle



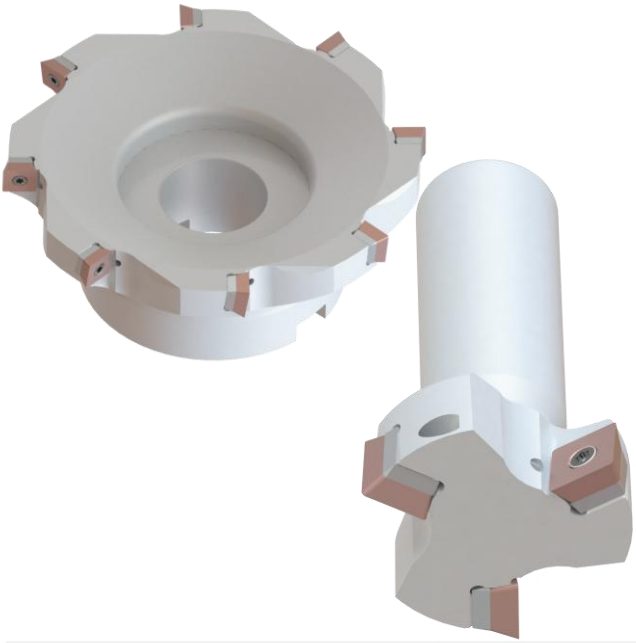


motherson

DELTACARB
HARDMETAL Switzerland

MSSM Cutter and SOMX Insert

Engineered for Reducing forces in Shoulder Milling.



- Higher Productivity, Lower Cutting Forces for Improved Machining Stability, existing pocket.
- Reduced Axial Forces on the Workpiece, Improved Machining Stability
- Superior wear and micro-chipping resistance.
- Chip-Thinning Effect Supports Higher Feed Rates and Improved Productivity.

Cutter Nomenclature

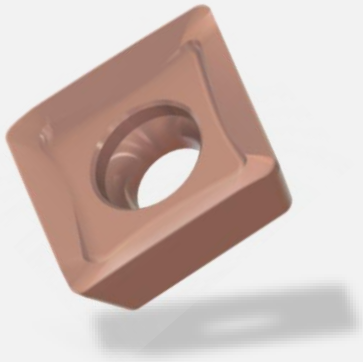
M	S	S	M	12	080	R	S	05
Motherson	Insert Shape	Shoulder	Milling	Insert Size	Dia.	Right Hand	Metric Size	Coarse Medium Fine

Grade selection

What is your primary Milling goal?

General purpose milling of Steel

- ❖ **Choose DMP2030P**
- ✓ **All round machining**
- ✓ **Proven wear resistance**
- ✓ **Multilayered coating**



motherson

DELTACARB
HARDMETAL Switzerland

Recommended Cutting parameters

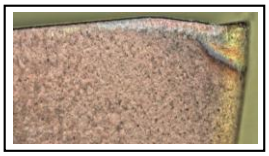
Insert	Parameters	For DMP2030P (HRC ~ 20-28)		
SOMX120408PDER-M (Ap ~ 8mm)	Speed (m/min)	Min. 100	Ideal 200	Max. 250
	Feed (mm/tooth)	Min. 0.10	Ideal 0.20	Max. 0.25

Success case

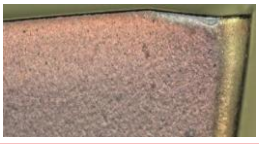
Face Milling (MSSM12063RS05 | SOMX120408PDER-M-DMP2030P)

Component: General Engineering
Material: MS (20HRC - ISO P)
Machine: VMC

SOMX insert - After machining of 46 min the **wear is 98µ** against **138µ** of Competition with Ra 0.46



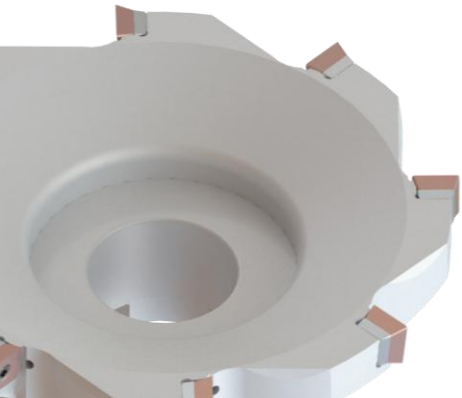
Existing

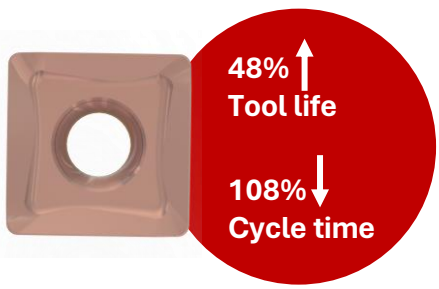


Motherson



Vc (m/min)	160	200
Fz (mm/tooth)	0.2	0.25
Ap (mm)	1.50	3.00
Passes	2	1
Tool life	46 min	**68 min** ↑
Cut time	166 sec	**80 sec** ↓





motherson

DELTACARB
HARDMETAL Switzerland

Cutter range MSSM Shell Type



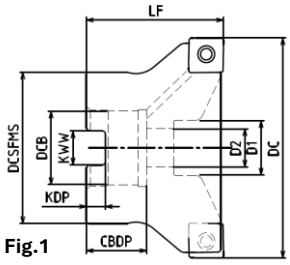


Fig.1

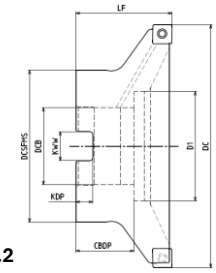
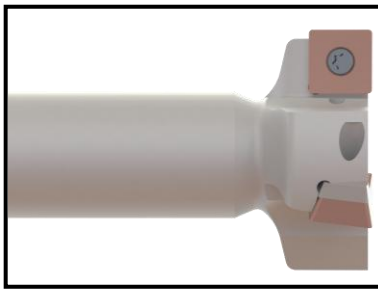


Fig.2

Catalogue No.	Stock	Diameter DC	Boss DCSFMS	Height LF	Hole Size DCB	Grooving Width KWW	Grooving Depth KDP	Mounting Depth CBDP	Bolt D1	Bolt D2	No. of Teeth	Weight (kg)	Fig
MSSM12050RS03	●	50	40	40	22	10.4	6.3	20	18	11	3	0.2	1
MSSM12050RS04	●	50	40	40	22	10.4	6.3	20	18	11	4	0.2	1
MSSM12063RS04	●	63	50	40	22	10.4	6.3	20	18	11	4	0.4	1
MSSM12063RS05	●	63	50	40	22	10.4	6.3	20	18	11	5	0.4	1
MSSM12080RS05	●	*80	60	50	27	12.4	7	25	20	13.5	5	0.8	1
MSSM12080RS06	●	*80	60	50	27	12.4	7	25	20	13.5	6	0.9	1
MSSM12100RS06	●	100	70	50	32	14.4	8.5	32	46	-	6	1.2	2
MSSM12100RS07	●	100	70	50	32	14.4	8.5	32	46	-	7	1.2	2

Cutter range MSSM Shank Type



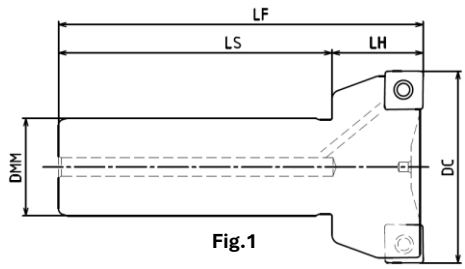


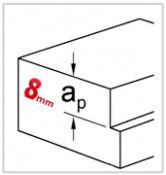
Fig.1

Catalogue No.	Stock	Diameter DC	Shank DMM	Head LH	Shank LS	Total Length LF	No. of Teeth	Fig
MSSM12040E03	●	40	32	30	90	120	3	1
MSSM12050E03	●	50	32	30	90	120	3	1
MSSM12050E04	●	50	32	30	90	120	4	1
MSSM12063E04	○	63	32	30	90	120	4	1
MSSM12063E05	○	63	32	30	90	120	5	1
MSSM12080E05	○	80	32	30	90	120	5	1
MSSM12080E06	○	80	32	30	90	120	6	1

motherson

DELTACARB
HARDMETAL Switzerland

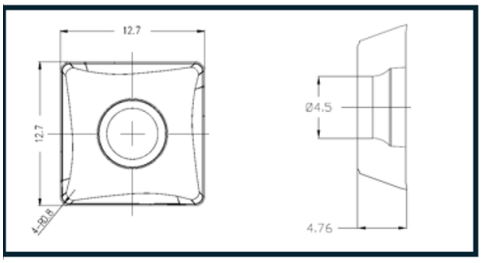
Insert range



NEW

Insert - SOMX120408

		PVD
Application	High-Speed	
Stable Cutting Forces	General Purpose	P
	Roughing	P
	Cat. No.	DMP2030P
	SOMX120408PDER-M	●



motherson

Motherson Techno Tools Limited

Communication address: A-2, Sector 84, Noida - 201301, Uttar Pradesh, India.
Reg. Office: 2nd floor, Block B1, Mohan Cooperative Industrial Estate, Mathura Road, New Delhi - 110044, India.
CIN No.: U74999DL1992PLC049607

Ph.: +91-120-6110000 | marketing.mttl@motherson.com

www.mothersontools.com

Motherson Deltacarb Advanced Metal Solutions SA

Via Al Molino 29,
CH-6915 Pambio Noranco-Lugano, Switzerland

info.deltacarb@motherson.com

www.deltacarb.ch | www.motherson.com