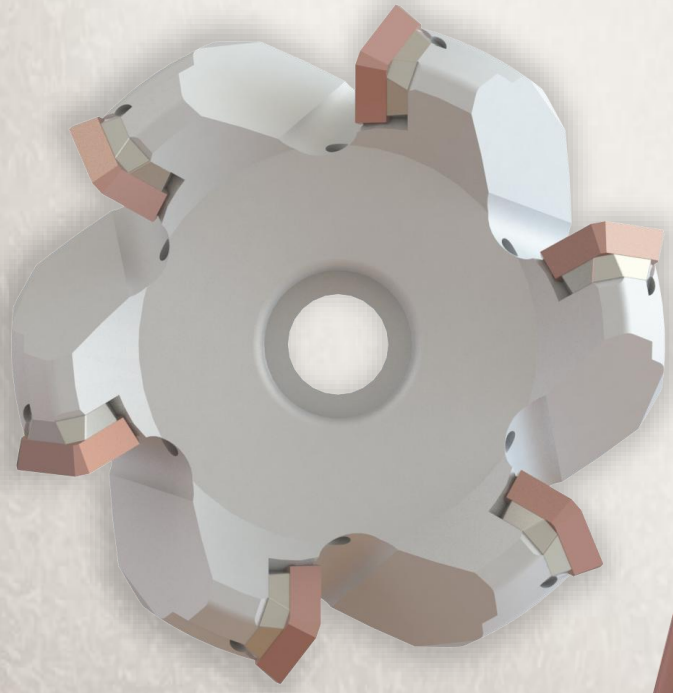
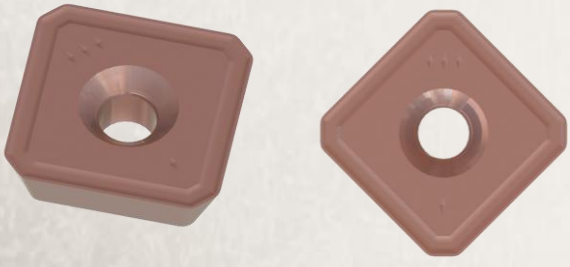
motherson

MSFM

General Purpose Face Milling for Steel and Cast Iron



Best-ever super-upgraded 45° Entering Angle



motherson

DELTACARB
HARDMETAL Switzerland

MSFM Cutter and SEMT Insert

Engineered for Reducing forces in Face 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	F	M	13	080	R	S	04
Motherson	Insert Shape	Face	Milling	Insert Size	Dia.	Right Hand	Metric Size	Coarse Medium Fine

- MSFM13080RS04
- MSFM13080RS06
- MSFM13080RS08

Diameters Range – 40mm to 250mm (Shell Type)



Grade selection

What is your primary Milling goal?

General purpose milling of Steel

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

Consistent performance in Cast Iron

- ❖ Choose DMP3030K
- ✓ Dry Cutting
- ✓ Stable tool life
- ✓ Abrasion resistance

motherson

DELTACARB
HARDMETAL Switzerland

Recommended Cutting parameters

Insert	Parameters	For DMP2030P (HRC ~ 20-28)			For DMP3030K (HRC ~ 20-25)		
		Min.	Ideal	Max.	Min.	Ideal	Max.
SEMT13T3 AGSN-JM (Ap ~ 5mm)	**Speed** (m/min)	**100**	**200**	**250**	**100**	**200**	**250**
	Feed (mm/tooth)	**0.10**	**0.20**	**0.30**	**0.15**	**0.25**	**0.30**

Success case

NEW!

MSFM MSFM13063RS06 + SEMT13T3AGSN-JM DMP2030P

Component: Fabricated Plate
Material: Cast Steel - ISO (P)
Machine: HMC (BT50)
Application: Face Milling (Heavy Interrupted)





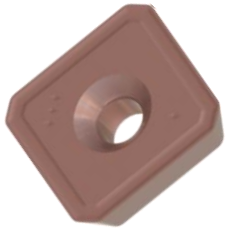


	Existing	Motherson
Vc (m/min)	257	260
↑ Fz (mm/tooth)	0.10	0.20
↑ Ap (mm)	4	5
↑ **Tool life**	48 m	68 m
↓ **Cut time**	8 min	4 min

NEW!

Feed 2X
Productivity 100
Tool Life 41





motherson

DELTACARB
HARDMETAL Switzerland

Cutter range MSFM13000RS Type



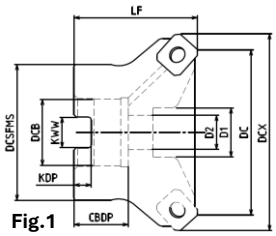
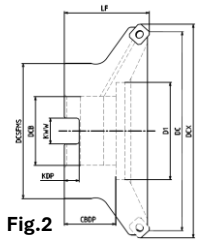
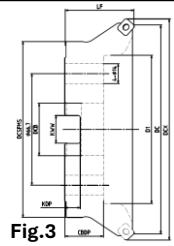
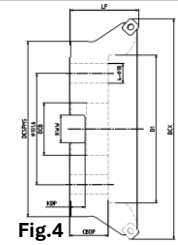


Fig.1


Fig.2


Fig.3


Fig.4

Shell type Catalogue No.	Stock	Diameter DC	Max. Diameter DCX	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
MSFM13040RS03	●	40	52	32	40	16	8.4	5.6	18	14	9	3	0.3	1
MSFM13050RS03	●	50	62	40	40	22	10.4	6.3	20	18	11	3	0.4	1
MSFM13050RS04	●	50	62	50	40	22	10.4	6.3	20	18	11	4	0.4	1
MSFM13050RS05	●	50	62	40	40	22	10.4	6.3	20	18	11	5	0.4	1
MSFM13063RS04	●	63	76	50	40	22	10.4	6.3	20	18	11	4	0.6	1
MSFM13063RS05	●	63	77	50	40	22	10.4	6.3	20	18	11	5	0.6	1
MSFM13063RS06	●	63	77	50	40	22	10.4	6.3	20	18	11	6	0.6	1
MSFM13080RS04	●	*80	93	55	50	27	12.4	7	25	20	13.5	4	1.2	1
MSFM13080RS06	●	*80	94	55	50	27	12.4	7	25	20	13.5	6	1.1	1
MSFM13080RS08	●	*80	94	55	50	27	12.4	7	25	20	13.5	8	1.1	1
MSFM13100RS05	●	100	113	70	50	32	14.4	8.5	32	46	-	5	1.6	2
MSFM13100RS07	●	100	114	70	50	32	14.4	8.5	32	46	-	7	1.6	2
MSFM13100RS10	○	100	114	70	50	32	14.4	8.5	32	46	-	10	1.5	2
MSFM13125RS06	○	125	138	80	63	40	16.4	9.5	29	52	29	6	2.8	1
MSFM13125RS08	○	125	139	80	63	40	16.4	9.5	29	52	29	8	2.8	1
MSFM13125RS12	○	125	139	80	63	40	16.4	9.5	29	52	29	12	2.7	1
MSFM13160RS07	○	160	173	130	63	40	16.4	9.5	29	88	-	7	4.5	3
MSFM13160RS10	○	160	174	130	63	40	16.4	9.5	29	88	-	10	4.5	3
MSFM13160RS16	○	160	174	130	63	40	16.4	9.5	29	88	-	16	4.5	3
MSFM13200RS08	○	200	213	150	63	60	25.7	14	35	130	-	8	7.1	4
MSFM13200RS12	○	200	214	150	63	60	25.7	14	35	130	-	12	7.0	4
MSFM13200RS20	○	200	214	150	63	60	25.7	14	35	130	-	20	6.9	4
MSFM13250RS10	○	250	263	190	63	60	25.7	14	35	160	-	10	11.2	4
MSFM13250RS14	○	250	264	190	63	60	25.7	14	35	160	-	14	11.1	4
MSFM13250RS24	○	250	264	190	63	60	25.7	14	35	160	-	24	11.0	4

Spare

Item Description	Screw	Wrench	Shim	Shim Screw	Wrench
SEMT13	S-M03512IP	MHT-T15IP	SH-10.7X3	HS-M0507	MLT-3.5

motherson

DELTACARB
HARDMETAL Switzerland

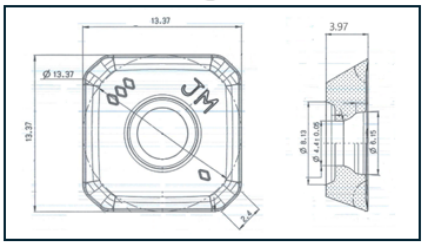
Insert range

NEW!

Insert - SEMT13T3

		PVD	PVD	
Application	High-Speed			
Lower Cutting Forces	General Purpose	P	K	
	Roughing	P	K	
	Cat. No.	**DMP2030P**	**DMP3030K**	Fig.
	SEMT13T3 AGSN-JM	●	●	1

Fig.1



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