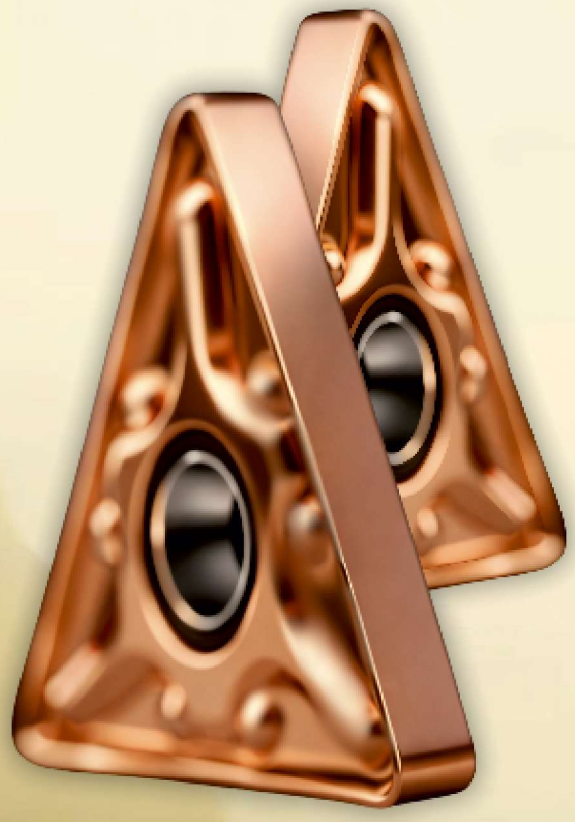
motherson

DELTACARB
HARDMETAL Switzerland

New PVD turning grade

DTP5035M

ISO
M



Leader in Stability & Superior Performance

Master of Stainless Steel

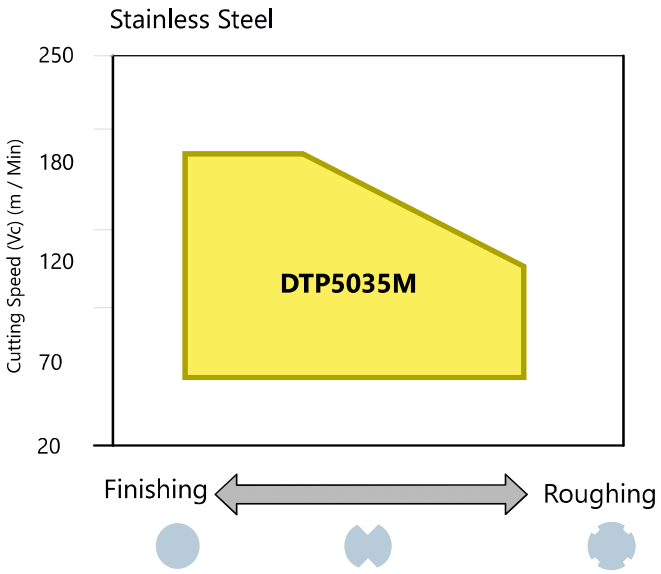
Uninterrupted turning, even under heavy interrupted conditions.

Brochure/HO/20220004/26E1

motherson

DELTACARB
HARDMETAL Switzerland

Application area



Machining of **stainless steels** – particularly the austenitic types – can be challenging to achieve a **stable tool life**, especially under conditions of moderate to severe interruptions. This challenge is effectively met with the help of the new grade **DTP5035M**.

DTP5035M is the **first choice** grade for Machining of Stainless Steels, especially the austenitic types, under interrupted cutting conditions.

Grade description

Delivering Maximum Stability and Superior Performance.

Advanced Coating: Multilayer PVD coating ensures excellent adhesion and peel-off resistance.

Tough Substrate: Provides added durability and strength to the cutting edge.

Stable Performance: Reliable results even under moderate to severe interruptions.

Material Suitability: Designed specifically for machining sticky materials.

Wear Detection: Smooth Coating ensures better chip flow and easy wear detection.

RECOMMENDED **Cutting parameters**

Grade	Parameters	for Ferritic Stainless Steel	for Martensitic Stainless Steel	for Austenitic Stainless Steel
DTP5035M	Speed (m/min)	125 **150** 190 (Ideal condition)	70 **125** 160 (Ideal condition)	70 **85** 180 (Ideal condition)
	Feed (mm/tooth)	0.15 **0.35** 0.50 (Ideal condition)	0.10 **0.20** 0.35 (Ideal condition)	0.10 **0.25** 0.40 (Ideal condition)
	Depth of Cut (mm)	1.5 **3.0** 4.5	1.0 **2.0** 4.0	1.0 **2.0** 4.0



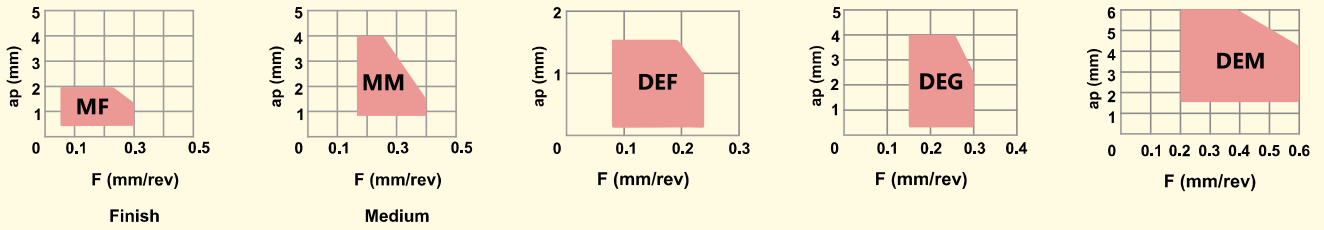
motherson

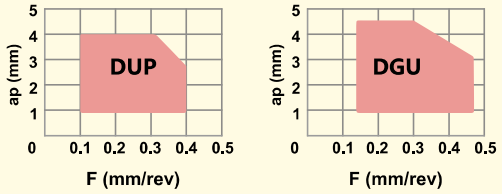
DELTACARB
HARDMETAL Switzerland

Chipbreaker application range

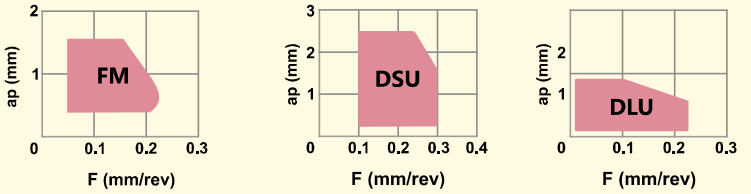
DTP5035M grade inserts are available in a large variety of insert styles in **3 chip breaker** geometries. Negative insets are manufactured in 2 geometries and positive insert range is available in 1 geometry.

Negative





Positive



Success Case

17% tool life

Interrupted Cutting of Stainless Steel

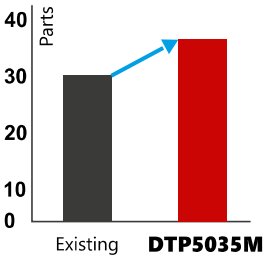
Application : Turning - External

SS316 (ISO M)

Insert: TNMG160408-MM-DTP5035M

Vc=80m/min, f=0.08mm/rev, ap=0.80mm, Wet





Existing

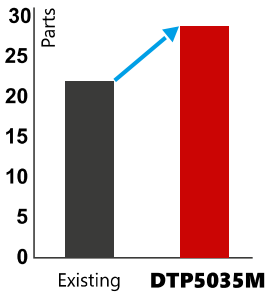


After 30 parts

DTP5035M



After 35 parts





Heavy Interrupted Cutting of Stainless Steel

Application : Face Turning

SS304 (ISO M)

Insert: TNMG160408-MM-DTP5035M

Vc=90m/min, f=0.28mm/rev, ap=0.50mm & 0.80mm, Wet

23% tool life

Before machining



After machining



Existing



After 22 parts

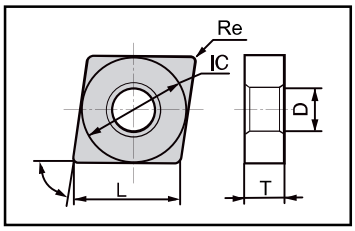
DTP5035M



After 27 parts

motherson

DELTACARB
HARDMETAL Switzerland



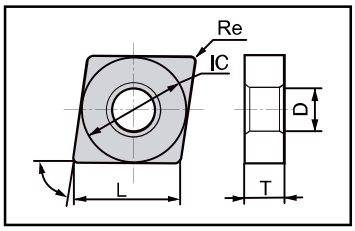
In Stock - ● Make to Order - ○

NEW In Stock - ● Make to Order - ○ **(All dimensions are in mm)**

Shape	Catalogue No.	Re Nose Radius	Grade DTP5035M	IC Inscribed circle	T Thickness	D Hole Dia.
Positive with Chip Breaker Geometry						
C 80°	CCMT060202-FM	0.2	●	6.35	2.38	2.8
	CCMT060202-DLU	0.2	●	6.35	2.38	2.8
	CCMT060204-FM	0.4	●	6.35	2.38	2.8
	CCMT060204-DLU	0.4	●	6.35	2.38	2.8
	CCMT060204-DSU	0.4	●	6.35	2.38	2.8
	CCMT060208-FM	0.8	●	6.35	2.38	2.8
	CCMT060208-DSU	0.8	●	6.35	2.38	2.8
	CCMT09T304-FM	0.4	●	9.525	3.97	4.4
	CCMT09T304-DSU	0.4	●	9.525	3.97	4.4
	CCMT09T308-FM	0.8	●	9.525	3.97	4.4
	CCMT09T308-DSU	0.8	●	9.525	3.97	4.4
	CCMT120404-FM	0.4	●	12.7	4.76	5.5
	CCMT120408-FM	0.8	●	12.7	4.76	5.5
D 55°	DCMT070202-FM	0.2	●	6.35	2.38	2.8
	DCMT070204-FM	0.4	●	6.35	2.38	2.8
	DCMT070208-FM	0.8	●	6.35	2.38	2.8
	DCMT070204-DSU	0.4	●	6.35	2.38	2.8
	DCMT11T304-FM	0.4	●	9.525	3.97	4.4
	DCMT11T308-FM	0.8	●	9.525	3.97	4.4
S 90°	SCMT09T304-FM	0.4	●	9.525	3.97	4.4
	SCMT09T308-FM	0.8	●	9.525	3.97	4.4
	SCMT120404-FM	0.4	●	12.7	4.76	5.5
	SCMT120408-FM	0.8	●	12.7	4.76	5.5

motherson

DELTACARB
HARDMETAL Switzerland



In Stock - ● Make to Order - ○

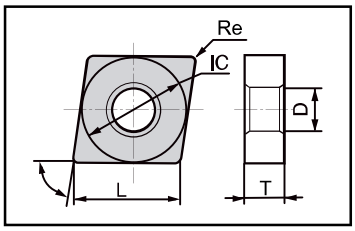
NEW In Stock - ● Make to Order - ○ **(All dimensions are in mm)**

Shape	Catalogue No.	Re Nose Radius	Grade DTP5035M	IC Inscribed circle	T Thickness	D Hole Dia.
Positive with Chip Breaker Geometry						
T 60°	**TCMT090204-FM**	**0.4**	●	5.56	2.38	2.5
	TCMT090208-FM	**0.8**	●	5.56	2.38	2.5
	TCMT110204-FM	**0.4**	●	6.35	2.38	2.8
	TCMT110208-FM	**0.8**	●	6.35	2.38	2.8
	TCMT110208-DSU	**0.8**	●	6.35	2.38	2.8
	TCMT16T304-FM	**0.4**	●	9.525	3.97	4.4
	TCMT16T308-FM	**0.8**	●	9.525	3.97	4.4
V 35°	**VCMT110304-FM**	**0.4**	●	6.35	3.18	2.8
	VCMT110302-DSU	**0.2**	●	6.35	3.18	2.8
	VCMT110304-DSU	**0.4**	●	6.35	3.18	2.8
	VBMT160404-FM	**0.4**	●	9.525	4.76	4.4
	VBMT160408-FM	**0.8**	●	9.525	4.76	4.4
	VBMT160404-DSU	**0.4**	●	9.525	4.76	4.4
	VBMT160408-DSU	**0.8**	●	9.525	4.76	4.4



motherson

DELTACARB
HARDMETAL Switzerland



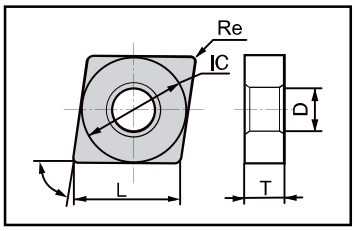
In Stock - ● Make to Order - ○

NEW In Stock - ● Make to Order - ○ **(All dimensions are in mm)**

Shape	Catalogue No.	Re Nose Radius	Grade DTP5035M	IC Inscribed circle	T Thickness	D Hole Dia.
Negative with Chip Breaker Geometry						
C 80°	CNMG120404-MM	0.4	●	12.7	4.76	5.16
	CNMG120408-MM	0.8	●	12.7	4.76	5.16
	CNMG120408-DEG	0.8	●	12.7	4.76	5.16
	CNMG120408-DEM	0.8	●	12.7	4.76	5.16
	CNMG120408-DGU	0.8	●	12.7	4.76	5.16
	CNMG120412-MM	1.2	●	12.7	4.76	5.16
	CNMG120412-DEM	1.2	●	12.7	4.76	5.16
D 55°	DNMG150604-MM	0.4	●	12.7	6.35	5.16
	DNMG150608-MM	0.8	●	12.7	6.35	5.16
	DNMG150608-DEM	0.8	●	12.7	6.35	5.16
	DNMG150612-DEG	1.2	●	12.7	6.35	5.16
S 90°	SNMG120404-MF	0.4	●	12.7	4.76	5.16
	SNMG120408-MM	0.8	●	12.7	4.76	5.16
	SNMG120408-DEM	0.8	●	12.7	4.76	5.16
	SNMG120412-MM	1.2	●	12.7	4.76	5.16
	SNMG120412-DEM	1.2	●	12.7	4.76	5.16
T 60°	TNMG160404-MM	0.4	●	9.525	4.76	3.81
	TNMG160404-DEF	0.4	●	9.525	4.76	3.81
	TNMG160404-DEG	0.4	●	9.525	4.76	3.81
	TNMG160404-DUP	0.4	●	9.525	4.76	3.81
	TNMG160408-MM	0.8	●	9.525	4.76	3.81
	TNMG160408-DEF	0.8	●	9.525	4.76	3.81
	TNMG160408-DEG	0.8	●	9.525	4.76	3.81
	TNMG160412-MM	1.2	●	9.525	4.76	3.81
	TNMG160412-DEG	1.2	●	9.525	4.76	3.81
	TNMG160412-DEM	1.2	●	9.525	4.76	3.81
	TNMG160412-DGU	1.2	●	9.525	4.76	3.81

motherson

DELTACARB
HARDMETAL Switzerland



In Stock - ● Make to Order - ○

NEW In Stock - ● Make to Order - ○ **(All dimensions are in mm)**

Shape	Catalogue No.	Re Nose Radius	Grade DTP5035M	IC Inscribed circle	T Thickness	D Hole Dia.
Negative with Chip Breaker Geometry						
V 35°	VNMG160402-DEF	0.2	●	9.525	4.76	3.81
	VNMG160404-MM	0.4	●	9.525	4.76	3.81
	VNMG160408-MM	0.8	●	9.525	4.76	3.81
	VNMG160408-DEG	0.8	●	9.525	4.76	3.81
W 80°	WNMG060408-DEG	0.8	●	9.525	4.76	3.81
	WNMG060412-DGU	1.2	●	9.525	4.76	3.81
	WNMG080404-MM	0.4	●	12.7	4.76	5.16
	WNMG080408-MM	0.8	●	12.7	4.76	5.16
	WNMG080408-DEG	0.8	●	12.7	4.76	5.16
	WNMG080412-MM	1.2	●	12.7	4.76	5.16
	WNMG080412-DEM	1.2	●	12.7	4.76	5.16



motherson

DELTACARB

HARDMETAL Switzerland

Scan for ordering codes and technical details

Double Hexa

Steel & Cast Iron Milling

MGSM

General Shoulder Milling

MEH Hardmill

Endmills for Die & Mould

Turning Holders

Turning and Boring

DTC2000P

Steel Turning

DTC3000K

Cast Iron Turning

DTP5035M

Stainless Steel Turning

DTP4015S

Exotic Alloy Turning

Powered by

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

Innovations that drive future