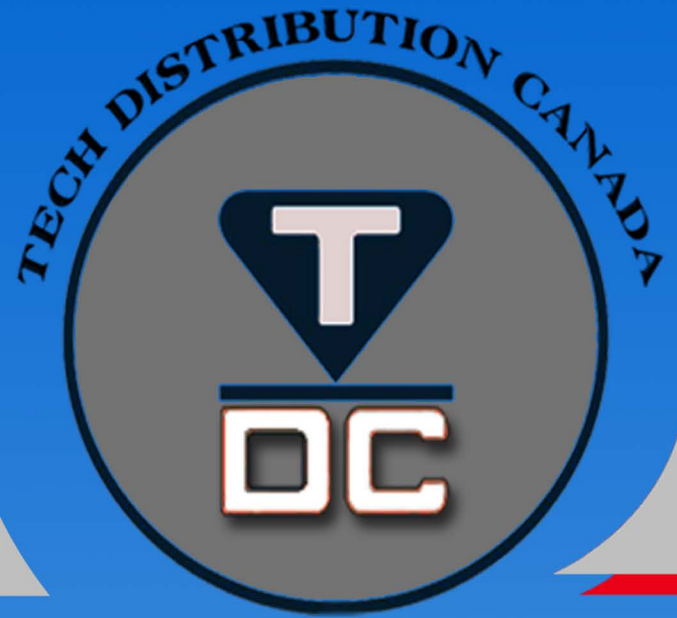


THICK TURRET TOOLING

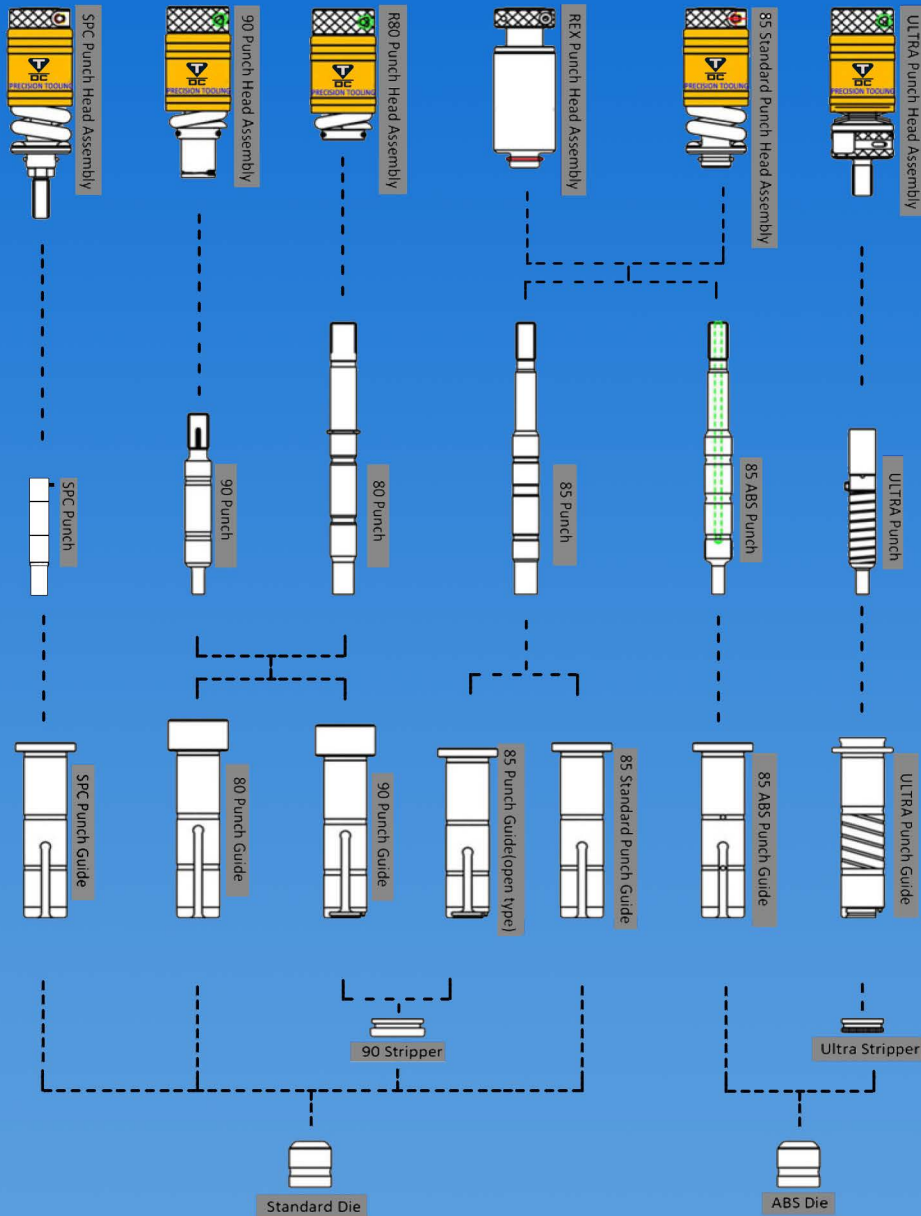
CNC PUNCHING MACHINES



WWW.TDCMACHINES.COM

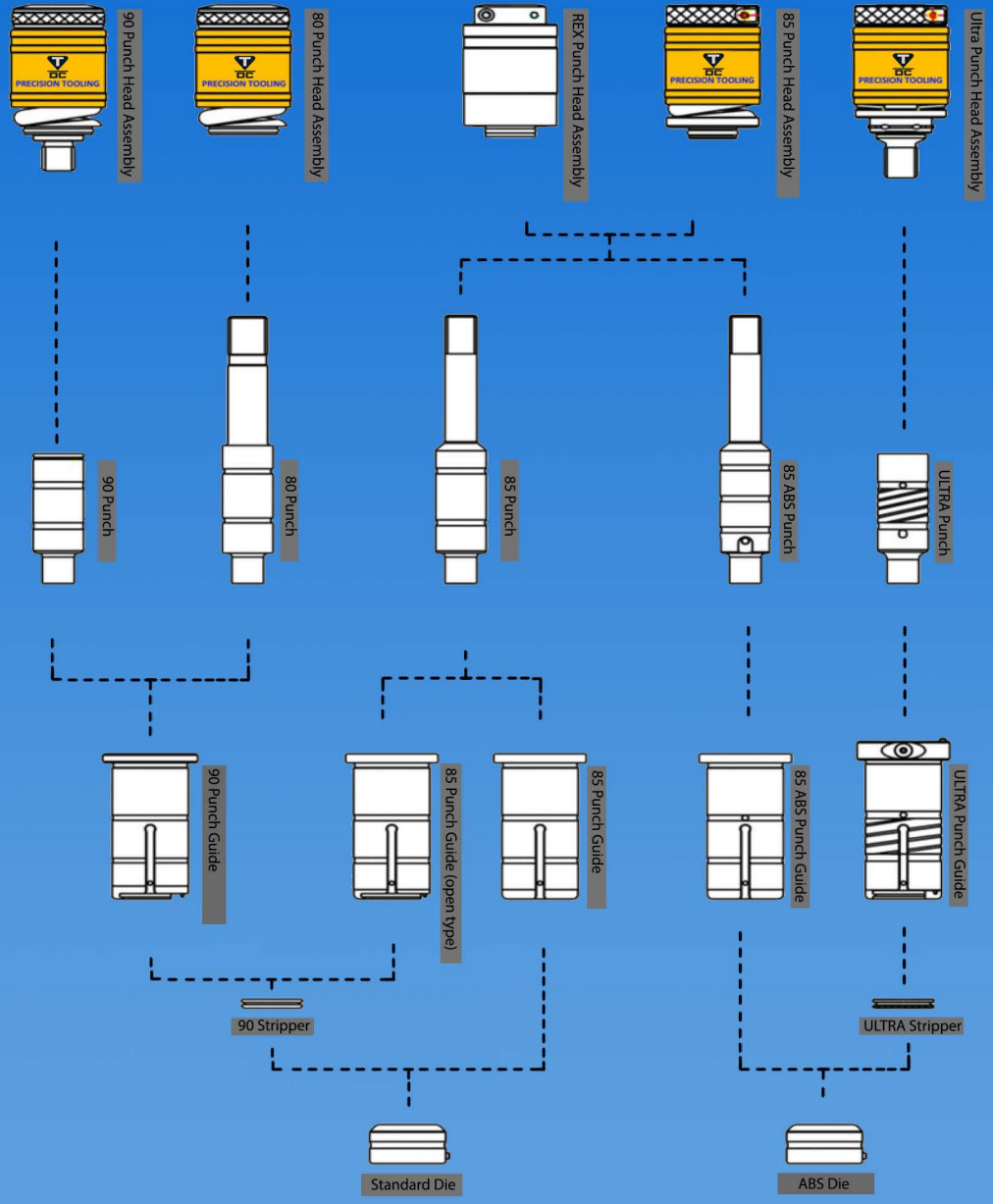
THICK TURRET TOOLING INDEX

A (1/2") STATION



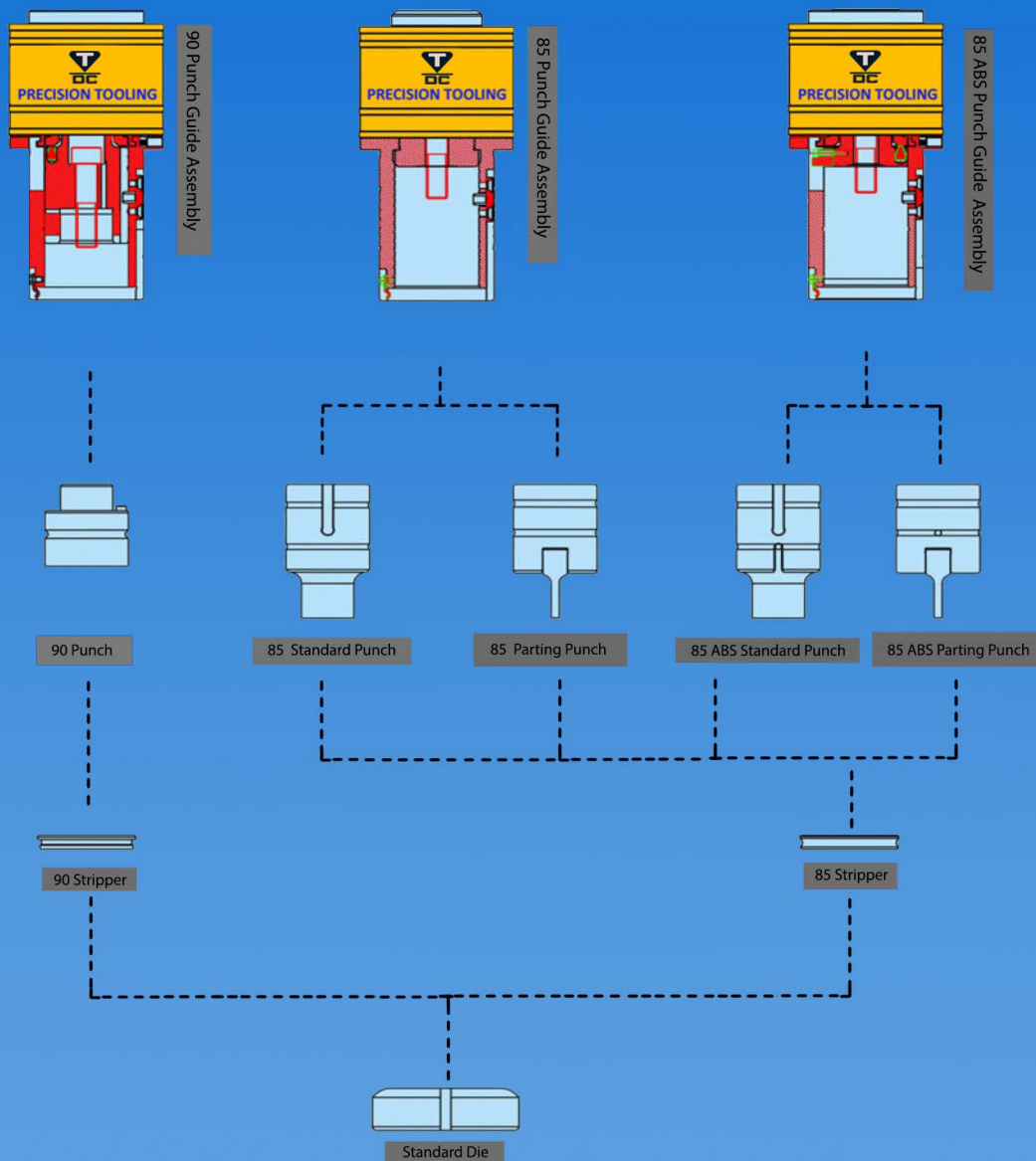
THICK TURRET TOOLING INDEX

B (1-1/4") STATION



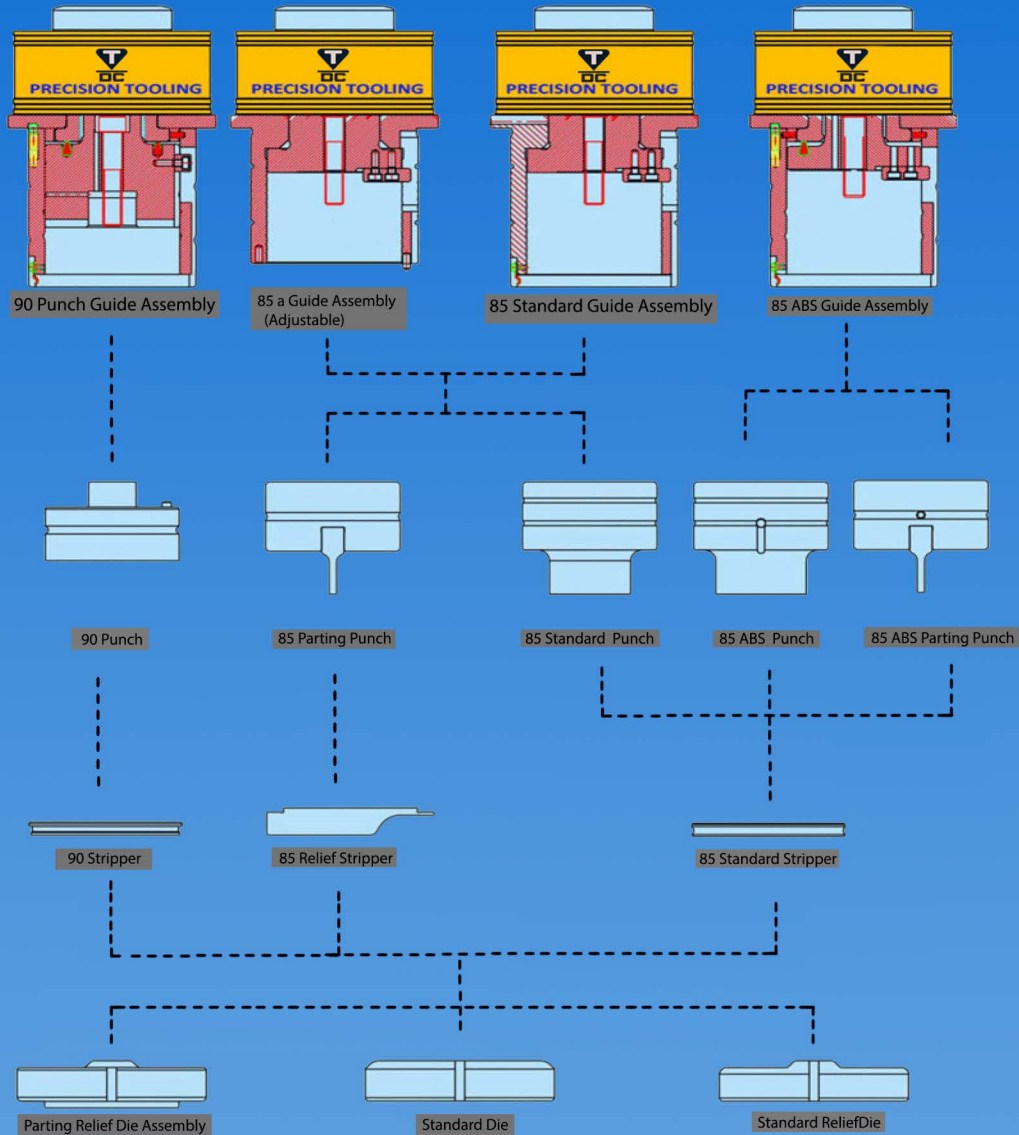
THICK TURRET TOOLING INDEX

C (2") STATION



THICK TURRET TOOLING INDEX

D (3-1/2") STATION



THICK TURRET 85 STANDARD SYSTEM

A (1/2") STATION

(Within 12.7 m m Diameter)



Full Set



Punch/Die



Guide/ Punch Head/ Spring

B (1-1/4") STATION

(Within 31.7 m m Diameter)



Full Set



Punch/Die



Guide/ Punch Head/ Spring

C (2") Station)

(Within 50.8 m m Diameter)



Full Set



Punch/Die/Stripper



Parting Punch

D (3-1/2") STATION

(Within 88.9 m m Diameter)



Punch Guide



Punch/Die/Stripper



Parting Punch

E (4-/12") Station)

(Within 114.3 m m Diameter)



Full Set



Punch/Die/Stripper



Punch / Double-Relief Die

THICK TURRET 90 SYSTEM

A (1/2") STATION

(Within 12.7 m m Diameter)



Full Set



Punch/Die/Stripper



Punch Guide /Punch Head

B (1-1/4") STATION

(Within 31.7 m m Diameter)



Full Set



Punch/Die/Stripper



Punch Guide /Punch Head

C (2") Station

(Within 50.8 m m Diameter)



Full Set



Punch/Die/Stripper

D (3-1/2") STATION

(Within 88.9 m m Diameter)



Full Set



Punch/Die/Stripper

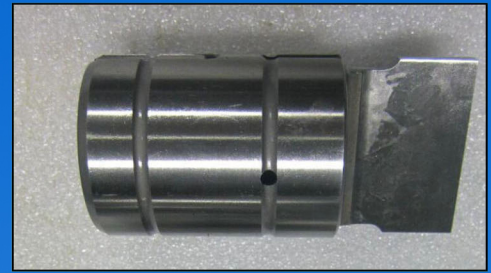
THICK TURRET ABS SYSTEM / ULTRA SYSTEM



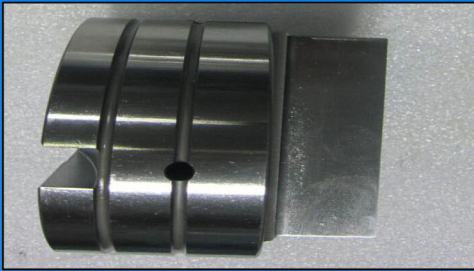
A Station 90 ABS System Punch



B Station 90 ABS System Punch



C Station 85 ABS System Punch



D Station 85 ABS System Punch



A Station Ultra type



B Station Ultra type



A Station Ultra type Punch Guide



B Station Ultra type Punch Guide



A Station Ultra Punch Assembly



A Station Ultra Punch Guide



B Station Ultra Punch Guide



C Station Ultra TEC Stripper

MULTI TOOLING



EUROMAC 8 tool station full set



EUROMAC 10 tool station full set



EUROMAC XMTE6-24



EUROMAC XMT4



EUROMAC XMT16



EUROMAC MT6-24
FINN-POWER MT8-24



EUROMAC MT8-16
FINN-POWER MT6-16, MT10-16



EUROMAC MT10-8
FINN-POWER MT24-8, MT20-8, MT12-8

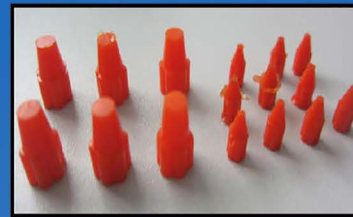
THICK TURRET OPTIONAL PARTS



Adapter (B-A)



Brush Die and Roller Die



PU Ejector



Adapter (C-B)



Tailift CP1500 Clamping Plate



AMADA 255/ 2510/245
INDEX Station Punch Holder



Adapter (C-A)



Machine Clamping Plate



AMADA 255
INDEX Station Die Holder



Adapter (D-B)



Machine Clamping Plate



Parting Die

Thick Turret Optional Part



Punch with Coating



Tooling Keys



Die Shims

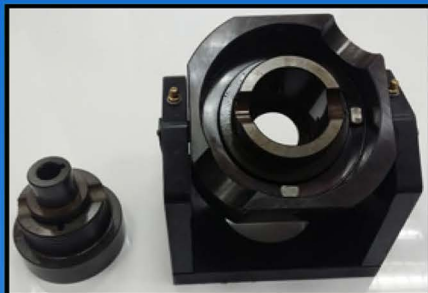


E Station Adjustable Holder



D Station Adjustable Holder

Thick Turret Optional Accessories



Grinding Device



Dismantling & Assembly Device



A Station



B Station



C Station



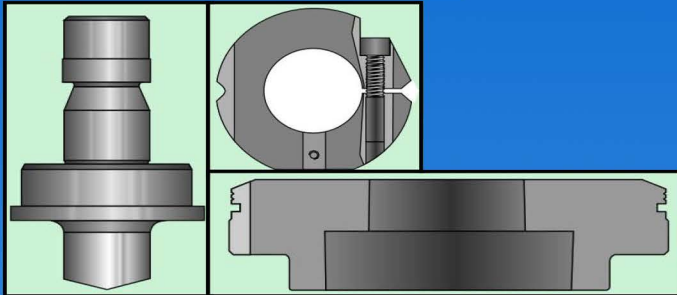
D Station



NC Surface Grinding Machine

Trumpf System

HEAVY DUTY TOOLING - Size I, II



Name	Order Code
Size I (10.00-30.00mm)	
Heavy Duty Punch	DCT1PH
Heavy Duty Die	DCT1DH
Heavy Duty Alignment Ring	DCT1AH
Size II (30.01-52.50mm)	
Heavy Duty Punch	DCT2PH
Heavy Duty Die	DCT2DH
Heavy Duty Alignment Ring	DCT2AH

PU PUNCH - Size II



Name	Order Code
30-60 mm x 5 mm	
Complete punch assembly	DCT2P3CP
Punch only	DCT2P3P
Urethane Strippers (Pair)	DCT2P3US
60-76.2 mm x 5 mm	
Complete punch assembly	DCT2P6CP
Punch only	DCT2P6P
Urethane Strippers (Pair)	DCT2P6US

QUICK SET PARTING TOOL



Name	Order Code
Complete Punch Assembly without Blade	DCTPQSP
56 x 5mm Punch RT Blade	DCTPQSPB56
30 x 5mm Punch RT Blade	DCTPQSPB30
76.2 x 5mm Punch RT Blade	DCTPQSPB76
Complete Die Assembly without Blade	DCTPQSP
56 x 5mm Die RT Blade	DCTPQSPB56
30 x 5mm Die RT Blade	DCTPQSPB30
76.2 x 5mm Die RT Blade	DCTPQSPB76

Trumpf System



TRUMPF Die PLATE



TRUMPF C Ring



TRUMPF Die Adapter



Boschert 8 Station Multi Tool



TRUMPF 2 Station Multi Tool



TRUMPF 4 Station Multi Tool



Option: Punch with TiCN coating



TRUMPF 5 Station Multi Tool



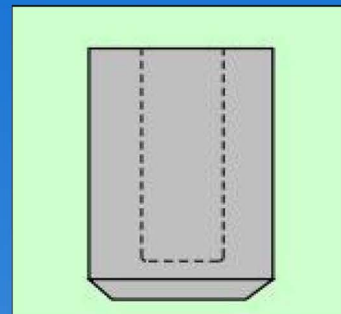
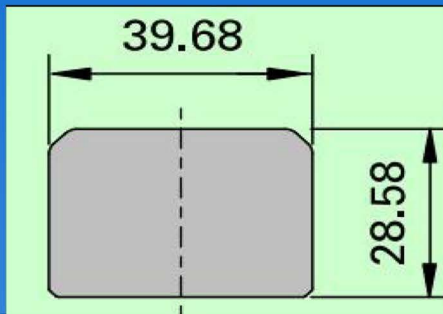
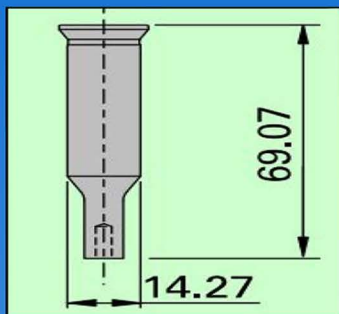
TRUMPF 6 Station Multi Tool



TRUMPF 10 Station Multi Tool

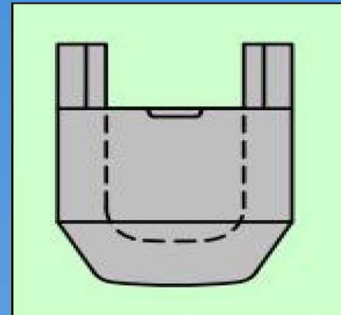
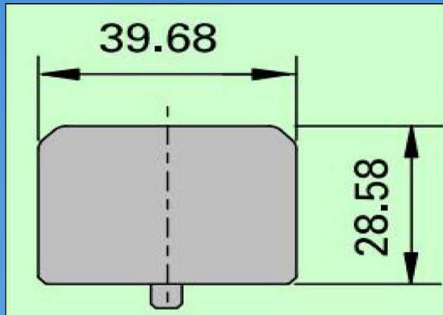
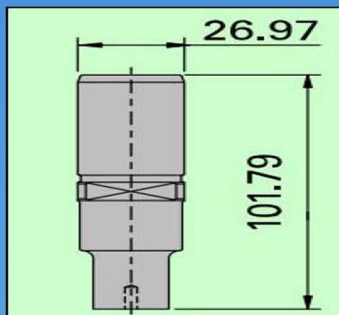
Murata (WiedeMann) System

A station (12.7mm)



Name	Order Code
Punch	MWAP
Die	MWAD
Urethane Stripper (IA station)	MWIAS
Urethane Stripper (XA station)	MWXAS

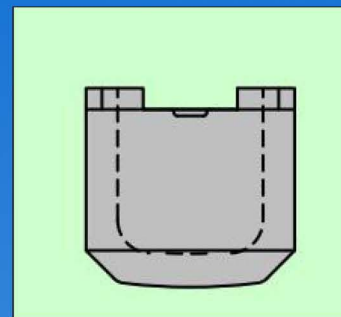
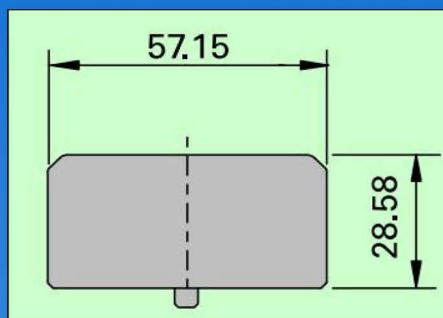
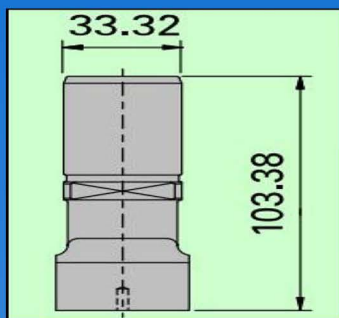
B station (25.4mm)



Name	Order Code
Punch	MWBP
Die	MWBD
Urethane Stripper	MWBS

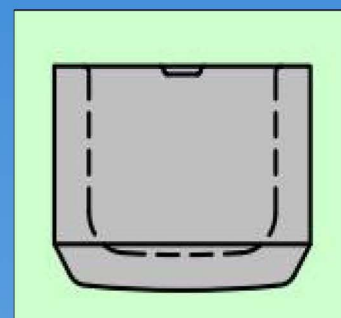
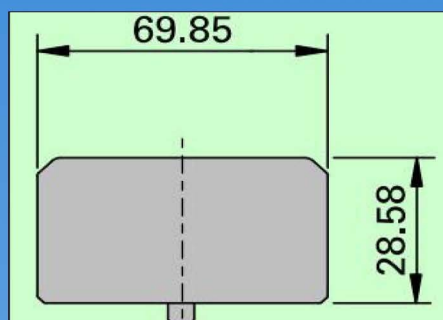
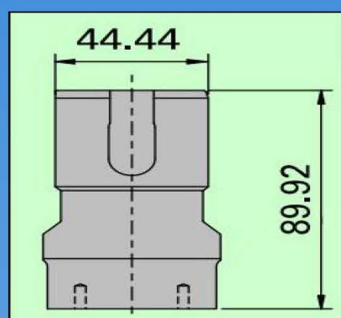
Murata (WiedeMann) System

C station (25.4 – 38.1mm)



Name	Order Code
Punch	MWCP
Die	MWCD
Urethane Stripper	MWCS

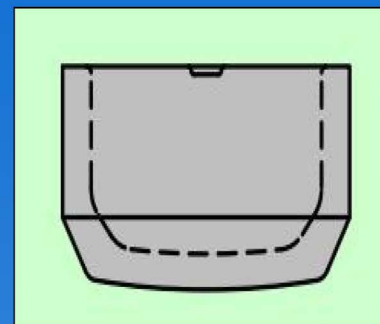
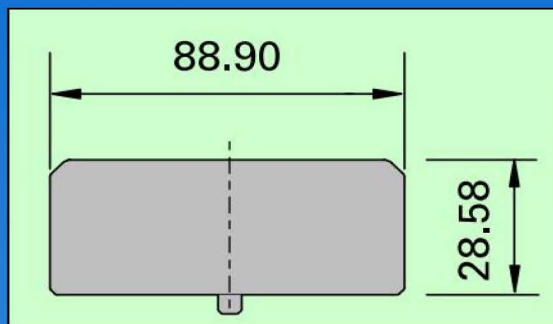
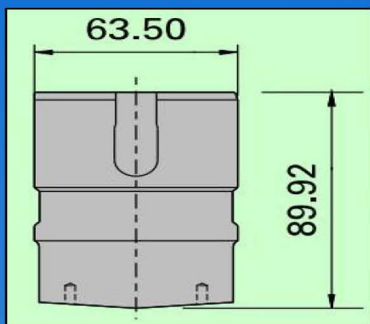
D station (38.1 – 50.8mm)



Name	Order Code
Punch	MWDP
Die	MWDD
Urethane Stripper	MWDS

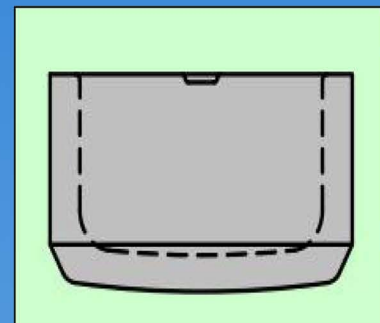
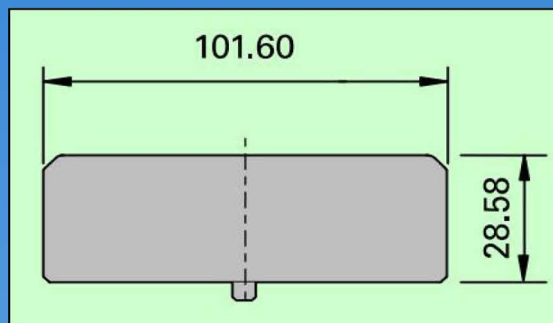
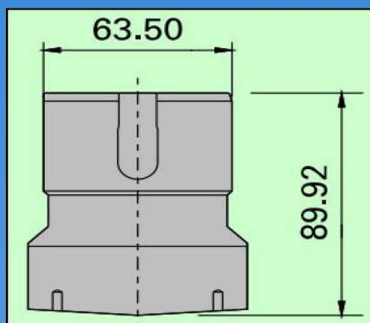
Murata (WiedeMann) System

E station (50.8 – 63.5mm)



Name	Order Code
Punch	MWEP
Die	MWED
Urethane Stripper	MWES

F station (63.5 – 76.2mm)



Name	Order Code
Punch	MWFP
Die	MWFD
Urethane Stripper	MWFS

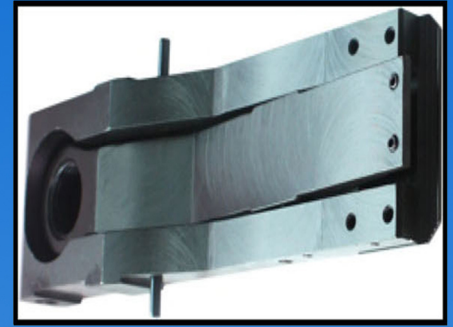
Murata (WiedeMann) Accessories



Murata M2048 UT Clamping



Murata Centrum C3000 Clamping



Murata C1000 - C2000 Clamping



Murata Die Base



Murata Urethane Stripper



Murata 114 Guide System



Murata Vulcan Guide System

Murata (WiedeMann) Tools

Index station Conversion Screws



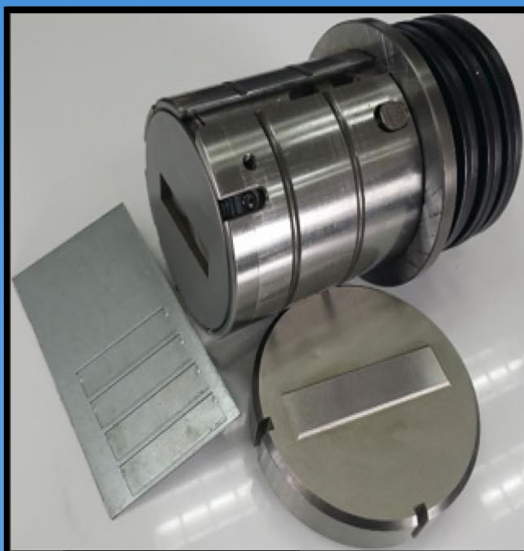
Murata Forming Tools

Thick Turret Form Tools

Cluster Tool



Knock Out Form Up Tool

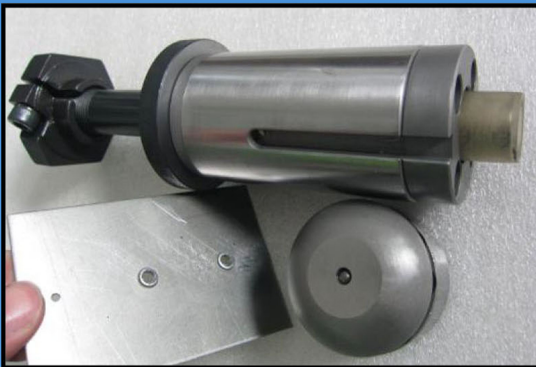


Thick Turret Form Tools

Emboss Forming Tool



Extrusion Tapping Hole Tool



Extrusion Forming Tool



Thick Turret Form Tools

Bridge Forming Tool



Extrusion & Emboss Tool

Thick Turret Form Tools

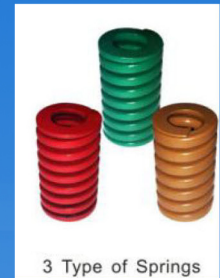
Louver Close end



Louver Open end

Thick Turret Form Tools

Multi Scribe Tool



Sheet Marker Tool



Thick Turret Form Tools

Lance and Form Tool



Progressive RIB Tool



Thick Turret Form Tools

Bending Up Tool



Hinge Tool

Thick Turret Form Tools

Wheel Family



ROLLER PINCHER



ROLLER SHEAR



ROLLER RIB

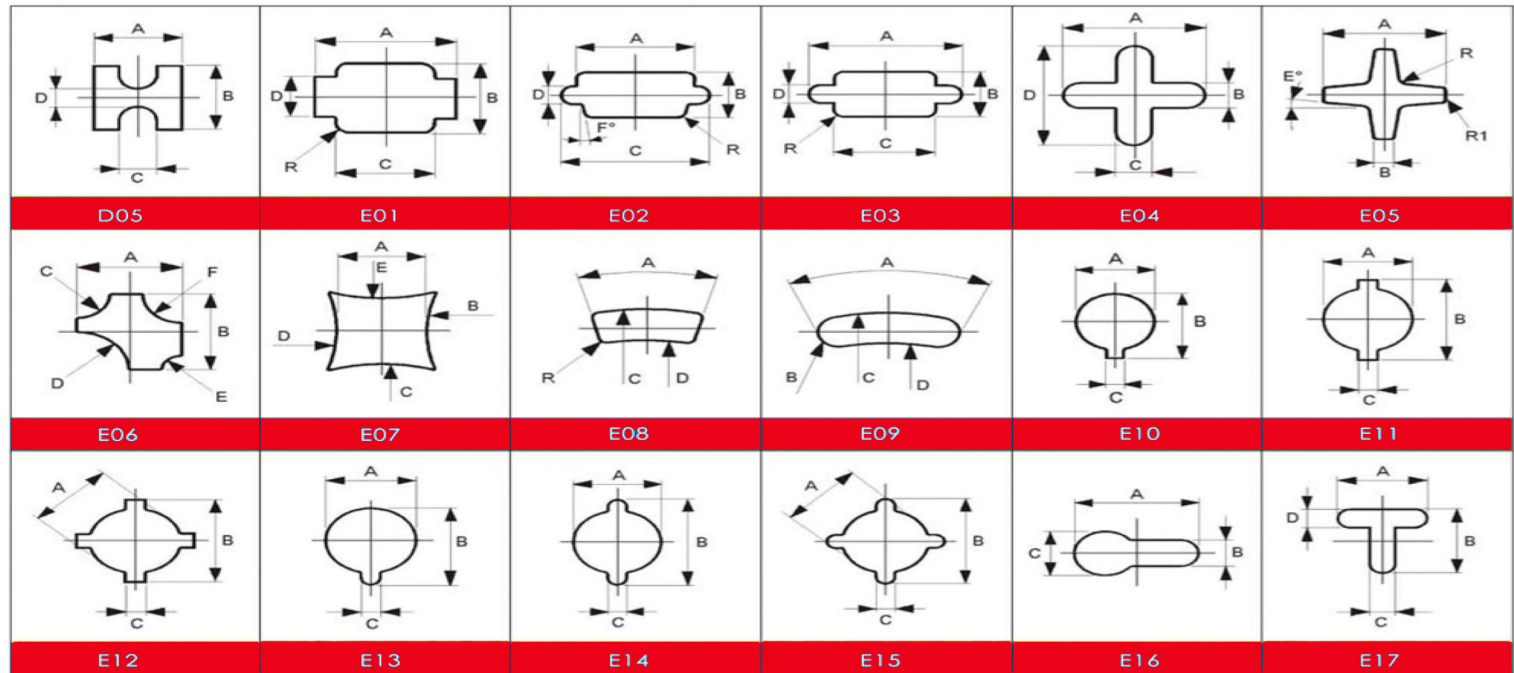


ROLLER OFFSET

Special Shapes

A01	A02	A03	A04	A05	A06
A07	A08	B01	B02	B03	B04
B05	B06	B07	B08	B09	B10
B11	B12	B13	B14	C01	C02
C03	C04	C05	C06	C07	C08
C09	C10	D01	D02	D03	D04

Special Shapes & Die clearance



1 Table of recommended die clearance(reference values)

NCT drive type	Material type / thickness	0.8	1.0	1.5	2.0	2.5	3.0	3.2	3.5	4.0	4.5	5.0	5.5	6.0
Hydraulic	Cold-rolled mild steel	0.15-0.2	0.2-0.25	0.30-0.38	0.40-0.50	0.50-0.63	0.60-0.75	0.64-0.80	0.70-0.88	0.80-1.00	0.90-1.13	1.00-1.25	1.10-1.38	1.20-1.50
	Aluminum	0.15-0.16	0.15-0.20	0.23-0.30	0.30-0.40	0.38-0.50	0.45-0.60	0.48-0.64	0.53-0.70	0.60-0.80	0.68-0.90	0.75-1.00	0.83-1.10	0.90-1.20
	Stainless steel	0.20-0.24	0.25-0.30	0.38-0.45	0.50-0.60	0.53-0.75	0.75-0.90	0.80-0.96	0.88-1.05	1.00-1.20	1.13-1.35	-	-	-
Mechanical	Cold-rolled mild steel	0.15	0.15-0.18	0.18-0.27	0.24-0.36	0.30-0.45	0.36-0.54	0.38-0.58	0.42-0.63	0.48-0.72	0.54-0.81	0.60-0.90	0.66-0.99	0.72-1.08
	Aluminum	0.15	0.15-0.16	0.15-0.24	0.20-0.32	0.25-0.40	0.30-0.48	0.32-0.51	0.35-0.56	0.40-0.64	0.45-0.72	0.50-0.80	0.55-0.88	0.60-0.96
	Stainless steel	0.15-0.18	0.15-0.22	0.21-0.33	0.28-0.44	0.35-0.55	0.42-0.66	0.45-0.70	0.49-0.77	0.56-0.88	0.63-0.99	-	-	-

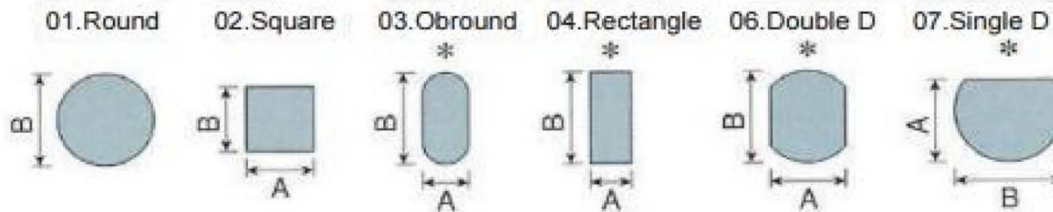
Calculation Of Punching on Different Shapes

2 Shape ,size and key angle

● Shape reference point of standard tooling

Dimension A = Short-side dimension

Dimension B = Long-side dimension



3 Punch force calculation method

$$P = A \times \tau \times t \div 1000$$

P → Punching force (kN)
 A → Cut contour length (mm)
 τ → Tensile strength (N / mm²)
 t → Material thickness (mm)

Material type	Tensile strength τ [N/mm ²]
Mild steel	400
Aluminium	200
Stainless steel	600

● Tonnage calculation examples

Ex1. Mild steel 2.3t $\Phi 23.5$

$$\text{Required tonnage} = \frac{\Phi 23.5 \times 3.14 \times 400 \times 2.3}{1000} = 67.9 \text{ kN}$$