

TOOLING FOR PUNCH PRESSES



JETFORM

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TOOLING FOR PUNCH PRESSES















Matrix's natural vocation for innovation was enhanced in 2017, when Matrix joined the Salvagnini Group, a historic manufacturer of sheet metalworking machinery. This established Matrix as an international tool manufacturer.













Our value lies in our team

Each and every day, our energy and know-how transform our customers' needs into immediate and lasting added value. The tools we produce are the result of decades of experience and reflect our spirit for exploration.



























Each customer is special

We want to go beyond product quality and excellent service.

Our mission is to make our customers more competitive in their own sectors.





















Technology and reliability

The constant search for improvement and the use of excellent raw materials help us to establish lasting cooperation with our customers.

Each day we invest in the most advanced and reliable technology: sophisticated control systems, latest-generation software and constant machinery upgrading.

Our focus is always on the future.





JETFORM

Forming is the process whereby the flatness of a sheet of metal is modified. The tools in the JETFORM range perform these operations, making punching machine use even more efficient. Many types of forming operations are possible. They can be combined with parting operations such as extrusion and coining.

The JETFORM insert-holder range is available for B, C, D and E stations. It follows the punch-holder philosophy of using interchangeable inserts to minimize the cost of new forming operations.

Matrix offers two different types of insert-holder, so as to better satisfy different customer needs.

The G series features precise tool height adjustment in steps, making it the best choice for punching machines where stroke adjustment is unpredictable or absent.

The W series, on the other hand, is non-adjustable, taking advantage of the precise stroke adjustment typical of latest-generation punching machines and making forming operations on such machines even more advantageous.

All insert-holders also allow all components to be fully lubricated by adding a specific oil from the top, either automatically or manually.





This is one of the first rules to apply. As punching is a cutting process, lubrication in the processing area is essential for success. Lubrication plays a very important role in punching machines and, in particular, in punching tools.

When the tool passes through the material being cut, small amounts of this material may adhere to the surface of the punch.

Appropriate lubrication increases tool life by significantly reducing friction and thus overheating, as well as material accumulation on the tool.

On machines without an automatic lubrication system, the hole in the middle must be filled with oil for sliding surfaces on a daily basis and whenever the setup is changed.

Failure to do so will cause excessive wear on the insert-holders.

The diagram on the left, valid for A and B stations, shows the areas affected by the presence of lubricant.

The letters indicate respectively:

A Hole for adding lubricant

B Hole that allows the lubricant to reach the contact area between the outside walls of the punch-holder and the seat in the punching machine

C Lubricant tank

Matrix can supply lubricants suitable for different types of processing. Volatile oils are also available if grease residue needs to be avoided.







COMMON FORMINGS

jetform

Some of the most common sheet metal forming operations are embossing, countersinking, extrusion, engraving, louver forming and so on.

The wide diffusion of these forming operations means that we can handle an extensive range of standardized products, drastically reducing delivery times. This type of forming is in continuous expansion. Please contact our sales department to find out more about what is new.



M01 ENGRAVED COUNTERSINK



M02 EXTRUDED HOLE **FORMING**



M03 ROUND EMBOSS **FORMING**



ROUND COUNTERSINK



M09 CLIP PUNCHING AND FORMING



CURVED-BLADE LOUVER PUNCHING AND FORMING



M13 BUTTON PUNCHING AND FORMING



M14 **ENGRAVING ENGRAVING**



M23 DOT MARKER **ENGRAVING**

SPECIAL FORMINGS

jetform

Our technical department is able to develop the very best solutions for customer problems and requirements. Thanks to this versatility, there are practically no limits on the types of forming that can be made and we are able to satisfy the most complex and disparate requirements. The continuous search for new production solutions means that we continue to find new forming possibilities, creating three-dimensional shapes alongside normal high- or low-embossed logos.



M24 **CLIP WITH BUTTON** PUNCHING AND FORMING



M25 REINFORCED CLIP PUNCHING AND FORMING



MULTIPLE KNOCKOUT PUNCHING AND FORMING



CUSTOM LOGOS EMBOSSED



EMBOSS FOR CABLES PUNCHING AND FORMING



BRIDGE WITH EXTRUDED HOLE PUNCHING AND FORMING



M28 **BEND FORMING**



M29 HINGE **FORMING**



NON-SLIP TREAD PLATE PUNCHING AND FORMING



JETFORM MATRIX

PROGRESSIVE FORMINGS AND SPECIAL APPLICATIONS

jetform

The latest technical solutions implemented in modern punching machines deliver decidedly superior tool control compared to the past. This has allowed us to develop new applications capable of fully exploiting their potential. Indeed, we have developed special tools for cutting protective film, creating continuous ribs and even deburring cut parts. These are just some examples of what you can get from your punching machine when you use tools produced by Matrix!





M32 FILM CUTTER ENGRAVING

M41 ROLLFORM OFFSET FORMING

M42 ROLLFORM RIB FORMING

8 FB25VQ00REV04



TOOLING FOR PUNCH PRESSES



JETFORM INSERT-HOLDERS

JETFORM - G SERIES

Adjustable height

The accurate tool height adjustment, in 0.08 mm steps, offered by the G Series of insert-holders, maximizes the performance of punching machines that feature inaccurate or no stroke adjustment.



JETFORM - G SERIES

Adjustable height

A large number of tool configurations for the most common forming operations are already available for fast delivery. Please contact our sales department for an up-to-date list.



JETFORM - W SERIES

Fixed height

The W Series of punch-holders makes forming operations on punching machines that already offer stroke adjustment extremely advantageous.



JETFORM - W SERIES

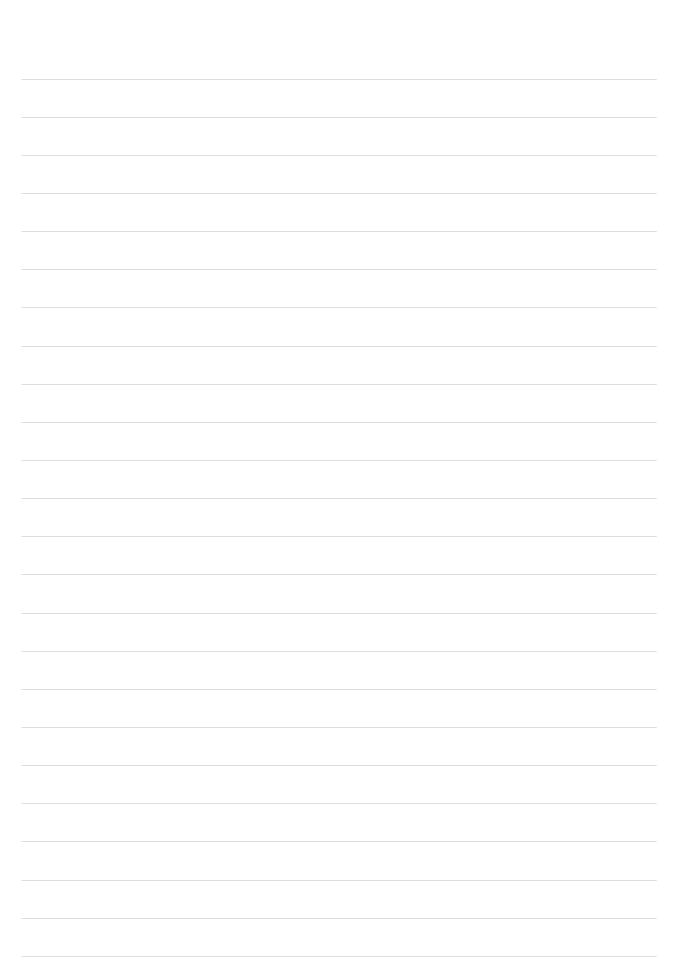
Fixed height

A large number of tool configurations for the most common forming operations are already available for fast delivery. Please contact our sales department for an up-to-date list.



12 FB25VQ00REV04







TOOLING FOR PUNCH PRESSES



ROLLFORM

M41 ROLLFORM - OFFSET



SETS OF INSERTS

RollFORM tools are an evolution of our JetFORM range for high-speed forming operations on punching machines.

An efficient solution for making embosses and offsets on sheet metal, the RollFORM series reduces costs by using interchangeable

Sets of inserts are designed to be used with a specific material and thickness.

Standard sets of inserts are designed for forming operations up to 3.2 mm high, whereas special sets of inserts are designed for heights from 1.5 to 4.7 mm.

RollFORM tools require hydraulic or electric punching machines with ram stroke control and the appropriate software applications.





Support



OFFSET Lower Insert



Lower Insert-holder







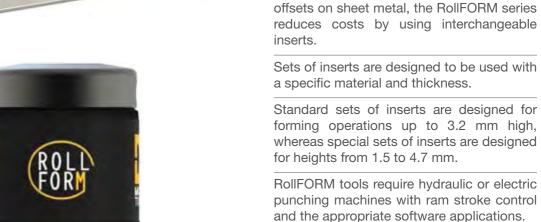
Upper Insert-holder



Support

Lower Insert-holder

M42 ROLLFORM - RIB





Complete Tool: TTB-JRB

SETS OF INSERTS

RollFORM tools are an evolution of our

JetFORM range for high-speed forming

An efficient solution for making embosses and

operations on punching machines.

RIB Upper Insert



Support



RIB Lower Insert



Lower Insert-holder

FB25VQ00REV04 17





RIB Lower Insert

Support

Lower Insert-holder

Upper Insert-holder



M43 ROLLFORM - PINCHER





SETS OF INSERTS

RollFORM tools are an evolution of our JetFORM range for high-speed forming operations on punching machines.

An efficient solution for partially cutting the sheet so as to make it easier to separate the

The RollFORM series guarantees reduced costs thanks to interchangeable inserts.

The sets of inserts are designed to be used on a wide range of materials and thicknesses.

RollFORM tools require hydraulic or electric punching machines with ram stroke control and the appropriate software applications.



PINCHER Upper Insert



Support



Support

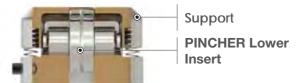


PINCHER Lower Insert



Lower Insert-holder





Lower Insert-holder



TOOLING FOR PUNCH PRESSES



M01 ENGRAVED COUNTERSINK



The inserts shown are for upward forming operations.

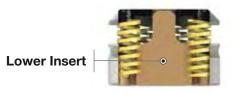
Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. If the forming is destined to house a screw, and the top of the screw needs to be below the surface of the sheet, the data sheet for the screw must be provided.



Upper Insert-holder



Lower Insert-holder



Upper Insert



Stripper



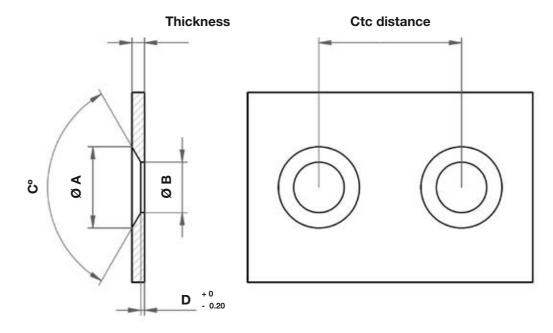
Springs



Lower Insert







Measurements Required (indicate the most important ones)						
Α	A B		D	Thickness	Ctc distance	

Dimensional Limits							
Material	C°	Thickness	Maximum Forming (Thickness - D)				
		1.20 to 2.00	85 %				
Mild steel	Maximum 100°	2.10 to 3.00	60 %				
		Above 3.00	50 %				
Aluminum	Maximum 100°	Above 1.20	85 %				
		1.20 to 2.00	85 %				
Stainless Steel	Maximum 100°	2.10 to 3.00	60 %				
		Above 3.00	50 %				

All measurements are expressed in mm

M02 EXTRUDED HOLE



The inserts shown are for upward forming

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. Processing requires an appropriate pre-

Multiple forming operations close together could distort the sheet.

Each set of inserts is composed of the elements shown below.

All lower inserts are equipped with B type coating.



Upper Insert-holder



Lower Insert-holder



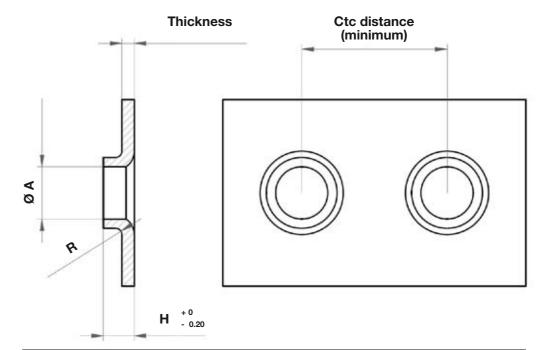
Ejector



Upper Insert



Lower Insert



M	Measurements Required (indicate the most important ones)						
Thread	Α	Thickness	Н	R	Ctc distance		

Dimensional Limits					
Α	Н	Thickness			
Maximum 10	Maximum 2.5 x Thickness	Maximum 5			

	Standard Set of Inserts for Thick Turret B Station									
Thread	Α	Pre-hole	Thickness	Code of Set of Inserts	Н	R	Ctc distance			
			0.80 to 1.00	FB09237421.305	2.5	0.5	10.8			
M4	3.3	2.0 ±10%	1.10 to 1.30	FB09237421.979	3.0	0.6	11.1			
			1.40 to 1.60	FB09237421.A43	3.75	0.75	11.55			
			0.80 to 1.00	FB09237422.305	2.5	0.5	11.7			
M5	4.2	2.5 ±10%	1.10 to 1.30	FB09237422.979	3.0	0.6	12.0			
			1.40 to 1.60	FB09237422.A43	3.75	0.75	12.45			
			0.80 to 1.00	FB09237423.305	2.5	0.5	12.5			
M6	5.0	3.0 ±10%	1.10 to 1.30	FB09237423.979	3.0	0.6	12.8			
			1.40 to 1.60	FB09237423.A43	3.75	0.75	13.25			
			0.80 to 1.00	FB09237424.305	2.5	0.5	14.3			
M8	6.8	4.1 +10%	1.10 to 1.30	FB09237424.979	3.0	0.6	14.6			
IVIO	0.0	4.1 ±10%	1.40 to 1.60	FB09237424.A43	3.75	0.75	15.05			
			1.90 to 2.10	FB09237424.217	5.0	1.0	15.8			
			0.80 to 1.00	FB09237424.305	2.5	0.5	16.0			
M10	8.5	5.1 +10%	1.10 to 1.30	FB09237424.979	3.0	0.6	16.3			
IVI IU	0.5	3.1 ±10%	1.40 to 1.60	FB09237424.A43	3.75	0.75	16.75			
			1.90 to 2.10	FB09237424.217	5.0	1.0	17.5			

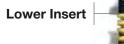
All measurements are expressed in mm

M03 ROUND EMBOSS





Upper Insert-holder





The inserts shown are for upward forming

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. Processing requires an appropriate pre-

Multiple forming operations close together could distort the sheet.

If the forming is destined to house a screw, and the screw thread needs to be beneath the surface of the sheet, the data sheet for the screw must be provided.

Each set of inserts is composed of the elements shown below.



Upper Insert



Stripper

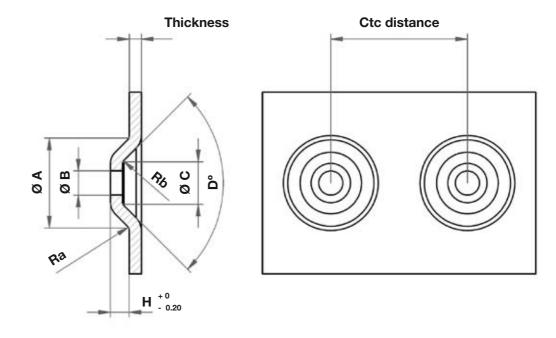




Lower Insert







	Measurements Required (indicate the most important ones)							
Α	В	С	D°	Н	Ra	Rb	Thickness	Ctc distance

	Dimensional Limits								
Station	D°	Н	Thickness	Recommended Center-to-center Distance					
В	Minimum 80°	Maximum 6	0.50 to 3.00	Minimum A + 3 x Thickness					
С	Minimum 80°	Maximum 7	0.50 to 3.00	Minimum A + 3 x Thickness					
D	Minimum 80°	Maximum 7	0.50 to 3.00	Minimum A + 3 x Thickness					



In addition to the model of machine and the type of material, there is no need to indicate all the measurements, but only the most important ones. If further information is required, our Technical Department will contact you.

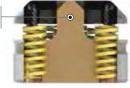
M04 ROUND COUNTERSINK





Upper Insert-holder





Lower Insert-holder

The inserts shown are for upward forming

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. Processing requires an appropriate pre-

Multiple forming operations close together could distort the sheet.

If the forming is destined to house a screw, and the screw thread needs to be beneath the surface of the sheet, the data sheet for the screw must be provided.

Each set of inserts is composed of the elements shown below.



Upper Insert



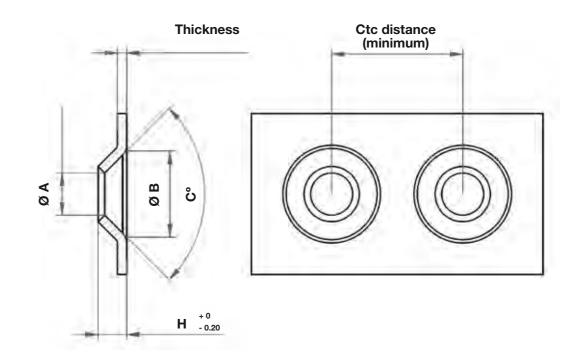
Springs



Lower Insert







	Measurements Required (indicate the most important ones)							
Α	В	Thickness	Н	C°	Ctc distance			

	Standard Set of Inserts for Thick Turret B Station									
Screw	Α	В	Pre-hole	Thickness	Code of Set of Inserts	Н	C°	Ctc distance		
			3.66 ±10%	0.80 to 1.20	FB09237239.305	3.06	90°	14.0		
M4	4.5	9.2	4.43 ±10%	1.50 to 1.90	FB09237239.BP5	3.55	90°	14.61		
			4.43 ±10%	2.00 to 2.50	FB09237239.844	3.91	90°	15.0		
			4.25 ±10%	0.80 to 1.20	FB09237240.305	3.56	90°	16.0		
M5	M5 5.5 11	11.2	5.02 ±10%	1.50 to 1.90	FB09237240.BP5	4.05	90°	16.6		
			5.57 ±10%	2.00 to 2.50	FB09237240.844	4.41	90°	17.0		
	6.5		4.83 ±10%	0.80 to 1.20	FB09237241.305	4.06	90°	18.0		
M6		13.2	5.61 ±10%	1.50 to 1.90	FB09237241.BP5	4.55	90°	18.6		
			6.16 ±10%	2.00 to 2.50	FB09237241.844	4.91	90°	19.0		
			5.92 ±10%	0.80 to 1.20	FB09237242.305	5.16	90°	22.2		
M8	8.5	17.4	6.70 ±10%	1.50 to 1.90	FB09237242.BP5	5.65	90°	22.8		
			7.25 ±10%	2.00 to 2.50	FB09237242.844	6.01	90°	23.2		
			9.13 ±10%	0.80 to 1.20	FB09237243.305	5.51	90°	26.4		
M10	12	2 21.6	9.91 ±10%	1.50 to 1.90	FB09237243.BP5	6.0	90°	27.0		
			10.46 ±10%	2.00 to 2.50	FB09237243.844	6.36	90°	27.4		

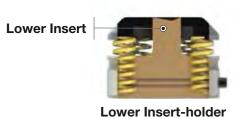
All measurements are expressed in mm

M09 ELASTIC CLIP





Upper Insert-holder



The inserts shown are for upward forming

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set.





Upper Insert



Stripper

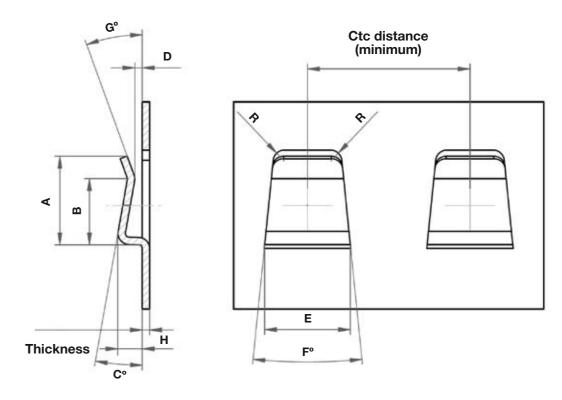




Lower Insert







		Measurements Required (indicate the most important ones)							
_	Α	Thickness	В	C°	D	E	F°	Н	Ctc distance

Dimensional Limits				
F°	Н			
Minimum 10°	Maximum 5			

	Standard Set of Inserts for Thick Turret B Station										
Α	Thickness	Code of Set of Inserts	В	С	D	E	F°	Н	Ctc distance		
	0.80 to 1.00	FB08237255.305	5.34	3.63	1.00	11,599	11,592	4.30			
12	1.10 to 1.30	FB08237255.979	5.46	3.70	1.20	11,600	11,408	4.90	22.00		
	1.40 to 1.60	FB08237255.A43	5.64	3.81	1.50	11,603	11,144	5.80			

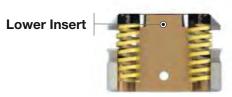
All measurements are expressed in mm

M₁₀ KNOCKOUT





Upper Insert-holder



Lower Insert-holder

The inserts shown are for upward forming

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set.



Spring



Ejector



Upper Insert



Stripper

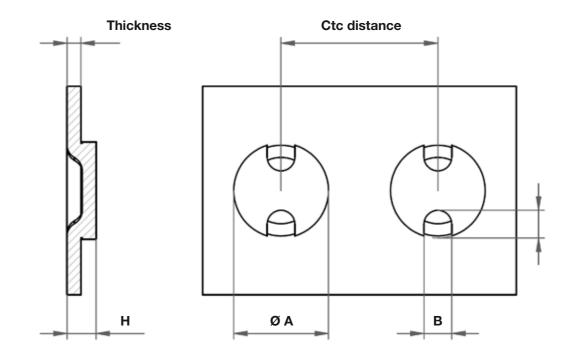




Lower Insert







Measurements Required (indicate the most important ones)									
Α	В	С	Н	Thickness	Ctc distance				

Dimensional Limits							
В	С	Thickness					
3 x Thickness	2.5 x Thickness	Maximum 3					

All measurements are expressed in mm

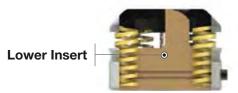


M12 LOUVER





Upper Insert-holder



Lower Insert-holder

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set.





Upper Insert



Upper Parting Insert





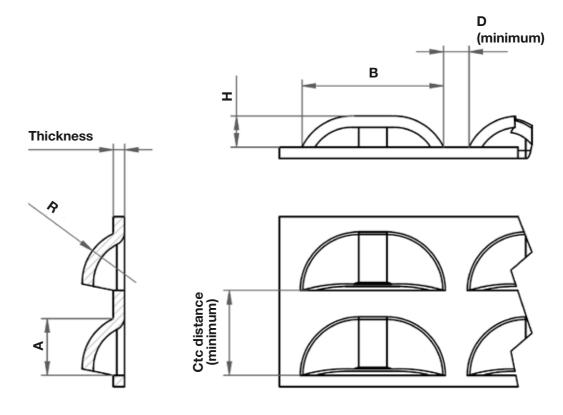
Springs



Lower Insert







Measurements Required (indicate the most important ones)								
Thickness	Thickness Station A B C H R Ctc distance							

Dimensional Limits								
Station B H								
В	25.00	5.50						
С	50.00	6.00						
D	80.00	7.00						

Standard Set of Inserts for Thick Turret										
Thickness	Station	on Code of Set of Inserts		В	С	Н	R	Ctc distance		
	В	FB08236968	10.00	25.00	4.50	5.50	9.50	15.00		
0.80 to 2.00	С	FB10236968	12.00	50.00	10.50	6.00	10.00	17.00		
	D	FB12236968	15.00	80.00	16.50	7.00	14.00	20.00		

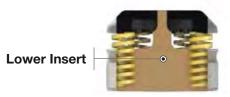
All measurements are expressed in mm

M₁₃ SHEAR BUTTON





Upper Insert-holder



Lower Insert-holder

The inserts shown are for upward forming

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set.





Ejector



Upper Insert



Stripper

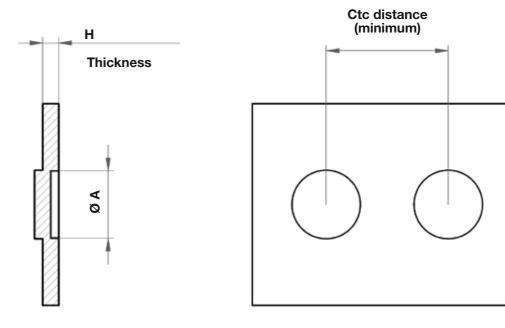




Lower Insert







N	Measurements Required (indicate the most important ones)									
Α	Thickness	Н	Ctc distance							

	Standard Set of Inserts for Thick Turret B Station										
Α	Code of Set of Inserts	Thickness	Н	Ctc distance							
5.00	FB09237471	1.00 to 4.00	Maximum	9.10							
8.00	FB09237470	1.00 to 4.00	Thickness x1.5	12.10							

All measurements are expressed in mm



M14 EARTH SYMBOL



The inserts shown are for upward forming

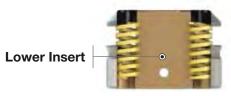
Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. The set of inserts offered can obtain a standard earth symbol with or without a circle, either upwards or downwards.



Upper Insert-holder



Lower Insert-holder



Upper Insert



Stripper

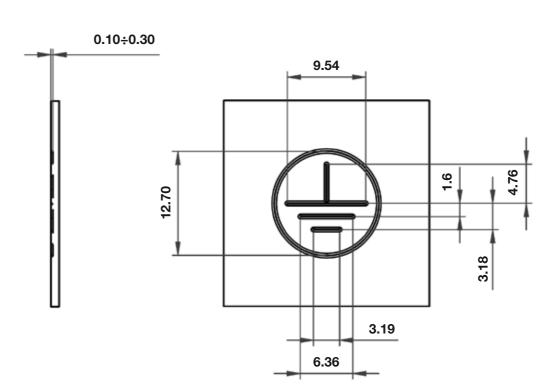


Springs



Lower Insert





Standard Set of Inserts for Thick Turret B Station										
Circle	Туре	Code of Set of Inserts	Thickness							
Vac	from the bottom	FB08238173	0.50 to 4.00							
Yes	from the top	FB08237273								
No	from the bottom	FB08238174	0.50 to 4.00							
NO	from the top	FB08237274								





The inserts shown are for upward forming operations.

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set.





Upper Insert



Upper Parting Insert



Stripper





Lower Insert









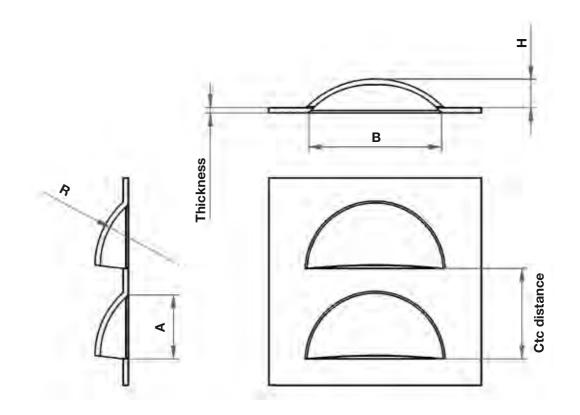
Upper Parting Insert

Upper Insert-holder









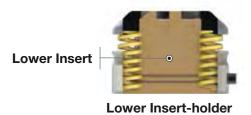
	Standard Set of Inserts for Thick Turret										
Station	Α	В	Н	R	Thickness	Code of Set of Inserts	Ctc distance				
					0.80 to 1.20	FB08237476.305	17.00				
В	12.00	25.00	5.30	15.00	1.30 to 1.70	FB08237476.A43	17.00				
					1.80 to 2.50	FB08237476.844	17.00				



M17 SEAT FOR **SELF-THREADING SCREW**







SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set.



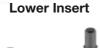


Ejector

Upper Insert

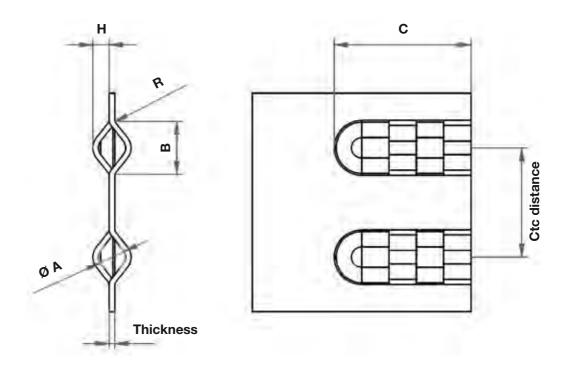












Measure	Measurements Required (indicate the most important ones)							
Thickness	Thickness Ø A B C H R Ctc distant							

All measurements are expressed in mm



In addition to the model of machine and the type of material, there is no need to indicate all the measurements, but only the most important ones. If further information is required, our Technical Department will contact you.

40 FB25VQ00REV04 FB25VQ00REV04 41

M20 PROGRESSIVE OBROUND EMBOSS



The inserts shown are for upward forming operations.

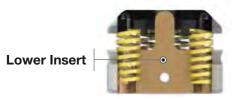
Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set.



Upper Insert-holder



Lower Insert-holder



Upper Insert



Stripper



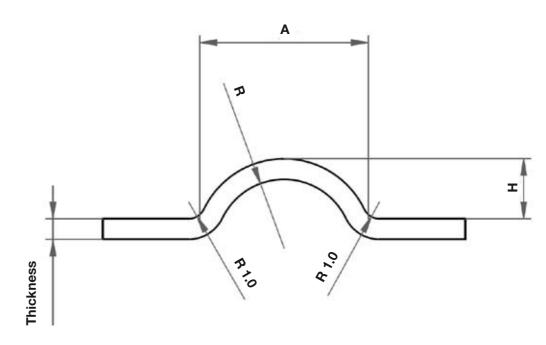
Springs



Lower Insert







Me	Measurements Required (indicate the most important ones)								
R	Α	Thickness	Н						

Dimensional Limits				
A H				
Minimum H x 2	Maximum 5.00			

	Standard Set of Inserts for Thick Turret B Station							
R	Α	Thickness	Code of Set of Inserts	Н				
4.00	9.83	0.80 to 1.60	FB08237291.979	3.50				
4.00	11,533	2.00 to 3.00	FB08237291.218	3.50				

All measurements are expressed in mm





M22 LOGOS



The inserts shown are for upward forming

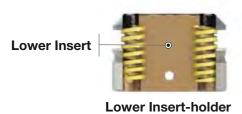
Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. In addition to using technical drawings in .DWG or .DXF format, tools for logos can also be created from images in the most common formats or even from .PDF files.



Upper Insert-holder





Upper Insert



Stripper

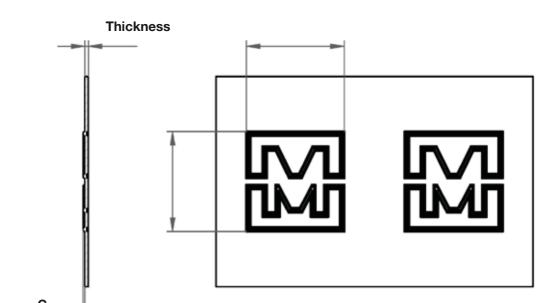


Springs



Lower Insert









M23 MICRODOT MARKER





Upper Insert-holder



forming operations. Please contact our Sales Office if you

The inserts shown are for downward

require upward forming operations.

SETS OF INSERTS

Available for both A and B Stations. Can be used on W and G Series insertholders, not included in the standard set. Requires hydraulic or electric punching machines with ram stroke control. If this is not available, we also offer a specific upper insert-holder with compensation spring.

The depth of penetration (H) depends on the thickness and type of material and on the power of the punching machine. Warning: reduce to the minimum the speed at which the insert approaches the sheet.



Upper Insert



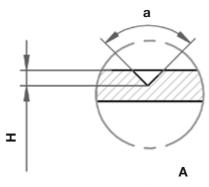
Insert



Die







Standard Set of Inserts for Thick Turret					
Station	Code of Set of Inserts	а			
Α	FAZL238197	90°			
В	FB09238197	90°			

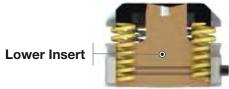


M24 CLIP WITH BUTTON





Upper Insert-holder



Lower Insert-holder

The inserts shown are for upward forming

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. This solution allows materials to be joined together without the need for screws or operations such as riveting or welding.





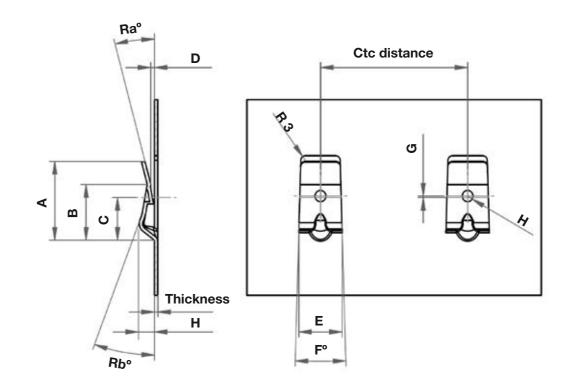
Upper Insert



Lower Insert







	Measurements Required (indicate the most important ones)								
Thickness	Α	В	С	D	E	F°	G	Н	Ctc distance

All measurements are expressed in mm



M25 REINFORCED CLIP





Upper Insert-holder



Lower Insert-holder

The inserts shown are for upward forming

Please contact our Sales Office if you require downward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set.



Ejector



Upper Insert



Stripper



Springs

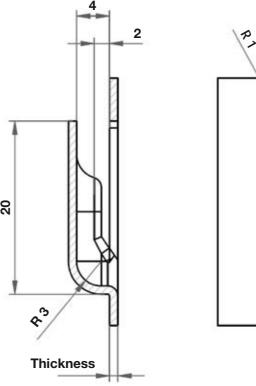


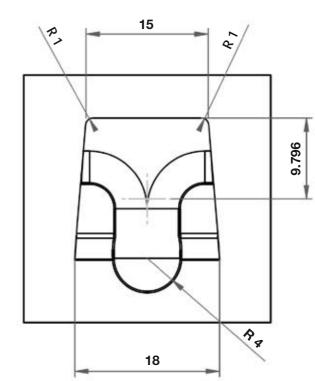
Lower Insert





Screws





Standard Set of Inserts for Thick Turret B Station				
Thickness Code of Set of Inserts				
0.80 to 1.00	FB082372AA.305			





M26 EMBOSS FOR CABLES



The inserts shown are for downward forming operations.

Please contact our Sales Office if you require upward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. Before using this specific set of inserts, a suitably sized M02-type extruded hole must be made.



Upper Insert-holder



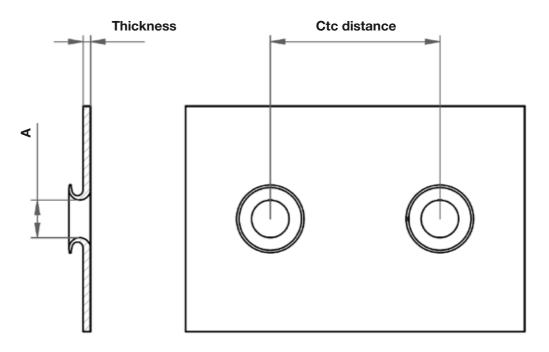
Die



Upper Insert







Measurements Required (indicate the most important ones)						
Thickness A Ctc distance						

All measurements are expressed in mm

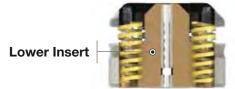


M27 BRIDGE WITH EXTRUDED HOLE





Upper Insert-holder



Lower Insert-holder

The inserts shown are for upward forming operations.

Please contact our Sales Office if you require downward forming operations.



Upper Parting Insert



Spring



Ejector



Upper Insert



Stripper



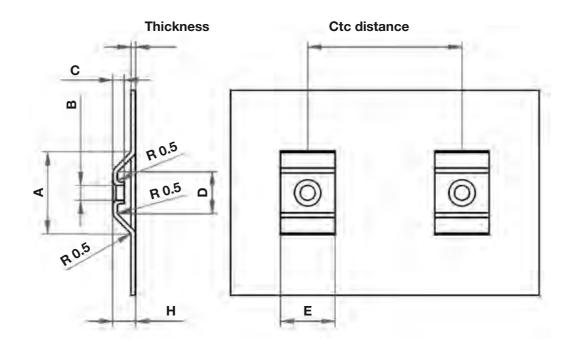
Springs



Lower Insert



MATRIX_JETFORM



Measurements Required (indicate the most important ones)							
Thickness	Thickness A B C D E H Ctc distance						

All measurements are expressed in mm



In addition to the model of machine and the type of material, there is no need to indicate all the measurements, but only the most important ones. If further information is required, our Technical Department will contact you.

Upper Parting

Insert Spring

Ejector

Upper Insert

M28 BENDING TOOL



The inserts shown are for upward forming operations.

SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. Before using this specific set of inserts, a suitably sized hole must be created.





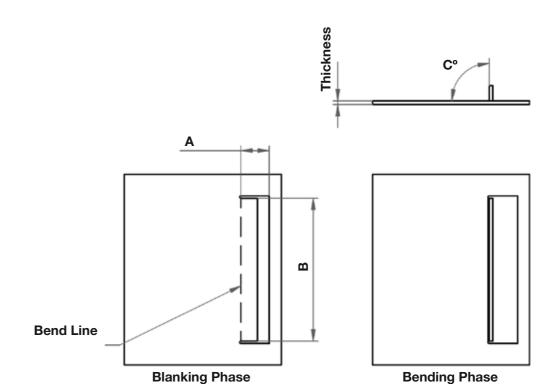


Lower Insert



Lower Insert-holder

Lower Insert



	Standard Set of Inserts for Thick Turret							
Station A B C° Thickness Total Height Code of Set of					Code of Set of Inserts			
С	Min. 12	Max. 50	Max. 91	Max. 1.50	Minimum 8 - Maximum 17	FB102369AH		
D	Min. 12	Max. 80	Max. 91	Max. 1.50	Minimum 10 - Maximum 16	FB122369AH		







SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. To obtain the result shown, two distinct processing phases must be performed, each requiring a specific set of inserts.

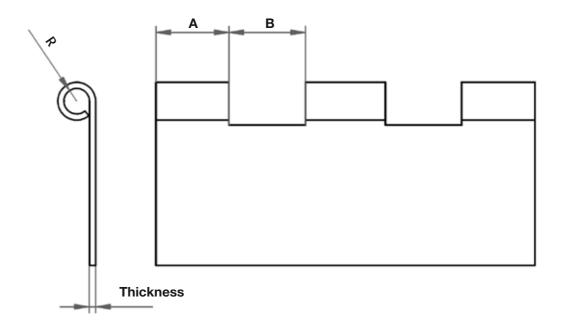


Lower

Insert

Screws





Measurements Required (indicate the most important ones)						
Thickness A B R						

Dimensional Limits				
Thickness R				
0.80 to 1.50	0.80 to 2.38			

All measurements are expressed in mm



In addition to the model of machine and the type of material, there is no need to indicate all the measurements, but only the most important ones. If further information is required, our Technical Department will contact you.

Lower Insert-holder

M31 DEBURRER



SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. Requires hydraulic or electric punching machines with ram stroke control and the appropriate software applications.



Upper Insert-holder



Lower Tool

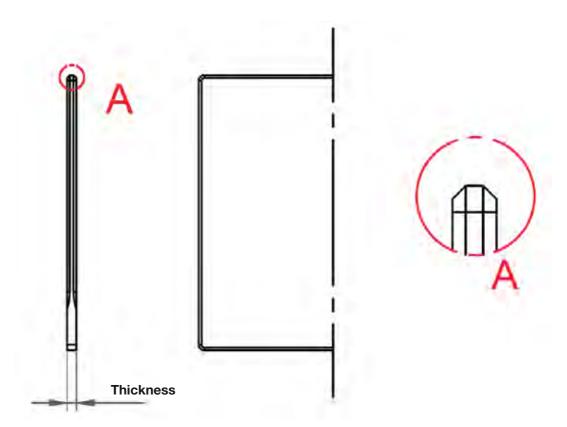


Upper Insert



Lower Tool





Standard Set of Inserts for Thick Turret B Station				
Thickness Code of Set of Inserts				
Max 6.00	FB092300AN			



M32 FILM CUTTER



SETS OF INSERTS

Can be used on W and G Series insertholders, not included in the standard set. Requires hydraulic or electric punching machines with ram stroke control and the appropriate software applications. Recommended working speed between 2 and 6 m/min. Warning: reduce to the minimum the speed at which the insert approaches the sheet.



Die



Upper Insert



Grub screw



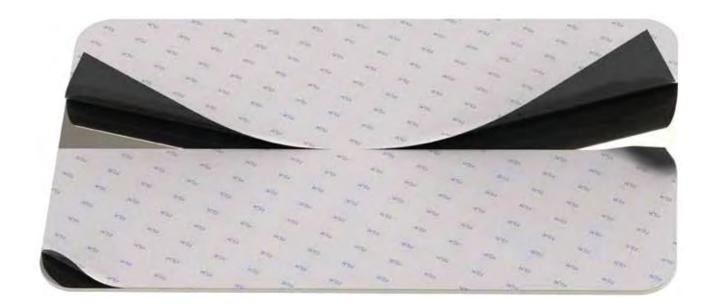


Parting Insert



Insert Guide





Standard Set of Inserts for Thick Turret				
Station Code of Set of Inserts				
Α	FAZL2381AP			
В	FB092381AP			





EMX THICK TURRET
SMX THICK TURRET
MULTIMATRIX
JETFORM
TRUMPF®
EUROMAC®
IRONWORKER
GRINDING





