



T O O L I N G F O R P U N C H P R E S S E S



JETFORM

CATALOG

INDEX

COMPANY PROFILE	2
WHAT'S NEW?	3
JETFORM	4
LUBRICATION: A MUST	5
COMMON FORMING	6
SPECIAL FORMING	7
CONTINUOUS FORMING AND SPECIAL APPLICATIONS	8
JETFORM HOLDERS	
WHITE SERIES - B and C Stations	10
WHITE SERIES - D and E Stations	11
GREEN SERIES - B and C Stations	12
GREEN SERIES - D and E Stations	13
ROLLFORM	
M41 Offset	16
M42 Rob	17
M43 Pincher	18
JETFORM INSERTS SETS	
M01 Forming - Engraved Countersink	20
M02 Forming - Extruded Hole	22
M03 Forming - Round Emboss	24
M04 Forming - Round Countersink	26
M09 Shearing & Forming - Spring Clip	28
M10 Shearing & Forming - Knockout	30
M12 Shearing & Forming - Radius Back Louver	32
M13 Shearing & Forming - Shear Button	34
M14 Engraving - Electrical Ground Symbol	36
M15 Shearing & Forming - Cont. Radius Back Louver	38
M17 Shearing & Forming - Thread Loop	40
M20 Forming - Continuous Obround Emboss	42
M22 Forming - Custom Logo	44
M23 Engraving - Dot Scriber	46
M24 Shearing & Forming - Clip with Safety Button	48
M25 Shearing & Forming - Strengthened Clip	50
M26 Shearing & Forming - Emboss for Electr. Cables	52
M27 Shearing & Forming - Bridge & Extruded Hole	54
M28 Forming - Bending Tool	56
M29 Forming - Hinge	58
M31 Forming - Deburr	60
M32 Engraving - Foil Slitting Tool	62

COMPANY PROFILE

A dynamic team

Matrix improved even further its commitment to innovation after joining Salvagnini group in 2017 and thus widening its product range, services and R&D department.

Thanks to the synergy with the reference worldwide machines manufacturer, Matrix redefines today the tools of tomorrow.

The customer, a unique partner

Each customer deserves special care, that's why Matrix doesn't simply offer a product but also a specialized consulting service and technical support, in order to reach the high competitive level required by the market.

Punches and dies born to last

The high reliability and life lasting which characterize Matrix' products, are the result of experience, devotion, constant research and use of superior quality raw materials.

Innovative technologies for high performances

Matrix invests on the best technologies: from designing software to the most modern planning techniques, from cutting edge machineries to sophisticated control systems.

Energies oriented to the maximum accuracy

The constant investments in machineries for our production is a must in order to keep the elevate standard level required by processing.



WHAT'S NEW?



RollFORM tooling are an evolution of our JetFORM range for high speed deformations processing on punch press machines.

An efficient solution for emboss and offsets production on sheet metal, as well as to produce a partial cut in the sheet metal to allow easy part separation.

RollFORM tooling grants costs reduction with interchangeable inserts.

Insert sets to work on a wide range of materials and designed to be used on specific material and thickness. Standard insert sets are designed to produce a 3,2 mm height deformation, while special insert sets are designed for heights between 1,5 and 4,7 mm.

RollFORM tooling require hydraulic or electrical punching machines with ram stroke control and proper software.

JETFORM

Jetform, line of tools for sheet metal forming, for efficient machine performances. Processings available from extrusions to engravings, clips and embosses and many others.

JETFORM inserts holder line is available on B, C, D and E station, with interchangeable inserts to reduce the costs for a new forming.

To better adapt to the specific customer's needs, Matrix' offer includes two types of inserts holders. The Green Series characterized by an accurate step adjusting of tool height; the best choice for punching machines with imprecise or missing stroke adjusting.

The White series, without adjusting, exploits the stroke adjusting of the most recent punching machines.

All inserts holders are manufactured with a total components lubrication system; this works by getting a specific oil from the top, either automatically or manually.



LUBRIFICATION: A MUST

It's the first rule to apply; being punching a shearing and extrusion process, in order to get a good result, lubrication of the shearing area is a must. Lubrication has an essential role on punching machines, particularly on punching stamps.

During punching phases, small quantities of material get stuck to the tool surface.

A lubricant oil with proper characteristics acts as a barrier between tool and material reducing significantly both friction and material build up on the tool surface, improving therefore the tool life.

On machines without an automatic lubricating system please daily fill up the central bore with sliding oil and always to each equipping.

Inobservance of this rule will cause an excessive insert holders wearing.

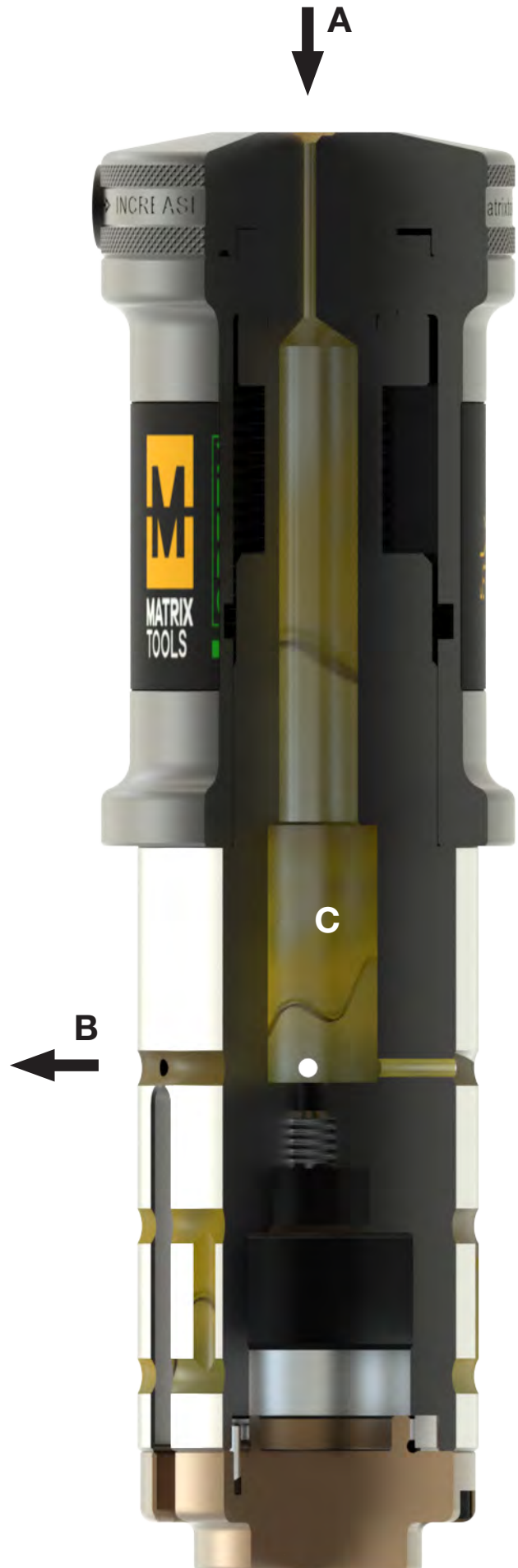
With the schema on the left, valid for B station, you can see the course of the lubricant.

The letters respectively indicate:

- A** Bore for lubricant liquid
- B** Bore to let the lubricant liquid into the outer punch holder walls and its housing contact area
- C** Tank for lubricant

The oil, by lubricating the tool cutting part, improves shearing and pulling

Matrix can supply lubricant and shearing oils for different working requirements. Evaporable oils are also available whenever grease waste parts must be avoided.



COMMON FORMING

jetform

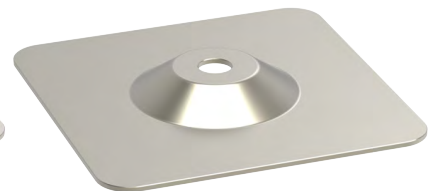
The most common forming are embosses, countersinks, engravings, logos, louvers and many others. The great diffusion of these forming allows to handle a wide offer of standardized products, reducing drastically delivery times. This type of forming is continuously growing, so please contact our sales department for assistance.



M01
ENGRAVED COUNTERSINK
FORMING



M02
EXTRUDED HOLE
FORMING



M03
ROUND EMBOSS
FORMING



M04
ROUND COUNTERSINK
FORMING



M09
SPRING CLIP
SHEARING AND FORMING



M12
RADIUS BACK LOUVER
SHEARING AND FORMING



M13
SHEAR BUTTON
SHEARING AND FORMING



M14
ENGRAVING
ENGRAVING



M23
DOT SCRIBER
ENGRAVING

SPECIAL FORMING

jetform

Our technical department is available to develop the best solutions for our customer's requirements. Thanks to this versatility we have no limits to satisfy the most complex requirements. The constant research of new solutions extends the possibility on the forming field, adding to normal engraving also tridimensional images.



**M24 - STRENGTHENED CLIP UP
WITH SAFETY BUTTON**
SHEARING AND FORMING



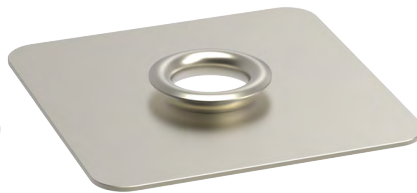
**M25
STRENGTHENED SPECIAL CLIP UP**
SHEARING AND FORMING



**M10
MULTIPLE KNOCKOUT**
SHEARING AND FORMING



**M22
CUSTOM LOGO
RELIEF**



**M26 - EMBOSS
FOR ELECTRICAL CABLES**
SHEARING AND FORMING



**M27 - BRIDGED & EXTRUDED
HOLE DOWN**
SHEARING AND FORMING



**M28
BENDING TOOL**
FORMING



**M29
HINGE**
FORMING



**M33
ANTI-SLIP TREAD PLATE**
SHEARING AND FORMING

CONTINUOUS FORMING AND SPECIAL APPLICATIONS

jetform

The most recent technical solutions implemented on the modern punching machines for much better tools control than in the past, gives great impulse to new applications. New special tools have been developed to shear the protecting film laid on the sheet metal or continuous embosses or to deburr sheared parts.

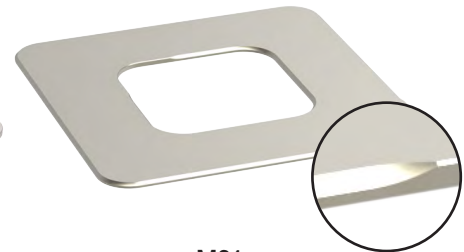
These are only some examples of what you could get from your punching machine just using Matrix products.



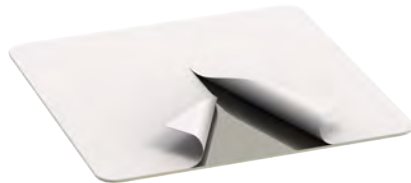
**M15 - CONTINUOUS RADIUS
BACK LOUVER
SHEARING AND FORMING**



**M20 - CONTINUOUS OBROUND
EMBOSS
FORMING**



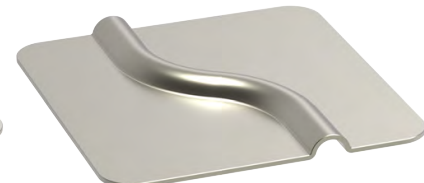
**M31
DEBURR
FORMING**



**M32
FOIL SLITTING TOOL
ENGRAVING**



**M41
ROLLFORM OFFSET
FORMING**



**M42
ROLLFORM RIB
FORMING**



T O O L I N G F O R P U N C H P R E S S E S



JETFORM HOLDERS

CATALOG

JETFORM - WHITE SERIES

B station

MAX Ø ∇ = mm 25

C station

MAX Ø ∇ = mm 40



WHITE SERIES

White Series insert holders, for extremely advantageous forming processes on punching machines recently manufactured, taking advantage from the stroke adjusting.

D station
MAX Ø \square = mm 70

E station
MAX Ø \square = mm 105



Tools for the most common formings are available for a quick delivery.
Our sales department is at your complete disposal to provide you with updated list.

JETFORM GREEN SERIES

(Adjustable Height)

B station

MAX Ø ∇ = mm 25

C station

MAX Ø ∇ = mm 40



GREEN SERIES

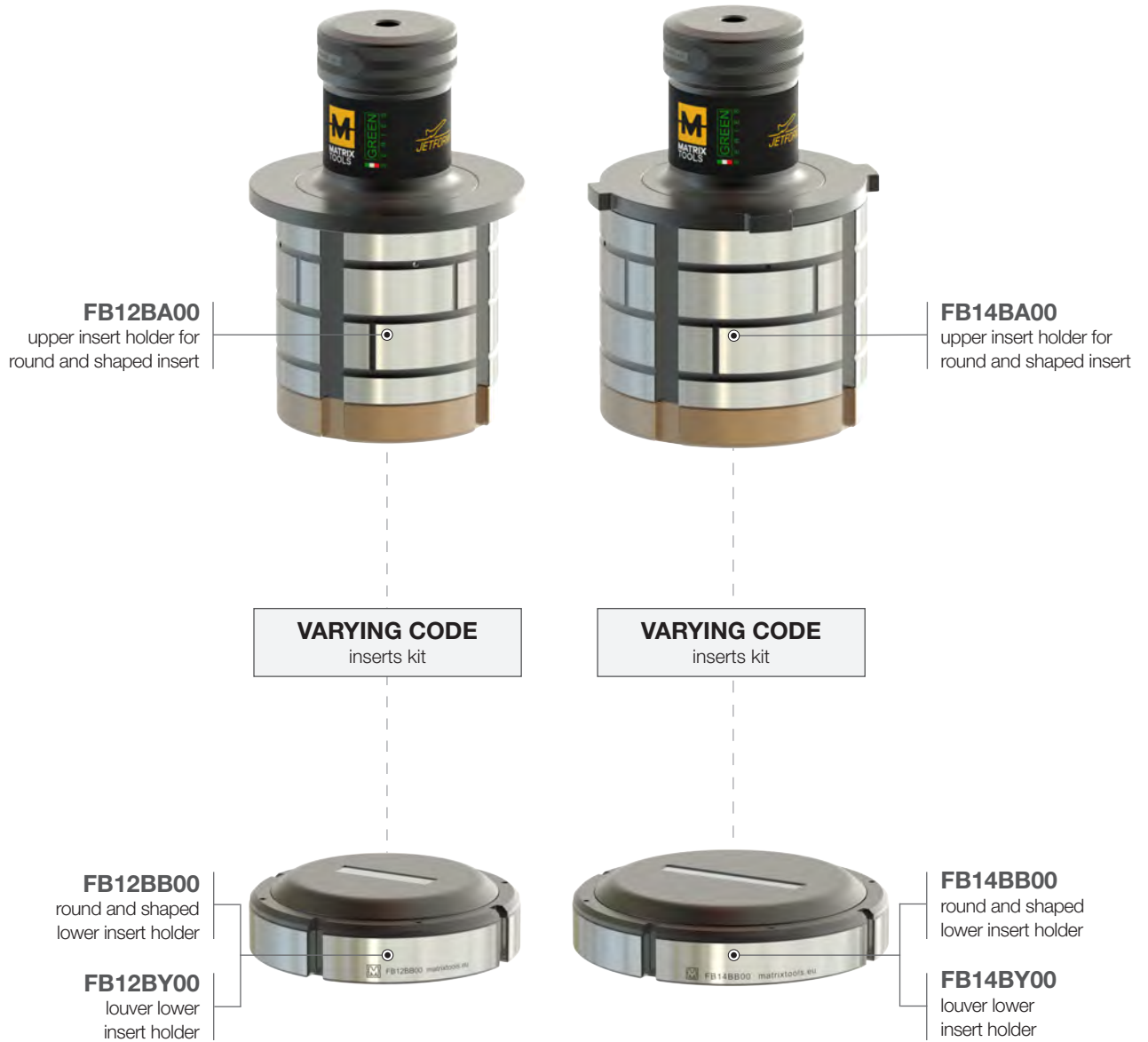
Accurate tool height adjusting by mean of 0.08 mm steps which characterize Green Series insert holders, for the maximum performances on punching machines with imprecise or without stroke adjusting.

D station

MAX Ø \varnothing = mm 70

E station

MAX Ø \varnothing = mm 105



Tools for the most common formings are available for a quick delivery.
Our sales department is at your complete disposal to provide you with updated list.



T O O L I N G F O R P U N C H P R E S S E S



ROLLFORM

CATALOG

M41 ROLLFORM - OFFSET

COMPLETE TOOL: FBB69200BJ

INSERTS SET

Insert sets to work on a wide range of materials and designed to be used on specific material and thickness.

Standard insert sets are designed to produce a 3,2 mm height deformation, while special insert sets are designed for heights between 1,5 and 4,7 mm.

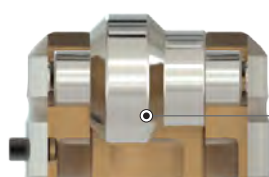
RollFORM tooling require hydraulic or electrical punching machines with ram stroke control and proper software.



Upper Insert Holder

OFFSET
Upper Insert

Support



Lower Insert Holder

OFFSET
Lower Insert



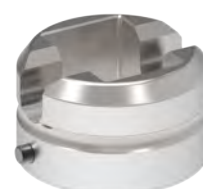
OFFSET Upper Insert



Support



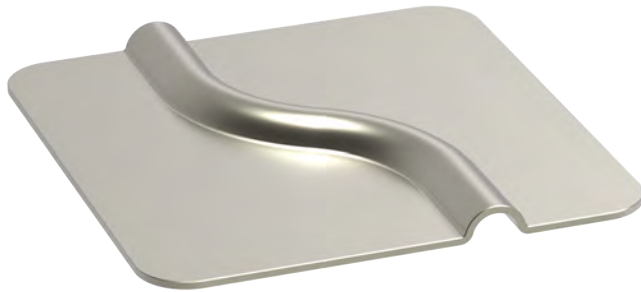
OFFSET Lower Insert



Lower Insert Holder

M42 ROLLFORM- RIB

COMPLETE TOOL: FBB69200BL



INSERTS SET

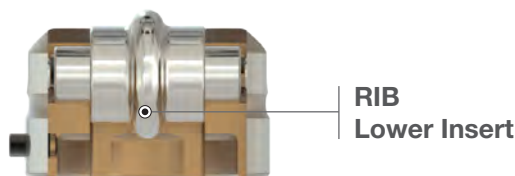
Insert sets to work on a wide range of materials and designed to be used on specific material and thickness.

Standard insert sets are designed to produce a 3,2 mm height deformation, while special insert sets are designed for heights between 1,5 and 4,7 mm.

RollFORM tooling require hydraulic or electrical punching machines with ram stroke control and proper software.



Upper Insert Holder



Lower Insert Holder



RIB Upper Insert



Support



RIB Lower Insert



Lower Insert Holder

M43 ROLLFORM- PINCHER

COMPLETE TOOL: FBD79200BO

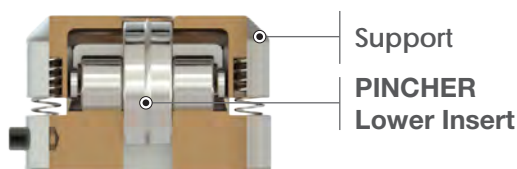
INSERTS SET

Insert sets to work on a wide range of materials and designed to be used on specific material and thickness.

RollFORM tooling require hydraulic or electrical punching machines with ram stroke control and proper software.



Upper Insert Holder



Lower Insert Holder



PINCHER Upper Insert



Support



Support



PINCHER Lower Insert



Lower Insert Holder



T O O L I N G F O R P U N C H P R E S S E S



JETFORM INSERTS SETS

CATALOG

M01 ENGRAVED COUNTERSINK

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

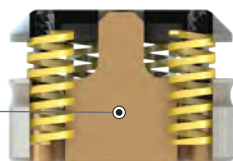
To be used on inserts holders WHITE and GREEN series, not included in the standard set.

It is necessary to supply technical sheet of the screw in case the purpose of the forming is to house a screw with the top part under the sheet plan.



Upper Insert

Upper Insert Holder



Lower Insert

Lower Insert Holder



Upper Insert



Stripper



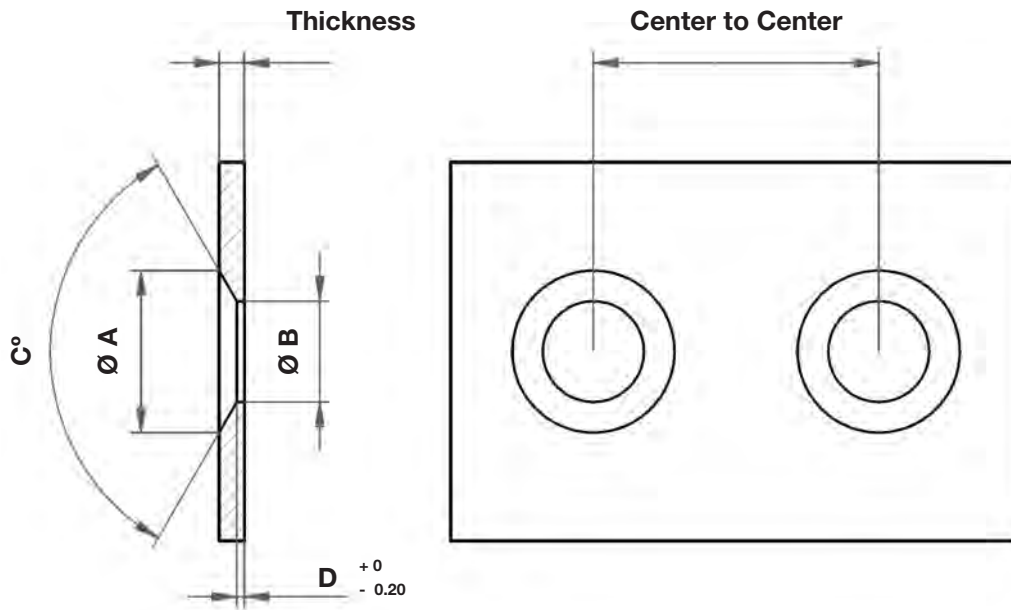
Springs



Lower Insert



Screws



Required Measures (indicate the most important ones)					
A	B	C°	D	Thickness	C. to C.

Dimensional Limits			
Material	C°	Thickness	Maximum Deformation (Thickness - D)
Mild Steel	Maximum 100°	1.20÷2.00	85 %
		2.10÷3.00	60 %
		Over 3.00	50 %
Aluminium	Maximum 100°	Over 1.20	85 %
Stainless Steel	Maximum 100°	1.20÷2.00	85 %
		2.10÷3.00	60 %
		Over 3.00	50 %

All measures are in mm

Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M02 EXTRUDED HOLE



The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

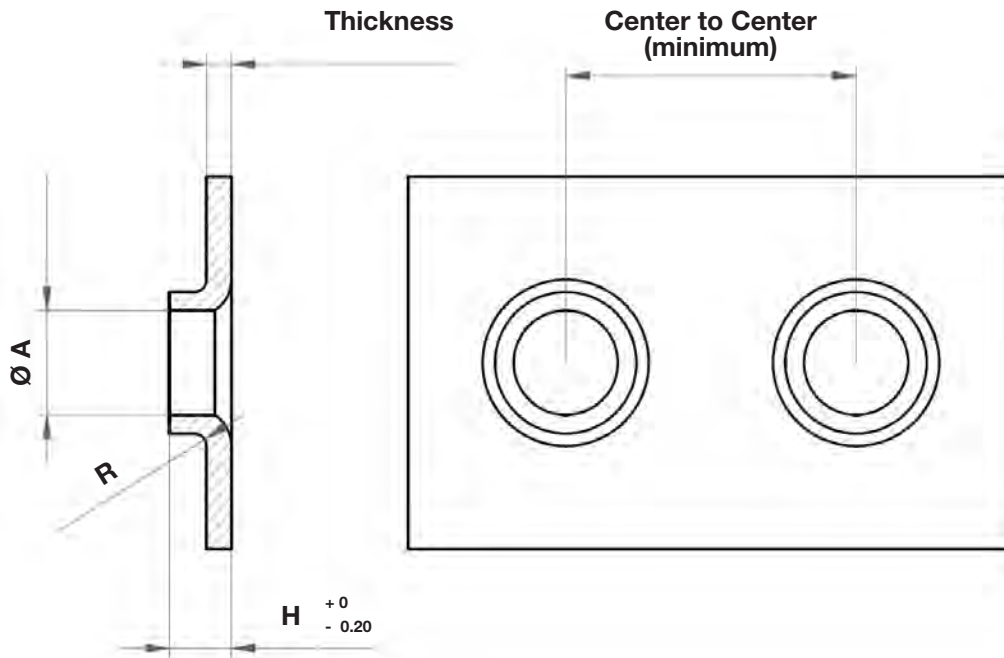
To be used on inserts holders WHITE and GREEN series, not included in the standard set.

This forming requires a suitable pre hole. Multiple close formings might bend the sheet metal.

Each set of insert is composed of all the following parts.

all lower inserts are coated with B coating.





Required Measures (indicate the most important ones)

Thread	A	Thickness	H	R	C. to C.

Dimensional Limits

A	H	Thickness
Maximum 10	Maximum 2,5 x Thickness	Maximum 5

Thick Turret B Station Standard Insert Sets

Thread	A	Pre Hole	Thickness	Inserts Set Code	H	R	C. to C.
M4	3.3	2.0 ±10%	0.80÷1.00	FB09237421.305	2.5	0.5	10.8
			1.10÷1.30	FB09237421.979	3.0	0.6	11.1
			1.40÷1.60	FB09237421.A43	3.75	0.75	11.55
M5	4.2	2.5 ±10%	0.80÷1.00	FB09237422.305	2.5	0.5	11.7
			1.10÷1.30	FB09237422.979	3.0	0.6	12.0
			1.40÷1.60	FB09237422.A43	3.75	0.75	12.45
M6	5.0	3.0 ±10%	0.80÷1.00	FB09237423.305	2.5	0.5	12.5
			1.10÷1.30	FB09237423.979	3.0	0.6	12.8
			1.40÷1.60	FB09237423.A43	3.75	0.75	13.25
M8	6.8	4.1 ±10%	0.80÷1.00	FB09237424.305	2.5	0.5	14.3
			1.10÷1.30	FB09237424.979	3.0	0.6	14.6
			1.40÷1.60	FB09237424.A43	3.75	0.75	15.05
			1.90÷2.10	FB09237424.217	5.0	1.0	15.8
M10	8.5	5.1 ±10%	0.80÷1.00	FB09237424.305	2.5	0.5	16.0
			1.10÷1.30	FB09237424.979	3.0	0.6	16.3
			1.40÷1.60	FB09237424.A43	3.75	0.75	16.75
			1.90÷2.10	FB09237424.217	5.0	1.0	17.5

All measures are in mm

Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M03 ROUND EMBOSS



The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.

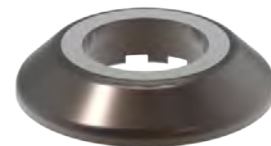
This forming requires a suitable pre hole.
Multiple close formings might bend the sheet metal.

It is necessary to supply technical sheet of the screw in case the purpose of the forming is to house a screw with the top part under the sheet plan.

Each set of inserts is composed of all the following parts.



Upper Insert



Stripper



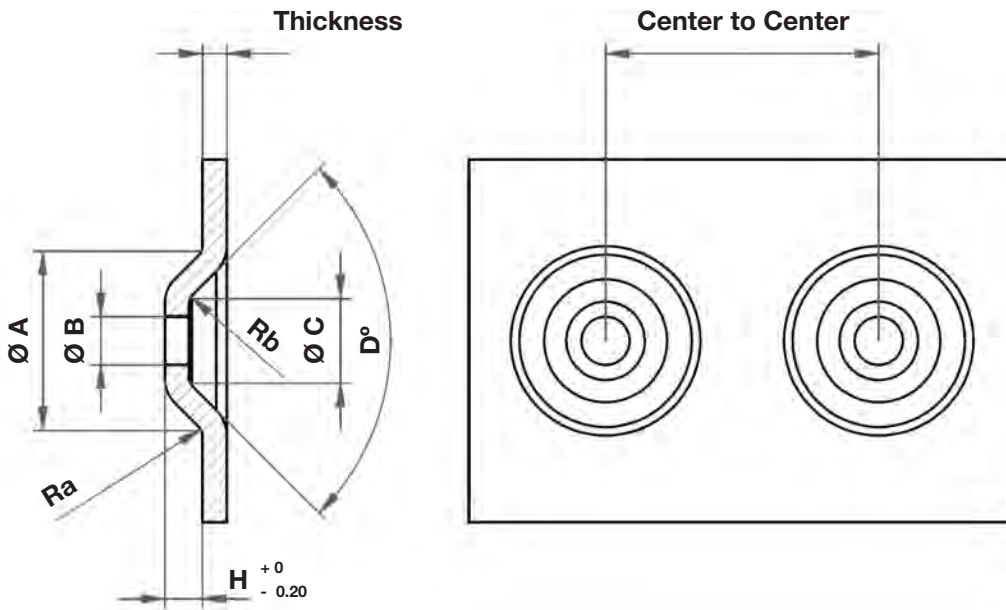
Springs



Lower Insert



Screws



Required Measures (indicate the most important ones)

A	B	C	D°	H	Ra	Rb	Thickness	C. to C.

Dimensional Limits

Station	D°	H	Thickness	Recommended C. to C.
B	Minimum 80°	Maximum 6	0.50÷3.00	Minimum A + 3 x Thickness
C	Minimum 80°	Maximum 7	0.50÷3.00	Minimum A + 3 x Thickness
D	Minimum 80°	Maximum 7	0.50÷3.00	Minimum A + 3 x Thickness

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M04 ROUND COUNTERSINK



The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.

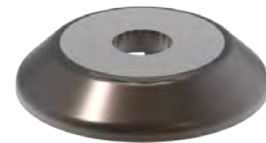
This forming requires a suitable pre hole.
Multiple close formings might bend the sheet metal.

It is necessary to supply technical sheet of the screw in case the purpose of the forming is to house a screw with the top part under the sheet plan.

Each set of inserts is composed of all the following parts.



Upper Insert



Stripper



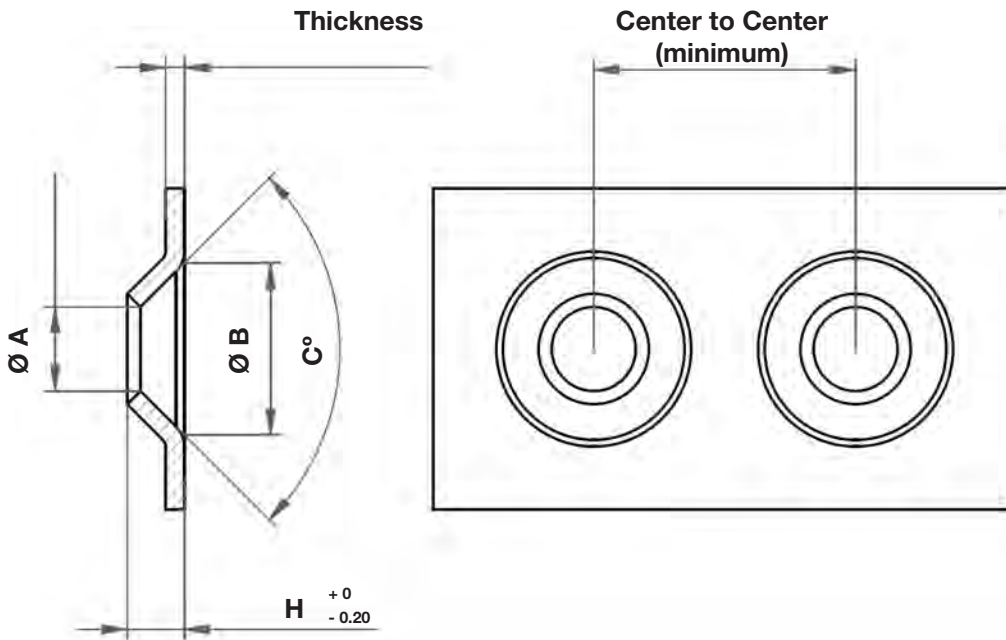
Springs



Lower Insert



Screws



Required Measures (indicate the most important ones)					
A	B	Thickness	H	C°	C. to C.

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

All measures are in mm

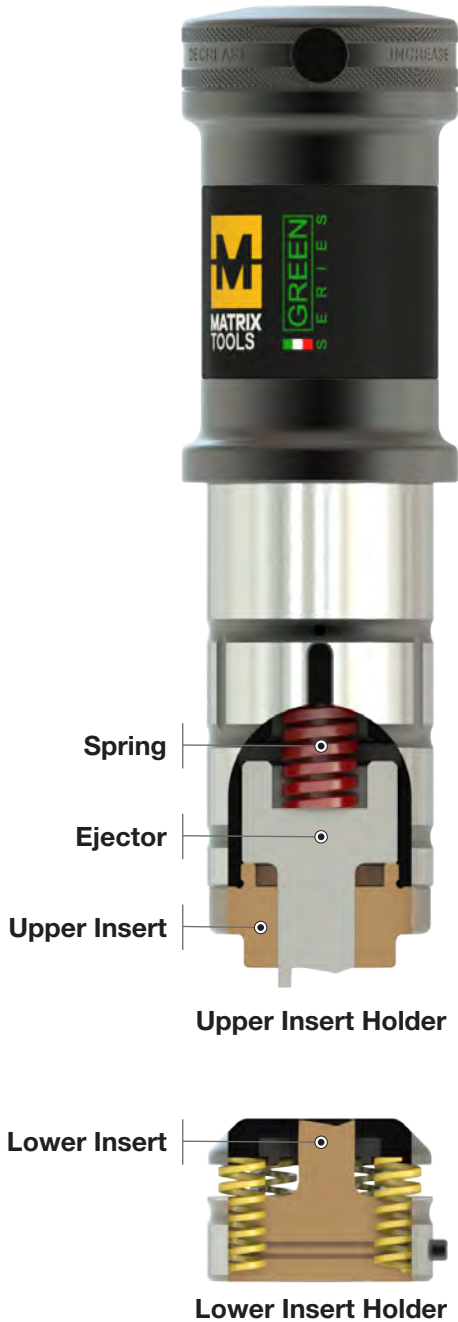
Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

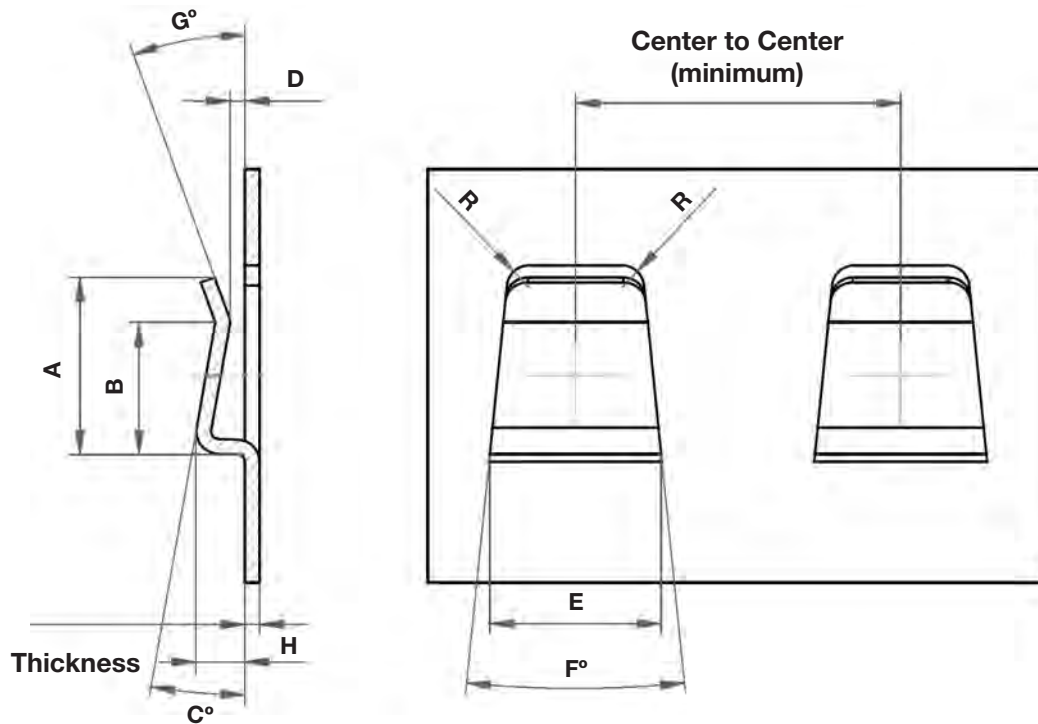
M09 SPRING CLIP

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.





Required Measures (indicate the most important ones)								
A	Thickness	B	C°	D	E	F°	H	C. to C.

Dimensional Limits	
F°	H
Minimum 10°	Maximum 5

Thick Turret B Station Standard Insert Sets									
A	Thickness	Inserts Set Code	B	C	D	E	F°	H	C. to C.
12	0.80÷1.00	FB08237255.305	5.34	3.63	1.00	11.599	11.592	4.30	22.00
	1.10÷1.30	FB08237255.979	5.46	3.70	1.20	11.600	11.408	4.90	
	1.40÷1.60	FB08237255.A43	5.64	3.81	1.50	11.603	11.144	5.80	

All measures are in mm

Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M10 KNOCKOUT

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.



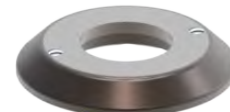
Spring



Ejector



Upper Insert



Stripper



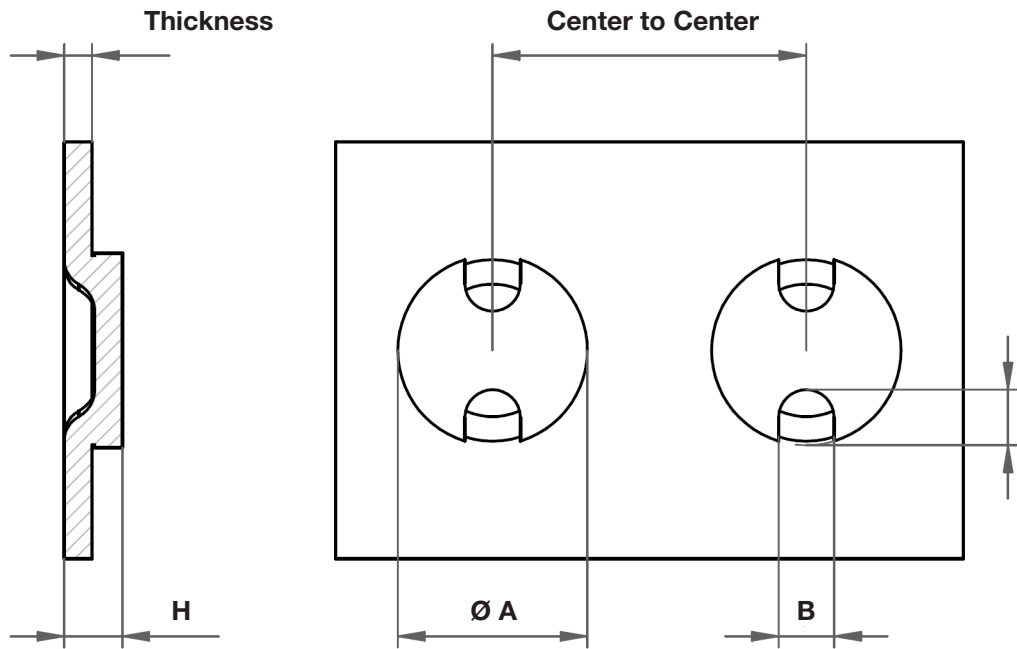
Springs



Lower Insert



Screws



Required Measures (indicate the most important ones)

A	B	C	H	Thickness	C. to C.
---	---	---	---	-----------	----------

Dimensional Limits

B	C	Thickness
3 x Thickness	2,5 x Thickness	Maximum 3

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M12 RADIUS BACK LOUVER



The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.



Upper Insert
Upper Shearing Insert

Upper Insert Holder



Lower Insert

Lower Insert Holder



Screws



Upper Insert



Upper Shearing Insert



Stripper



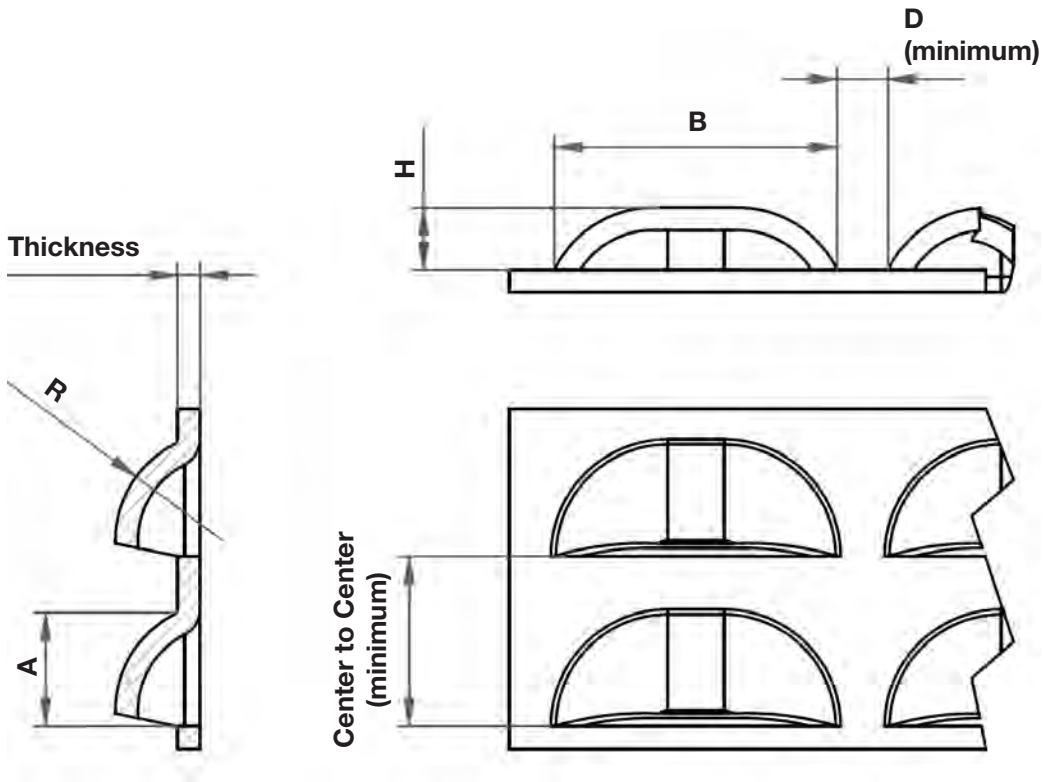
Springs



Lower Insert



Screws



Required Measures (indicate the most important ones)							
Thickness	Station	A	B	C	H	R	C. to C.

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

Thick Turret Standard Insert Sets								
Thickness	Station	Inserts Set Code	A	B	C	H	R	C. to C.
0.80÷2.00	B	FB08236968	10.00	25.00	4.50	5.50	9.50	15.00
	C	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 measures are in mm

Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

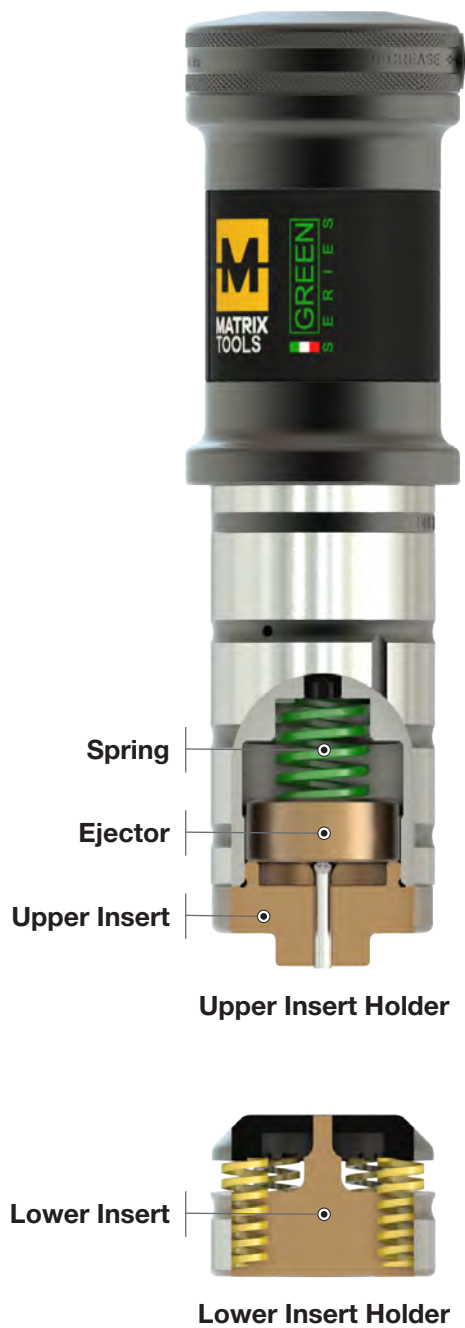
M13 SHEAR BUTTON

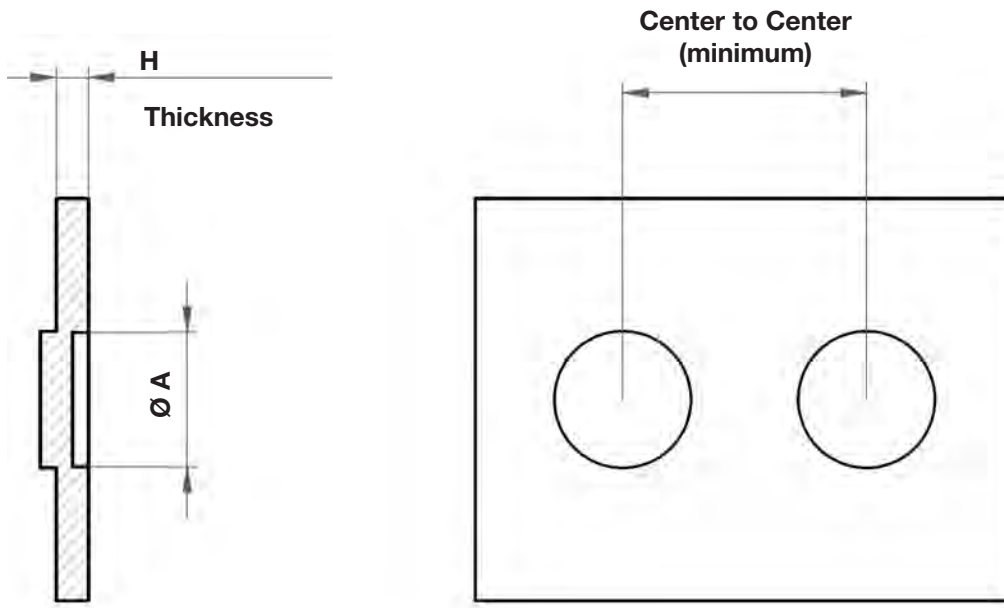


The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.





Required Measures (indicate the most important ones)			
A	Thickness	H	C. to C.

Thick Turret B Station Standard Insert Sets				
A	Inserts Set Code	Thickness	H	C. to C.
5.00	FB09237471	1.00÷4.00	Maximum Thickness x1.5	9.10
8.00	FB09237470			12.10

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M14 ELECTRICAL GROUND SYMBOL



The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

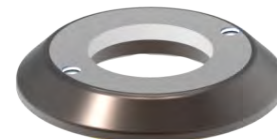
INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.

With the set of inserts proposed, it is possible to obtain a standard electrical ground symbol with or without circle, upwards or downwards.



Upper Insert



Stripper



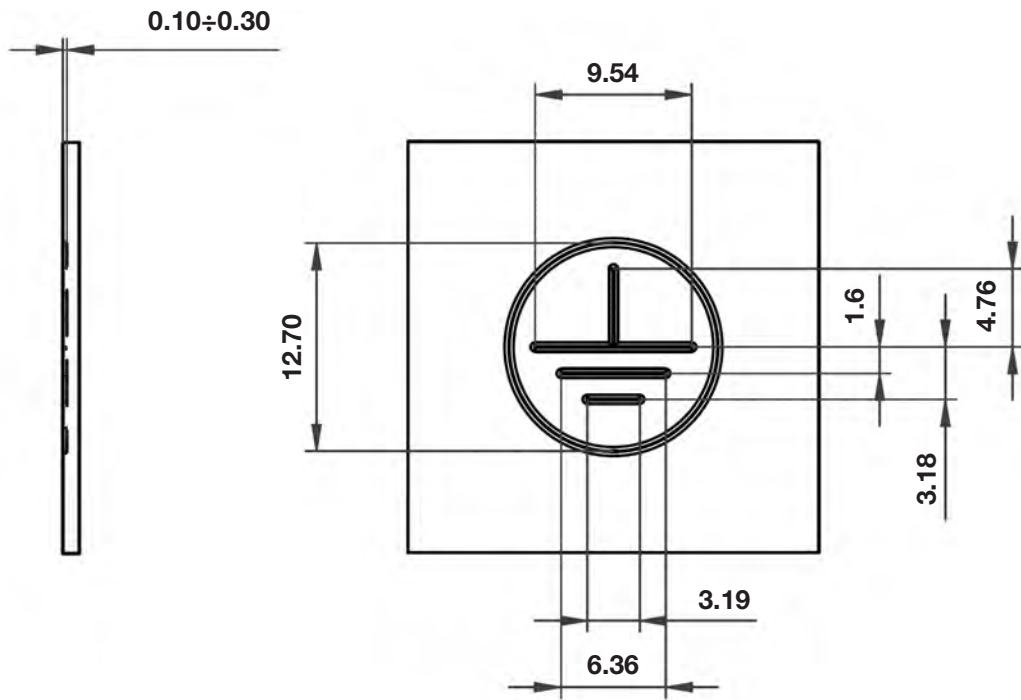
Springs



Lower Insert



Screws



Thick Turret B Station Standard Insert Sets			
Circle	Forming	Inserts Set Code	Thickness
Yes	downforming	FB08238173	0.50÷4.00
	upforming	FB08237273	
No	downforming	FB08238174	0.50÷4.00
	upforming	FB08237274	

All measures are in mm



M15 CONTINUOUS RADIUS BACK LOUVER



The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.



Upper Insert
Upper Shearing Insert

Upper Insert Holder



Lower Insert

Lower Insert Holder



Screws



Upper Insert



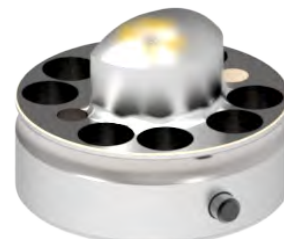
Upper Shearing Insert



Stripper



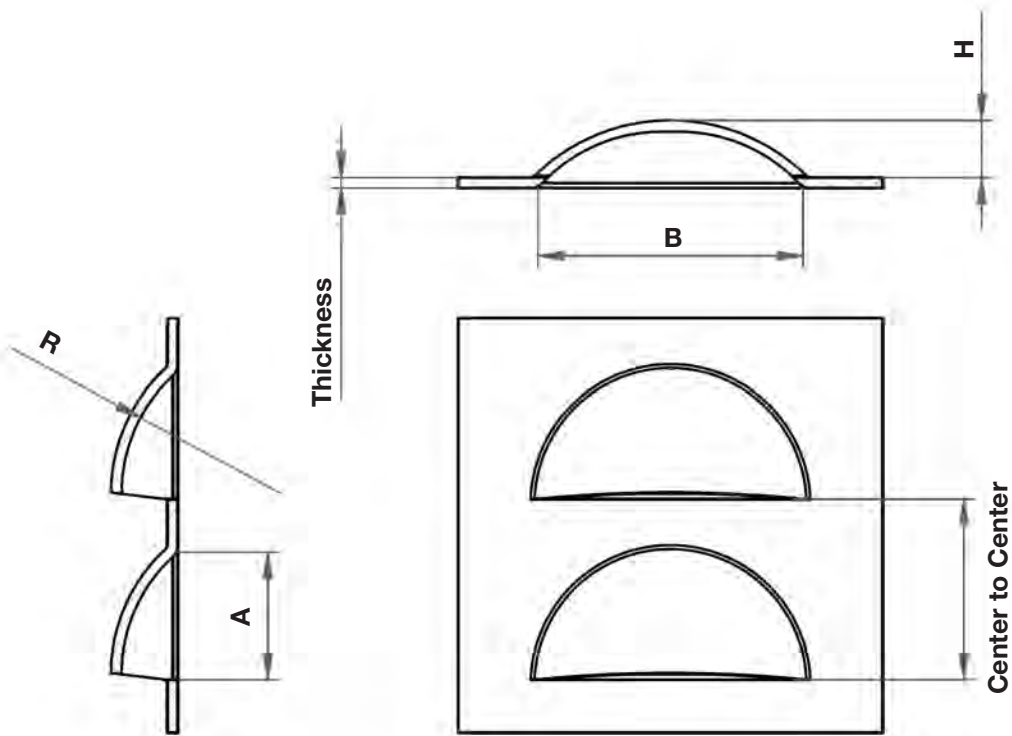
Springs



Lower Insert

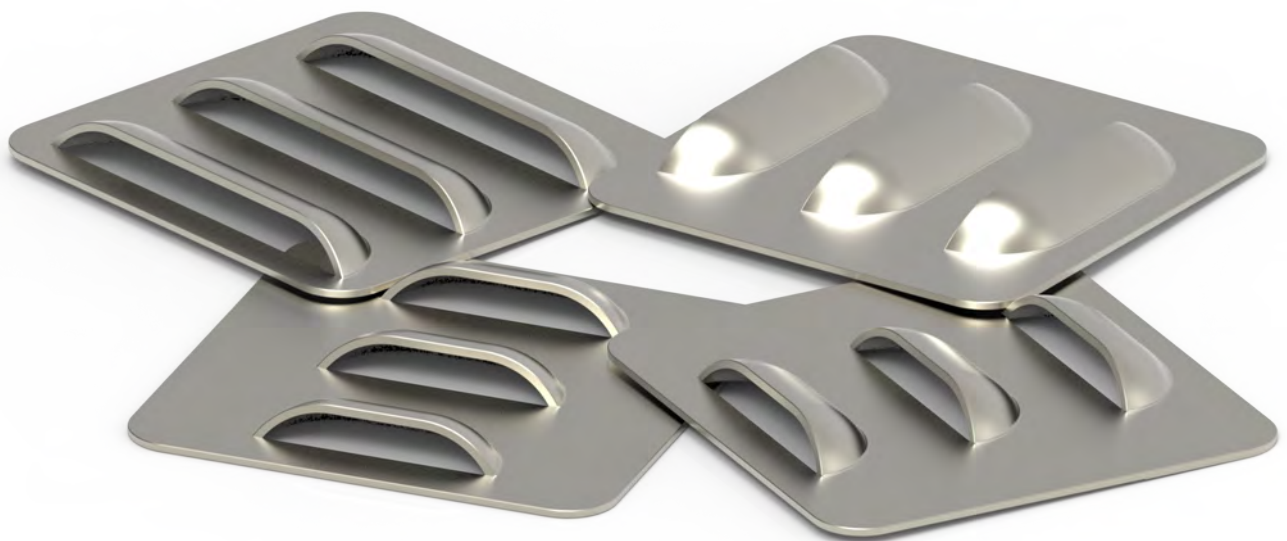


Screws



Thick Turret Standard Insert Sets							
Station	A	B	H	R	Thickness	Inserts Set Code	C. to C.
B	12.00	25.00	5.30	15.00	0.80÷1.20	FB08237476.305	17.00
					1.30÷1.70	FB08237476.A43	17.00
					1.80÷2.50	FB08237476.844	17.00

All measures are in mm



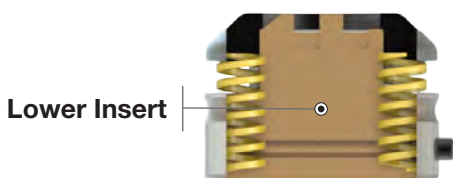
M17 THREAD LOOP

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.



Upper Insert Holder



Lower Insert Holder



Spring



Ejector



Upper Insert



Stripper



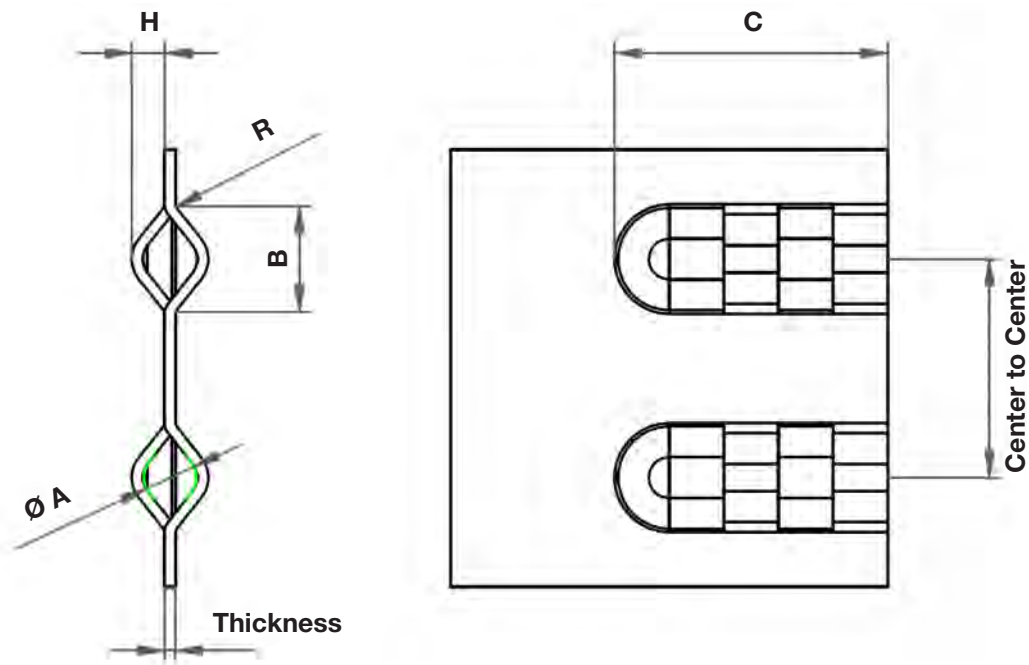
Springs



Lower Insert



Screws



Required Measures (indicate the most important ones)						
Thickness	Ø A	B	C	H	R	C. to C.

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M20 CONTINUOUS OBROUND EMBOSS



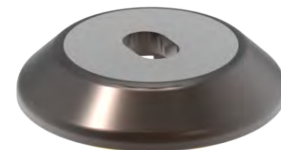
The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.



Upper Insert



Stripper



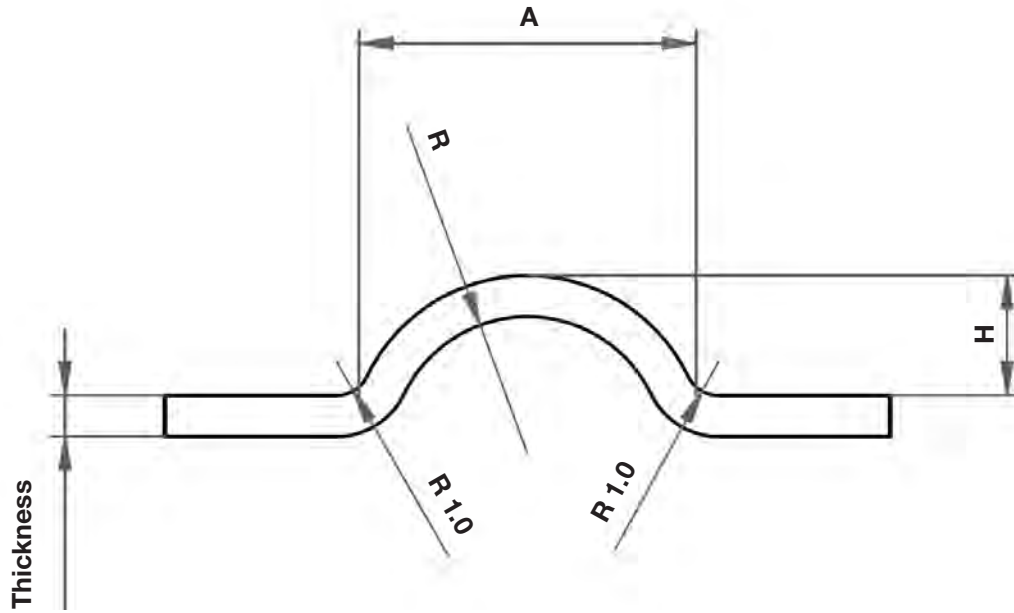
Springs



Lower Insert



Screws



Required Measures (indicate the most important ones)

R	A	Thickness	H

Dimensional Limits

A	H
Minimum H x 2	Maximum 5,00

Thick Turret B Station Standard Insert Sets

R	A	Thickness	Inserts Set Code	H
4.00	9.83	0.80÷1.60	FB08237291.979	3.50
	11,533	2.00÷3.00	FB08237291.218	

All measures are in mm



M22 CUSTOM LOGO



The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

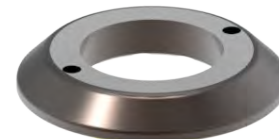
INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.

Besides using technical drawings in .DWG or .DXF format, it is possible to produce tools for logos starting from images on the most common formats or even from file .PDF.



Upper Insert



Stripper



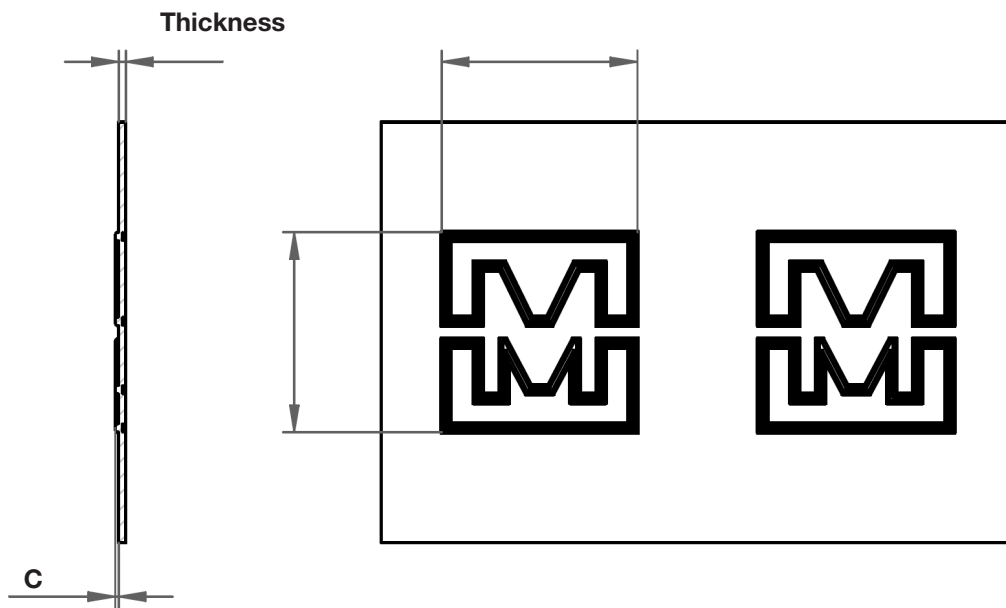
Springs



Lower Insert



Screws



M23 DOT SCRIBER



The inserts are shown to obtain a down forming operation.
For up forming operations, please contact our sales department.

INSERTS SET

Available on both A and B Stations.
To be used on inserts holders WHITE and GREEN series, not included in the standard set.

This type of working requires hydraulic or electrical punching machine with ram stroke control and whenever not possible, an upper insert holder with compensating spring is available.

The penetration (H) depends on thickness and type of material as well as punching machine power.

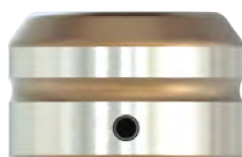
Attention: reduce to the minimum the approaching speed of the insert to the sheet metal.



Upper Insert



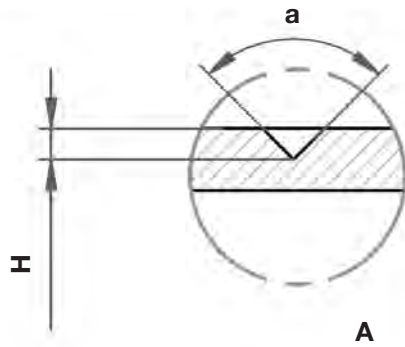
Insert



Die



Die



Thick Turret Standard Insert Sets

Station	Inserts Set Code	a
A	FAZL238197	90°
B	FB09238197	90°

All measures are in mm



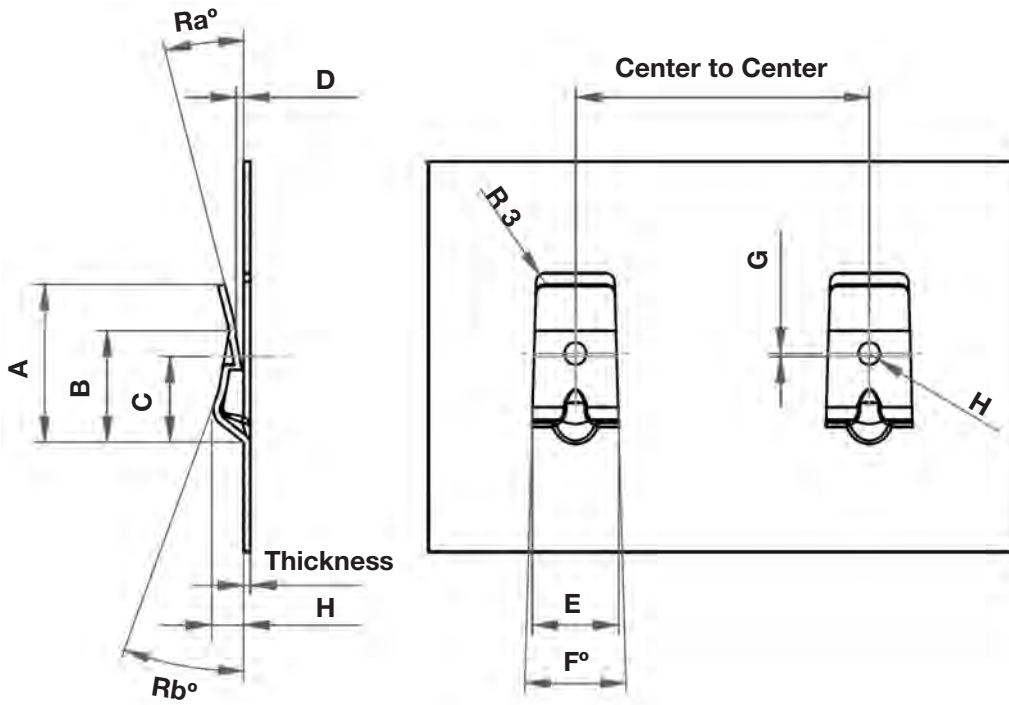
M24 CLIP WITH SAFETY BUTTON

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.
This solution allows to joint materials without using any screws, avoiding also welding and riveting operations.





Required Measures (indicate the most important ones)									
Thickness	A	B	C	D	E	F°	G	H	C. to C.

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M25 STRENGTHENED CLIP

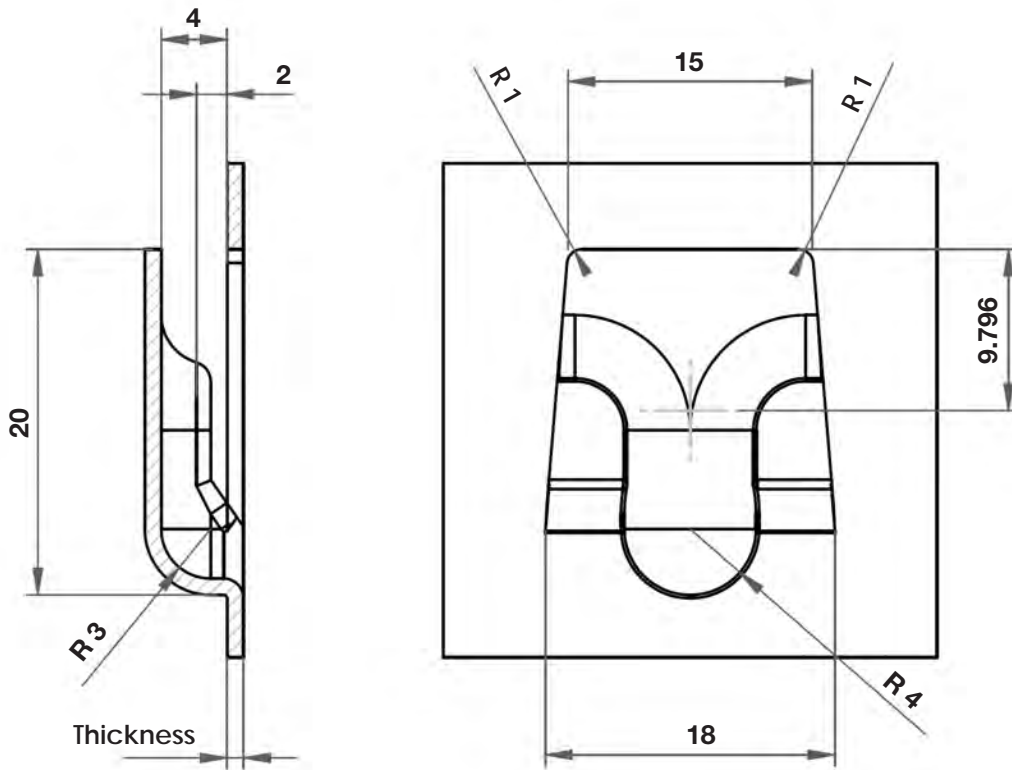


The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.



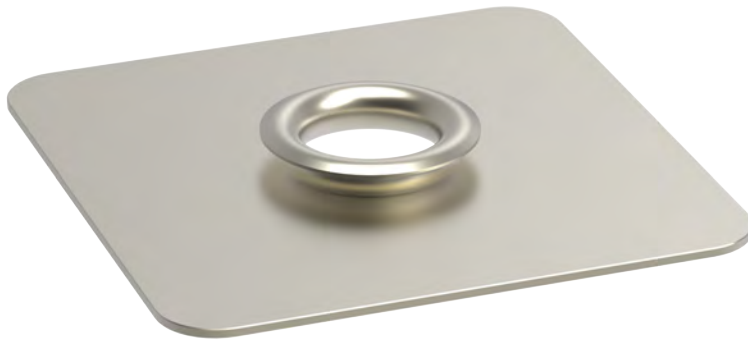


Thick Turret B Station Standard Insert Sets	
Thickness	Inserts Set Code
0.80÷1.00	FB082372AA.305

All measures are in mm



M26 EMBOSS FOR ELECTRICAL CABLE

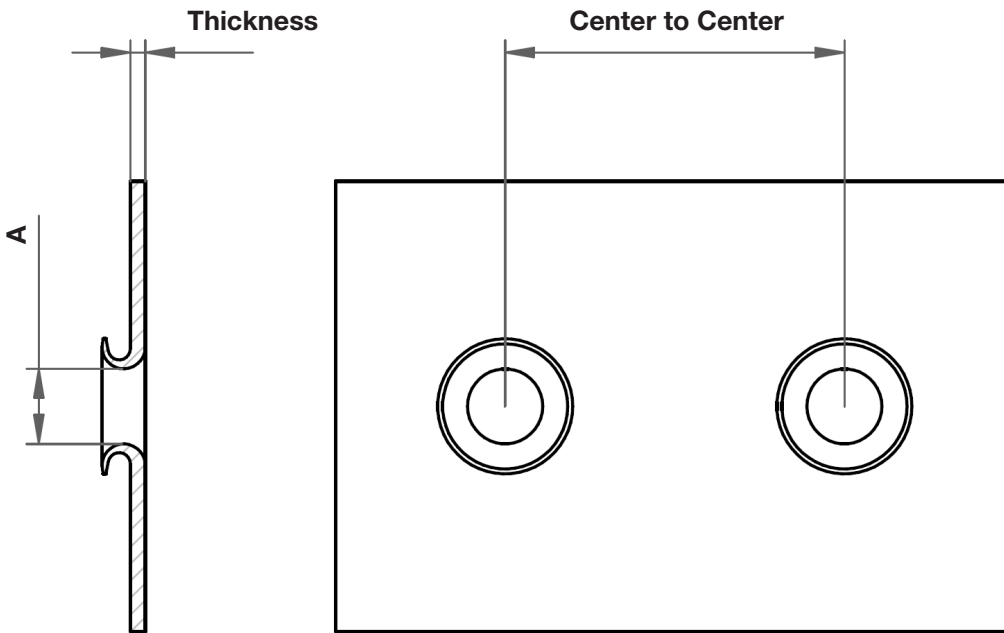


The inserts are shown to obtain a down forming operation.
For up forming operations, please contact our sales department.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.
Before using this specific set of inserts, it is necessary to perform an extruded hole duly dimensioned type M02.





Required Measures (indicate the most important ones)		
Thickness	A	C. to C.

All measures are in mm



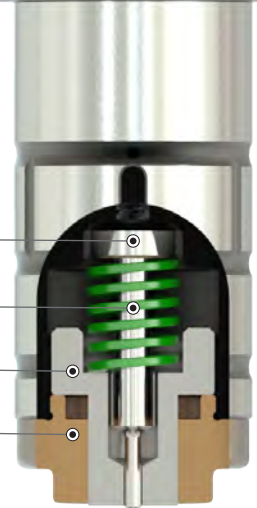
Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M27 BRIDGE & EXTRUDED HOLE

The inserts are shown to obtain an up forming operation.
For down forming operations, please contact our sales department.



Upper Shearing Insert
Spring
Ejector
Upper Insert



Upper Insert Holder

Lower Insert



Lower Insert Holder



Upper Shearing Insert



Spring



Ejector



Upper Insert



Stripper



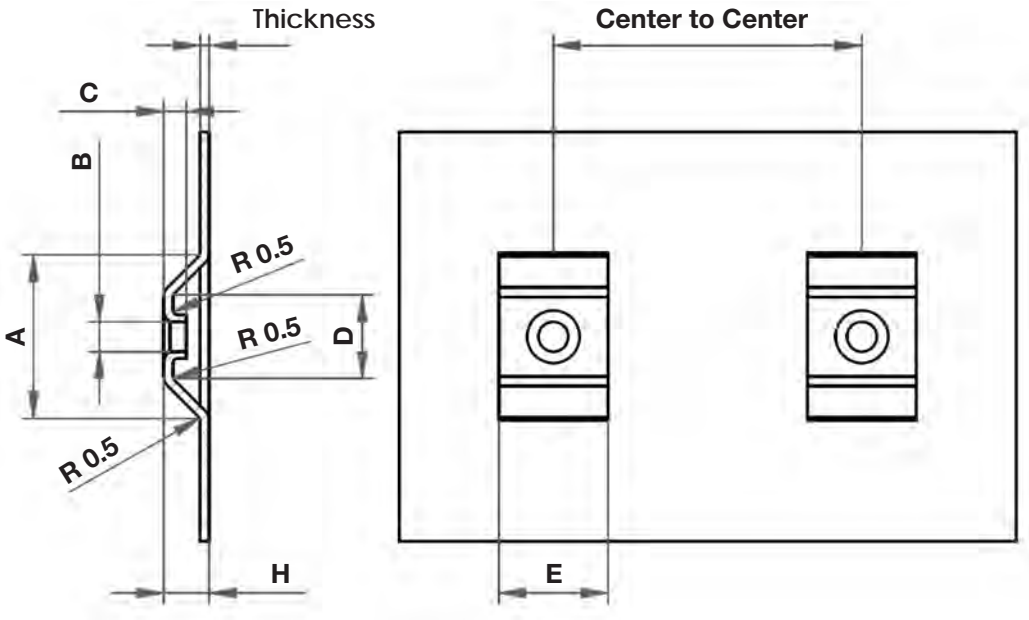
Springs



Lower Insert



Screws



Required Measures (indicate the most important ones)

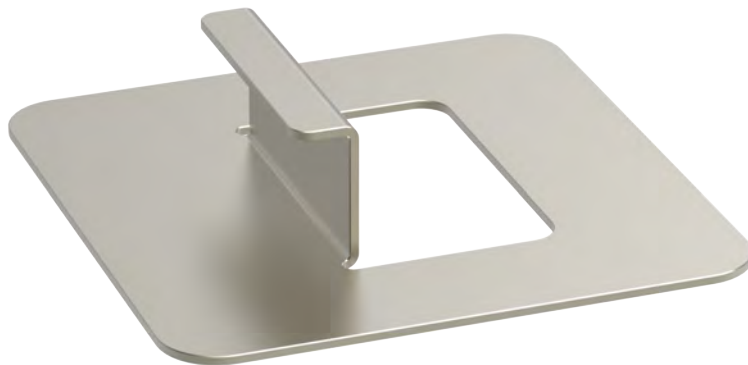
Thickness	A	B	C	D	E	H	C. to C.

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M28 BENDING TOOL



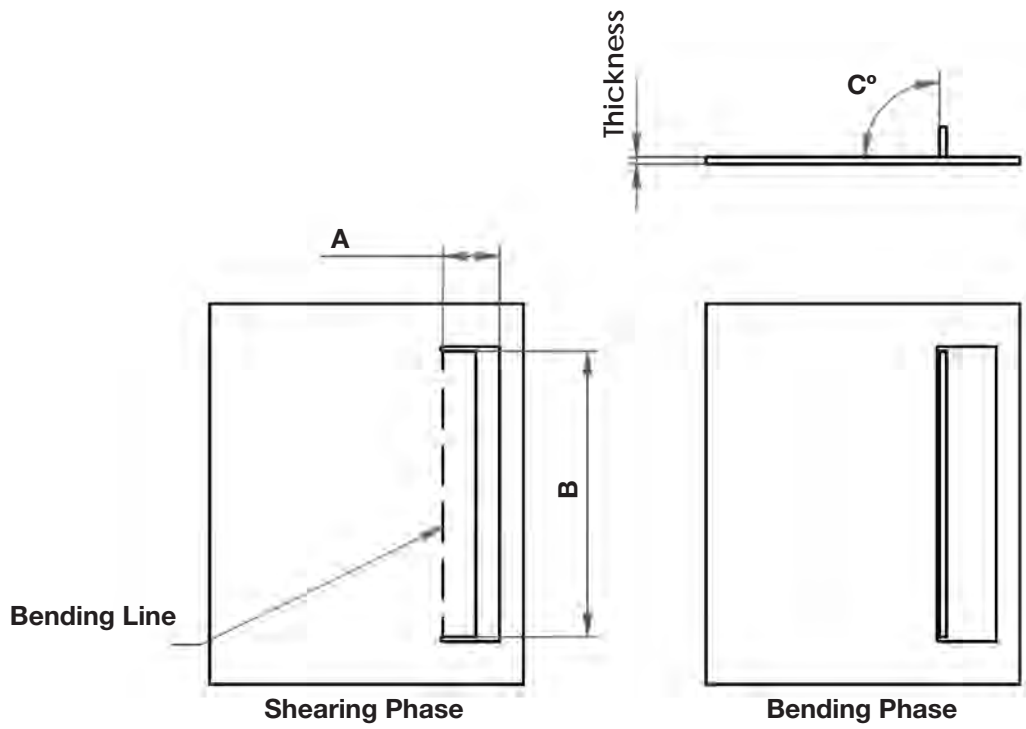
The inserts are shown to obtain an up forming operation.

INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.

Before using this specific set of inserts, it is necessary to perform a shearing duly dimensioned.





Thick Turret Standard Insert Sets						
Station	A	B	C°	Thickness	Total Height	Inserts Set Code
C	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

All measures are in mm



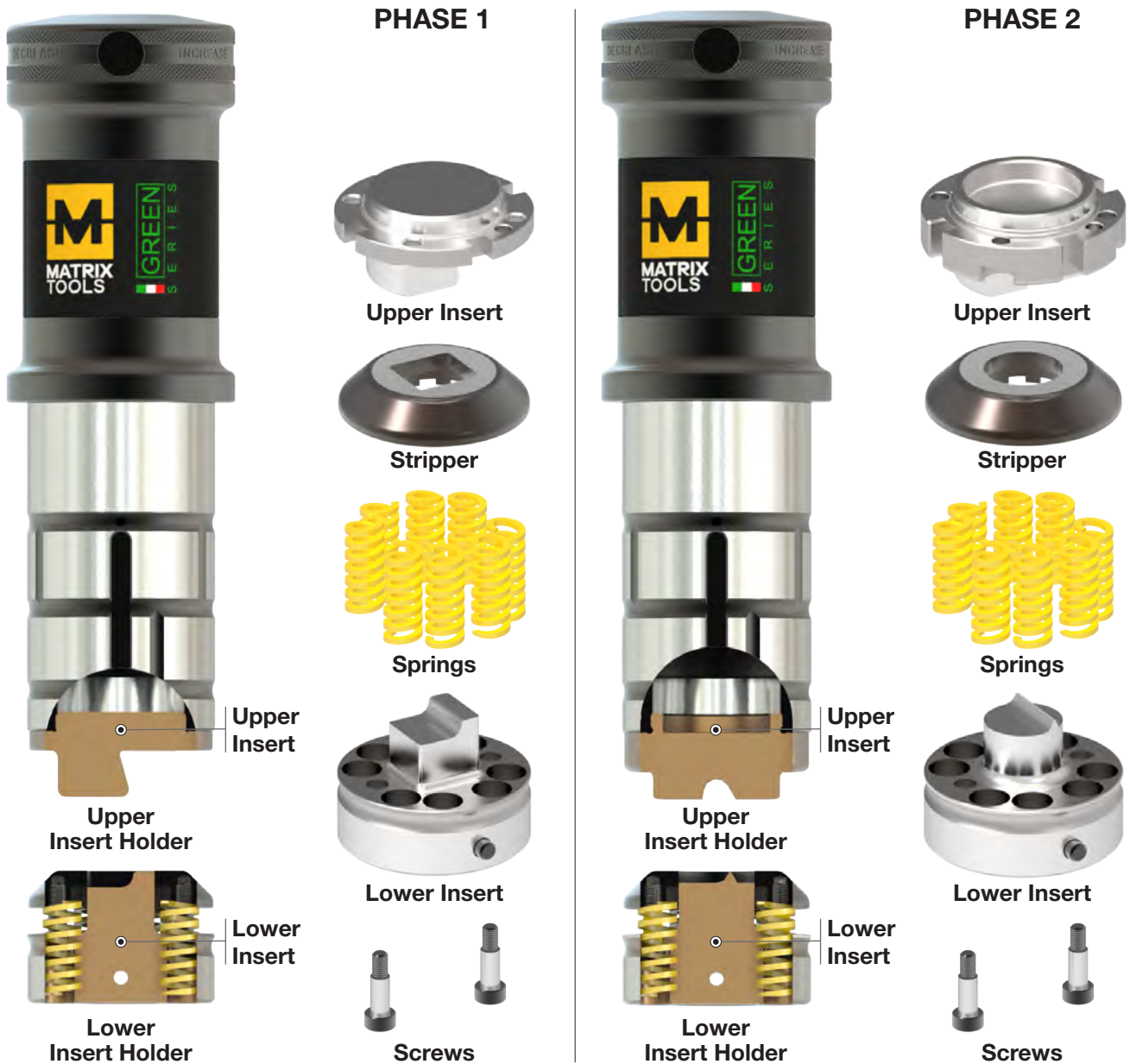
M29 HINGE

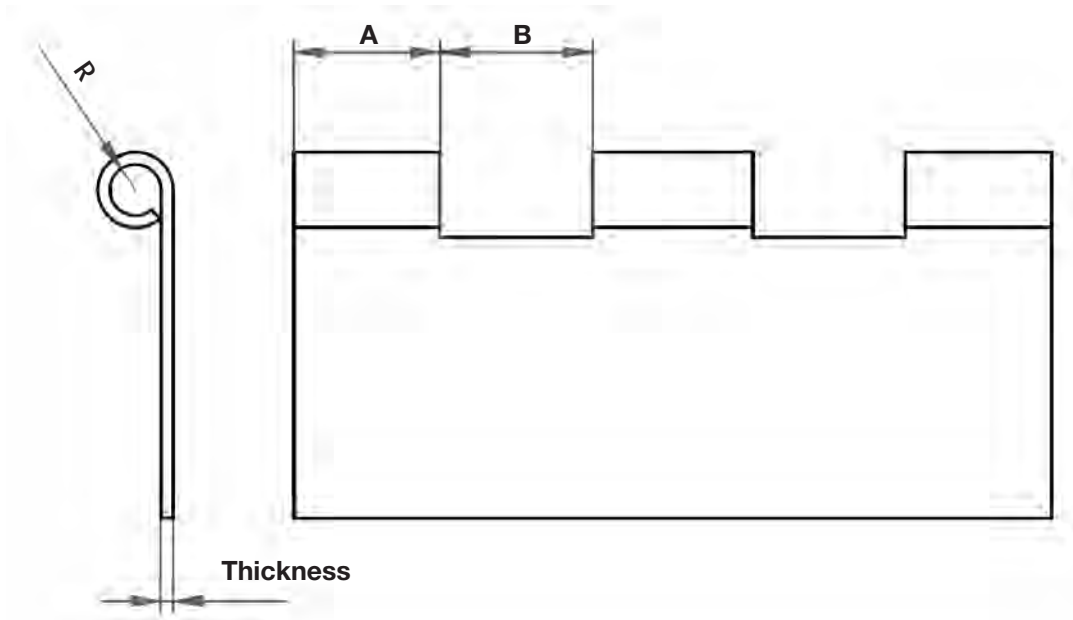


INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.

In order to obtain the shown result, it is necessary to proceed with two separate working steps, for which a specific set of inserts is required.





Required Measures (indicate the most important ones)

Thickness	A	B	R

Dimensional Limits

Thickness	R
0.80÷1.50	0.80÷2.38

All measures are in mm



Besides the machine model and type of material, it is not necessary to indicate all measures but the most important ones only; in case further information are needed our technical department will get in touch with you.

M31 DEBURR



INSERTS SET

To be used on inserts holders WHITE and GREEN series, not included in the standard set.

This type of working requires hydraulic or electrical punching machine with ram stroke control and proper software.



Upper Insert

Upper Insert Holder



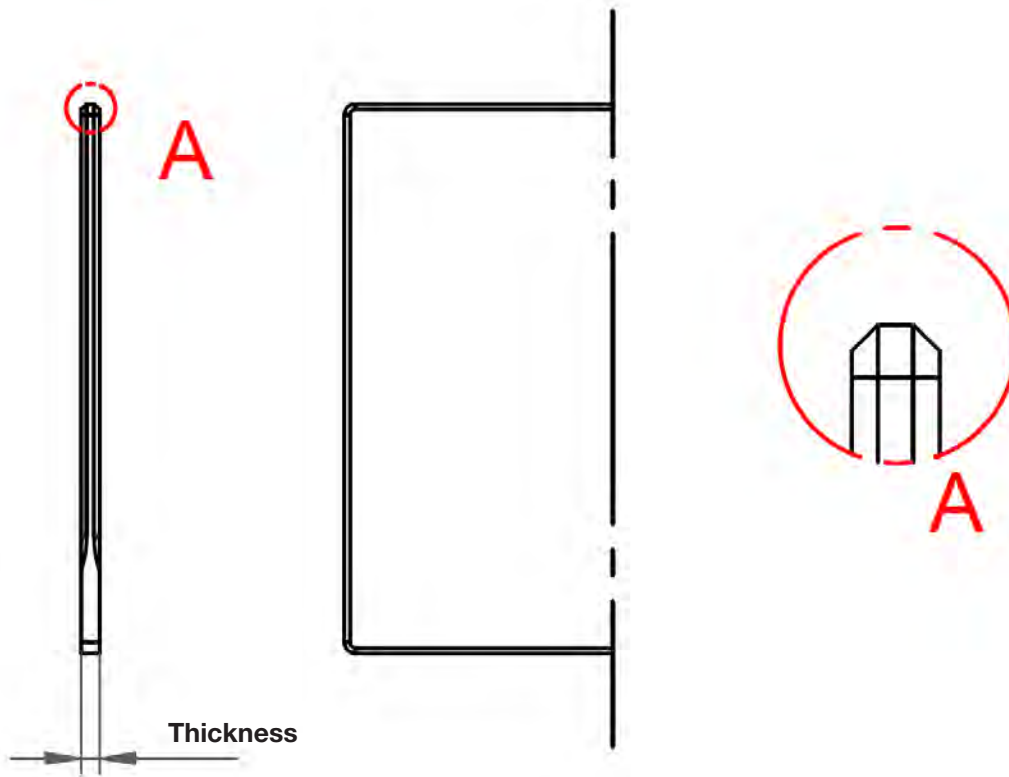
Lower Tool



Upper Insert



Lower Tool

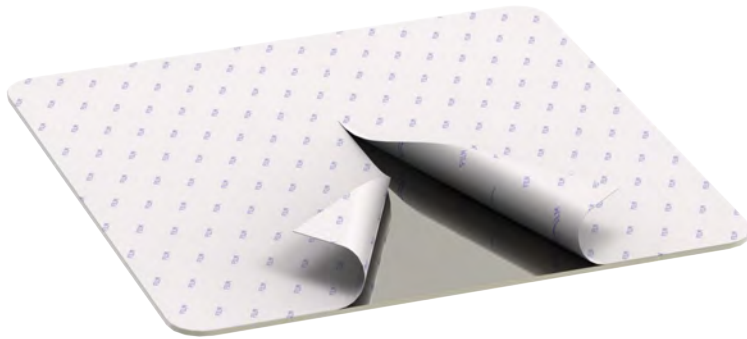


Thick Turret B Station Standard Insert Sets	
Thickness	Inserts Set Code
Max 6.00	FB092300AN

All measures are in mm



M32 FOIL SLITTING TOOL



INSERTS SET

Available on both A and B Stations.
To be used on inserts holders WHITE and GREEN series, not included in the standard set.

This type of working requires hydraulic or electrical punching machine with ram stroke control and proper software. Recommended working speed between 2 and 6 m/min.

Attention: reduce to the minimum the approaching speed of the insert to the sheet metal.



Upper Insert



Screw



Spring



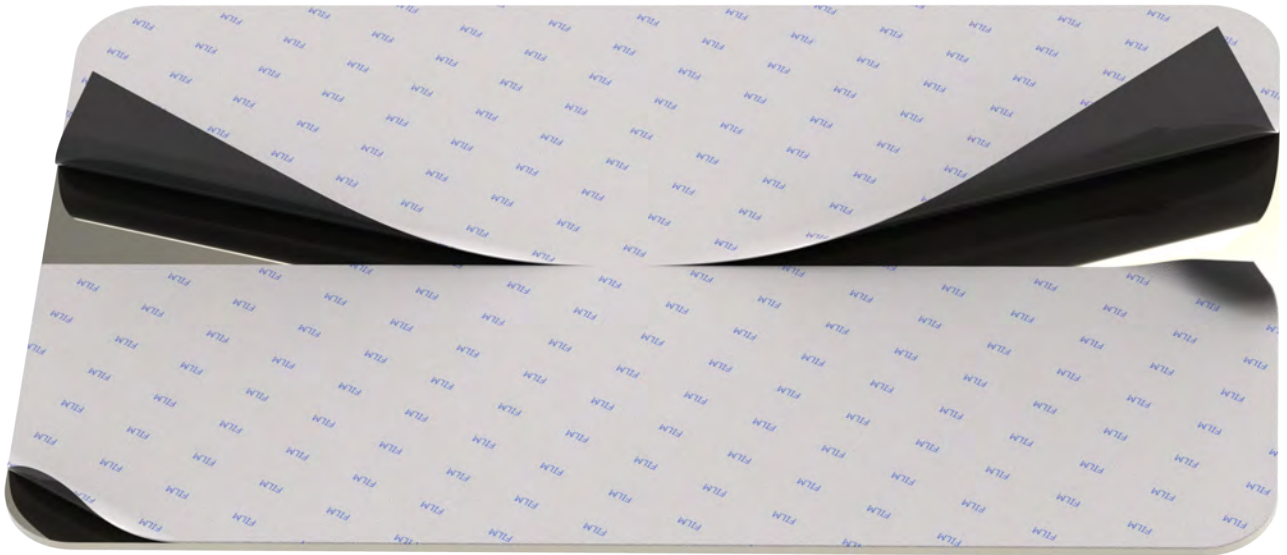
Shearing Insert



Insert Guide



Die



Thick Turret Standard Insert Sets

Station	Inserts Set Code
A	FAZL2381AP
B	FB092381AP



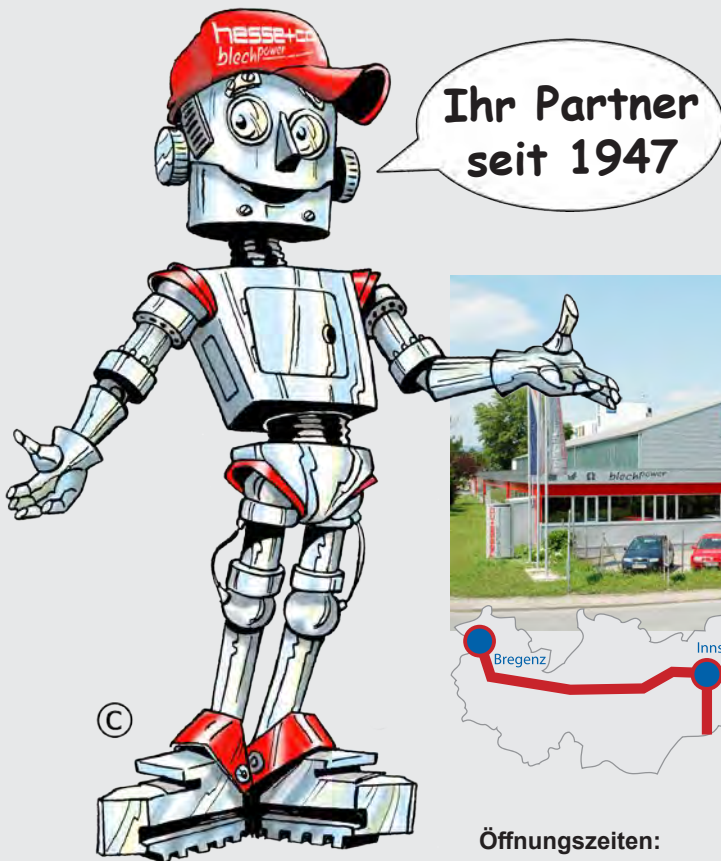
Vertrauen Sie auf über 70 Jahre Erfahrung!

Die Firma HESSE+CO wurde 1947 als Hersteller von Blechbearbeitungsmaschinen gegründet. Seit 1980 sind wir auf den Handel mit neuen sowie gebrauchten Blechbearbeitungs- und Werkzeugmaschinen spezialisiert. Wir haben ständig etwa 300 Maschinen in unserer 2.000 m² großen Ausstellungshalle, die nur 20 Minuten vom internationalen Flughafen Wien entfernt ist.

Trust in more than 70 years of experience!

HESSE+CO was established in 1947 as a manufacturer of sheet metal working machines. Since 1980 we are specialized in dealing with new and second hand sheet metal processing machines and machine tools. We always have approximately 300 machines available in our 2.000 m² showroom, which is located only 20 minutes from the Vienna International Airport, waiting for your inspection.

www.hesse-maschinen.com



Öffnungszeiten:

Mo - Do 8:00 - 16:30 Uhr
Fr 8:00 - 14:30 Uhr

HESSE+CO Maschinenfabrik GmbH
Industriezentrum NÖ-Süd
Straße 4 - Objekt 8
A-2351 Wiener Neudorf
AUSTRIA

hesse **hesse+co**
blechpower
maschinen und werkzeuge

Technische Änderungen, Irrtum und Druckfehler vorbehalten.
Gültig bis auf Widerruf.

Tel.: +43/2236/638 70-0
Fax: +43/2236/636 62
office@hesse-maschinen.com
www.hesse-maschinen.com
www.blechpower.com