Tooling for punch presses MULTIMATRIX

MATRIX

MULTIMATRIX CATALOG

MATRIX

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BASIC CONCEPTS

For over 20 years MATRIX has been manufacturing tooling for working metal sheet, availing of highly qualified technicians who constantly update their knowledge about the different needs of the production cycle.

MATRIX also invests in best technologies: from sophisticate software for projecting to the computerization of productions data, from planning to the final tests of the products.

All this allows our company to reach a high qualitative standard, certified by the system ISO 9001:2008 and to obtain fast delivery times even for special tooling supplies.

PUNCHES

Punches are manufactured in accordance with the most modern processes, as well as using a single type of steel (M2), and with their high vacuum thermal treatment they guarantee the best performances on all types of material; this performance could be further improved by the most modern surface coatings of TiAlN micro layer.
Matrix ensures the maximum care in dimensional and axial concentric accuracy, as well as in the roughness of the cutting part to guarantee its longer life.

STRIPPERS

These tools are manufactured with steels that are resistant to both wear and the greatest stresses, and are produced with the strictest tolerances to guarantee long life to the punches and punch press turrets; all guides are hardened to 60 HR_c and, where possible, are provided with large lubrication channels.

DIES

Full automatic production cycles guarantee the quality standard of our dies which are manufactured with certified steel (D2), as well as having high vacuum treatment.
All possible technologies are employed to discharge cyclical tensions, as well as to avoid scraps reclimbing through the use of proper manufacturing geometry.
Dies, which are tested with computerized systems and with hourly frequency, guarantee a very high reliability level.

SPECIAL TOOLING

Considering the continuous requests of special tooling, MATRIX takes particular care of such a sector.
Our technical department, in short time, is able to give solutions, quotations and delivery times which are getting more and more close to the standard tooling ones.
Each special tool is coded in order to allow us an easy and quick tracking down during all its working phases, from design to testing.

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BASIC CONCEPTS

MATERIAL HARDNESS

Punching is usually carried out on mild or low alloy steel. On material with a higher resistance there are difficulties, and the processing requires special punches which however sustain a greater wear.
In any case, the maximum load necessary to execute punching must be definitely lower than the punch maximum resistance to compression *(see tonnage calculation formula on page 8)*.
The maximum compression load that the punch can tolerate depends on the type of steel and its hardness. For instance, an hardened steel for tools resistant to collisions can tolerate a compression load of 2000 N/mm^2 before reaching the breaking point, and can be used with specific working pressure up to 1500 N/mm^2, therefore providing good results to the life of the tool.
When you place an order for a punching tool, it is recommended to specify the type of material and thickness that must be punched.

MATERIAL THICKNESS IN RELATION TO HOLE DIAMETER

Material thickness also plays its part both alone and in relation to the punching diameter. This is particularly valid when the diameter of punched holes is close to the metal sheet thickness value.
A traditional rule says that the diameter of the punch must never be lower than the metal sheet thickness. Nevertheless, with the advent of the hydraulic punching machine, it has become possible to adjust the impact speed between the punch and metal sheet more easily and so partially overcome that rule.
In various cases, although with very great stresses, holes are punched on materials with a thickness higher than the hole diameter.
However, in these conditions there are great stresses and consequently higher wear and the tool life is proportionally lower.
The same great stresses that occur in this case require precautionary measures as well as respect for accident prevention norms, for instance the use of blockages and protections.
On the following pages there are some simple mathematical formulas to calculate the strength.

ROUNDING OFF AND SMOOTHING

The life of a stamp could be considerably influenced by the shape of the hole to be punched. The geometry that involves sharp corners is less favourable by nature. Wherever possible, it is necessary to smooth or round off these sharp corners. In the cases of square or rectangular holes, providing a 0,3÷0,5 mm minimum round off greatly helps the life of the tool.

THE MACHINE OPERATOR, THE MOST IMPORTANT FACTOR

Even with all of the constructive devices on the front of the tools and machines, the machine operator probably remains the most important factor in considering the life of the stamp. In fact, he directly controls various factors not noticeable in other ways.
The correct use of a punching machine is a task which requires experience: first of all, the machine operator must be familiar with the machine, and be informed on the previous points and related operations.
Punching operations are developed, as seen, with extremely high specific pressures and stresses, so that the safety of the machine and the operator must be appropriately considered in respect to regulations in force, but also without forgetting to use the measures that are requested by particular environmental conditions not foreseen by legislation.

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CLEARANCE CALCULATION AND CONTROL

The clearance value between punch and die affects not only the life of these two components, but also the surface evenness of the sheared piece. In practice, clearance is fixed in accordance with the material thickness as well as its nature.

A correct clearance produces (on a mild steel sheet) holes in which the upper third of the height is cylindrical and properly sheared, while the lower two thirds are lightly conical and show tear signs.

An inadequate clearance produces instead a secondary shearing effect which means additional wear on the punch.
As previously said, the lack of lubrication contributes to a progressive spontaneous increase of the punch diameter and therefore to a likewise progressive and spontaneous clearance reduction.

However, an excessive clearance produces holes with intermediate tear zone and, as a whole, a great loss of evenness on the surface.

Quoted below is a table for die clearance percentage calculations with regards the thickness and common types of material to be worked.
It is a table based on our own and our customers' experiences, in order to obtain the best quality on finished pieces and less wear on tools.

DIE CLEARANCE RELATED TO MATERIAL THICKNESS

Material	Thickness Range	Minimum or Blanking*	Standard	Maximum
Aluminium Copper Brass 20÷25% Kg/mm²	Up to mm 2	8%	10%	12%
	From mm 2 to mm 4	10%	12%	15%
	Over mm 4	12%	15%	20%
Mild Steel 30÷40% Kg/mm²	Up to mm 2,5	15%	18%	20%
	From mm 2,5 to mm 5	18%	22%	25%
	Over mm 5	20%	25%	30%
Stainless Steel 60÷80% Kg/mm²	Up to mm 1,5	15%	20%	22%
	From mm 1,5 to mm 3	18%	22%	25%
	Over mm 3	20%	25%	28%

* Blanking: when the scrap is the requested part.

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PUNCHING STRAIN AND RELATED CALCULATIONS

TONNAGE GENERAL FORMULA				Material	Material K
$\frac{P \times S \times K}{28,3}$	P	Punch Perimeter	Cope	Aluminium	0,6
	S	Material Thickness		0,6	0,6
	K	Material Coefficient		0,6	0,6
				1	1
				Stainless Steel	1,5
EXAMPLE:	$\frac{40 \text{ (perimeter of a square with mm 10 side)} \times 2 \text{ (material thickness in mm)} \times 1,5 \text{ (Stainless Steel K)}}{28,3}$			= 4,24 (tonnage)	

SHEAR SHARPENING

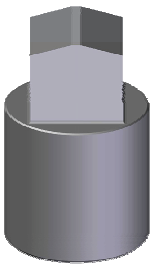
USE AND BENEFITS

With whisper sharpening we mean the various geometry of the punch upper face that are made only upon request.
Sharpening benefits are:

- Tonnage reduction
- Scrap reclimbing reduction
- Ease of extraction
- Noise reduction
- Vibrations and counterblow reduction on all components of the machine.

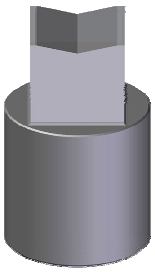
DWP

Double positive whisper: for high thickness and balanced load.



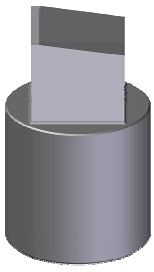
WNT

Concave negative whisper: for thin thickness ans small punch shape nibbling.



WN

Negative whisper: for high thickness and stiff and fast machines (the inclined sharpening tends to shift the sheet).



Quoted below is an illustrative table showing tonnage reduction where we consider standard depth DWP sharpening.

Material Thickness in mm	1	1,5	2	2,5	3	4	5	6
% Tonnage reduction	60	50	40	35	25	20	15	10

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SURFACE COATINGS

USE AND BENEFITS

In order to improve working characteristics, the surface of all punches can be coated.
The coating thickness, from 0,002 mm to 0,005 mm, adheres to punch surface by a multilayer PVD (Physical Vapour Deposition) processing and gives the surface a considerably greater hardness, and also a lubricating ability. It is a really effective barrier between tool and metal sheet.
MATRIX uses two types of coating, Type A (Titanium Nitrite) and Type B (Titanium-Aluminium Nitrite).
Type A coating yellow-gold coloured, provides to the punch a higher surface hardness up to four times the initial one and an optimal self-lubrication capability with a friction coefficient equal to 0,44.
It's recommended for extreme working processes, without lubrication or with difficulty extractable doughy materials, such as copper or aluminium alloys.
Type B coating grey-blue coloured, is an evolution of the previous one which, besides imparting a higher hardness on tool surface, is more solid and its endurance increase; this coating resists to higher temperature, little lower than 900°.
Thanks to these characteristics, it's recommended in case of high speed punching machines (500÷1000 strokes per minute) and it's also excellent for STAINLESS STEEL processing.

Coatings are on customer demand only, and are priced separately.

PROCESSING ON DEMAND

Radius on corners of the punches
Radius on square and rectangular corners of the punches (specify radius) increases the life of the punch and drastically reduces dies breaking near corners.

Whisper
Whisper punches: variable price increase (request quotation) depending on whisper type (see previous page) and punch dimensions.

Large punch rake (SPM)
It is recommended on material thicknesses over mm 4, where it helps punch reclimbing or punch extraction from metal sheet.

Coatings
Anti-wear coating available. We recommend coatings on nibbling or punching processing on seizing materials like Stainless Steel or alloys, or on any material high thicknesses.

Stiffened dies
On high material thicknesses or critical shapes we suggest stiffened dies which are suited to stand high compression.

Our Technical Office is at your disposal for any possible explanations, advice on better usage, feasibility and cheapness of special processing and their applications.

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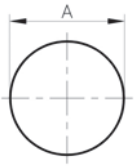
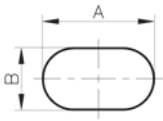
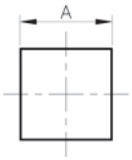
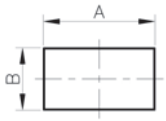
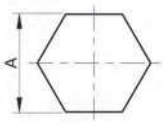
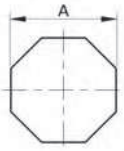
SHAPES CODING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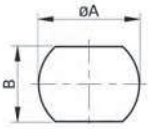	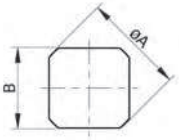	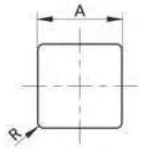	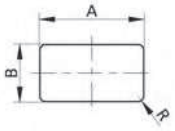	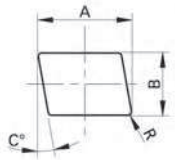	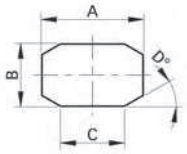
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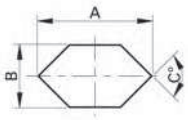	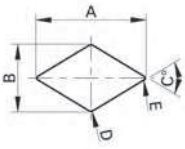	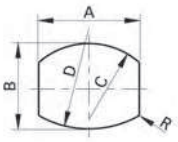	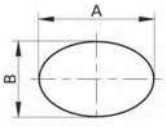	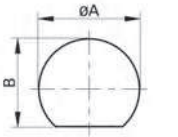	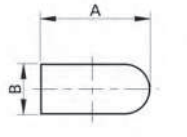
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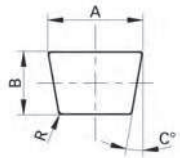	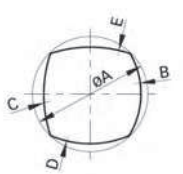	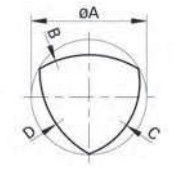	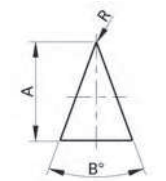	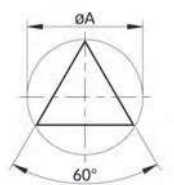	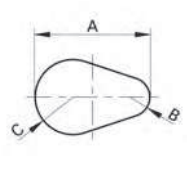
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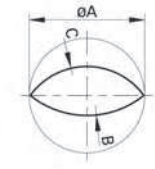	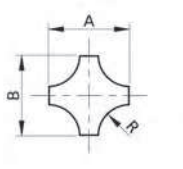	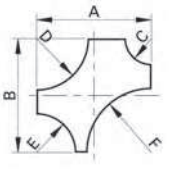	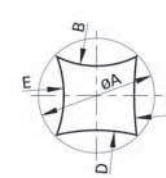	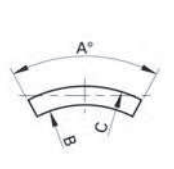	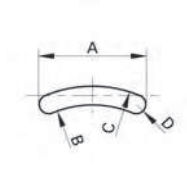
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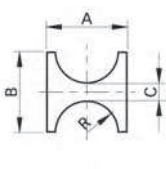	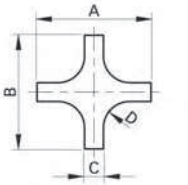	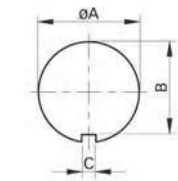	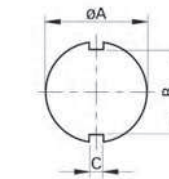	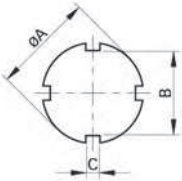	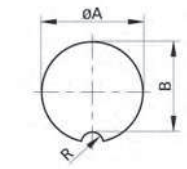
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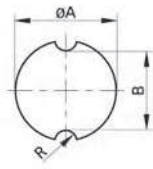	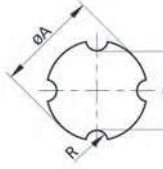	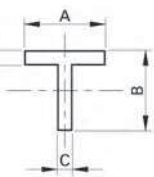	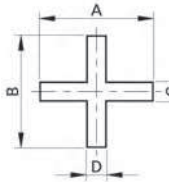	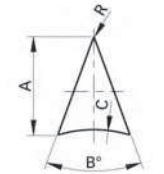	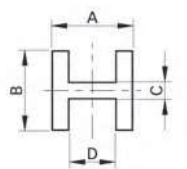
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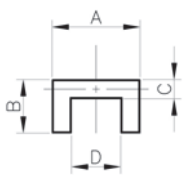
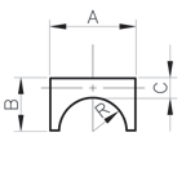
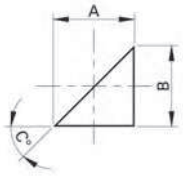
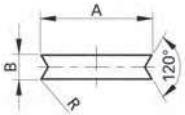
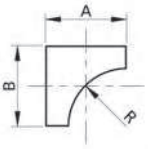
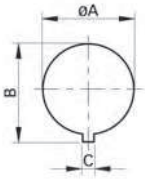
SHAPES CODING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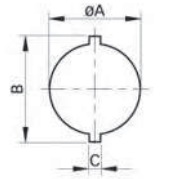	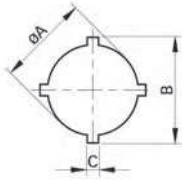	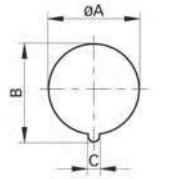	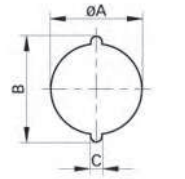	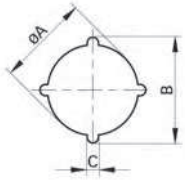	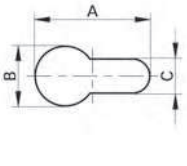
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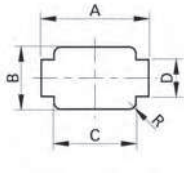
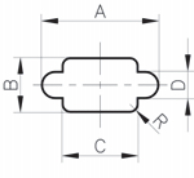
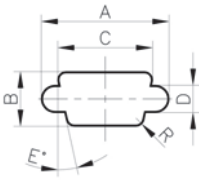
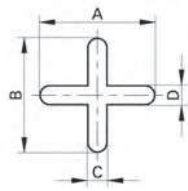
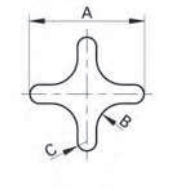
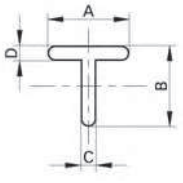
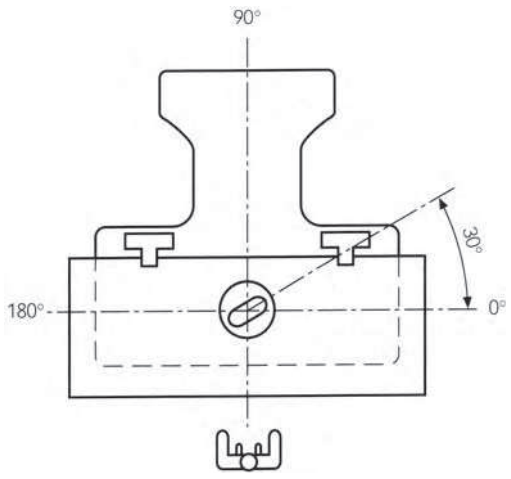
					
H08	H09	H10	H11	H12	H13

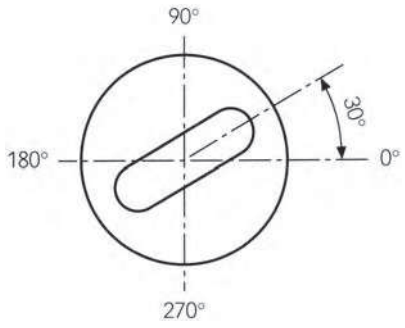
ANGLE SETTINGS

The diagram that follows is illustrative of angle settings



Top view of punch press

Attention: in case of order please specify the position of the references placed on the die housing of the machine (not only the shape orientation respect the die).



30° shape example

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PROGRAMMING AND USE SUGGESTIONS

The choice how to punch, to nibble, to feed and to round off during programming, is free.
Nevertheless, a logical and accurate choice will avoid problems and reduce the working time. The operator's experience will be a great help, but at the beginning we suggest to ask for information and help to the machine manufacturer.

Some good rules:

I. Do not ever leave any metal scraps on the punching machine working surface (nibbling or round off residuals); they could lay on the cutting area causing a double thickness.

II. The easiest way to nibble is with round punches, but being limitative, square or rectangular punches are often used; in this case flat cut is recommended, while if the punch has a special sharpening, feeding is compulsory (see fig. A). For nibbling, do not use round punches with special sharpening.
However a correct nibbling is programmed with step equal to 75% of the punch measure (for instance: square 10, step 7,5; rectangular 4x20, step 15). Like this, the punch will always work balanced.

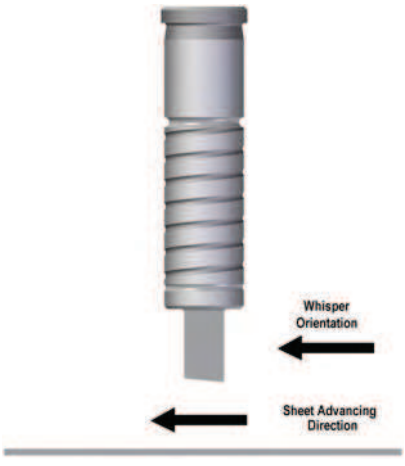

Figure A

III. Another problem which might occur when nibbling, is actually connected to the programming; in fact when setting up a nibbling length, by feeding according to point II, the last sheared part might happen to be lower than 75% of tool dimension (see fig. B).

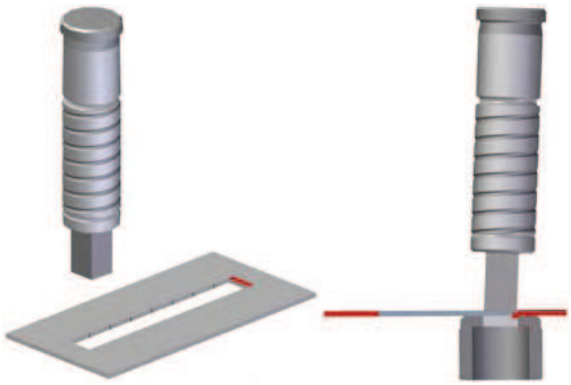

Figure B

On such a situation, due to the side load, the tool tends to lean over the sheet, causing the following:

a) collision of the punch opposite cutting part with the die, in case the clearance is proper for thin thicknesses;
b) clearance increase on the shearing area which will cause sheet deformation, excessive burrs and tool wearing.

The same problem occurs when we want to shear a sheet edge, like shown on Figure C.

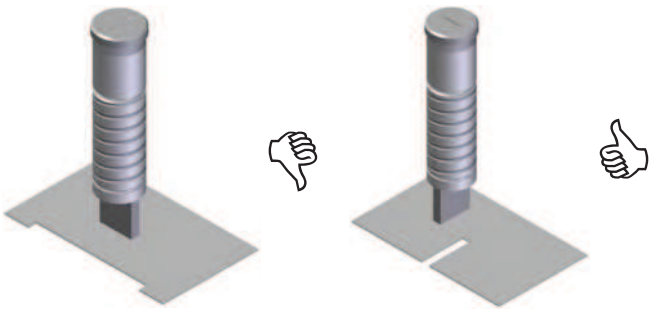

Figure C

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PROGRAMMING AND USE SUGGESTIONS

To avoid the above mentioned problem it is recommended to reverse the last two strokes of the nibbling sequence (see Fig. D).
In this second case the punch will perform a shearing with the 100 % of the cutting area as second-last stroke (end- nibbling);afterwards it will be positioned exactly above the centre of the material section which has to be eliminated.

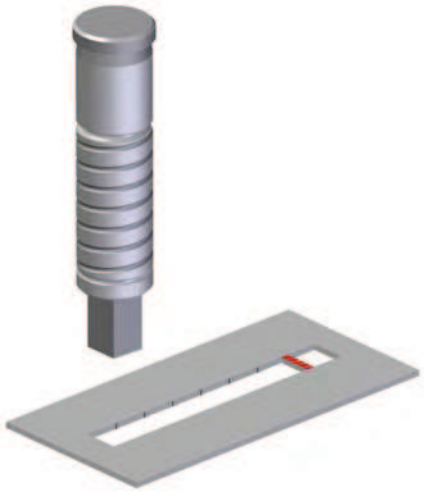

Figure D

IV. If the processing requires to perform cluster holes, that means processes which might deform the sheet, it is recommended to make at first a pre-pierce with dimension equal to 40% of the final hole, while the final hole itself will be performed later on.
This expedient considerably reduces the efforts necessary to obtain the desired result, minimizing the sheet deformations.

V. In order to have a correct punch extraction, when the material thickness increases, please reduce the punching machine speed. This because the metal sheet dragging axle could move before the complete extraction, shutting the machine down in alarm.

Anyhow, keep in mind that shearing and nibbling processes performed by using a multitool, need some tricks required by the machine/multitool structure and according to the forces generated during working phases.
A multitool advantage is to have several tools inside the same guide assembly, selected by rotating the machine ram; but there's also a disadvantage since the force applied to the active punch, acts lengthwise the axle which does not coincide to the multitool one, so this causes a multitool and consequently a punch inclination, although minimum.
This situation amplifies once thickness and diameter increase, that is when the force (see arrow 1, Fig. E) is enough to cause machine structure bending (see arrow 2, Fig. E) worsening therefore the problem.

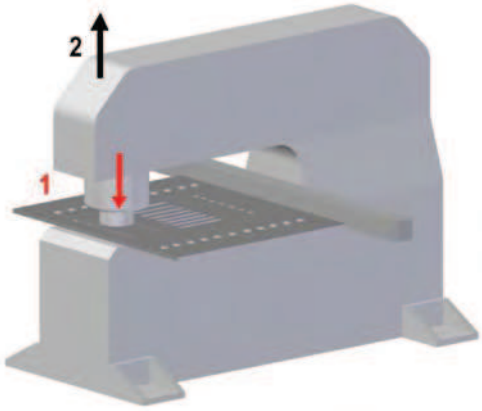

Figure E

LUBRICATION: a must
It is the first rule to apply; being punching a shearing and extrusion processing, the shearing area lubrication is a must for a good result.
Lubrication has an essential role in punching machines and particularly in punching stamps.

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PROGRAMMING AND USE SUGGESTIONS

When the punch shears the sheet, small quantities of material get stuck to the punch surface.
Passing from one punching cycle to another, the material deposits layer after layer, causing a progressive increase of the punch diameter, although only hundredths of a millimetre.
This phenomenon triggers a recurrent cycle: the punch diameter, by widening, reduces the clearance and accentuates the material friction, letting the problem to get worse and worse.
A lubricant oil with proper characteristics acts as a barrier between punch and material, reducing significantly both friction and material accumulation on the punch surface, improving therefore the punch life.
Generally, with a greater viscosity there's a better protection against such a phenomenon. High viscosity is useful during punch retraction.
If for some reasons lubrication is a problem, Titanium coated punches could help (please consult our Technical Department)

Daily multitool lubrication is obligatory.

The inobservance of this rule will cause an excessive Multitool wearing.

CONCLUSIONS
Being the Multitool a precision device, we recommend its use only to trained personnel.
After several hits or however once a year for 8 hours shifts per day, the Multitool needs ordinary maintenance carried out by the manufacturer or qualified personnel.
Periodic replacement of extraction springs sets inside the multitool, might be necessary in case of high thicknesses

Before proceeding with any action on the multitool, in case of doubts please contact the manufacturer

MULTIMATRIX: ROTATION SYSTEMS

TYPE OF MULTIMATRIX
Matrix manufactures 2 types of multitool which differentiate by the head characteristics.
We can supply either tools with rotating head on series R and RHP, or fixed head on Series F.
The above mentioned differentiation, basically indicates the way of active tool selection between the ones available on the multitool.

TOOL ROTATION (INDEXING)
Rotation of single tool is possible with both types of multitool and gets performed by the multitool rotation itself.

This can be performed by means of a punching rotating station, only on machines provided with this characteristic.
The advantage is considerable since you can use one single tool by rotating it through 360° without having to use several punches.

0° 45° 90° 0°÷360°

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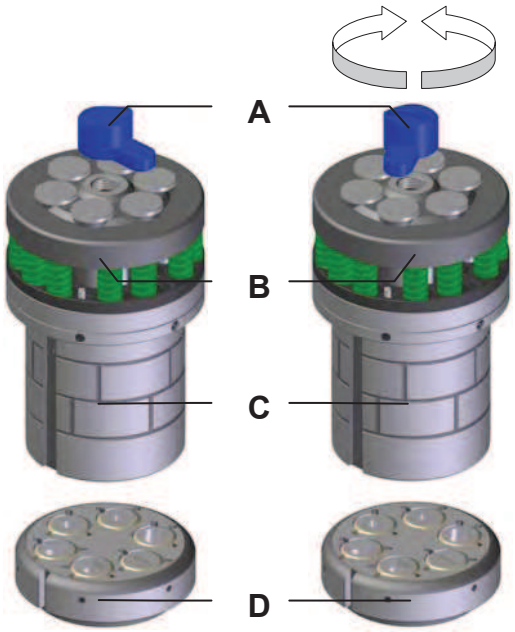
MULTIMATRIX WITH FIXED HEAD

TOOL SELECTION

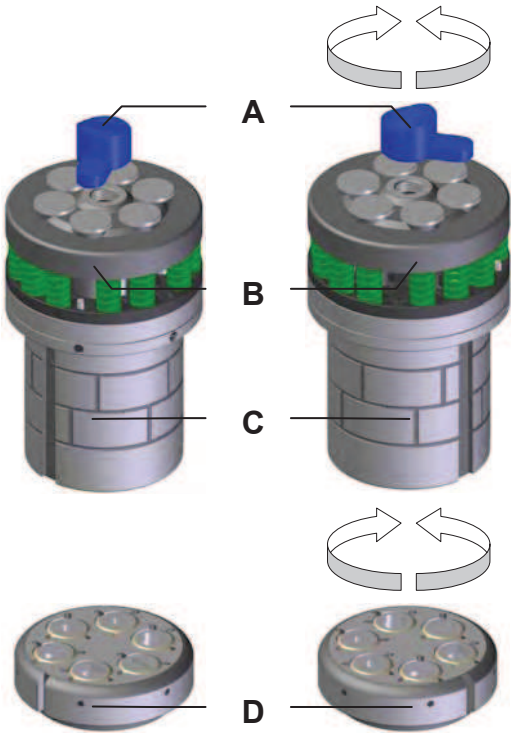
In order to use a multimatrix with fixed head it's necessary the punching machine to be equipped with ram (A) conformed to hit one tool at the time besides the centre head (B) of the multimatrix.
The ram, by rotating, selects the required tool.



Tool selection

TOOL ROTATION (INDEXING)

Tool indexing is also possible when we use a punching machine with rotating station.
In order to avoid any modification of the active tool selection on a multitool with fixed head, rotation of ram (A) must equivalently accompany the multitool overall rotation (parts B, C and D).



Tool indexing

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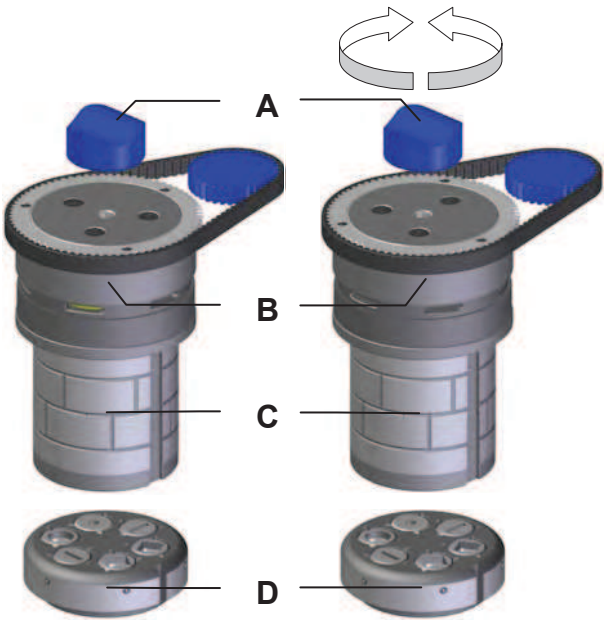
MULTIMATRIX WITH ROTATING HEAD

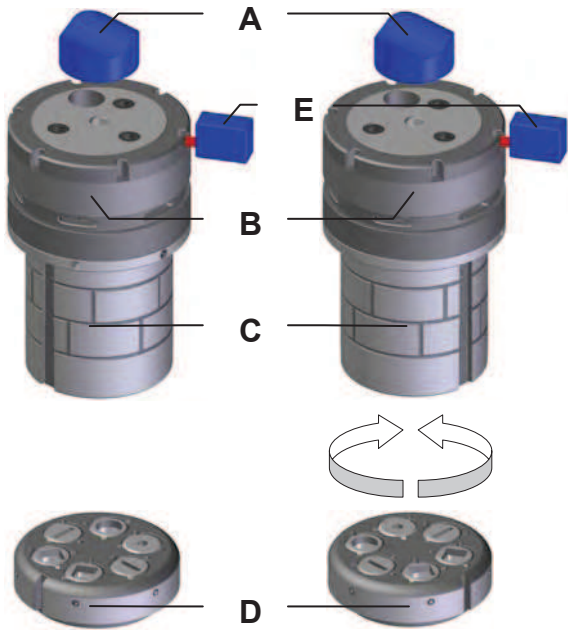
TOOL SELECTION

On multitool with rotating head the ram (A) can be a normal piston with the only vertical movement, having no particular shape.
In this case, the selection of required tool refers to some other devices placed inside the head (B)
Selection occurs by rotating the multitool head (B) compared to its body (C) and this movement can be performed by means of gear, pulley system or cam.
Alternatively, on machines with rotating station, we can take advantage of this last characteristic.



Tool selection with pulley or belt

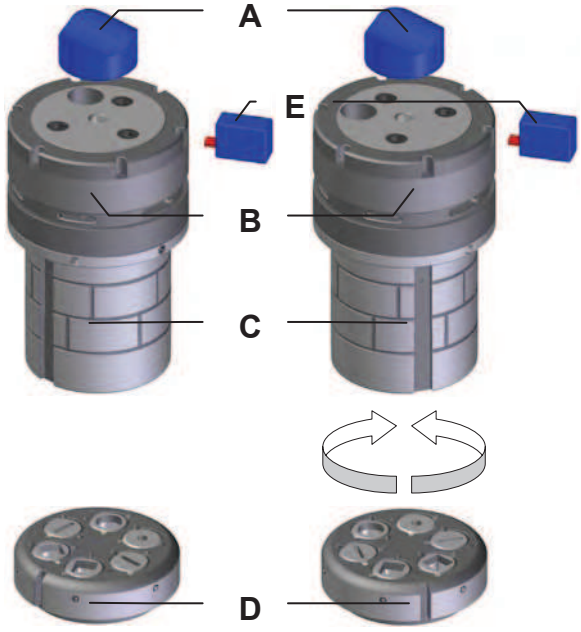
In this case we can fit a simple system to keep the multitool head (B) fixed (for instance by fitting a pneumatic little piston (E) on proper grooves placed on the upper part) while the lower parts (C) and (D) turn thanks to the station movement itself.
To manufacture a punching machine with this second system is more inexpensive since just by rotating the station, either the tool selection or its indexing get carried out.
In order to adapt to specific client's needs, all multitool with rotating head can be supplied with customized head upper part (B)



Tool selection with rotating station

TOOL ROTATION (INDEXING)

Tool indexing is also possible when we use a punching machine with rotating station.
On a multitool with rotating head, its overall rotation (parts B, C and D) is sufficient to complete the operation since the selection of active tool doesn't get modified.



Tool indexing

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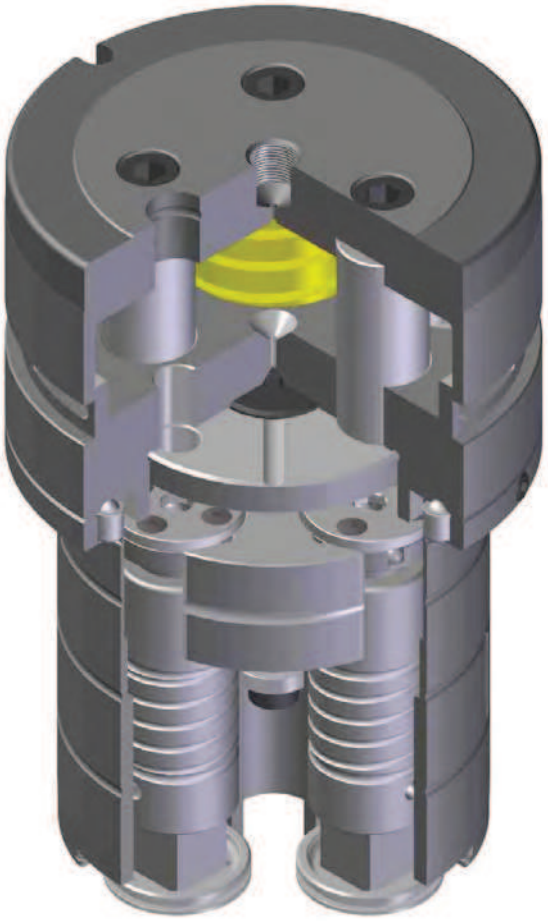
MULTIMATRIX: MULTITOOL AND TOOLING

MULTIMATRIX 4/B RHP

PATENTED

MULTIMATRIX ROTATING SERIES

4 x MAX Ø ▱ = mm 31,7



REFERENCE CODES

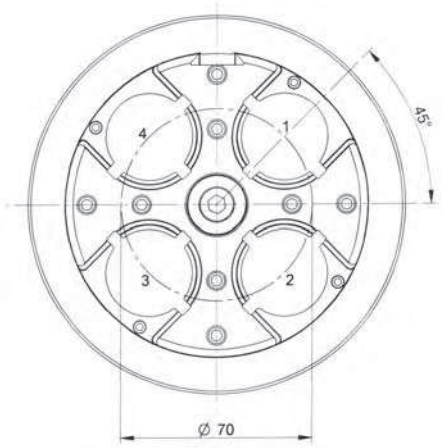
Basic Set: FAEVDY00

Starting Set: FAEVGS00

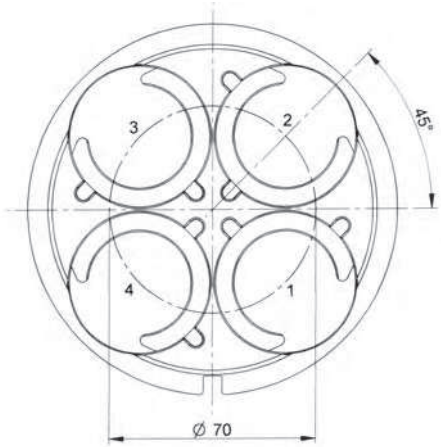
TECHNICAL SPECIFICATIONS

- 4 stations for Thick Turret B Station standard punches (maximum diagonal mm 31,7 - height mm 100,5)
- Maximum thickness on standard working:
  - 4 mm on stainless steel
  - 6 mm on mild steel
- Quick strippers and punches change, without Multitool opening
- Dies holder with 2 positioning references, for each station
- Compression and extraction aligned with selected punch, for a high rigidity, comparable to a mono tool one
- Total lubrication: inner and outer, manual or automatic
- Customizable upper part according to specific requirements, for several machine models
- Fitting on a regular Thick Turret D Station
- For punching machines with rotating station (index)

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



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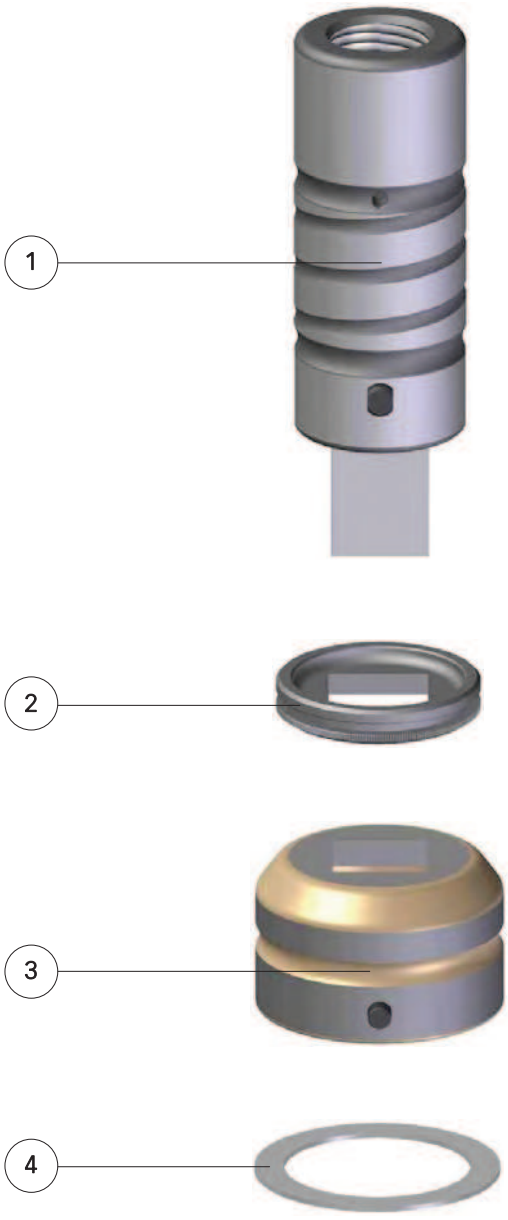
THICK TURRET

B STATION - LUBRICATED

MAX Ø □ = mm 31,7



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F219ZZ00.YYY Round Punch - Lubricated	
2	F2224W00.YYY Round Stripper	
3	F2222W00.YYY Round Die	
	SHAPED TOOLS	
1	F219ZZXX.YYY Shaped Punch (Standard Shapes[1]) - Lubricated	
2	F2224WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F2232WXX.YYY Shaped Die (Standard Shapes[1])	
	FITTINGS AND OPTIONS	
4	F2187400 9 x Die Shims Kit	
	WN Whisper Sharpening on Punch	
	DWP Whisper Sharpening on Punch	
	WNT Whisper Sharpening on Punch	
	DWNT Whisper Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Stengthened Shaped Die	
	Shaped Dies with 3 References: 0°-90°-225°	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	31,7
Punch height (new)	mm	100,5
Shear Sharpening on demand		
Die height (new)	mm	30,4
Min. die height (sharpened)	mm	27,9

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 4B RHP

MATE PRECISION TOOLING:

MTE4
Ultra MT 3
Ultra IMT 3

NOTE
[1] Standard Shapes are all those indicated at page 10 beginning with character A

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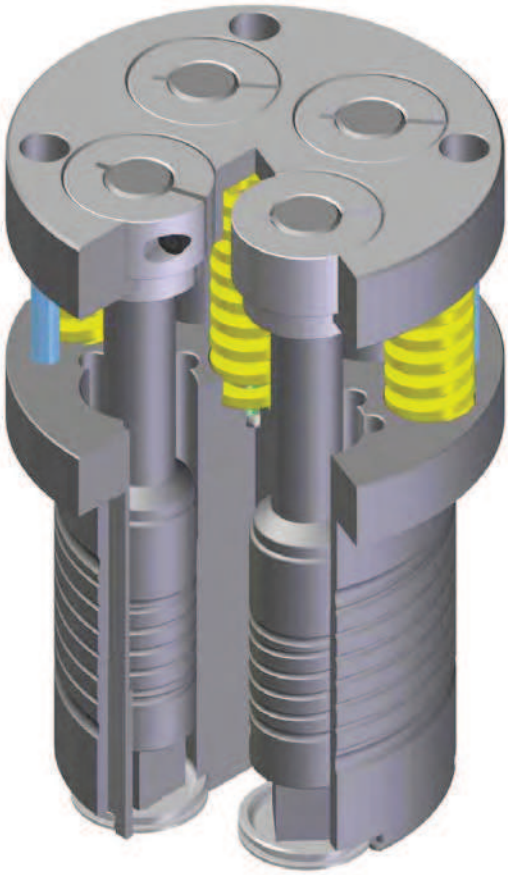
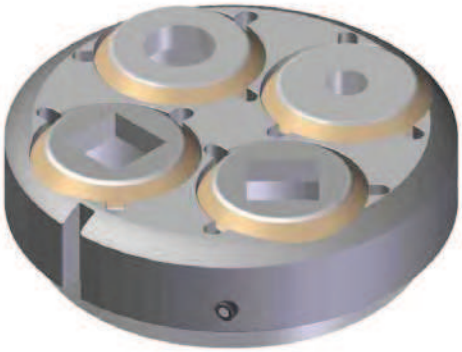
MULTIMATRIX 4/B

MULTIMATRIX STANDARD SERIES

4 x MAX Ø □ = mm 31,7





REFERENCE CODES

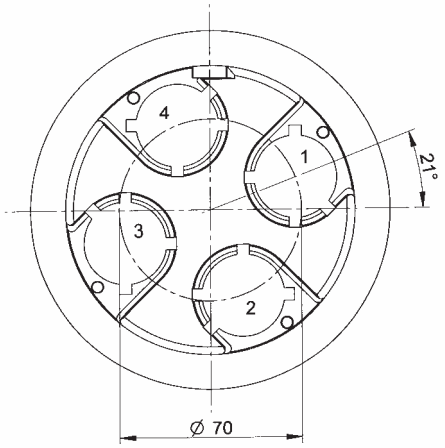
Basic Set: F615DY00

Starting Set: F615GS00

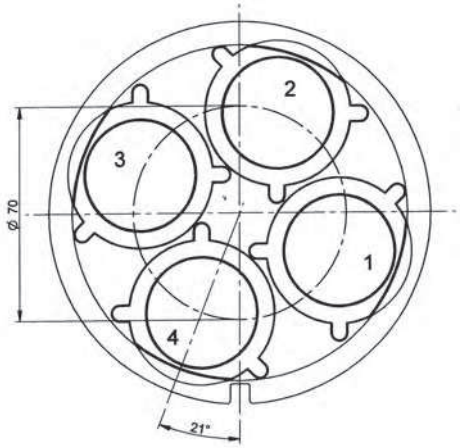
TECHNICAL SPECIFICATIONS

- 4 stations for Thick Turret B Station standard punches (maximum diagonal mm 31,7 - height mm 207)
- Maximum thickness on standard working:
  - 4 mm on stainless steel
  - 6 mm on mild steel
- Quick strippers and punches change, without Multitool opening
- Dies holder with 3 positioning references, for each station
- External springs for easy replacement when maintaining
- Fitting on a regular Thick Turret D Station
- For punching machines with fixed station and rotating ram

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



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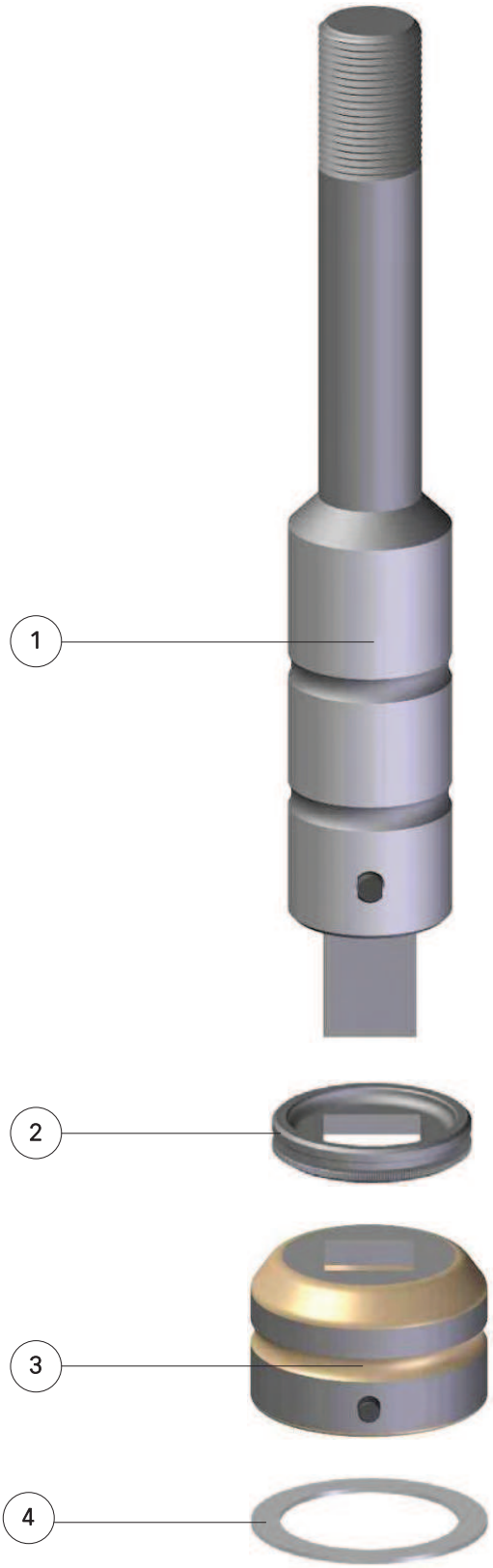
THICK TURRET

B STATION - STANDARD

MAX Ø □ = mm 31,7



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F221ZZ00.YYY Round Punch	
2	F2224W00.YYY Round Stripper	
3	F2222W00.YYY Round Die	
	SHAPED TOOLS	
1	F221ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	F2224WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F2232WXX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2187400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	WNT Shear Sharpening on Punch	
	DWNT Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Stengthened Shaped Die	
	Shaped Dies with 3 References: 0°-90°-225°	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm 31,7
Punch height (new)	mm 207
Shear Sharpening on demand	
Die height (new)	mm 30,4
Die min. height (sharpened)	mm 27,9

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 4B

NOTE

[1] Standard Shapes are all those indicated at page 10 beginning with character A

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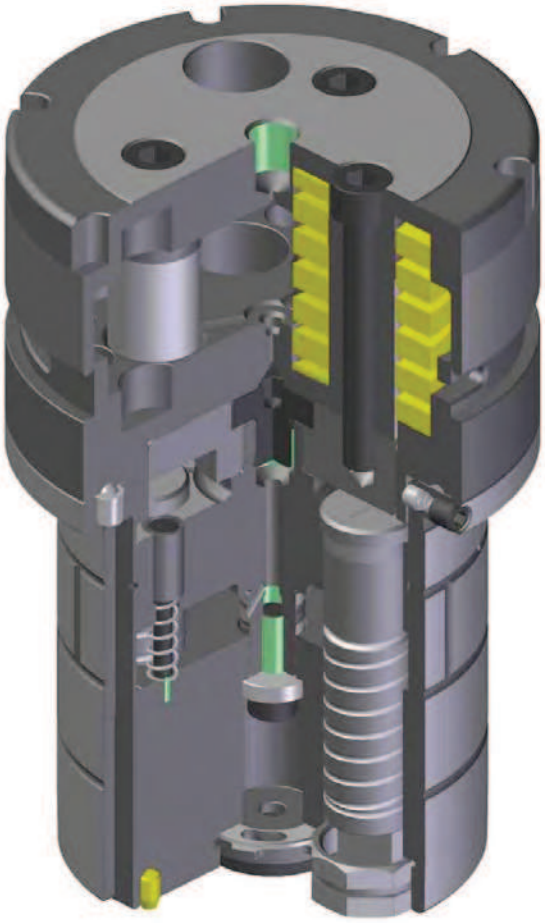
MULTIMATRIX 6/24 R MMX

PATENT PENDING

MULTIMATRIX ROTATING SERIES

6 x MAX Ø ▱ = mm 24,0



REFERENCE CODES

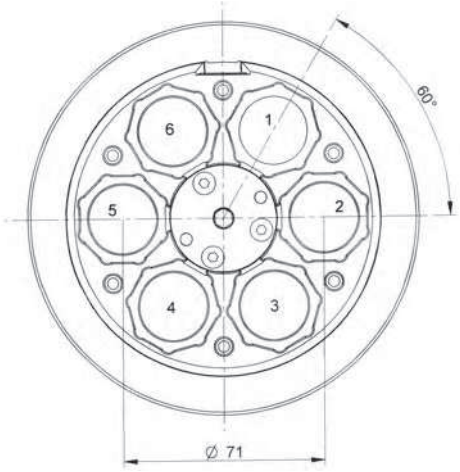
Basic Set: FALPDY00

Starting Set: FALPGS00

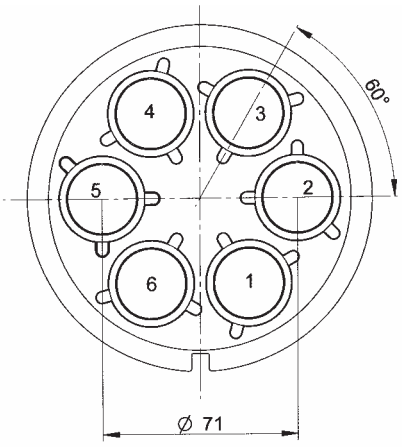
TECHNICAL SPECIFICATIONS

- 6 stations for punches with maximum diagonal mm 24
- Maximum Tonnage: 15 Tons[1]
- Quick strippers unblocking
- Quick strippers and punches change, without Multitool opening
- Octagonal strippers for quick punch orientation with 45° steps
- Dies holder with 3 positioning references, for each station
- Compression and extraction aligned with selected punch, for a high rigidity, comparable to a mono tool one
- Total lubrication: inner and outer, manual or automatic
- Customizable upper part according to specific requirements, for several machine models
- Fitting on a regular Thick Turret D Station
- For punching machines with rotating station (index)
- Several models with different tool orientation are available

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



NOTE:

1) Some end user can exceed the indicated limit without problems, but it depends on both specific job to be performed and type of punching machine, which aspects must be duly evaluated time by time.

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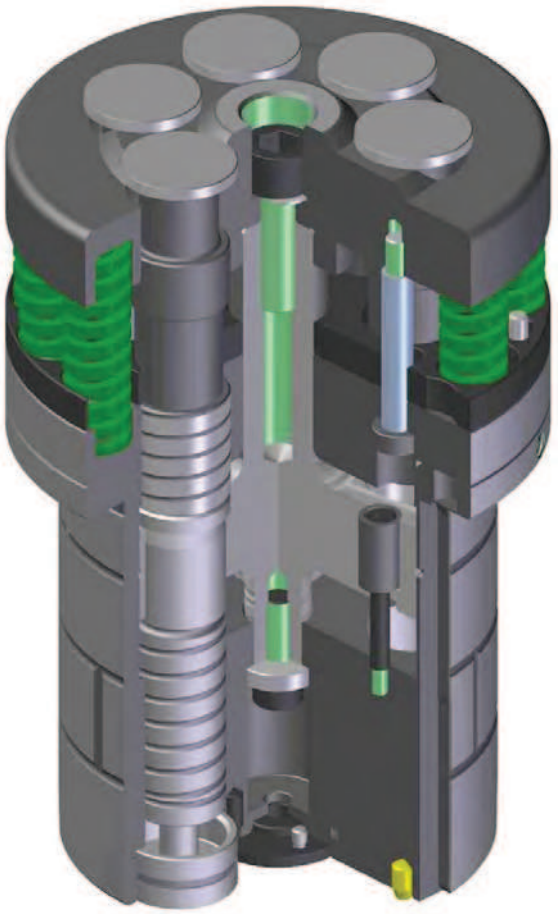
MULTIMATRIX 6/24 F MMX

PATENT PENDING

MULTIMATRIX STANDARD SERIES

6 x MAX ⌀ ▱ = mm 24,0



REFERENCE CODES

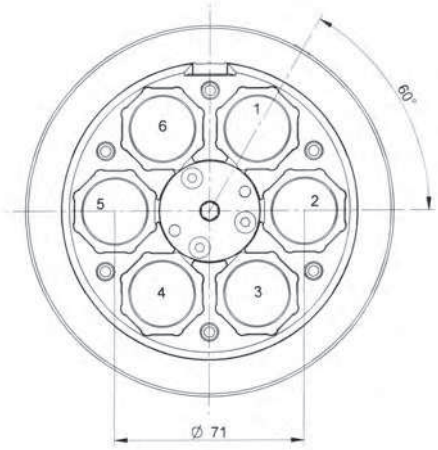
Basic Set: FALMDY00

Starting Set: FALMGS00

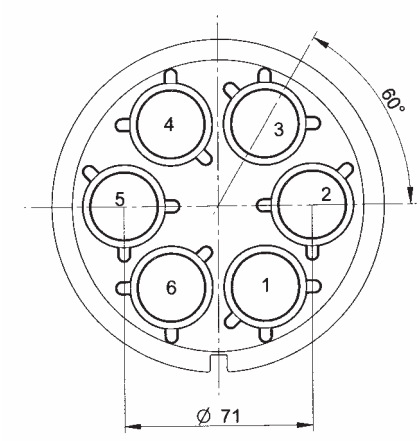
TECHNICAL SPECIFICATIONS

- 6 stations for punches with maximum diagonal mm 24
- Specifically designed to avoid undesired marks on sheet metal
- Maximum Tonnage: 15 Tons[1]
- Quick strippers and rams unblocking
- Quick strippers and punches change, without Multitool opening
- Octagonal strippers for quick punch orientation with 45° steps
- Dies holder with 3 positioning references, for each station
- External springs for easy replacement when maintaining
- Total lubrication: inner and outer, manual or automatic
- Fitting on a regular Thick Turret D Station
- For punching machines with fixed station and rotating ram

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



NOTE:

1) Some end user can exceed the indicated limit without problems, but it depends on both specific job to be performed and type of punching machine, which aspects must be duly evaluated time by time.

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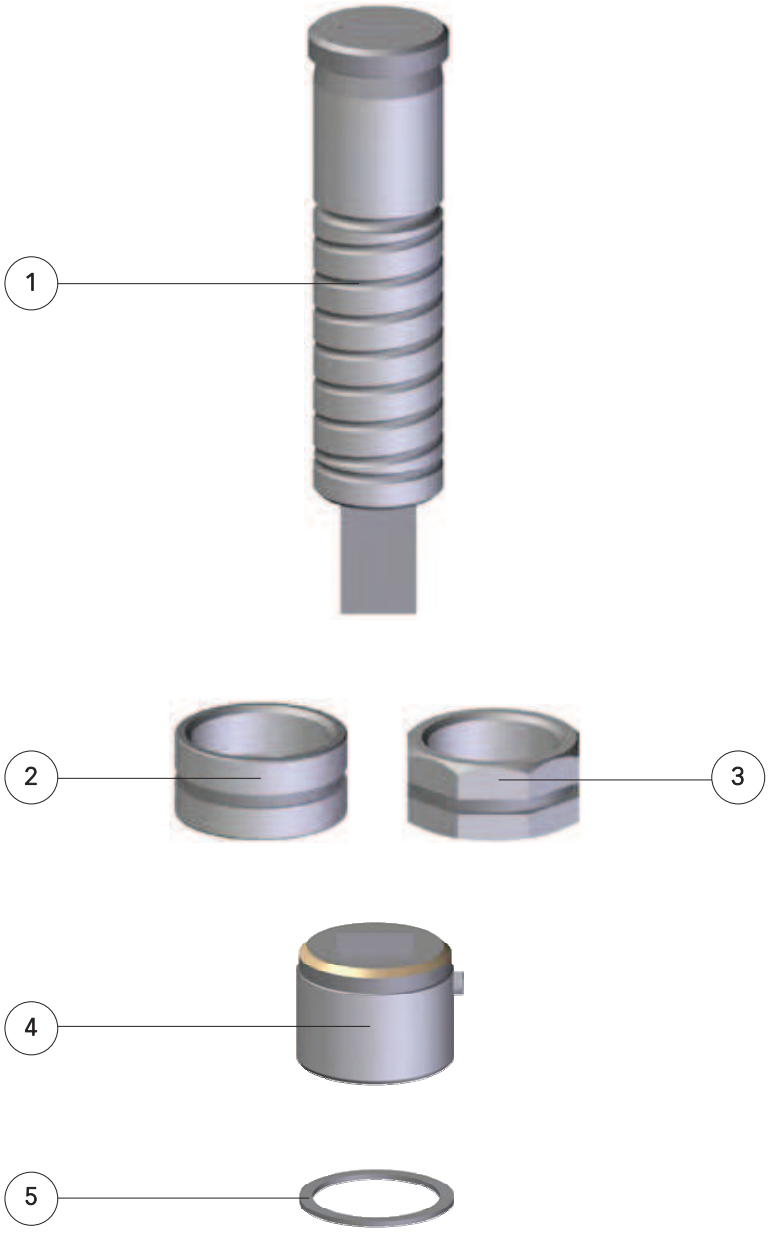
MULTIMATRIX

SERIES 6/24

MAX Ø □ = mm 24,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F250ZZ00.YYY Round Punch	
2	F2494W00.YYY Round Stripper	
4	F2492W00.YYY Round Die	
	SHAPED TOOLS	
1	F250ZZXX.YYY Shaped Punch (Standard Shapes[1])	
3	F2504WXX.YYY Shaped Stripper (Standard Shapes[1])	
4	F25420XX.YYY Shaped Die (Standard Shapes[1]) - fino a mm 3 di spess.	
4	F25020XX.YYY Shaped Die (Standard Shapes[1]) - oltre mm 3 di spess.	
	FITTINGS AND OPTIONS	
5	F2527400 9 x Die Shims Kit	
	WN Whisper Sharpening on Punch	
	DWP Whisper Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	24,0
Punch height (new)	mm	113,5
Shear Sharpening on demand		
Die height (new)	mm	24,0
Die min. height (sharpened)	mm	22,5

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 6/24
MultiMATRIX 6/24 N
MultiMATRIX 6/24 NR
MultiMATRIX 6/24 R
MultiMATRIX 6/24 RN
MultiMATRIX 6/24 RHP
MultiMATRIX 6/24 RHP-N
MultiMATRIX 6/24 F MMX
MultiMATRIX 6/24 FR MMX
MultiMATRIX 6/24 R MMX
MultiMATRIX 6/24 RF MMX
MultiMATRIX 10/24-C R

NOTE
[1] Standard Shapes are all those indicated at page 10 beginning with character A

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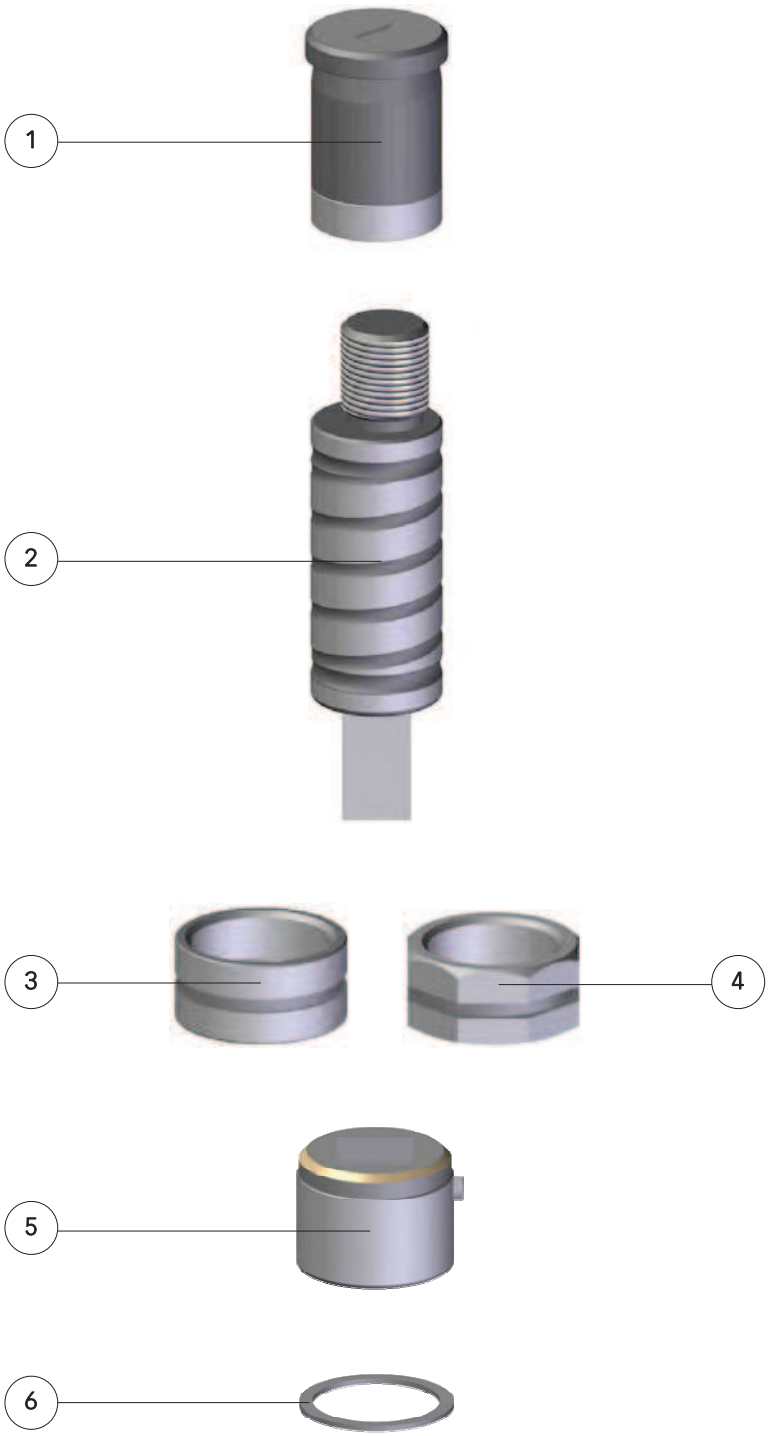
MULTIMATRIX

SERIES 6/24 AR

MAX Ø □ = mm 24,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F802GG00.YYY Adjustment Head	
2	F8020ZZ00.YYY Round Punch	
3	F2494W00.YYY Round Stripper	
5	F2492W00.YYY Round Die	
	SHAPED TOOLS	
1	F802GG00.YYY Adjustment Head	
2	F802ZZXX.YYY Shaped Punch (Standard Shapes[1])	
4	F2504WXX.YYY Shaped Stripper (Standard Shapes[1])	
5	F25420XX.YYY Shaped Die (Standard Shapes[1]) - up to mm 3	
5	F25020XX.YYY Shaped Die (Standard Shapes[1]) - over mm 3	
	SETTINGS AND OPTIONS	
6	F2527400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	24,0
Punch height (new)	mm	113,5
Shear Sharpening on demand		
Die height (new)	mm	24,0
Die min. height (sharpened)	mm	22,5

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 6/24
MultiMATRIX 6/24 N
MultiMATRIX 6/24 NR
MultiMATRIX 6/24 R
MultiMATRIX 6/24 RN
MultiMATRIX 6/24 RHP
MultiMATRIX 6/24 RHP-N
MultiMATRIX 6/24 F MMX
MultiMATRIX 6/24 FR MMX
MultiMATRIX 6/24 R MMX
MultiMATRIX 6/24 RF MMX
MultiMATRIX 10/24-C R

NOTE
[1] Standard Shapes are all those indicated at page 10 beginning with character A

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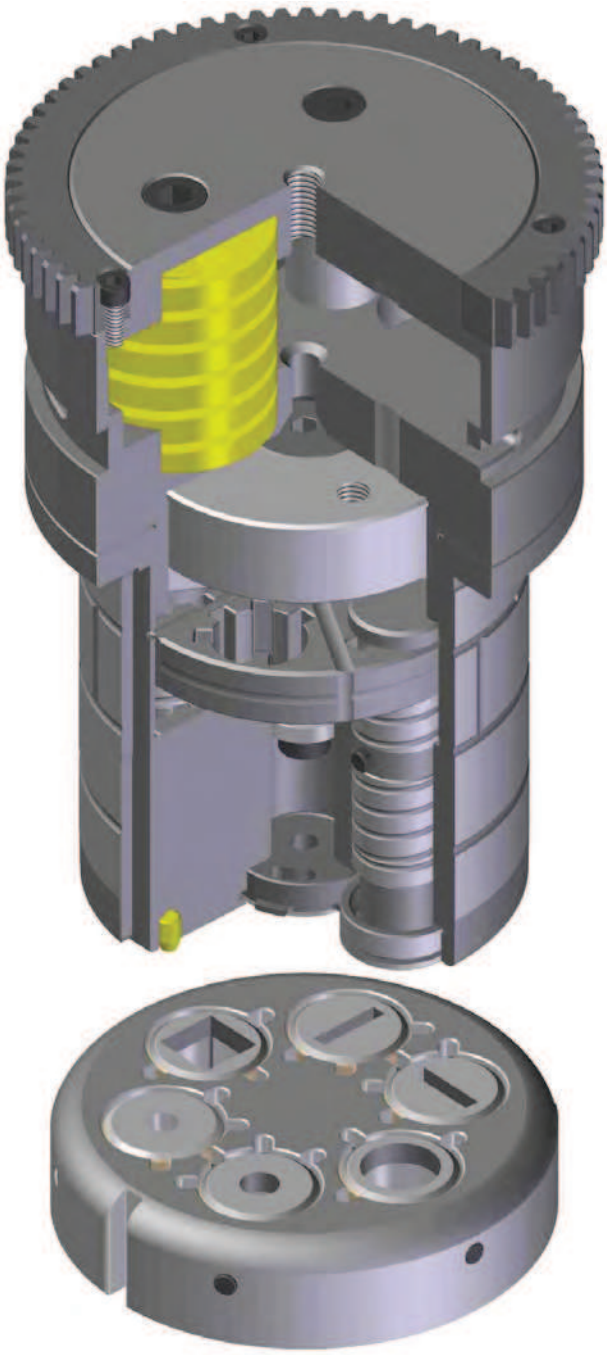
MULTIMATRIX 6/24-6 ERHP

PATENTED

MULTIMATRIX ROTATING SERIES

6 x MAX Ø ▱ = mm 24,0



REFERENCE CODES

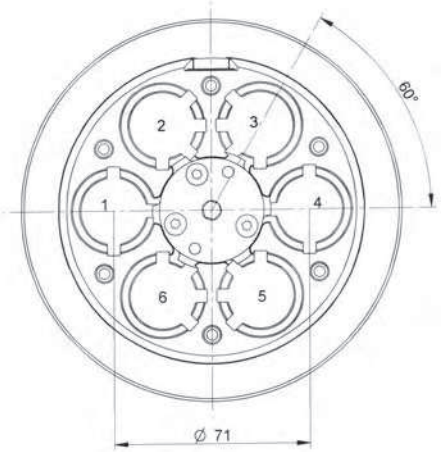
Basic Set: F845DY00

Starting Set: F845GS00

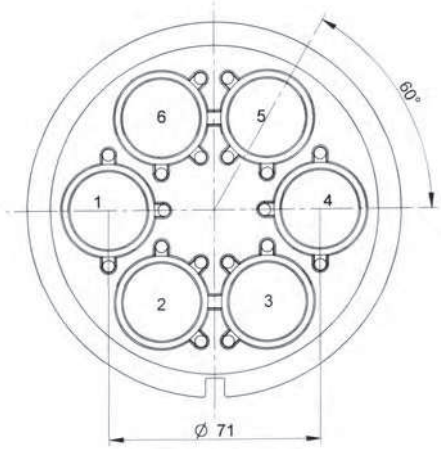
TECHNICAL SPECIFICATIONS

- 6 stations for punches with maximum diagonal mm 24
- Maximum thickness on standard working:
  - 4 mm on stainless steel
  - 6 mm on mild steel
- Quick strippers unblocking
- Dies holder with 3 positioning references, for each station
- Compression and extraction aligned with selected punch, for high rigidity, comparable to a mono tool one
- Total lubrication: inner and outer, manual or automatic
- Fitting on a regular Thick Turret D Station
- For punching machines with rotating station (index)

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



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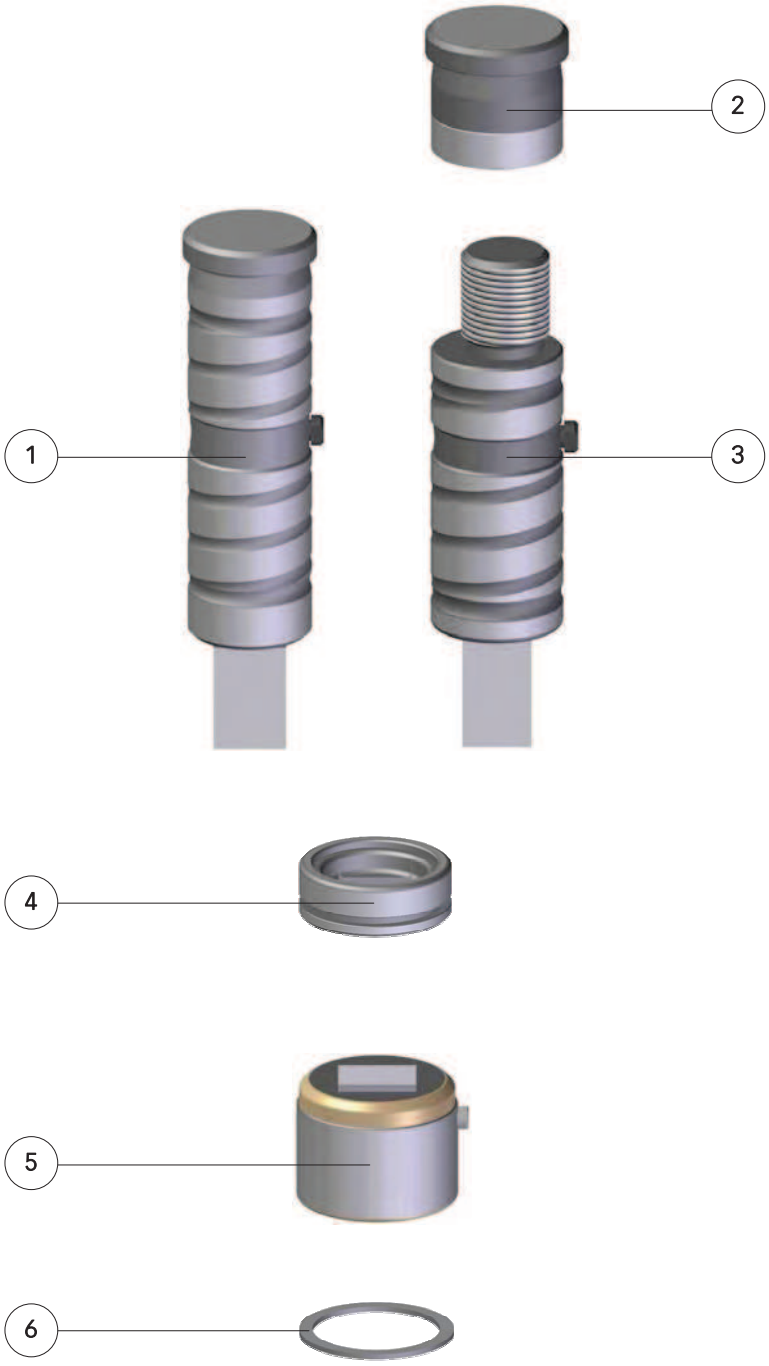
MULTIMT

SERIES 6/24-6 and SERIES 6/24-6 AR

MAX ⌀ ▱ = mm 24,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F845ZZ00.YYY Round Punch	
2	F803GG00.YYY Adjustment Head	
3	F803ZZ00.YYY Round Punch	
4	F2534W00.YYY Round Stripper	
5	F2492W00.YYY Round Die	
	SHAPED TOOLS	
1	F845ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	F803GG00.YYY Adjustment Head	
3	F804ZZXX.YYY Shaped Punch (Standard Shapes[1])	
4	F8454WXX.YYY Shaped Stripper (Standard Shapes[1])	
5	F25420XX.YYY Shaped Die (Standard Shapes[1]) - up to mm 3	
5	F25020XX.YYY Shaped Die (Standard Shapes[1]) - over mm 3	
	SETTINGS AND OPTIONS	
6	F2527400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	24,0
Punch height (new)	mm	100,0
Shear Sharpening on demand		
Die height (new)	mm	24,0
Die min. height (sharpened)	mm	22,5

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 6/24-6

MATE PRECISION TOOLING:

XMTE6 (Long)
XMTE10

NOTE
[1] Standard Shapes are all those indicated at page 10 beginning with character A

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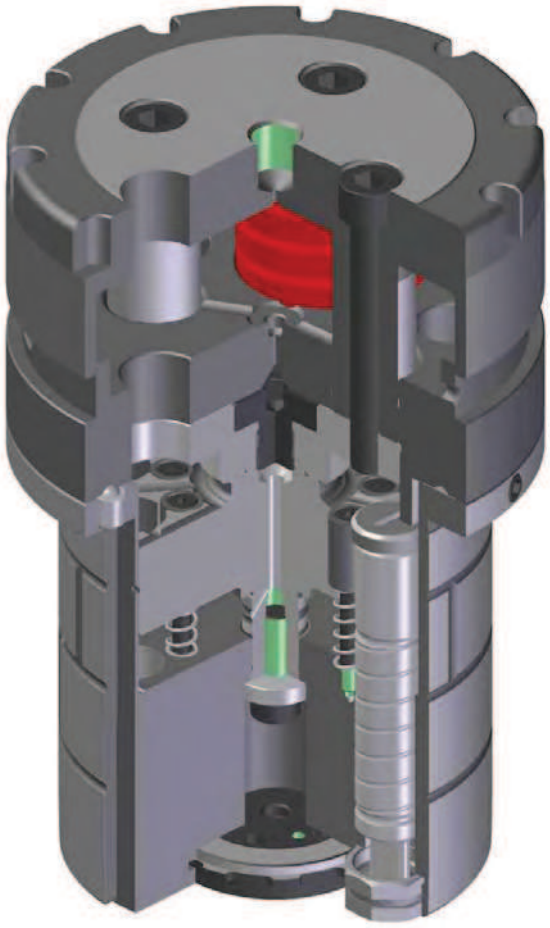
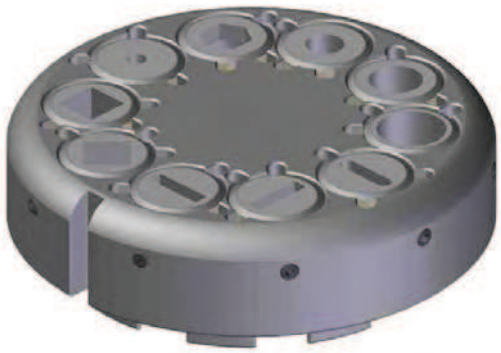
MULTIMATRIX 10/18 R MMX

PATENT PENDING

MULTIMATRIX ROTATING SERIES

10 x MAX ⌀ ▱ = mm 18,0





REFERENCE CODES

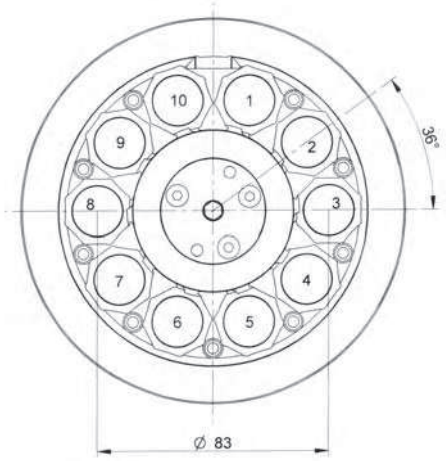
Basic Set: FALNDY00

Starting Set: FALNGS00

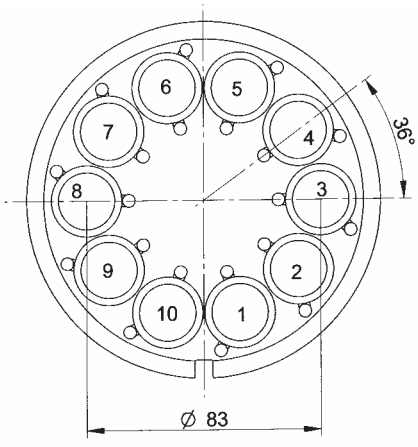
TECHNICAL SPECIFICATIONS

- 10 stations for punches with maximum diagonal mm 18
- Specifically designed to avoid undesired marks on sheet metal
- Maximum Tonnage: 12 Tons[1]
- Quick strippers unblocking
- Quick strippers and punches change, without Multitool opening
- Octagonal strippers for quick punch orientation with 45° steps
- Dies holder with 2 positioning references, for each station
- Compression and extraction aligned with selected punch, for a high rigidity, comparable to a mono tool one
- Total lubrication: inner and outer, manual or automatic
- Customizable upper part according to specific requirements, for several machine models
- Fitting on a regular Thick Turret D Station
- For punching machines with rotating station (index)
- Several models with different tool orientation are available

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



NOTE:

1) Some end user can exceed the indicated limit without problems, but it depends on both specific job to be performed and type of punching machine, which aspects must be duly evaluated time by time.

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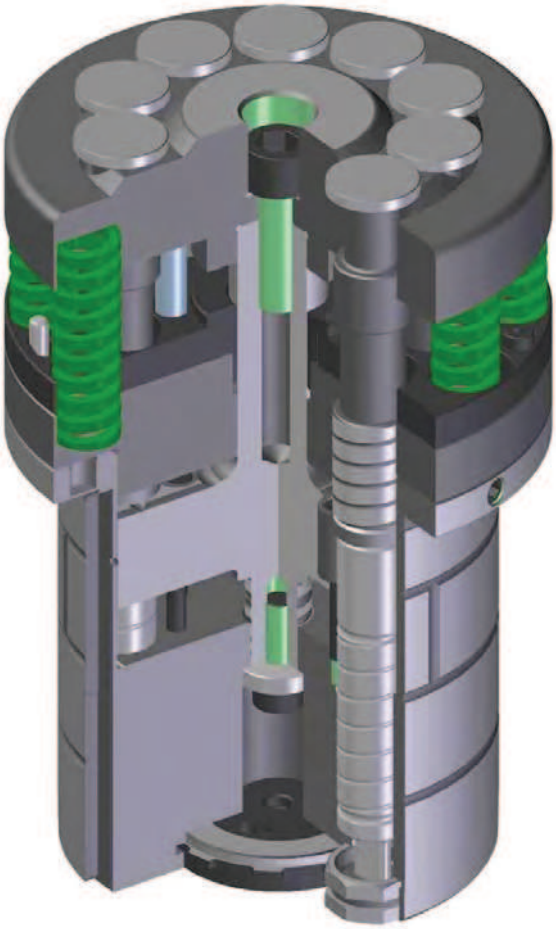
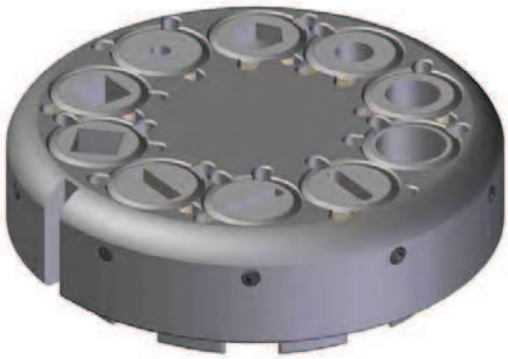
MULTIMATRIX 10/18 F MMX

PATENT PENDING

MULTIMATRIX SERIE STANDARD

10 x MAX ⌀ ▱ = mm 18,0





REFERENCE CODES

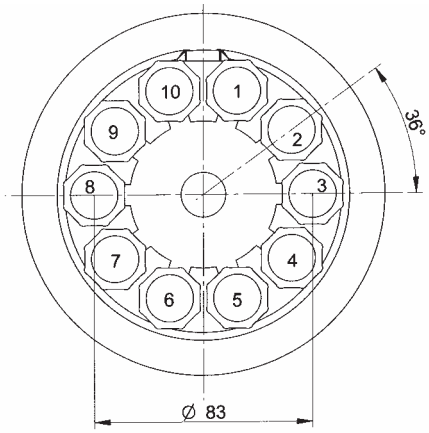
Basic Set: FALLDY00

Starting Set: FALLGS00

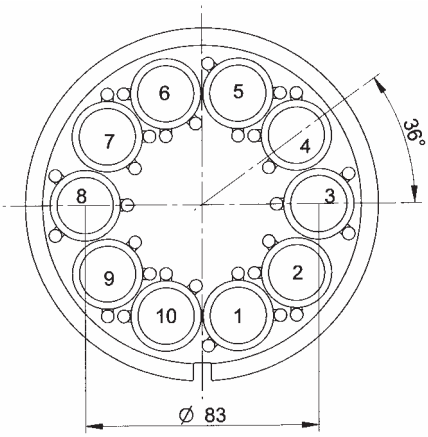
TECHNICAL SPECIFICATIONS

- 10 stations for punches with maximum diagonal mm 18
- Specifically designed to avoid undesired marks on sheet metal
- Maximum Tonnage: 12 Tons[1]
- Quick strippers and rams unblocking
- Quick strippers and punches change, without Multitool opening
- Octagonal strippers for quick punch orientation with 45° steps
- Dies holder with 3 positioning references, for each station
- External springs for easy replacement when maintaining
- Total lubrication: inner and outer, manual or automatic
- Fitting on a regular Thick Turret D Station
- For punching machines with fixed station and rotating ram

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



NOTE:

1) Some end user can exceed the indicated limit without problems, but it depends on both specific job to be performed and type of punching machine, which aspects must be duly evaluated time by time.

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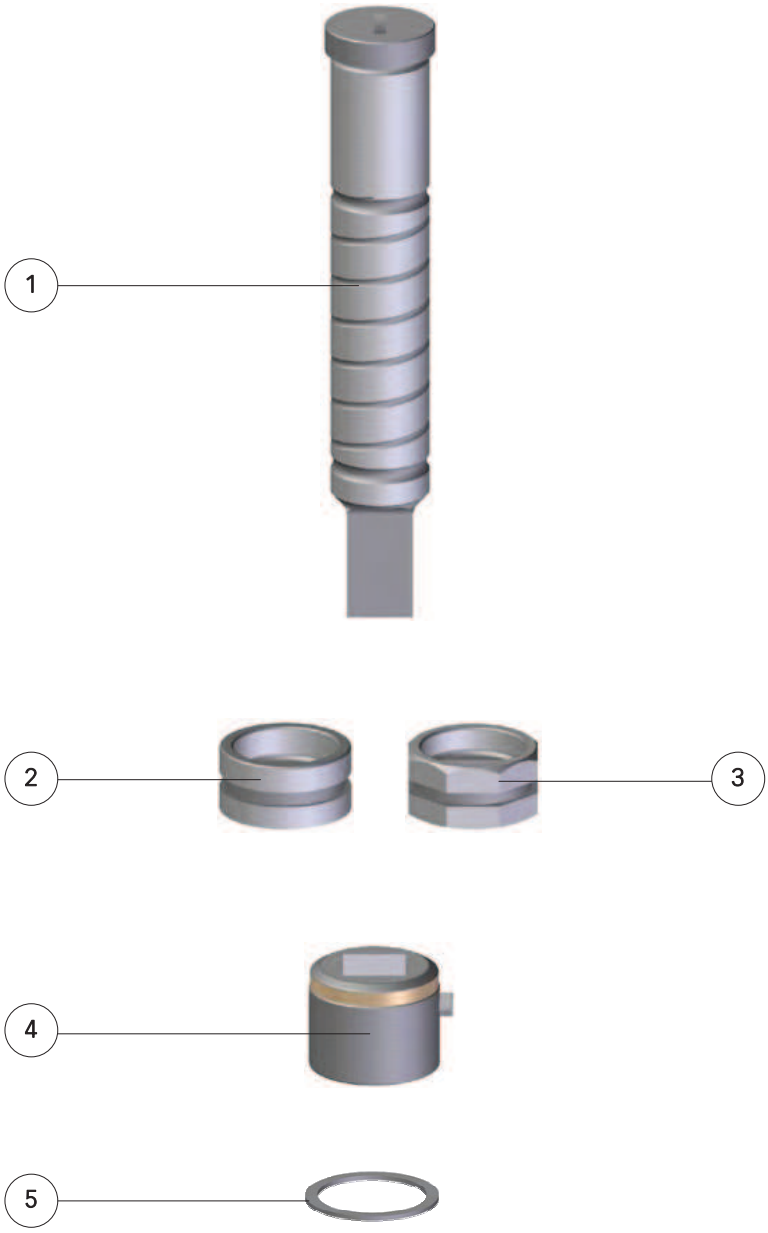
MULTIMATRIX

SERIES 10/18

MAX ⌀ ▱ = mm 18,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	FA96ZZ00.YYY Round Punch	
2	FA964W00.YYY Round Stripper	
4	FA962W00.YYY Round Die	
	SHAPED TOOLS	
1	FA96ZZXX.YYY Shaped Punch (Standard Shapes[1])	
3	FA974WXX.YYY Shaped Stripper (Standard Shapes[1])	
4	FA9720XX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
5	FA957400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	18,0
Punch height (new)	mm	113,5
Shear Sharpening on demand		
Die height (new)	mm	20,0
Die min. height (sharpened)	mm	18,5

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 10/18 N
MultiMATRIX 10/18 NR
MultiMATRIX 10/18 R
MultiMATRIX 10/18 RN
MultiMATRIX 10/18 RHP
MultiMATRIX 10/18 RHP-N
MultiMATRIX 10/18 F MMX
MultiMATRIX 10/18 FR MMX
MultiMATRIX 10/18 R MMX
MultiMATRIX 10/18 RF MMX

NOTE
[1] Standard Shapes are all those indicated at page 10 beginning with character A

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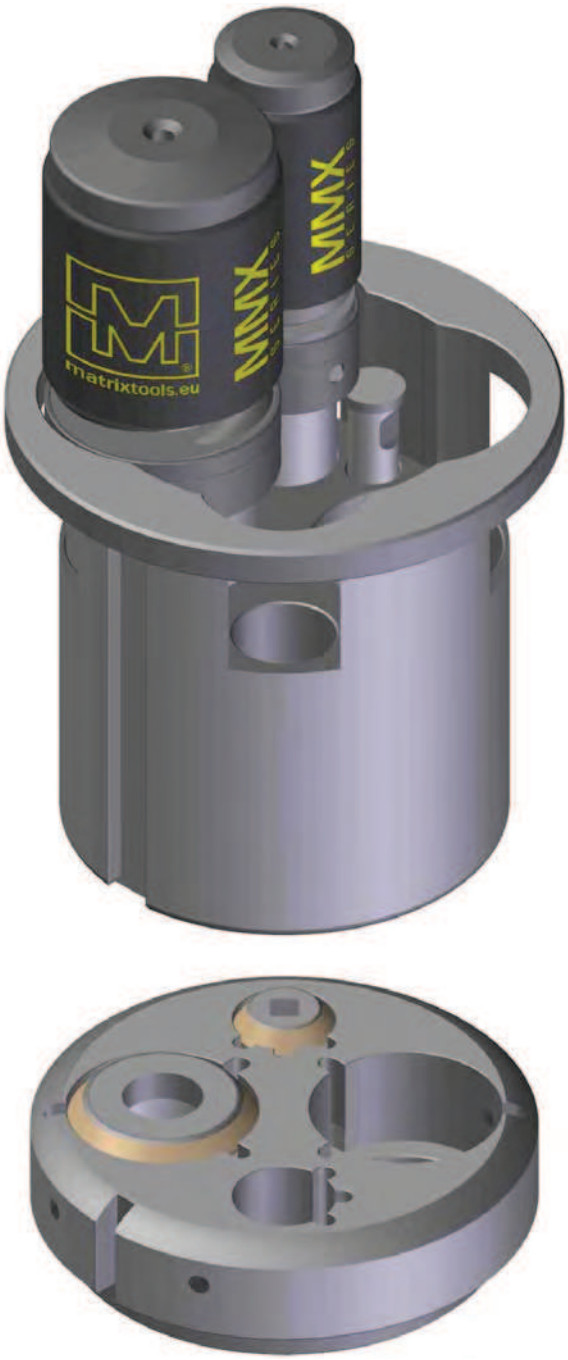
MULTIMATRIX: MULTITOOL WITH PUNCH HOLDER

MULTIMATRIX 2/A-2/B

MULTIMATRIX STANDARD SERIES

2 x MAX Ø ▢ = mm 12,7

2 x MAX Ø ▢ = mm 31,7



REFERENCE CODES

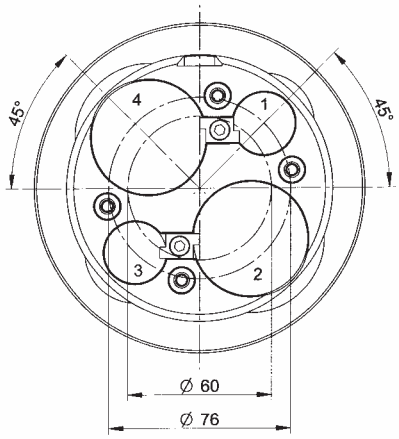
Basic Set: F613DY00

Starting Set: F613GS00

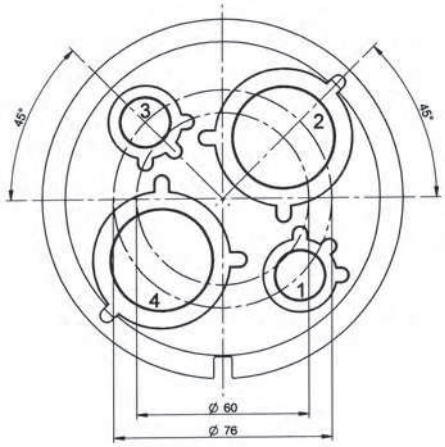
TECHNICAL SPECIFICATIONS

- Holder for 2 Thick Turret A Stations (maximum tools diagonal mm 12,7) and 2 Thick Turret B Stations (maximum tools diagonal mm 31,7)
- For working thicknesses and technical characteristics, refer to the specifications of used punch holders
- Dies holder with 3 positioning references, for each station
- Fitting on a regular Thick Turret D Station
- For punching machines with fixed station and rotating ram

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



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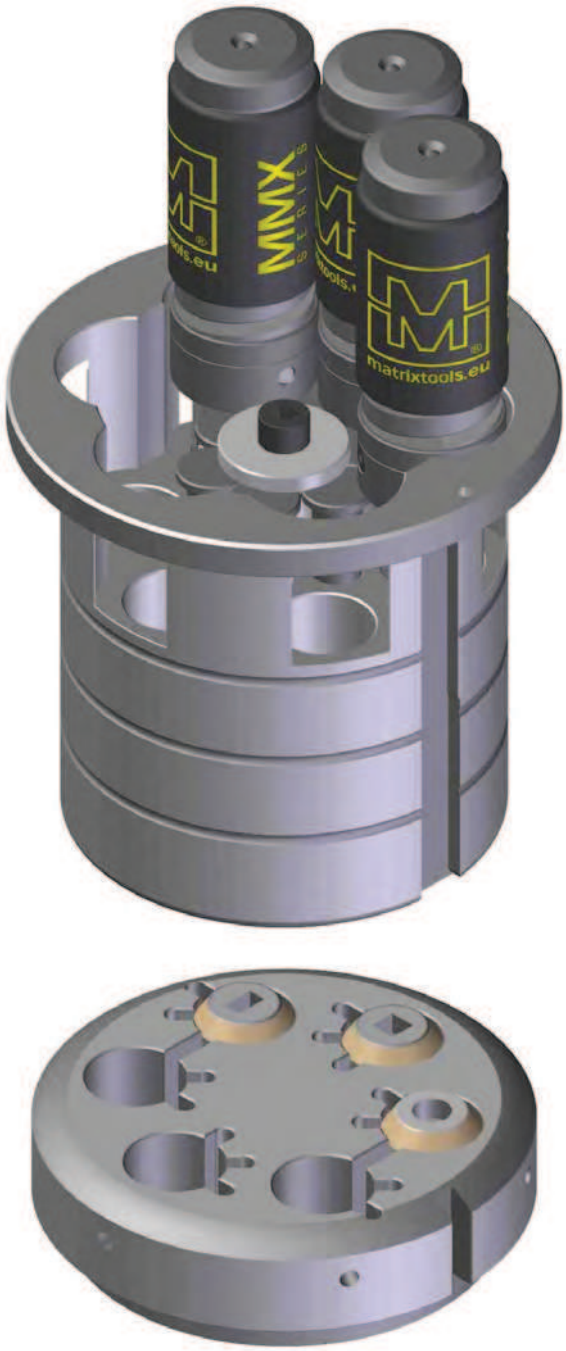
MULTIMATRIX 6/A

MULTIMATRIX STANDARD SERIES

6 x MAX Ø □ = mm 12,7



REFERENCE CODES

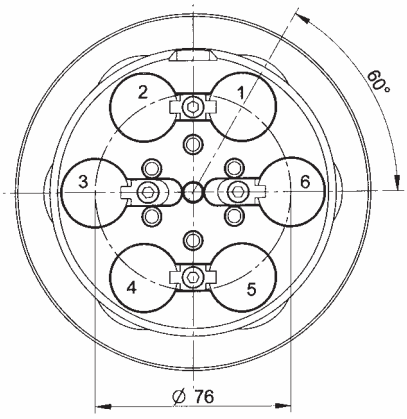
Basic Set: F612DY00

Starting Set: F612GS00

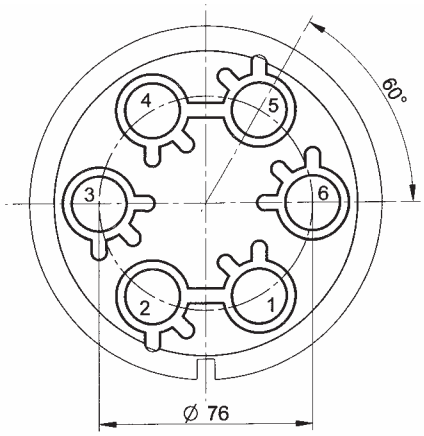
TECHNICAL SPECIFICATIONS

- Holder for 6 Thick Turret A Stations (maximum tools diagonal mm 12,7)
- For working thicknesses and technical characteristics, refer to the specifications of used punch holders
- Dies holder with 3 positioning references, for each station
- Fitting on a regular Thick Turret D Station
- For punching machines with fixed station and rotating ram

UPPER ASSEMBLY VIEW



LOWER ASSEMBLY VIEW



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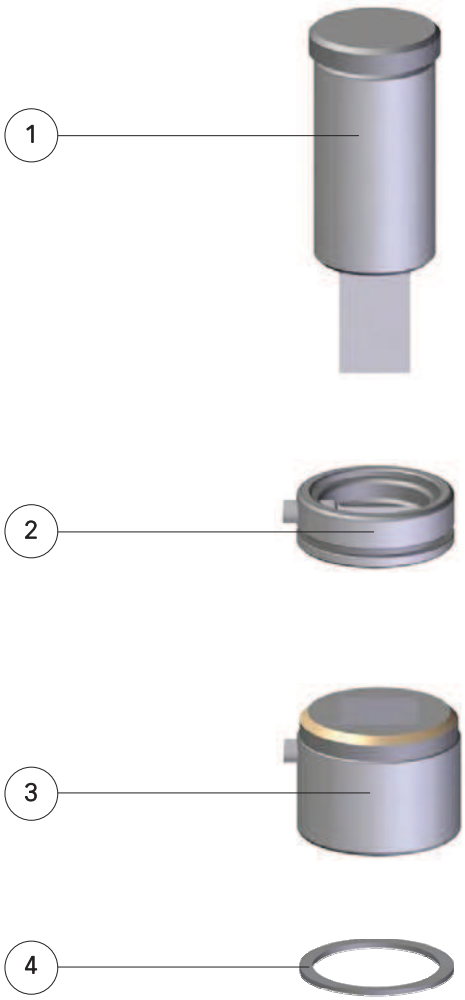
MULTITOOL: TOOLINGS

MULTIMT

SERIES 24

MAX ⌀ ▱ = mm 24,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F253ZZ00.YYY Round Punch	
2	F2534W00.YYY Round Stripper	
3	F2492W00.YYY Round Die	
	SHAPED TOOLS	
1	F253ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	F2544WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F25420XX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2527400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	24,0
Punch height (new)	mm	70,5
Shear Sharpening on demand		
Die height (new)	mm	24,0
Die min. height (sharpened)	mm	22,5

COMPATIBLE MULTITOOL

MATE PRECISION TOOLING:

MT6
MT8
MTE6
MTE10

WILSON TOOL:

MT 6-24
MT 8-24

NOTE
[1] Standard Shapes are all those indicated at page 10 beginning with character A

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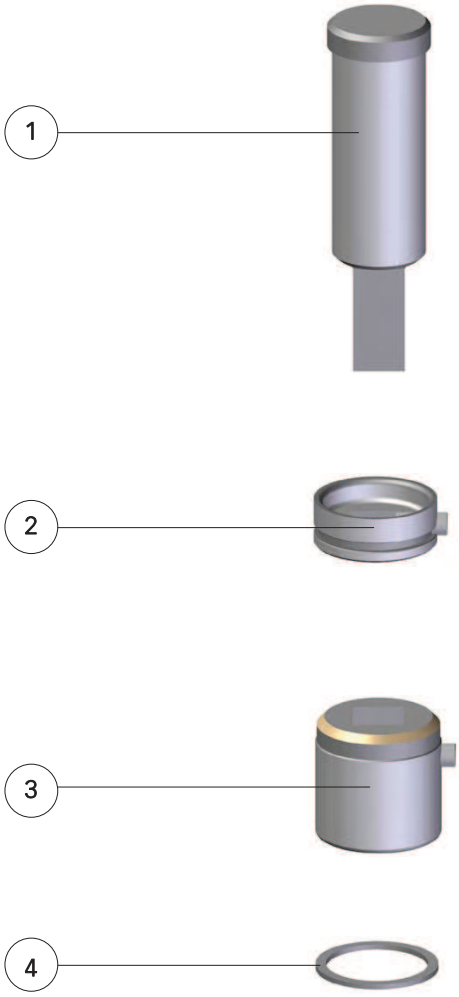
MULTIMT

SERIES 16

MAX Ø □ = mm 16,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F260ZZ00.YYY Round Punch	
2	F2604W00.YYY Round Stripper	
3	F2602W00.YYY Round Die	
	SHAPED TOOLS	
1	F260ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	F2614WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F26120XX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2607400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	16,0
Punch height (new)	mm	70,5
Shear Sharpening on demand		
Die height (new)	mm	24,0
Die min. height (sharpened)	mm	22,5

COMPATIBLE MULTITOOL

MATE PRECISION TOOLING:

MT10

WILSON TOOL:

MT 6-16
MT 10-16

NOTE
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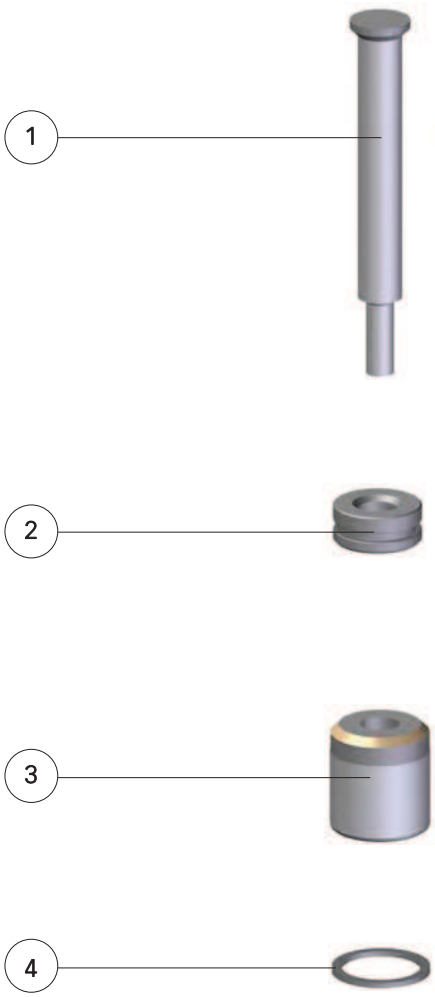
MULTIMT

SERIES 8

MAX Ø □ = mm 8,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F257ZZ00.YYY Round Punch	
2	F2574W00.YYY Round Stripper	
3	F2572W00.YYY Round Die	
	SHAPED TOOLS	
1	F257ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	F2584WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F25820XX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2577400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	8,0
Punch height (new)	mm	70,5
Shear Sharpening on demand		
Die height (new)	mm	17,0
Die min. height (sharpened)	mm	15,5

COMPATIBLE MULTITOOL

MATE PRECISION TOOLING:

MT20
MT24
MTE10

WILSON TOOL:

MT 12-8 (Round only)
MT 20-8
MT 24-8

NOTE
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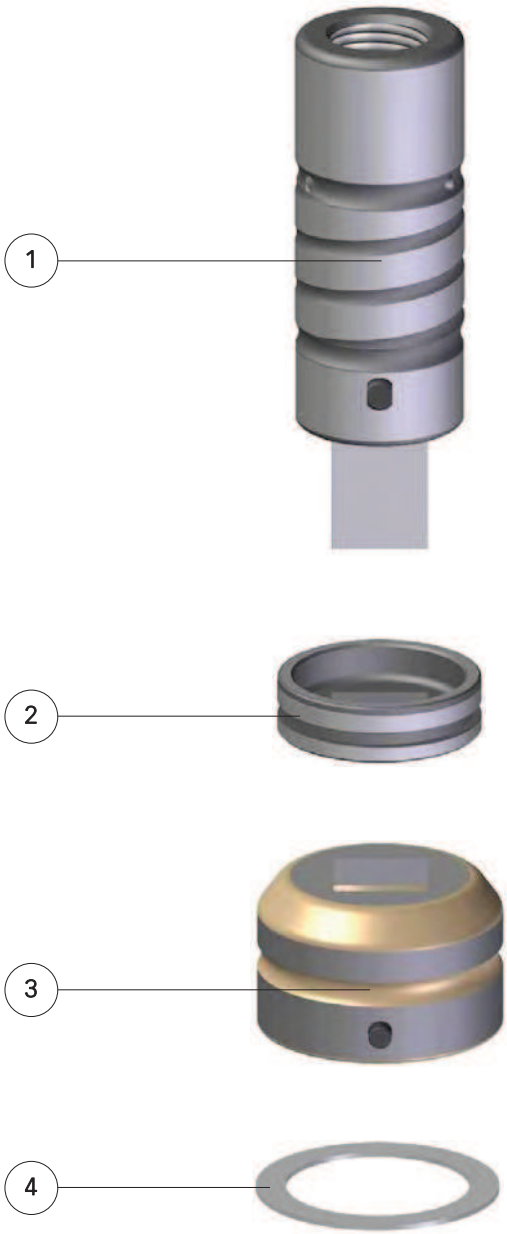
MULTIMT

SERIES XB

MAX ⌀ ▱ = mm 31,7



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F219ZZ00.YYY Round Punch	
2	FAG64W00.YYY Round Stripper	
3	F2222W00.YYY Round Die	
	SHAPED TOOLS	
1	F219ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	FAG64WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F2232WXX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2187400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	WNT Shear Sharpening on Punch	
	DWNT Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Stengthened Shaped Die	
	Shaped Dies with 3 References: 0°-90°-225°	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	31,7
Punch height (new)	mm	100,5
Shear Sharpening on demand		
Die height (new)	mm	30,4
Die min. height (sharpened)	mm	27,9

COMPATIBLE MULTITOOL

MATE PRECISION TOOLING:

XMTE4

NOTE

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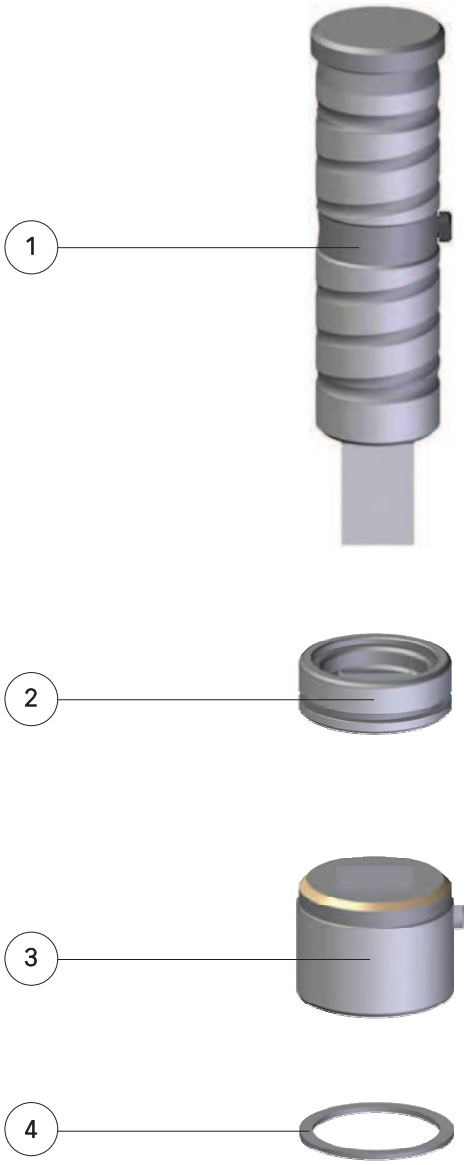
MULTIMT

SERIES 6/24-6

MAX Ø ▱ = mm 24,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F845ZZ00.YYY Round Punch	
2	F2534W00.YYY Round Stripper	
3	F2492W00.YYY Round Die	
	SHAPED TOOLS	
1	F845ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	F8454WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F25420XX.YYY Shaped Die (Standard Shapes[1]) - up to mm 3	
3	F25020XX.YYY Shaped Die (Standard Shapes[1]) - over mm 3	
	SETTINGS AND OPTIONS	
4	F2527400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	24,0
Punch height (new)	mm	100,0
Shear Sharpening on demand		
Die height (new)	mm	24,0
Die min. height (sharpened)	mm	22,5

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 6/24-6

MATE PRECISION TOOLING:

XMTE6 (Long)
XMTE10

NOTE
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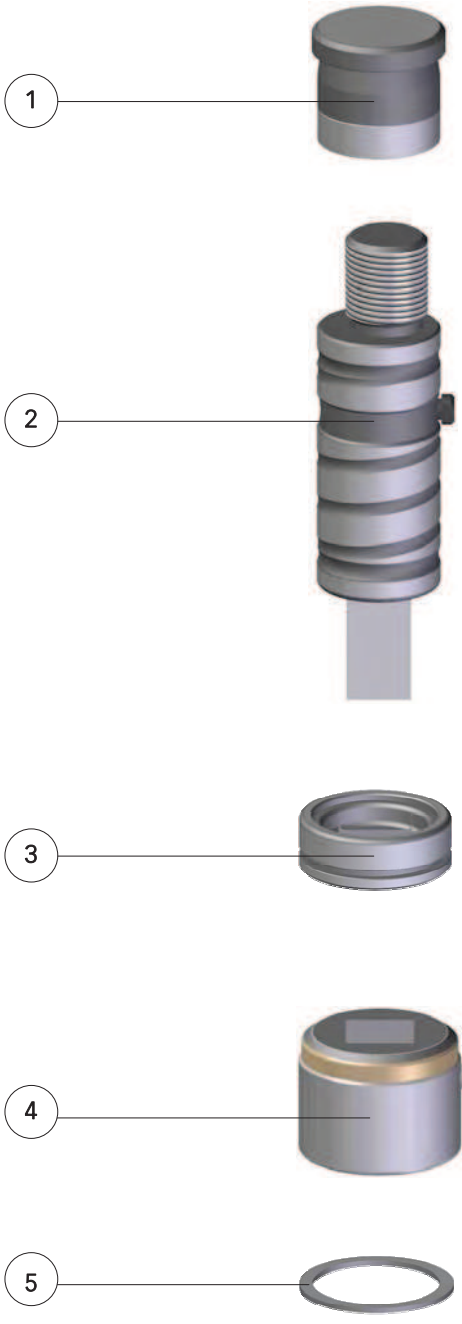
MULTIMT

SERIES 6/24-6 AR

MAX Ø □ = mm 24,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F803GG00.YYY Adjustment Head	
2	F803ZZ00.YYY Round Punch	
3	F2534W00.YYY Round Stripper	
4	F2492W00.YYY Round Die	
	SHAPED TOOLS	
1	F803GG00.YYY Adjustment Head	
2	F804ZZXX.YYY Shaped Punch (Standard Shapes[1])	
3	F8454WXX.YYY Shaped Stripper (Standard Shapes[1])	
4	F25420XX.YYY Shaped Die (Standard Shapes[1]) - up to mm 3	
4	F25020XX.YYY Shaped Die (Standard Shapes[1]) - over mm 3	
	SETTINGS AND OPTIONS	
5	F2527400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	24,0
Punch height (new)	mm	100,0
Shear Sharpening on demand		
Die height (new)	mm	24,0
Die min. height (sharpened)	mm	22,5

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 6/24-6

MATE PRECISION TOOLING:

XMTE6 (Long)
XMTE10

NOTE
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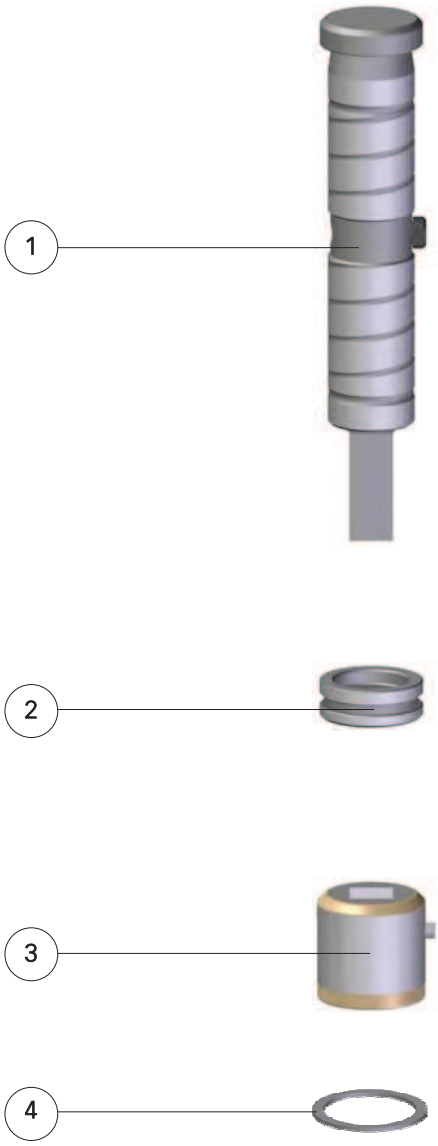
MULTIMT

SERIES X12,7

MAX Ø □ = mm 12,7



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	FAFRZZ00.YYY Round Punch	
2	FAFQ4W00.YYY Round Stripper	
3	FAFQ2W00.YYY Round Die	
	SHAPED TOOLS	
1	FAFRZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	FAFQ4WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	FAFR20XX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	FAFQ7400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	12,7
Punch height (new)	mm	100,0
Shear Sharpening on demand		
Die height (new)	mm	20,0
Die min. height (sharpened)	mm	17,5

COMPATIBLE MULTITOOL

MATE PRECISION TOOLING:

XMTE10

NOTE

[1] Standard Shapes are all those indicated at page 10 beginning with character A

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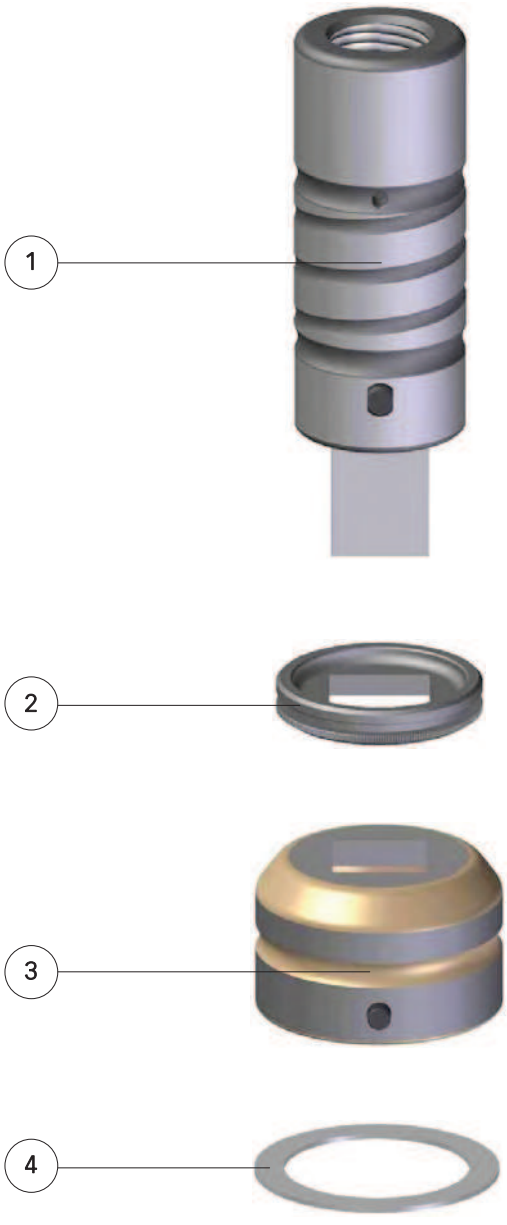
THICK TURRET

B STATION - LUBRICATED

MAX Ø □ = mm 31,7



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F219ZZ00.YYY Round Punch	
2	F2224W00.YYY Round Stripper	
3	F2222W00.YYY Round Die	
	SHAPED TOOLS	
1	F219ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	F2224WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F2232WXX.YYY Shaped Die (Standard Shapes[1])	
	ACCESSORI ED OPZIONI	
4	F2187400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	WNT Shear Sharpening on Punch	
	DWNT Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Stengthened Shaped Die	
	Shaped Dies with 3 References: 0°-90°-225°	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	31,7
Punch height (new)	mm	100,5
Shear Sharpening on demand		
Die height (new)	mm	30,4
Die min. height (sharpened)	mm	27,9

COMPATIBLE MULTITOOL

MATRIX:

MultiMATRIX 4B RHP

MATE PRECISION TOOLING:

MTE4
Ultra MT 3
Ultra IMT 3

NOTE
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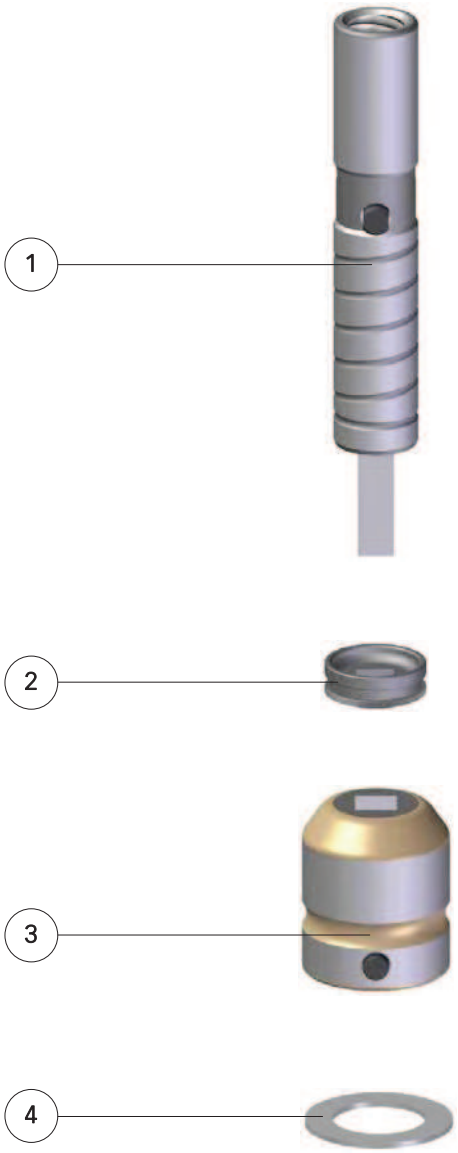
THICK TURRET

A STATION - LUBRICATED

MAX Ø □ = mm 12,7



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F215ZZ00.YYY Round Punch	
2	F2144W00.YYY Round Stripper	
3	F2142W00.YYY Round Die	
	SHAPED TOOLS	
1	F215ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	F2144WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F2152WXX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2157400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Shaped Dies with 3 References: 0°-90°-225°	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	12,7
Punch height (new)	mm	108
Shear Sharpening on demand		
Die height (new)	mm	30,4
Die min. height (sharpened)	mm	27,9

COMPATIBLE MULTITOOL

MATE PRECISION TOOLING:

Ultra MT 8
Ultra IMT 8

NOTE
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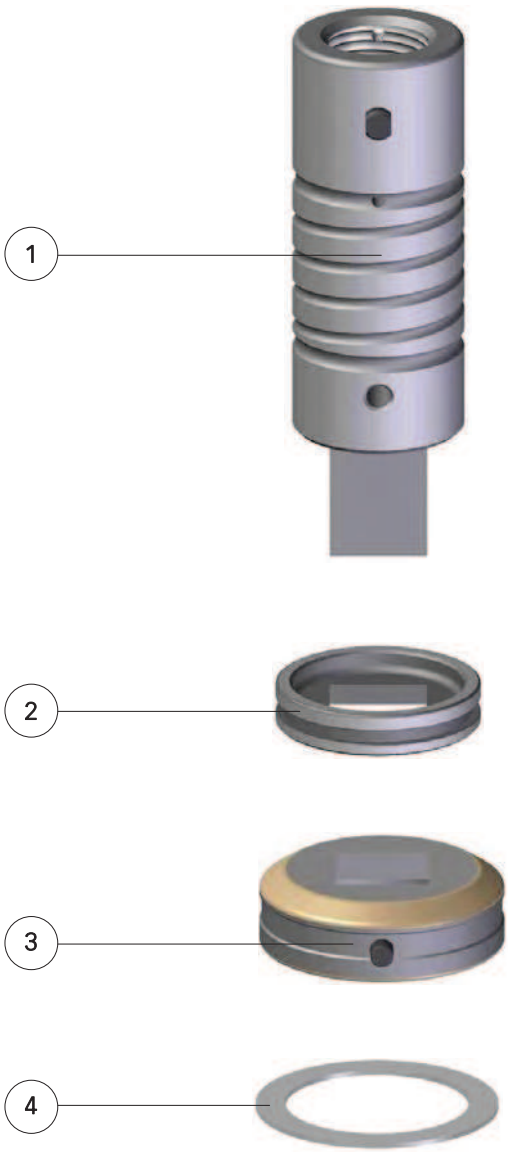
MULTIW

SERIES 3B

MAX Ø ▱ = mm 31,7



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F528ZZ00.YYY Round Punch	
2	F7364W00.YYY Round Stripper	
3	F7362W00.YYY Round Die	
	SHAPED TOOLS	
1	F528ZZXX.YYY Shaped Punch (Standard Shapes*)	
2	F7374WXX.YYY Shaped Stripper (Standard Shapes*)	
3	F7382WXX.YYY Shaped Die (Standard Shapes*)	
	SETTINGS AND OPTIONS	
4	F2187400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	DWP Shear Sharpening on Punch	
	WNT Shear Sharpening on Punch	
	DWNT Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Shaped Dies with 3 References: 0°-90°-225°	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (over or equal to mm 1,5 and under mm 4,00)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	31,7
Punch height (new)	mm	100,5
Shear Sharpening on demand		
Die height (new)	mm	15,0

COMPATIBLE MULTITOOL

WILSON TOOL:

MT3Ri

NOTE

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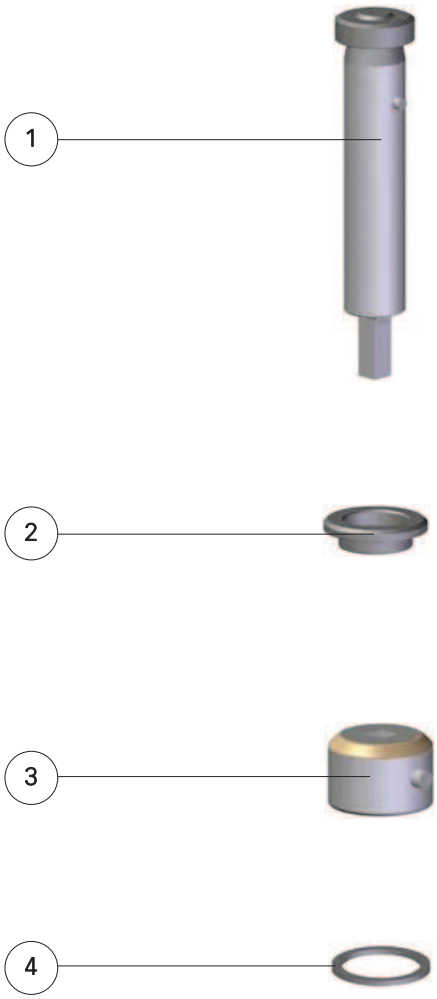
MULTIW

SERIES 8/16

MAX Ø □ = mm 16,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	FAE3ZZ00.YYY Round Punch	
2	FAE34W00.YYY Round Stripper	
3	FAE32W00.YYY Round Die	
	SHAPED TOOLS	
1	FAE4ZZXX.YYY Shaped Punch (Standard Shapes[1])	
2	FAE34WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	FAE42WXX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2157400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	16,0
Punch height (new)	mm	100,0
Shear Sharpening on demand		
Die height (new)	mm	17,6

COMPATIBLE MULTITOOL

WILSON TOOL:

8 Stations Multitool for Nisshinbo Punch Presses *(Old design)*

NOTE

[1] Standard Shapes are all those indicated at page 10 beginning with character A

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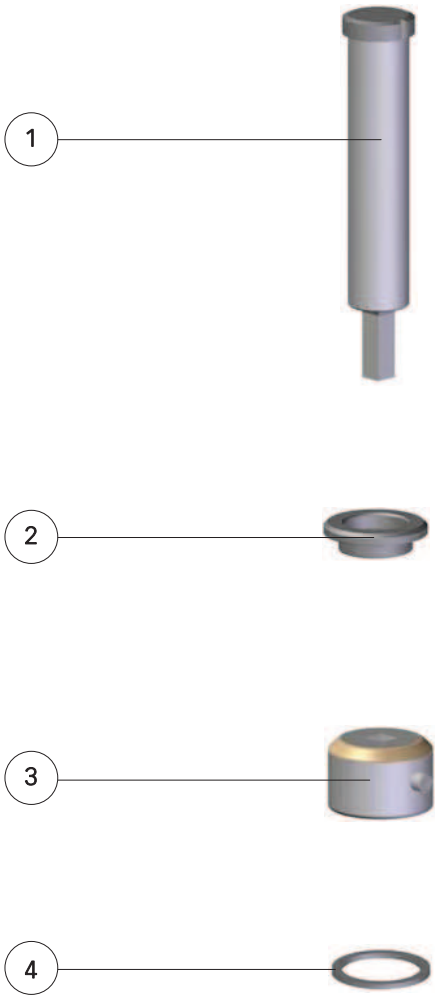
MULTIW

SERIES 8/16 N

MAX Ø ▱ = mm 16,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	FAFMZZ00.YYY Round Punch	
2	FAE34W00.YYY Round Stripper	
3	FAE32W00.YYY Round Die	
	SHAPED TOOLS	
1	FAFNZZXX.YYY Shaped Punch (Standard Shapes[1]) - Reference 0°	
1	FAN6ZZXX.YYY Shaped Punch (Standard Shapes[1]) - References 0°-45°	
1	FAN7ZZXX.YYY Shaped Punch (Standard Shapes[1]) - References 0°-90°	
2	FAE34WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	FAE42WXX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2157400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	16,0
Punch height (new)	mm	100,5
Shear Sharpening on demand		
Die height (new)	mm	17,6

COMPATIBLE MULTITOOL

WILSON TOOL:

MT8i
MT8Ri
8 Stations Multitool for Nisshinbo Punch Presses *(New design)*

NOTE
[1] Standard Shapes are all those indicated at page 10 beginning with character A

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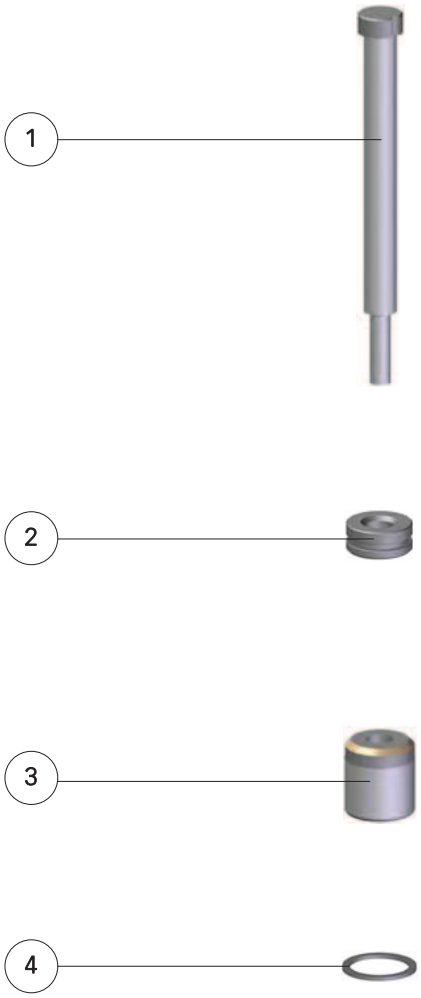
MULTIW

SERIES 20/8 N

MAX Ø ▱ = mm 8,0



POS.	CODE DESCRIPTION	PRICE
	ROUND TOOLS	
1	F960ZZ00.YYY Round Punch	
2	F2574W00.YYY Round Stripper	
3	F2572W00.YYY Round Die	
	SHAPED TOOLS	
1	F960ZZXX.YYY Shaped Punch (Standard Shapes[1]) - Reference 0°	
1	FAN4ZZXX.YYY Shaped Punch (Standard Shapes[1]) - References 0°-45°	
1	FAN5ZZXX.YYY Shaped Punch (Standard Shapes[1]) - References 0°-90°	
2	F9604WXX.YYY Shaped Stripper (Standard Shapes[1])	
3	F2582WXX.YYY Shaped Die (Standard Shapes[1])	
	SETTINGS AND OPTIONS	
4	F2577400 9 x Die Shims Kit	
	WN Shear Sharpening on Punch	
	Type A or Type B Coating on Standard Punch (5 extra working days required)	
	Dies with Rotated Shape	
	Punches with Rotated Shapes	
	Dies with small dimensions shapes (under mm 1,70 including clearance)	
	Punches with small dimensions shapes (under mm 1,5)	
	Anti Slug available on dies with clearance equal to mm 0,13 and over	
	Dies with Anti Slug SC	

TECHNICAL CHARACTERISTICS

Punch max. diameter/diagonal	mm	8,0
Punch height (new)	mm	100,5
Shear Sharpening on demand		
Die height (new)	mm	17,6

COMPATIBLE MULTITOOL

WILSON TOOL:

MT20i

NOTE

[1] Standard Shapes are all those indicated at page 10 beginning with character A

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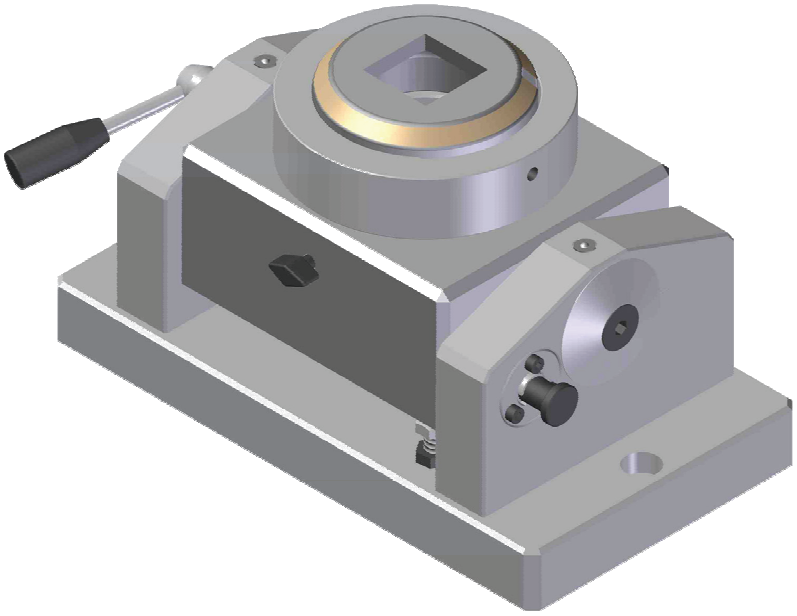
ACCESSORIES AND ADAPTORS

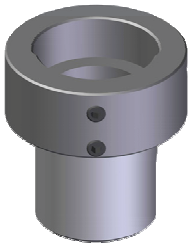
MULTIMATRIX
SHEAR GRINDING FIXTURE



CODE DESCRIPTION	PRICE
FA22QE00 Reclining Universal Base	

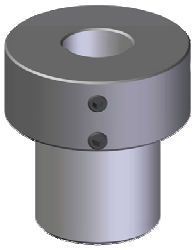
TECHNICAL SPECIFICATIONS

- The sharpening of tools often is a problem, especially when the tools have a single inclined cutting parto e even a double inclined cutting part (see *Shear Sharpening*).
- This fixture solves the problem by allowing to execute alla kind of sharpening in an easy and fast way: when it is clamped on grinding machine, it acceots alla adaptors showed in this page and in the following one..
- To be able to use the following adaptors:
  FA22QLOO - FA22QP00 - FA22QN00 - FA22QM00 - FA22QF00 - FA22WJ00
  It is necessary to combine them with adaptor: FA22QG00
- Thsi elementi s used on 0° position for plain punches and dies, or with a maximum ± 20° inclination for whisper punches.

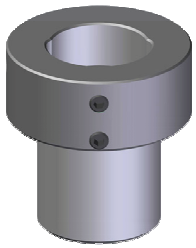


CODE DESCRIPTION	PRICE
FA22QL00 Punch and Die Adaptor - MultitMT and MultiMATRIX Series 24	

CODE DESCRIPTION	PRICE
FA22QP00 Punch and Die Adaptor - MultMATRIX Series 18	



CODE DESCRIPTION	PRICE
FA22QN00 Punch and Die Adaptor - MultiMT Series 8	



CODE DESCRIPTION	PRICE
FA22QM00 Punch and Die Adaptor - MultiMT Series 16	

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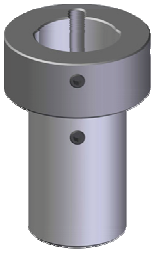
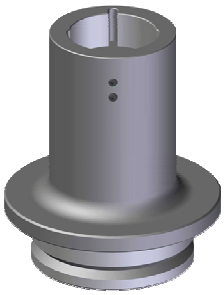
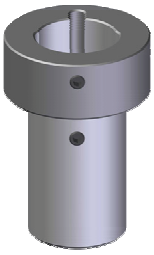
MULTIMATRIX
SHEAR GRINDING FIXTURE



CODE DESCRIPTION	PRICE
FA22QF00 Punch and Die Adaptor - A Station	



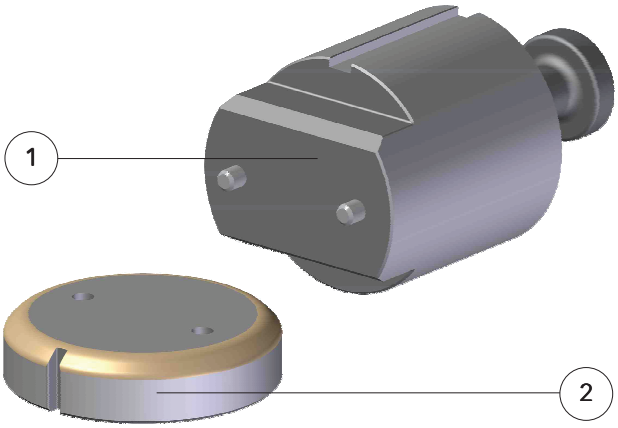
CODE DESCRIPTION	PRICE
FA22QG00 Punch and Die Adaptor - B Station	



CODE DESCRIPTION	PRICE
FA22WI00 Punch and Die Adaptor - MultiMT Series X12,7	

MULTIMATRIX
ALIGNMENT TOOL

D STATION



POS.	CODE DESCRIPTION	PRICE
1 + 2	**FABU7200** **D Station Alignment Tool**	
1	FABUEG00 Alignment Punch	
2	FABUEH00 Alignment Die	

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TOOL HOLDER CART

POS.	CODE DESCRIPTION	PRICE
1	F680WQ00 Tool Holder Cart	

TECHNICAL SPECIFICATIONS

- Tool holder cart on four wheels, with dimensions mm 745 x 475 x h 1098, composed of:
  - 8 compartments of which: 7 with external height mm 80 and 1 of mm 270;
  - Support plan anti-slip rubber.
  - Tooling for maintenance and tool replacement.

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TOOLS

NEBULIZER A3708433.421

Pneumatic spray with two nozzles, for economic and clean lubrication of sheet metal.

OILER A4108544.422

Spray oil can, capacity 0,35 liters.

GREASE A1808629.425

Grease resistant to high temperatures, ideal for all sliding surfaces such as punches, holders and turrets.

ABRASIVE STONE A2907545.423

Abrasive stone for shining and reviving corners.

CALIBRE A4608342.419

Slider calibre with mm and inch scale.

ALLEN SPANNER A3804341.418

Set of 9 allen spanners from mm 1,5 to mm 10, for holders maintenance.

HAMMER A4508140.416

Plastic hammer with anti sliver and anti wearing urethane plugs.

FILE A2907543.420

Diamond needle file, for removal or maintenance.

SNIPE A3908241.417

Long nose snipe, length mm 47

DEMAGNETIZER A4700000.424

220 Volt Frequency 50 Hz, for demagnetizing all punching tools and components.

LIFTING KEY F227QC00

For extraction of punch holders from punching machine (C/D/E stations and all MultiMATRIX).

Note: The actual look of these tools might vary according to market availability.

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MULTITOOL-TOOLING LINK TABLE

MATRIX - MultiMATRIX 2A-2B			
Tooling:	*Thick Turret - A Station (See Thick Turret catalog)*	Page:	
	Thick Turret - B Station (See Thick Turret catalog)	Page:	
MATRIX - MultiMATRIX 4B			
Tooling:	*Thick Turret - B Station Standard*	Page:	21
MATRIX - MultiMATRIX 4B RHP			
Tooling:	*Thick Turret - B Station Lubricated*	Page:	19, 43
MATRIX - MultiMATRIX 6A			
Tooling:	*Thick Turret - A Station (See Thick Turret catalog)*	Page:	
MATRIX - MultiMATRIX 6/24			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 F MMX			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 FR MMX			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 N			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 NR			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 R			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 R MMX			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 RF MMX			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 RHP			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 RHP-N			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
MATRIX - MultiMATRIX 6/24 RN			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25

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MULTITOOL-TOOLING LINK TABLE

MATRIX - MultiMATRIX 6/24-6 ERHP			
Tooling:	*MultiMT Series 6/24-6*	Page:	27, 40
	MultiMT Series 6/24-6 AR	Page:	27, 41
MATRIX - MultiMATRIX 10/24-C R			
Tooling:	*MultiMATRIX Series 6/24*	Page:	24
	MultiMATRIX Series 6/24 AR	Page:	25
	Thick Turret - C Station (See Thick Turret catalog)	Page:	
MATRIX - MultiMATRIX 10/18 F MMX			
Tooling:	*MultiMATRIX Series 10/18*	Page:	30
MATRIX - MultiMATRIX 10/18 FR MMX			
Tooling:	*MultiMATRIX Series 10/18*	Page:	30
MATRIX - MultiMATRIX 10/18 N			
Tooling:	*MultiMATRIX Series 10/18*	Page:	30
MATRIX - MultiMATRIX 10/18 NR			
Tooling:	*MultiMATRIX Series 10/18*	Page:	30
MATRIX - MultiMATRIX 10/18 R			
Tooling:	*MultiMATRIX Series 10/18*	Page:	30
MATRIX - MultiMATRIX 10/18 R MMX			
Tooling:	*MultiMATRIX Series 10/18*	Page:	30
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Tooling:	*MultiMATRIX Series 10/18*	Page:	30
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Tooling:	*MultiMATRIX Series 10/18*	Page:	30
MATRIX - MultiMATRIX 10/18 RHP-N			
Tooling:	*MultiMATRIX Series 10/18*	Page:	30
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Tooling:	*MultiMATRIX Series 10/18*	Page:	30
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MATE PRECISION TOOLING - MT8			
Tooling:	*MultiMT Series 24*	Page:	36
MATE PRECISION TOOLING - MT10			
Tooling:	*MultiMT Series 16*	Page:	37
MATE PRECISION TOOLING - MT20			
Tooling:	*MultiMT Series 8*	Page:	38
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TOOLS CODING

In order to give to customers a quick and efficient service each tool feature has been coded, to allow the final user a fast identification means for the correct tool.
Here as following some examples of the most commonly used codes.

Tool Shape (XX)

00 - Round
01 - Obround
02 - Square
03 - Rectangular
A1 - Special Shape A01
A2 - Special Shape A02
A3 - Special Shape A03
A4 - Special Shape A04
A5 - Special Shape A05
A6 - Special Shape A06
B1 - Special Shape B01
B2 - Special Shape B02
B3 - Special Shape B03
B4 - Special Shape B04
B5 - Special Shape B05
B6 - Special Shape B06
C1 - Special Shape C01
C2 - Special Shape C02
C3 - Special Shape C03
C4 - Special Shape C04
C5 - Special Shape C05
C6 - Special Shape C06
C7 - Special Shape C07
C8 - Special Shape C08
C9 - Special Shape C09
CA - Special Shape C10
CB - Special Shape C11
CC - Special Shape C12
CD - Special Shape C13
CE - Special Shape C14
CF - Special Shape C15
CG - Special Shape C16
D1 - Special Shape D01
D2 - Special Shape D02
D3 - Special Shape D03
D4 - Special Shape D04
D5 - Special Shape D05
D6 - Special Shape D06
E1 - Special Shape E01
E2 - Special Shape E02
E3 - Special Shape E03
E4 - Special Shape E04
F1 - Special Shape F01
F2 - Special Shape F02
G1 - Special Shape G01
H1 - Special Shape H01
H2 - Special Shape H02
H3 - Special Shape H03
H4 - Special Shape H04
H5 - Special Shape H05
H6 - Special Shape H06
H7 - Special Shape H07
H8 - Special Shape H08
H9 - Special Shape H09
HA - Special Shape H10
HB - Special Shape H11
HC - Special Shape H12
HD - Special Shape H13

Tool Dimensions (YYY)

This three digit code univocally identifies tool dimensions, if it is a punch, a die or a stripper.

Example:
000 - 3
001 - 3,5
002 - 4
003 - 4,5
004 - 5
…

Tool Groups (W)

In some cases inside a tool typology it is possible to find various groups, meaning measures sets, which are identified through this variable.

Example:
B0 - Punch, 1st Group, “A” Coating
B1 - Punch, 2nd Group, “A” Coating
B2 - Punch, 3rd Group, “A” Coating
B3 - Punch, 4th Group, “A” Coating
B4 - Punch, 5th Group, “A” Coating

Tool Features (ZZ)

00 - Punch
20 - Die
40 - Stripper
60 - Punch Guide
63 - Die Adaptor
68 - Punch Adaptor
72 - Adjustable Guide Assembly
AF - Punch Guide
AR - Die Holder
B0 - Punch, “A”
C0 - Punch, “B”
D0 - Punch, “A” Coating, DWP
E0 - Punch, “B” Coating, DWP
F0 - Punch, “A” Coating, DWNT
G0 - Punch, “B” Coating, DWNT
H0 - Punch, “A” Coating, WN
I0 - Punch, “B” Coating, WN
J0 - Punch, “A” Coating, WNT
K0 - Punch, “B” Coating, WNT
L0 - Punch DWP
M0 - Punch DWNT
N0 - Punch WN
P0 - Punch WNT
Q0 - Punch Extended
R0 - Punch, Measures under mm 4
BA - Complete Upper Insert Holder
BB - Complete Lower Insert Holder
DY - Basic Set
GS - Starting Set
LX - Punch Holder Set

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COMPANY PROFILE

We produce tooling for

CNC Punch Presses	Iron Workers
AMADA	FICEP
FINN-POWER	GEKA
LVD	IMS
RAINER	OMERA
TRUMPF	MUBEA
MURATA-WIEDEMANN	PEDDINGHAUS
EUROMAC	KINGSLAND
SCHIAVI	
IMAC	
DURMA	
HACO	

and more.

A DYNAMIC TEAM

Each Matrix product is the result of the cooperation of young and highly qualified technicians who constantly keep themselves abreast and deal with problems and requirements of the production cycle.

THE CUSTOMER, A UNIQUE AND UNREPEATABLE PARTNER

We are convinced that every customer deserves special care. For this reason Matrix does not offer just a product, but also technical support and an advice service which aim is to obtain mutual satisfaction.

QUALITY TOOLS FOR EVERY REQUIREMENT

Our design and production are oriented to develop innovative solutions to fulfil different customers' problems, as well as guarantee the highest quality standard in each production processing phase.

ENERGIES ORIENTED TO MAXIMUM ACCURACY

To the production unit devoted to traditional mechanical processing has been added a new plant optimized to accomplish high technology content processing. The recent building, innovative in our field, is entirely wired and built with specific features to guarantee the product high quality and accuracy.

DIES AND PUNCHES BORN TO LAST

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

INNOVATIVE TECHNOLOGIES FOR HIGH PERFORMANCES

Matrix invests in the best technologies: from sophisticated software for designing, to computerization of production data. From the scheduling to product tuning and final test.

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