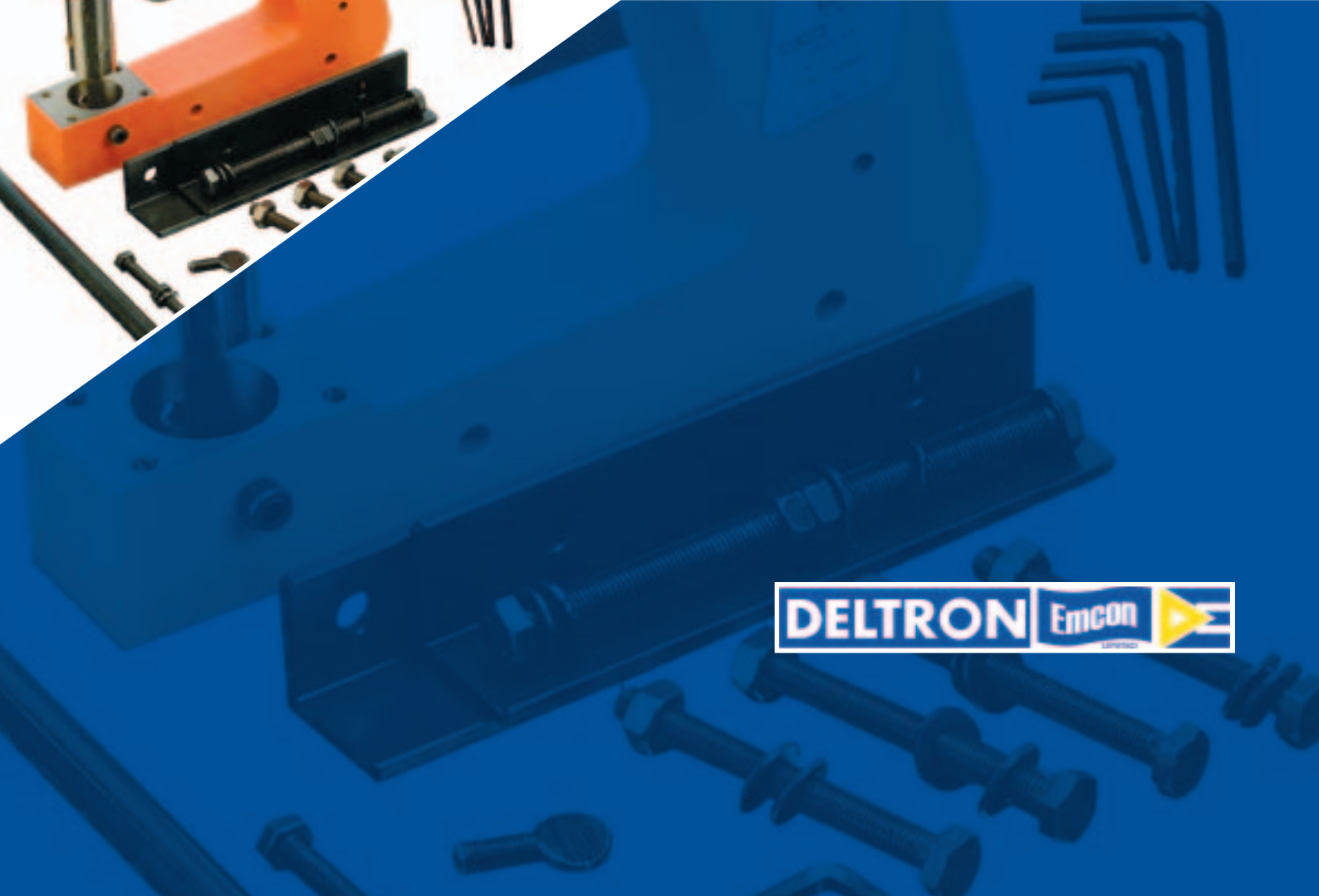


PRODUCTION TOOLING GUIDE



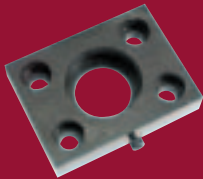


### 3000lb RANGE

**Series: 3000lb Lever Press**

Hand operated lever press system which, when used in conjunction with the precision tooling, offers a complete sheet metal manufacturing workstation, ideally suited for prototyping and small production runs. Constructed from high quality carbon steel with precision machined rack and pinion, giving a constant pressure through the stroke up to 3000lb/ft.

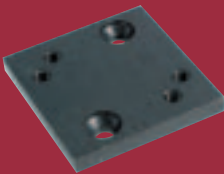
Description	Part No. Selection
3000lb Lever Press	900-0000



**Series: Dieholder**

A range of three dieholders is offered which accommodates the full range of circular and square punches and dies

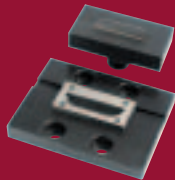
Description	Part No. Selection
3mm to 12mm Diameter	903-0010
12.5mm to 27.5mm Diameter	903-0020
All Rectangular and Square Dies	903-0030



**Series: Tool Rotation Plate**

The plate enables tools to be rotated through 90°. For ease of access to confined corners.

Description	Part No. Selection
Tool Rotation Plate	901-0080

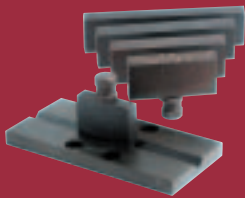


**Series: Louvre Tool**

A louvre forming tool which enables the press to form professional ventilation apertures. The tool produces a louvre 44.4mm x 10mm in width.

Maximum capacity: aluminium up to 2.5mm and sheet steel up to 1.6mm.

Description	Part No. Selection
Louvre Tool	901-0060

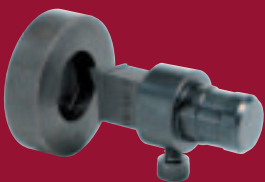


**Series: Standard 'V' Bending Tool**

This tool enables folds to be produced in sheet metal to any angle not less than 90° and is supplied with five blades of 50, 75, 100, 125 and 150mm in length. These blades are not hardened so they can easily be cut to required lengths.

Maximum capacity: aluminium up to 2.5mm and mild steel up to 1.6mm.

Description	Part No. Selection
Standard 'V' Bending Tool	901-0050

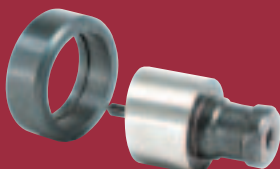


**Series: Rectangular / Square Hole Punch and Die (Case Hardened Steel)**

A range of case hardened steel rectangular and square punches and dies. The punches and dies have been designed to suit standard rocker switches, IEC panel mounting connectors and other standard panel mounting products.

Size (mm)	Part No. Selection	Size (mm)	Part No. Selection
13.7 x 11.1	906-0010	28.4 x 11.4	906-0040
15.9 x 13	906-0020	28.0 x 21.0	906-0050
16.8 x 16.8	906-0080	(radius corners)	
28.2 x 22.5	906-0030	29.4 x 22.0	906-0060

Use Die holder part number 903-0030



**Series: Circular Hole Punch and Die (Tool Steel)**

A range of hardened and tempered tool steel punches and dies manufactured to ensure accurate and clean hole punching in a wide range of materials. Each punch and die has a centre location point for accurate alignment of the workpiece.

Larger punches (12.5 to 27.5mm) have a retractable spring loaded centre pin, which is removable for re-grinding.

Diameter	Part No. Selection	Diameter	Part No. Selection	Diameter	Part No. Selection	Diameter	Part No. Selection
1/8"	913-0010	3.0mm	912-0010	7.0mm	912-0080	14.5mm	914-0030
3/16"	913-0020	3.5mm	912-0020	8.0mm	912-0090	16.5mm	914-0040
1/4"	913-0030	4.0mm	912-0030	9.0mm	912-0100	20.0mm	914-0050
5/16"	913-0040	4.5mm	912-0040	10.0mm	912-0120	22.5mm	914-0050
3/8"	913-0050	5.0mm	912-0050	11.0mm	912-0130	25.0mm	914-0060
7/16"	913-0060	5.5mm	912-0060	12.0mm	914-0010	27.5mm	914-0070
17/64"	913-0070	6.0mm	912-0070	12.5mm	914-0020		

1/8" to 12.0mm use Dieholder part number 903-0010

12.5mm to 27.5mm use Dieholder part number 903-0020



### Series: Raised 'V' Block and Blade Bending Tool

This raised 'V' block enables forms on the workpiece to be produced in close proximity plus allowing close return folds. Supplied with five blades of 50, 75, 100, 125 and 150mm in length.

Maximum capacity: aluminium up to 2.5mm and mild steel up to 1.6mm.

Description	Part No. Selection
Raised 'V' Block and Blade Bending Tool	901-0210

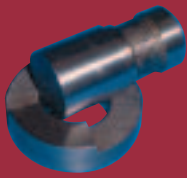


### Series: Corner Notching Tool

This tool enables the press to cut accurate 90° notches up to 53mm per side. A base plate fitted with adjustable stops enables corner notches to be accurately repeated.

Maximum capacity: aluminium up to 2.5mm and mild steel up to 1.6mm.

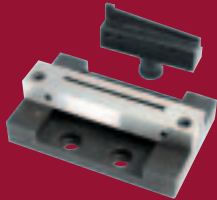
Description	Part No. Selection
Corner Notching Tool	901-0040



### Series: Corner Radiusing Tool

This tool enables quick and accurate radii to be cropped, enabling a radius of 5 or 10mm to be cropped onto the corner of the workpiece.

Description	Part No. Selection
Corner Radiusing Tool	901-1200



### Series: Slot Guillotine

A 3 x 70mm slitting tool which is used for accurately guillotining and slitting products without material distortion. A toe guide is built into the blade enabling a precise continuous cutting action.

Description	Part No. Selection
Slot Guillotine	901-0070



### Series: Side Stop

The side stop enables the press to have a repeatable side reference. This attachment can be fitted to either side of the press, and enables the workpiece to be accurately and repeatedly replaced in a horizontal plane.

Description	Part No. Selection
Side Stop	901-0020



### Series: Stripper

The strippers enable the workpiece to be separated from the punch which in turn allows for continuous punching without re-setting. Each stripper is supplied with fixing hardware.

Description	Part No. Selection
Max. Dia. 16.5mm Aperture Stripper	902-0010
Max. Dia. 31.75mm Aperture Stripper	902-0020
Max. Dia. 22.5mm Aperture Stripper	902-0030
Max. Dia. 39mm Aperture Stripper	902-0040
D Connector 37mm x 13.7mm Aperture Stripper	902-0050
D Connector 67.2mm x 16.5mm Aperture Stripper	902-0060



### Series: Boxed Set of Punches and Dies

Four complete sets of punches and dies housed in a mild steel case with pre-formed internal packaging.

Sets also include die-holders, strippers, hexagon keys, and all fixing hardware.

Description	Size	Part No. Selection
13 punches and dies set	3 to 12mm	907-0010
6 complete sets of punches and dies	1/8" to 7/16"	907-0020
7 complete sets of punches and dies	12.5mm to 27.5mm	907-0030
5 complete sets of punches and dies	1/2" to 1"	907-0040
Boxes with pre-formed Polystyrene – 5 sets		907-0050
Inserts only – 10 sets		907-0060

907-0030 and 907-0040 do not include strippers.





**Series: Back Stop**

The attachment enables the press to have a repeatable depth reference. This back stop can be fitted to either side of the press and has an 'L' shape profile which acts as a work support.

**Description**

Back Stop

**Part Number**

**Selection**  
901-0010



**Series: Centre Point**

This product enables the centre point of the ram to be defined. By placing in either of the Manupress base holes, it offers a point of reference for the side and back stops.

**Description**

Centre Point

**Part Number**

**Selection**  
901-0030



**Series: Shear and Barcrop Attachment**

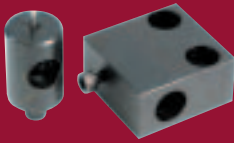
A hand operated cropping and shearing tool which can be attached to the Manupress or independently bench mounted. The lever with its comfortable PVC hand grip gives a substantial shearing action and enables 3mm of aluminium and 1.6mm mild steel to be cut. This tool has the added facility of being able to crop bolts and studding from 3mm to 6mm diameter in brass and mild steel.

**Description**

Shear and  
Barcrop Attachment

**Part Number**

**Selection**  
901-0100



**Series: Circle Cutting Attachment**

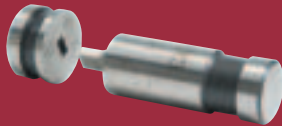
An attachment which enables the shear and crop tool to cut circles in sheets from 70 to 500mm radii.

**Description**

Circle Cutting Attachment

**Part Number**

**Selection**  
901-0090



**Series: Nibbling Tool**

A range of four versatile nibbling tools.

**Description**

Square  
Triangular  
Elliptical  
Rectangular

**Part Number**

**Selection**  
901-0120  
901-0130  
901-0140  
901-0150



**Series: Circle Nibbling Attachment**

A radius nibbling attachment that when used in conjunction with the elliptical shaped nibbling tool, enables large internal circular holes to with a radius in the range of 15 to 170mm.

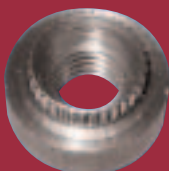
This tool has a variable focal point about which the workpiece can be turned, and can also act as a standard dieholder with a capacity of 3 to 12mm and 1/8 to 7/18" dies.

**Description**

Circle Nibbling  
Attachment

**Part Number**

**Selection**  
901-0110

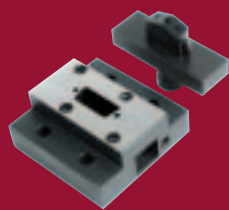


**Series: Insert**

A range of self-clinching inserts are offered separately to enable a wide range of materials and thread sizes to be accommodated.

Thread Size (mm)	Material Thickness (swg)	Part No. Selection	Hole Punch Required	Thread Size (mm)	Material Thickness (swg)	Part No. Selection	Hole Punch Required
2.5	16	981-0070	912-0060	4.0	16	981-0130	913-0040
2.5	18	981-0080		4.0	18	981-0140	
3.0	16	981-0090		5.0	16	981-0150	
3.0	18	981-0100		5.0	18	981-0160	
3.5	16	981-0110	913-0070	6.0	16	981-0170	
3.5	18	981-0120		6.0	18	981-0180	





**Series: 'D' Connector Punch and Die Set**

A range of hardened and tempered tool steel punches and dies that can be used to produce this complex shape with one stroke, punching the two mounting holes and connector hole in the same operation.

This range of punches and dies must be used in conjunction with a suitable stripper.

Part No. Selection	Front Set	Rear Set	Part No. Selection	Front Set	Rear Set
9 Way	908-0010	909-0010	37 Way	908-0040	909-0040
15 Way	908-0020	909-0020	50 Way	908-0050	909-0050
25 Way	908-0030	909-0030			

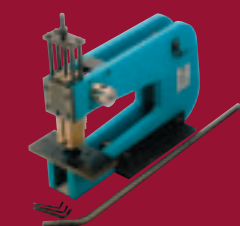


**Series: Din Rail Cutting Tool**

A tool which enables Top Hat Din Rail to be cut, and pierces mounting holes into the DIN Rail. The punches for the mounting hole can be removed if not required.

Description	Part No. Selection
DIN Rail Cutting Tool	901-0220

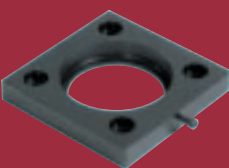
**5000lb RANGE**



**Series: 5000lb Lever Press**

An increased capacity bench mounting press, with the advantage of 5000lb ram pressure and a 308mm throat depth. Increased capacity enables this machine to manipulate larger sizes of sheet. The press has a double, flame-cut steel frame with a precision ground rack and pinion mechanism giving a constant force through the stroke up to 5000lb. The ram can be accurately adjusted to enable the cutting depth of the tool to be controlled, which in turn safeguards against tool and material damage.

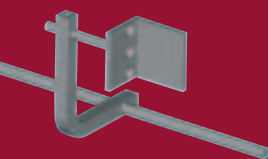
Description	Part No. Selection
5000lb Lever Press	920-0000



**Series: Dieholder**

The dieholder accommodates circular and rectangular dies from 30 to 50mm, and comes complete with die locking screw plus four fixing screws.

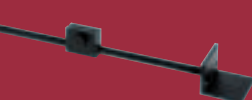
Description	Part No. Selection
Dieholder	923-0010



**Series: Side Stop**

The side stop enables material to be repeatedly and accurately positioned for piercing up to an adjustment of 0 to 350mm horizontally, and 0 to 50mm vertically.

Description	Part No. Selection
Side Stop	921-0010



**Series: Back Stop**

The back stop enables the depth of work to be varied from its maximum throat depth to zero.

Description	Part Number Selection
Back Stop	921-0020



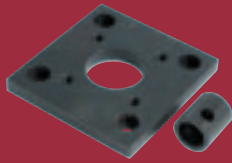
**Series: Punch and Die Circular and Rectangular**

A range of punches and dies dedicated to the 5000lb lever press, manufactured in hardened and tempered tool steel. The punches and dies have a retractable spring-loaded centre pin incorporated into the design enabling accurate hole alignment.

These punches and dies can punch a wide range of materials including 2mm fibreglass, 3.2mm SRBP, 2mm mild steel and 3mm aluminium. The spring loaded centre pin is also removable, enabling punches to be re-ground.

Circular Selection	Part No.	Rectangular Selection	Part No.
30mm Diameter	922-0010	31.4mm x 28.3mm	924-0010
35mm Diameter	922-0020	34.0mm x 27.0mm	924-0020
40mm Diameter	922-0030	34.5mm x 23.5mm	924-0030
50mm Diameter	922-0040		





**Series: Adaptor**

Enabling all tooling on the 3000lb press to be utilised on the larger 5000lb press. Supplied with fixing screws and all necessary adapting hardware.

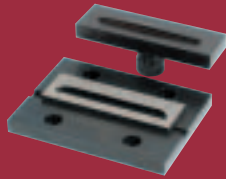
Description	Part No. Selection
Adaptor	921-0070



**Series: Cutting Tool**

This is an ideal product for slitting and guillotining to accurate measurements without material distortion. The tool has a blade cutting length of 133mm and a 3mm width, but also has the facility of a toe guide which enables accurate alignment. This product can cut 2mm fibreglass, 3.2mm SRBP boards and up to 1.6mm mild steel and 2.5mm aluminium.

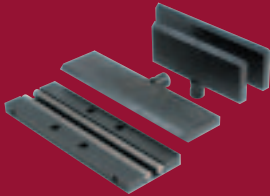
Description	Part No. Selection
Cutting Tool	921-0060



**Series: Louvre Tool**

This is an ideal product for producing ventilation apertures in equipment panels. The louvre has an overall length of 100mm x 10mm in width and can produce louvres in 1.6mm mild steel and 2.5mm aluminium.

Description	Part No. Selection
Louvre Tool	921-0050



**Series: 'V' Bending Tool**

This 'V' bending attachment can produce bends up to 300mm in width and is supplied with three blades of 200, 250 and 300mm lengths. These blades are not hardened so they can be easily cut into specific lengths if required.

Maximum capacity: aluminium up to 2.5mm and mild steel up to 1.6mm.

Description	Part No. Selection
'V' Bending Tool	921-0040



**Series: Corner Notching Tool**

This tool can cut 90° notches up to 150mm per side and is supplied with adjustable stops so that set corners can be made repeatedly, making it ideal for box making.

Maximum capacity: aluminium up to 2.5mm and mild steel up to 1.6mm.

Description	Part No. Selection
Corner Notching Tool	921-0030



**MANUPUNCH HOLE CUTTERS**

A complete, easy-to-use system enabling a wide variety of hole configurations to be punched by hand. The friction-reducing ball races make hole punching effortless. Heat treated steel punches are manufactured to close tolerances in industry standard sizes.

Will punch burr free holes in up to 1.65mm thick mild steel, and up to 2mm aluminium.

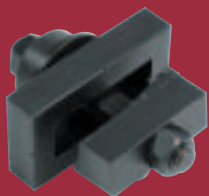
**Series: Hole Cutter - Square**

Hole Size (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection	Hole Size (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection
9.53 x 9.53	10.0	10.0	972-0010	16.8 x 16.8	14.5	10.0	972-0020
12.6 x 12.6	10.0	8.0	972-0050	19.1 x 19.1	14.5	10.0	972-0040
14.1 x 14.1	10.0	8.0	972-0030	32.5 x 32.5	16.5	12.0	972-0070
15.1 x 15.1	10.0	8.0	972-0060	45.0 x 45.0	25.0	16.0	972-0080

**Series: Hole Cutter - Round**

Hole Size (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection	Hole Size (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection
12.5	10.0	8.0	970-0010	50.0	20.0	16.0	970-0130
14.5	10.0	8.0	970-0020	60.0	20.0	16.0	970-0140
16.5	10.0	8.0	970-0030	70.0	20.0	16.0	970-0150
18.0	12.0	10.0	970-0040	75.0	20.0	16.0	970-0160
20.0	12.0	10.0	970-0050	76.2	20.0	16.0	970-0170
22.5	12.0	10.0	970-0060	3/4"	12.0	10.0	971-0010
25.0	12.0	10.0	970-0070	7/8"	12.0	10.0	971-0020
27.5	12.0	10.0	970-0080	1"	12.0	10.0	971-0030
30.0	12.0	10.0	970-0090	1 1/4"	12.0	10.0	971-0040
32.0	14.5	12.0	970-0180	1 1/2"	14.5	12.0	971-0050
35.0	14.5	12.0	970-0100	1 3/4"	20.0	16.0	971-0060
40.0	14.5	12.0	970-0110	3"	20.0	16.0	971-0070
45.0	20.0	16.0	970-0120				





**Series: Hole Cutter - Rectangular**

Width (mm)	Length (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection	Width (mm)	Length (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection
11.0	30.0	10.0	8.0	MR11x30	27.2	12.2	10.0	8.0	973-0130
13.7	11.1	10.0	8.0	973-0010	28.2	22.5	14.5	10.0	973-0140
15.8	9.45	8.0	5/16"	973-0020	28.4	11.4	10.0	8.0	973-0150
15.9	13.0	10.0	8.0	973-0030	29.0	71.0	14.5	10.0	MR29x71
16.1	11.6	10.0	8.0	973-0040	29.4	22.0	14.5	10.0	973-0160
19.3	13.1	10.0	8.0	973-0050	34.5	23.5	16.5	12.0	973-0170
22.0	19.6	14.5	10.0	973-0070	34.5	24.5	16.5	12.0	970-0180
22.0	30.0	14.5	10.0	MR22x30	36.9	21.1	16.5	12.0	973-0200
22.0	45.0	14.5	10.0	MR22x45	37.0	21.9	16.5	12.0	973-0210
24.1	16.1	14.5	10.0	973-0080	45.0	92.0	24.5	20.0	MR45x92
25.8	21.6	14.5	10.0	973-0090	53.6	19.5	16.5	12.0	973-0220
26.3	25.4	14.5	10.0	973-0100	55.0	44.0	25.0	16.0	973-0230
26.9	16.8	14.5	10.0	973-0110	61.0	29.0	25.0	16.0	973-0240
27.2	22.1	14.5	10.0	973-0120					



**Series: Hole Cutter - Rectangular with Radius Corners**

Width (mm)	Length (mm)	Radius (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection
28.0	21.0	3.5	14.5	10.0	974-0010
28.3	23.3	1.0	14.5	10.0	974-0020
30.2	22.7	5.5	14.5	10.0	974-0030
31.4	28.3	3.0	16.5	12.0	974-0040
34.0	27.0	7.0	16.5	12.0	974-0050
33.0	29.0	4.0	16.5	12.0	974-0060



**Series: Hole Cutter - 'D' Connector**

Includes drilling jig for mounting holes

No. of Ways	Width (mm)	Length (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection	No. of Ways	Width (mm)	Length (mm)	Drill Size (mm)	Bolt Size (mm)	Part No. Selection
Front Mounting						Rear Mounting					
9	21.3	12.9	8	5/16"	975-0010	9	19.8	11.3	8	5/16"	976-0010
15	29.6	12.9	8	5/16"	975-0020	15	28.2	11.3	8	5/16"	976-0020
25	43.4	12.9	8	5/16"	975-0030	25	41.9	11.3	8	5/16"	976-0030
37	59.8	12.9	8	5/16"	975-0040	37	58.4	11.3	8	5/16"	976-0040
50	57.4	15.7	8	5/16"	975-0050	50	55.7	13.9	8	5/16"	976-0050



**Series: Ball Bearing Spares**

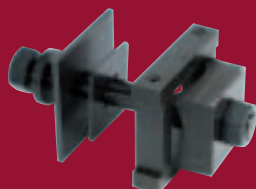
Description	Part No. Selection	Description	Part No. Selection
8mm	977-0010	12mm	977-0030
10mm	977-0020	16mm	977-0040

**Series: Hydraulic Power Pack**

The cutting principle is essentially the same as the hole cutters, but this power pack, complete with pump, cylinder and 1.8 metres of high pressure hose, exerts a force capable of cutting larger holes in thicker materials.

Maximum capacity: aluminium and similar materials up to 4.0mm and mild steel up to 3.0mm.

Description	Part No. Selection
Hydraulic Power Pack	940-0000
Spare Adaptor Set	940-0001



**Series: Hole Cutter for Hydraulic Power Pack**

Size (mm)	Round	Part No. Selection	Size (mm)	Round	Part No. Selection
20.0 Diameter		942-0010	116.0 Diameter		942-0080
22.5 Diameter		942-0020	3" Diameter		942-0090
25.0 Diameter		942-0030		Square	
27.5 Diameter		942-0040	45 x 45		943-0010
30.0 Diameter		942-0050	68 x 68		943-0020
35.0 Diameter		942-0060	92 x 92		943-0030

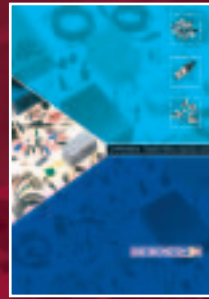




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