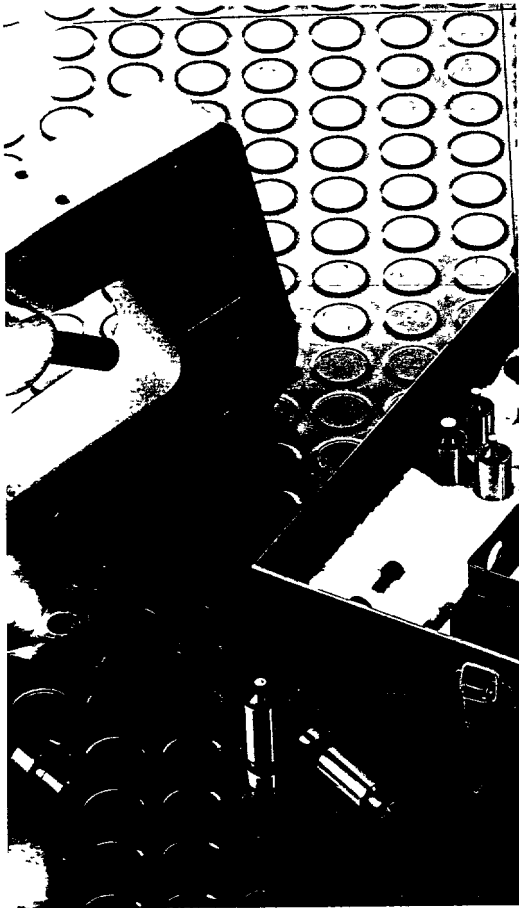
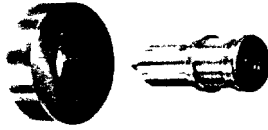


149-377



## 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	Order Code
1/8"	913-0010
3/16"	913-0020
1/4"	913-0030
5/16"	913-0040
3/8"	913-0050
7/16"	913-0060
17/64"	913-0070
3.0mm	912-0010
3.5mm	912-0020
4.0mm	912-0030
4.5mm	912-0040
5.0mm	912-0050
5.5mm	912-0060
6.0mm	912-0070
7.0mm	912-0080
8.0mm	912-0090
9.0mm	912-0100
10.0mm	912-0120
11.0mm	912-0130
12.0mm	912-0140
12.5mm	914-0010
14.5mm	914-0020
16.5mm	914-0030
20.0mm	914-0040
22.5mm	914-0050
25.0mm	914-0060
27.5mm	914-0070

## Stripper

Six sizes of stripper are available to suit all sizes of Manupress tooling.

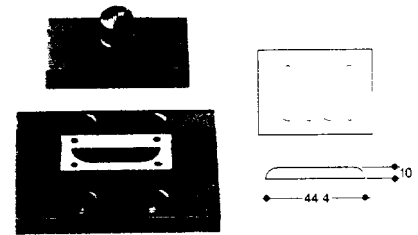


The strippers enable the workpiece to be separated from the punch which in turn allows for continuous punching without re-setting. Each stripper is supplied with fixing hardware.

Type	Order Code
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
67.2mm x 16.5mm Aperture Stripper	902-0060

## Louvre Tool

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



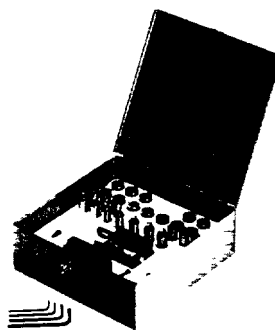
Maximum capacity aluminium up to 2.5mm and sheet steel up to 1.6mm.

Type	Order Code
Louvre Tool	901-0060

Diameter	Order Code
1/2"	905-0010
5/8"	905-0020
3/4"	905-0030
7/8"	905-0040
1"	905-0050
12.5mm	904-0010
14.5mm	904-0020
16.5mm	904-0030
20.0mm	904-0040
22.5mm	904-0050
25.0mm	904-0060
27.5mm	904-0070

## 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.

Type	Diameter	Order Code
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	12.5 to 27.5mm	907-0030*
5 Complete Sets of Punches and Dies	1/2" to 1"	907-0040*
Boxes with Preformed Polystyrene	5 sets	907-0050
Inserts only	10 sets	907-0060

\* 907-0030 and 907-0040 do not include strippers

## 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.

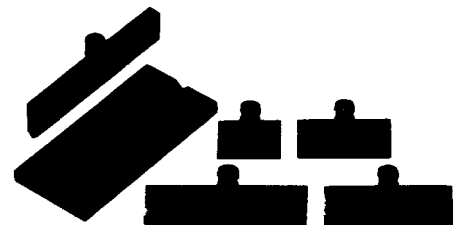


The punches and dies incorporate the same design as our case hardened circular range. Thereby the range can be utilised without the necessity of a stripper.

Size (mm)	Order Code
13.7 x 11.1	906-0010
15.9 x 13	906-0020
16.8 x 16.8	906-0080
28.2 x 22.5	906-0030
28.4 x 11.4	906-0040
28.0 x 21.0 (radius corners)	906-0050
29.4 x 22.0	906-0060

## 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 50mm, 75mm, 100mm, 125mm and 150mm in length. These blades are not hardened, so they can easily be cut to required lengths.



Box sizes that can be made using the 'V' bending tool and lever press cover the range: length 20mm, width 20mm, depth 10mm to length 155mm, width 155mm, depth 130mm. Maximum bending capacity is: aluminium 2.5mm and mild steel 1.6mm.

Type	Order Code
Standard 'V' Bending Tool	901-0050