

STUDWELDING

- fast to last

For optimum welding results Studfast CD Studwelding equipment, chucks and accessories should be used. For a demonstration of our portable British built studwelders or details of our bench mounted production systems contact our sales office.

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CD WELD STUDS



Technical Data

The size of the pip on the end of a CD weld stud is critical to ensure optimum welds. For consistent pips the studs are cold forged & a flange is produced. This flange can be trimmed or removed at extra cost but by retaining it the larger welding area gives stronger welds.

DIN specification 32501 guides the manufacture of the following stock weld studs:

Ø Range	Type	Material	Part	Dated
M3 to M6	Threaded	MS,SS,AA*	1	July 1991
3 to 6mm	Unthreaded	MS	2	July 1991
5 & 6mm	Tapped	MS,SS	5	Aug 1986

MS = Mild Steel SS = Stainless Steel AA = Aluminium Alloy

All studs conforming to these DIN specifications are suitable for standard automatic stud feeding because these mechanisms rely upon defined flange dimensions held within a tight tolerance band.

Threads are rolled to a 6g medium class fit to BS3643 part 2 ISO Metric Screw Threads.

Stock studs conform to the following material specifications:

Mild Steel	BS3111 1979 type 0 DIN ISO898 pt 1 ST 37-3
Stainless Steel	304Cu to BS3111 1979 Type 2
Aluminium Alloy	AlMg3 to BS1476
Brass	70/30 Lead free to BS2873 BS2874

Brass Studs are not usually stocked but can be manufactured to order.

All studs are supplied self finish except Mild Steel which are copper coated to extend shelf life.

For positioning CD studs the pips can be located in constant depth shallow indents. An automatic "centre-pop" or punch press may be used to form these indentations but a manual centre punch must not be used. Ideally templates made from sheet metal or Tufnol should be used & advice on the construction of these jigs is available on request.

Studfast data sheets detailing strengths & weldability of different materials are available on request.

*except M3 AA

Dimensional Data (stock studs only)

Metric threaded, Tapped & Unthreaded

D	M2.5	M3 & 3mm	M4 & 4mm	M5 & 5mm	M6 & 6mm	7.1mm	M8	M10
FD	3.6	4.5	5.5	6.5	7.5	8.5	9.5-10.4	10.5

Flange thickness (FT) can vary from 0.5mm to 1.5mm depending upon stud diameter (D).

① The creation of a 32501 DIN standard for M8 & M10 could change these dimensions. For M8 AA FD is 9mm. For M10 SS FD is 11.5 to 12.3mm

② For M5 tapped studs the outside diameter will change from 7.1 to 8mm & FD will increase to 9mm.

③ FD for 5mm SS Unthreaded is 6.5 to 8mm. FD for 6mm SS Unthreaded is 7.5mm to 9mm.

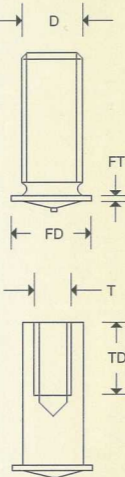
④ FD for M3 AA is 5.15mm.

A general tolerance of +/- 0.2mm applies unless otherwise stated.

Tapping Sizes

D	5mm	6mm	7.1mm
T	M3	M4	M5
TD	5	6	7.5

All dimensions shown are in millimetres



Capacitor Discharge "CD" Weld Studs

A symbol in the table indicates a stock item, the colour denotes the material as follows -

▲ = Mild Steel ▲ = Stainless Steel ▲ = Aluminium Alloy

Metric Threaded

Law	Ø	M2.5 x 0.45	M3 x 0.5	M4 x 0.7	M5 x 0.8	M6 x 1.0	M8 x 1.25	M10 x 1.5
6			▲	▲	▲	▲	▲	▲
8	▲		▲	▲	▲	▲	▲	▲
10	▲		▲	▲	▲	▲	▲	▲
12	▲		▲	▲	▲	▲	▲	▲
15	▲						▲	▲
16			▲	▲	▲	▲	▲	▲
20	▲		▲	▲	▲	▲	▲	▲
25	▲		▲	▲	▲	▲	▲	▲
30			▲	▲	▲	▲	▲	▲
35				▲	▲	▲	▲	▲
40					▲	▲	▲	▲
50						▲	▲	▲

Law = Length After Weld

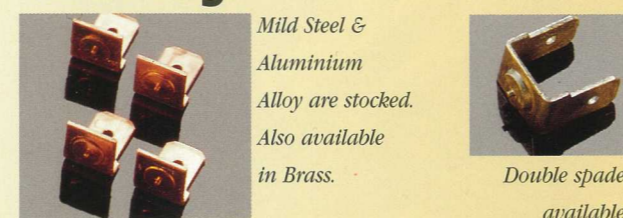
Internally Threaded Bosses (tapped pads)

Law	Ø	5mm tap M3	6mm tap M4	7.1mm tap M5
8		▲	▲	
10		▲	▲	▲
12		▲	▲	▲
16		▲	▲	▲
20		▲	▲	▲
25		▲		▲
30		▲	▲	▲

Unthreaded (plain pins)

Law	Ø	3mm	4mm	5mm	6mm
8		▲		▲	▲
10		▲	▲	▲	▲
12		▲	▲	▲	▲
16		▲	▲	▲	▲
20		▲	▲	▲	▲
25		▲	▲	▲	▲
30		▲	▲	▲	▲

Earth Tags



Mild Steel & Aluminium Alloy are stocked. Also available in Brass.

Double spade available

Dimensions: (single spade)
Width = 6.3mm Height = 11.3mm Base = 8 x 9.3mm

Projection Weld Bolts

L	Ø	M5	M6	M8
10			▲	
12		▲		
16		▲		▲
20		▲		▲
25		▲	▲	▲
30		▲	▲	▲

L = Length excluding flange

To Rover Engineering standard 06.02.105 Issue 2 April 1990

PRICE BREAKS OCCUR AT THE FOLLOWING ORDER QUANTITIES (stock threaded studs only)

	100	250	500	1000	2000	5000	10000	25000	50000
▲		▲	▲	▲	▲	▲	▲	▲	▲
▲		▲	▲	▲	▲	▲	▲	▲	▲
▲		▲	▲	▲	▲	▲	▲	▲	▲

USEFUL NOTES

Sales Contact:	
Technical Contact:	
Progress Contact:	
Tel: 01604 790901	Tel: 01604 790901

Some Specials: Made to Order

Insulation Pins (3mm Ø) CD Nails



Turned CD Boss

Fir Tree Pip & No Pip



Large Flanged

Flanged Shoulder

Cross Drilled



Flangeless Shoulder

Collar

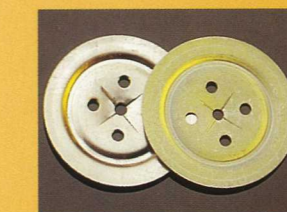


Bracket

Specify your own design



Speed Fix Washers



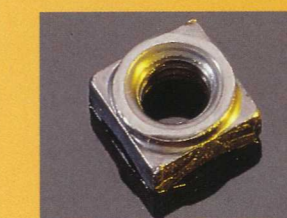
Material zintec.

With a 38mm outside diameter these are stocked to suit 3mm pins.



Plastic Coated

Square Weld Nuts



To DIN 928

M5	M6	M8
▲	▲	▲

Conditions of Sale: Our standard terms and conditions of sale apply to all transactions. Copies of these conditions are available upon request.
Minimum Order Charge: £20.00 plus carriage and VAT at the current rate.
Carriage: All prices quoted are ex works, carriage will be charged extra.
Certificates of Conformity: are available for all goods, these are chargeable and if required must be requested at time of order.