

# Magnetic Welding Aids

For fast and accurate welding, fabrication and assembly



# Eclipse Magnetics

Over 100 Years of Manufacturing Excellence



Serving some of the leading names in industrial distribution

- CPC
- RS Components
- Cromwell
- Brammer
- Hoffmann
- MSC
- Monks and Crane
- Buck and Hickman
- THS
- Troy

## Adding Value to Your Portfolio

With over 100 years' experience in the design and manufacture of high performance magnetics, we supply critical components to some of the leading names in the most demanding industries. From large automation and security projects to routine workshop applications, the end user can rest assured that Eclipse is definitely a brand to trust for quality and service.

In addition, distributors or stockists can enjoy the benefits of a prestigious range which adds financial and brand value to your portfolio.

## Designing Excellence

We have a track record of producing high quality products backed by a commitment to total customer service. All manufacturing is carried out under an ISO9001 certified quality management system and we are accredited to ISO14001 environmental standards.

# The fast, safe, efficient way to hold steel workpieces



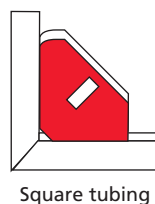
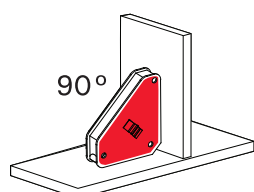
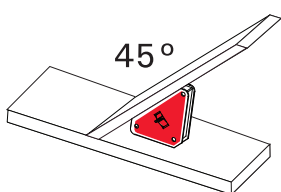
We have utilised our expertise in magnetics to re-engineer traditional methods of clamping during welding, assembly or repair. We now offer a range of options to suit different angles, workpiece size or configuration.

Applying magnetics to welding aid design improves efficiency, productivity and ultimately profitability, delivering key benefits:-

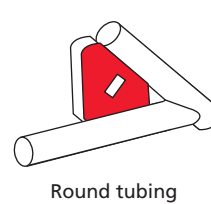
- **Speed & Simplicity** – easy, fast set-up , no manual clamping or mounting holes. Switchable style ensures easy precise adjustment
- **Safe** – high strength magnets ensure secure clamping
- **Versatile** – some models suitable for different angles and material configuration
- **Access** – minimal surface contact ensure maximum access to the workpiece
- **Durability** – permanent magnets require no maintenance, simple wipe down cleaning



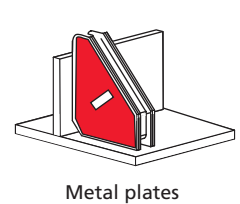
## Typical use



Square tubing



Round tubing



Metal plates

# Switchable Magnetic Welding Aids

**NEW**  
for 2019

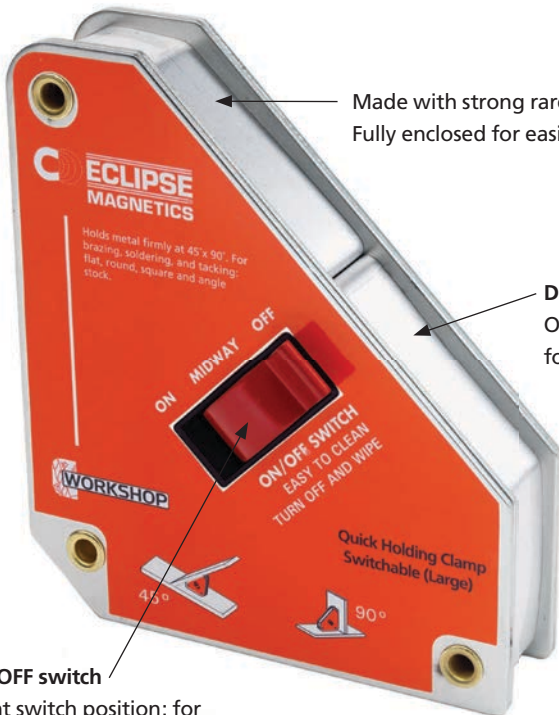
## Quick Holding Clamp Switchable

- Features ON/OFF switches
- The fast & easy way to hold metal workpieces at 45°, 90°
- Turn the magnet OFF or at the **midpoint** position when setting up, turn ON when you're ready to work
- **Fast and safe set-up!**
- Ideal for round and square tubing, angle, and flat stock
- Simple wipe clean design



Product Number	Angles	Dimensions mm	Weight kg	Pull Force* kg
QHCSS	45°, 90°	111 x 95 x 29	0.7	40
QHCSL	45°, 90°	152 x 130 x 35	1.4	75

\* Magnetic force is based on the longest side of magnet with 10mm thick steel.



Made with strong rare earth magnets. Fully enclosed for easier cleaning.

**DOUBLE Plate**  
Optimize magnetic force (-HD models)

The ON/OFF switch  
Mid point switch position: for alignment / easy part placement.



**NOTE:** Must be used for tack welding only and removed before completing weld. Avoid prolonged exposure of magnetic products to heat sources of 356°F / 180°

For professional jobs that demand strong hold down forces.  
Holds flat and round metal work pieces.



## 90° Fixed Welding Clamps Switchable

- Convenience of ON/OFF switches
- Two ON/OFF switches for independent operation
- **Easy and safe set-up!**
- Machined flat and V-surfaces are ideal for round and square tubing, angle, and flat stock
- Heavy duty construction



Product Number	Angles	Dimensions mm	Weight kg	Pull Force* kg
FWCSS	90°	152 x 152 x 38	1.2	55
FWCSL	90°	197 x 197 x 48	2.7	120

\*Magnetic force is based on 10mm thick steel.

## Inside and Outside Welding Clamps

- Hold and position sheet metal, round pipes, square, angled or flat stock
- The Inside and Outside Welding Clamps are constructed from two independent rectangular magnets for consistent, undiminished magnetic force when both sides are attached to workpieces
- Use mounting holes to link two magnets together for use as fixturing elements
- Use hex hole on magnet for breakaway leverage



Product Number	Angles	Height mm	Width mm	Thickness mm	Weight kg	Pull Force kg
IOWCC*	30°, 60°, 90°	75.5	52	14	0.13	9
IOWCC	30°, 60°, 90°	125	85	18	0.415	15
IOWCL	30°, 60°, 90°	165	110	20	0.8	18

\* Pack includes 2 clamps

**NOTE:** Must be used for tack welding only and removed before completing weld. Avoid prolonged exposure of magnetic products to heat sources of 356°F / 180°

# Magnetic Welding Aids



In addition to our featured products. We offer a range of other welding aids for various applications.

## Variable Welding Clamp

- Fast accurate holding of ferrous sheets and tubes for welding and assembly work
- Variable from 25° to 280°



Product Number	Angles	Length mm	Height mm	Width mm	Weight kg	Pull Force kg
E952	25°-280°	195	200	11	0.49	20

## Heavy Duty Variable Welding Clamp

- Clamps components during welding, fabrication and assembly
- Powerful 40kg clamping force, enables larger components to be clamped with ease



Product Number	Angles	Length mm	Height mm	Width mm	Weight kg	Pull Force kg
E974	45°-90°	140	140	35	1.40	40

## 90° Fixed Welding Clamps

- Two magnetic faces in a rigid 90° angle for jiggling on sheets, pipes and tubes
- A fast and cost effective means of clamping components rigid at 90° angles during fabrication, assembly and weld preparation applications



Product Number	Angles	Length mm	Height mm	Width mm	Weight kg	Pull Force kg
E971	90°	140	140	35	1.40	40
E972	90°	225	225	22	2.20	75
E973	90°	300	300	35	4.70	200

## Heavy Duty Welding Clamps

- Holds workpieces at an exact 45° or 90° angle to each other
- 10kg and 15kg of magnetic pull make these ideal for a range of workshop welding and applications



Product Number	Angles	Depth mm	Height mm	Width mm	Weight kg	Pull Force kg
E954	45°, 90°	14	82	120	0.3	10
E955	45°, 90°	18	102	160	0.7	15

## Quick Holding Clamps

- Fast and accurate holding of ferrous metals at different fixed angles
- Also suitable for retrieval applications



Product Number	Angles	Length mm	Height mm	Width mm	Weight kg	Pull Force kg
E951	30°, 45°, 60°, 75°, 90°	100.5	65.5	12	0.3	10
E953	30°, 45°, 60°, 75°, 90°	100.5	65.5	20	0.4	15

## Mitre Clamps

- Effective and inexpensive method of clamping flat (923) or round (924) ferrous components



Product Number	Angles	Length Base Face mm	Length Top Face mm	Height mm	Width mm	Weight kg	Pull Force kg
923	45°, 90°	156	66	45	43	1.36	100
924	45°, 90°	184	94	45	43	1.64	68



## Positioners

- 2 magnetic blocks connected by 2 non magnetic steel straps
- The blocks contain ferrite magnetic material
- Magnetic on 2 faces
- ON / OFF switch coated at each end



Product Number	Length mm	Height mm	Width mm	Weight kg	Pull On Flat Face kg	Pull On V Face kg
922	206	63.5	76	3.17	80	80
922SU	63.5	63.5	51	1.48	80	80

## Adjustable Links

- Ferrite magnetic material
- Clamp components at any angle for welding and assembly applications



Product Number	Length mm	Height mm	Width mm	Weight kg	Pull Force kg
920SU (Single)	60	25	29	0.35	12
920 (Pair)	127	25	51	0.70	12

## Adjustable Clamping Links

- Alnico magnetic material
- Clamp components at any angle for welding and assembly applications



Product Number	Length mm	Height mm	Width mm	Weight kg	Pull Force kg
920SUOT (Original Single)	60	25	25	0.32	12
920OTPR (Original Pair)	127	25	48	0.70	12

## Earth Welding Clamp

- Quick and easy earthing for most steel welding operations
- Provides earthing / ground on large welding operations where croc-clip or G-Clamps cannot be easily used



Product Number	Width mm	Height mm	Length mm	Weight kg	Pull Force kg	Maximum Current amps
E946	90	64	193	1.6	25	800

## Holdfasts

- Supplied with screw release handle
- Can be built into workholding, handling and assembly fixtures to provide a high clamping force and positive grip



Product Number	Diameter mm	Height mm	Fixing Holes PCD mm	Holes mm	Weight kg	Pull Force kg
E939	44.5	44.5	31.75	2 x M8	0.6	20
E940	54.0	49.2	38.1	2 x M8	1.0	40
E941	70.0	64.5	50.8	2 x M8	2.0	88
E942	101.6	74.6	69.0	3 n/a	4.7	183

## Weld Holder

- Provides the welder with a powerful, rigid support on flat and round components at various angles during welding preparation applications



Product Number	Length mm	Height mm	Width mm	Weight kg	Pull Force kg
E925	108	140	108	5.67	100



## Eclipse Magnetics Worldwide

### Europe

Atlas Way  
Sheffield  
S4 7QQ  
England

**T** +44 (0)114 225 0600  
**F** +44 (0)114 225 0610  
sales@eclipsemagnetics.com

### Americas

442 Millen Road, Unit 9,  
Stoney Creek  
Ontario, L8E 6H2,  
Canada

**T** +1 905-664-5585  
**F** +1 905-664-7090  
sales@eclipsemagnetics.com

### China

No. 168 Chengjian Road  
Minhang District  
Shanghai  
PR China

**T** +86 21 6434 8600 \*150  
**F** +86 21 6434 6488  
szhou@eclipsemagnetics.com

### Australia

PO BOX 4400  
Dandenong South  
Victoria 3175  
Australia

**T** +613 8792-9999  
**F** +613 8792-9900  
sales@spear-and-jackson.com.au

Representative:

[www.eclipsemagnetics.com](http://www.eclipsemagnetics.com)

### Eclipse Magnetics Ltd

Atlas Way, Atlas North, Sheffield, S4 7QQ, England.

**T** +44 (0)114 225 0600 **F** +44 (0)114 225 0610 **Q** [www.eclipsemagnetics.com](http://www.eclipsemagnetics.com) **E** [info@eclipsemagnetics.com](mailto:info@eclipsemagnetics.com)

While every effort has been made to ensure the accuracy of the information within this publication, please note that specifications may change without notice.