



The Elotop Series

KOCO Stud Welding equipment is designed for rough wear on building sites and continuous operation.

Top performance is ensured with all KOCO stud welding machines. The microprocessor controls, current regulation and high performance ensure precise repeatability and optimum welding results, even under a great variety of conditions. The intelligent self-diagnosis system increases productivity through minimising machine downtime.

Advantages of our machines

The Elotop Series

- Robust all duty stud welding equipment
- For stud diameter from 3 to 25mm
- Maximum current from 450 to 3500 Amps
- Easy handling for operator and service
- Optimally for using on construction site and shop fabrication
- Steel housing, power-coated

The Inverter Series

- Lightweight
- Welded stud range 3-16mm
- Integrated process control
- Suitable for all stud welding processes
- Memory connection with USB





The Elotop Series

HBS Complete and innovative product line has evolved from meeting individual market needs and requirements. The HBS CDi series with CDI 1502, 2302 and 3102 is an efficient trio thanks to the innovative inverter-capacitor charging technology, which not only enables maximum welding rates and maximum efficiency, but also ensures minimum power consumption with minimum weight.

With numerous quality and safety factors as well as a robust and functional industrial design these HBS welders are superior for all applications in stud welding.

Features include

- Efficient invert-capacity charging technology
- Enormous time and energy savings (30% less energy)
- Highest cycle sequence of its class (up to 40 studs / minute)
- 20% energy reserve due to 22V charging voltage
- Simple operation and minimal weight
- Extreme long life due to robust and functional industrial design
- Shock-proof capacitor battery
- Cooling channel – protects the electronic components from getting soiled

CDI 2302

Capacitor discharge (CD)



Mild steel Stainless steel

Brass Aluminium

M3 to M8 (M10) - #4 to 5/16" (7/16")

CDI 3102

Capacitor discharge (CD)



Mild steel Stainless steel

Brass Aluminium

M3 to M10 - #4 to 7/16"

CDI 1502

Capacitor discharge (CD)

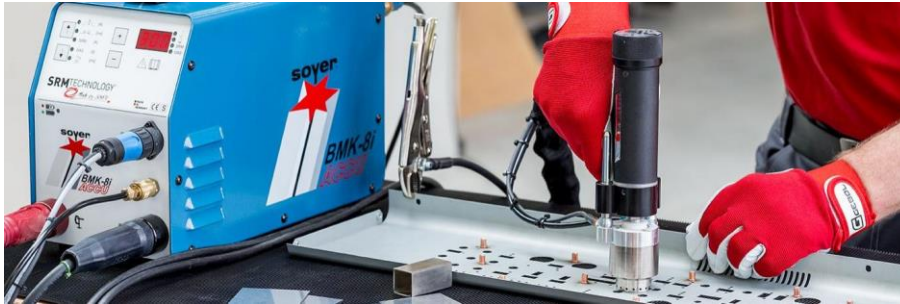


Mild steel Stainless steel

Brass Aluminium

M3 to M8 - #4 to 5/16"





Soyer SRM Stud Welding

The patented SRM stud welding process (patent no.: 10 2004 051 389), in conjunction with the innovative HZ-1 universal weld stud featuring a plane end face and centering tip (patent no.: 10 2006 016 553) enables welds at a sheet thickness to stud diameter ratio of 1:10 instead of 1:4 as previously. In this process, the use of ceramic rings is no longer needed.

The numerous advantages delivered by the SRM procedure open up whole new possibilities for application especially in automated stud welding plants and large-scale component production.

Features include

- No special, pre-treated welding studs with conical tips, reduced shafts or loaded with an aluminium flux ball
- No ceramic rings as welding aids, hence no ceramic ring waste & disposal
- No disturbing flange, weld bead or weld spatters
- Stud thread can be used right up to the base material
- Full-surface welding without diameter reduction or notching
- Centring tip for precise stud positioning
- Sheet thickness to stud diameter ratio of 1 to 10 (previously only 1 to 4)
- No arc blow effect and applicable even with only one ground terminal



Shear Connectors



Headed Shear Connectors are used as an essential component in composite beam design and construction.



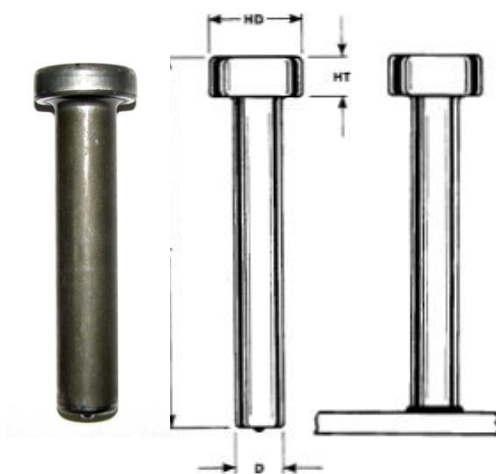
Common applications:

- Multi story car parks
- High rise buildings
- Bridge construction
- Composite beams
- Anchor plates

Shank Diameter (d)	Length (L) tolerance	Head Diameter tolerance	Minimum head height HT
19.0 +0.00 -0.38	±1.6	31.7 ± 0.4	9.5
22.2 +0.00 -0.38	±1.6	34.9 ± 0.4	9.5

Material	Mechanical Properties	
LOW CARBON STEEL AS1445 S1010 to S1020 Or K1010 to K1020	Tensile Yield Elongation Reduction of area	410MPa (min) 345MPa (min) 12% 50% (min)

Shear Connectors		
Size	Part Number	Pack Size
13 X 50	ESC11-13-050	250
13 X 75	ESC11-13-075	150
13 X 100	ESC11-13-100	125
16 X 75	ESC11-16-075	125
16 X 100	ESC11-16-100	100
16 X 150	ESC11-16-150	75
19 X 75	ESC11-19-075	100
19 X 95	ESC11-19-095	75
19 X 100	ESC11-19-100	75
19 X 105	ESC11-19-105	75
19 X 115	ESC11-19-115	60
19 X 120	ESC11-19-120	60
19 X 127	ESC11-19-127	60
19 X 150	ESC11-19-150	50
19 X 178	ESC11-19-178	45
19 X 198	ESC11-19-198	40
22 X 100	ESC11-22-100	50
22 X 125	ESC11-22-125	50
22 X 150	ESC11-22-150	40
22 X 178	ESC11-22-178	40
22 X 198	ESC11-22-198	35



FERRULE



Note Ferrules are a component part of studs and not sold separately

