

# ISO

**Fastening systems  
for insulation**

# HVAC

## Fasteners for heating, ventilation and air-conditioning

If you want to fasten insulation mats in a fast and cost efficient way, you should use ISO-PLUS cupped head pins.

With this procedure, you fasten the insulation mat to the base material in one process step. This perfect fastening procedure replaces the very complicated traditional procedure: weld on a pin, push the mat over the pin, put on the clip and then cut the projecting tip or bend it.

It's so easy! Push the cupped head pin onto the chuck of the welding gun and push it through the mat – weld within 3 milliseconds! Done.



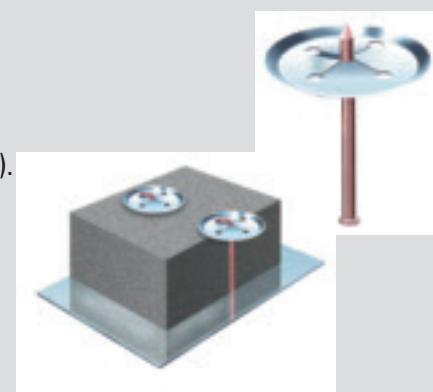
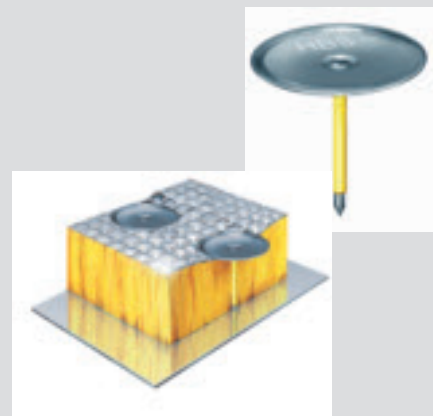
	CD 1501
<b>Welding range</b>	CH pins dia. 2 and 2.7 mm, Insulation pins dia. 2 and 3 mm (studs with standard gun M3 to M8)
<b>Welding rate</b>	CH pins up to 20 pieces/min.
<b>Primary power</b>	230/115 V. 50/60 Hz, 10 AT
<b>Weight</b>	17 kg

More information: [www.hbs-info.com](http://www.hbs-info.com)

## Power Units and Welding Guns

Especially suitable for insulation mats with and without aluminum cover.

- **CD 1501:** Compact, robust unit with metal casing for rugged operating conditions. Infinitely adjustable power setting (charge reversal via set-point switch)
- **CI 03:** For welding cupped head pins (Ø 2 and 2.7 mm, length 9.5 to 152,4 mm).
- **C 08:** For welding insulation pins with flange and ignition tip (Ø 2 and 3 mm, length 20 to 300 mm).





## HVAC – advantages

- Suitable for thin sheets of 0.5 mm and above
- Low heat input using pins of 2 mm diameter only
- No damage to the backside of thin and galvanized sheets when keeping the predefined welding parameters; especially with cupped head pins of 2 mm dia (zinc-corrosion protection is retained on back side)
- Suitable for insulation mats with and without aluminum foil
- Easiest operation
- Welding in 3 milliseconds

### ISO-PLUS cupped head pins

With or without shaft insulation. Insulation mats with aluminum foil require special cupped head pins with insulation (1). The shaft insulation and the down-holder (2) avoid a short-circuit with the aluminum foil during welding. Also Conlit fire-insulation mats can be fastened with cupped head pins.

### ISO-Pin with Clip

Insulation pins with clips are preferably used with pre-assemblies, e.g. fire-protection mats or mats with wire meshing.



# FRI

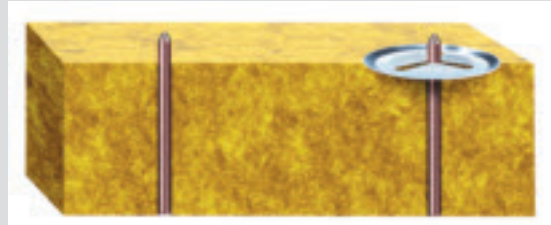
## Fire-Resistant Insulation

HBS in use! For example: Thermal power stations with incineration plants, industrial furnaces, chemical and petrochemical industries.

Optimum fastening of fire-resistant insulation with special pins and clips. For outstanding protection of steel structures against high temperature (up to 1250°C) and corrosion.



HBS supplies suitable pins and clips



## FRI – advantages:

- Applicable mobile and stationary
- 230 V main connection or 400 V 3-phase current connection
- Fast and cost efficient
- Optimum result even with difficult surface
- Welding in milliseconds

	SC 2401	ARC 500	IT 1002
<b>Welding range</b>	ARC-insulation pins dia. 3 to 5 mm	ARC-insulation pins dia. 3 to 6 mm (studs with standard gun dia. 2 to 8 mm)	ARC-insulation pins. – fiberfix pins, ARC Y-Refractory anchors, ARC Rectangular two tine refractory anchors, dia. 2 to 14 mm
<b>Welding rate</b>	dia. 4 = 12 pieces/min; dia. 5 = 8 pieces/min		M12 = 25 studs/min
<b>Primary power</b>	230/115 V, 50/60 Hz, 10/16 AT	400 V, 3 phases, 32 A, 50/60 Hz, 35 AT	400 V, 3 phases, 32 A, 50/60 Hz, 35 AT
<b>Weight</b>	28 kg	31 kg	29 kg

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## Power Units and Welding Guns

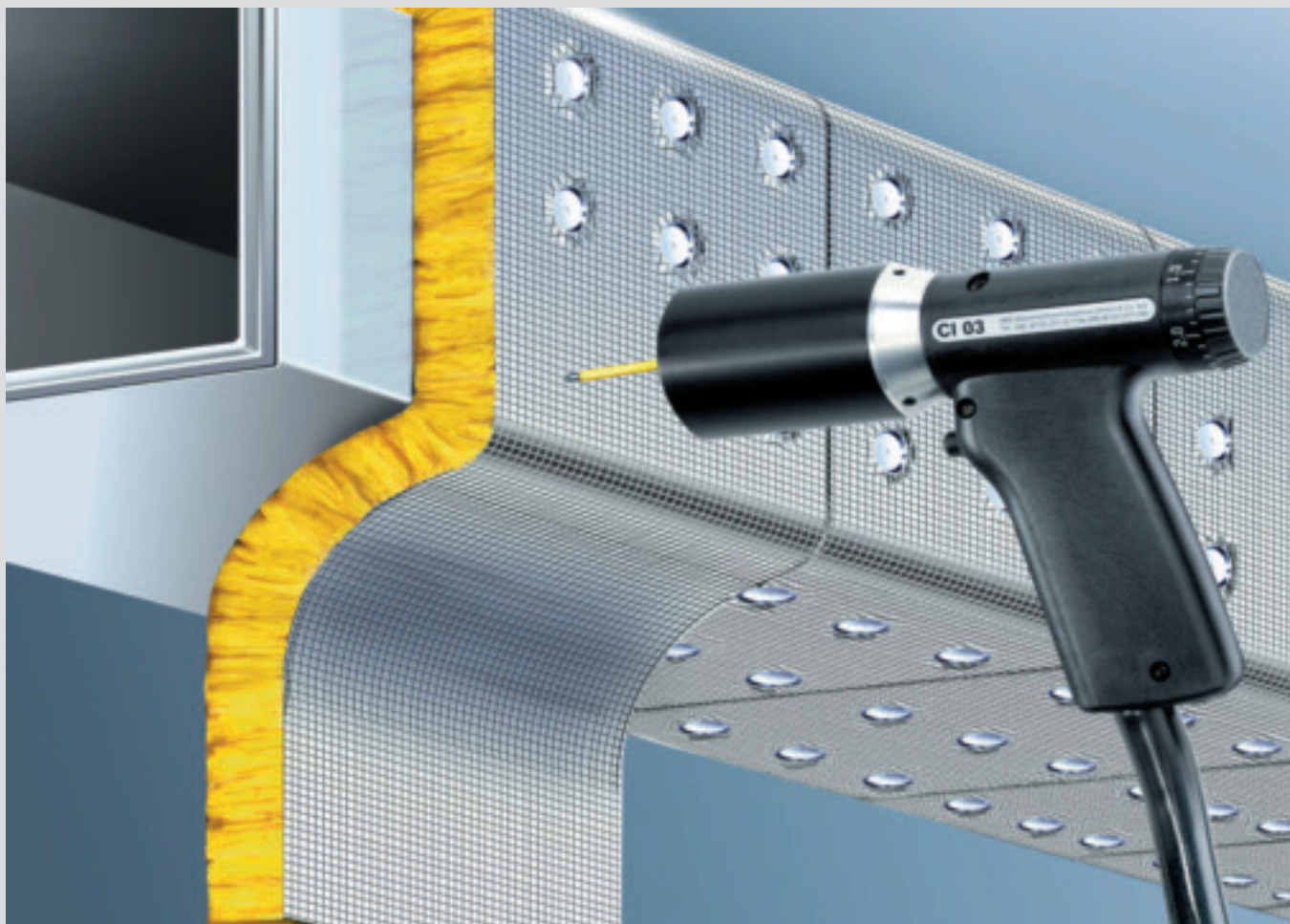
Integrated mains filter. Optimal for construction sites with large mains voltage fluctuations.

- **SC 2401:** Welding unit for 230 V mains supply
- **ARC 500:** Applicable mobile and stationary. Suitable for welding ARC-insulation and -fiberfix pins
- **IT 1002:** Especially suitable for material with high heat resistance. Current adjustment range 100 to 1,000 A. Welding time 5 to 1,000 msec (stepless)
- **AI 06 (with 10 m welding cable)**
- **A 12 and A 16 (with 5 m welding cable)**



# HVAC

Fasteners for heating, ventilation and air-conditioning



Example: Insulation of HVAC (heating, ventilation and air-conditioning) by cupped head pins. Weld within 3 milliseconds

# FRI

Fire-Resistant  
Insulation



Example: Power stations with  
HBS Welding unit SC 2401 and  
230 V mains connection



## Benefit with HBS

Leading through  
technology,  
quality and service.

5 welding processes,  
12 model series  
and more than  
30 model variants.

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