



MARC

**Pad welding with
magnetic rotating arc**

MARC 1 Innovative ARC welding technique

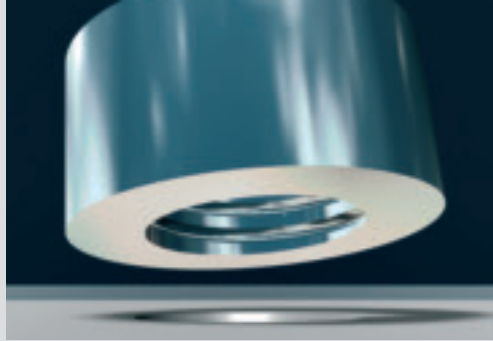
HBS presents MARC 1, a manual pad and nut welding system which is more and more replacing traditional processes all over the world due to the innovative procedure with a magnetic rotating ARC.

Independent whether you need a high static strength or whether the joint is dynamically stressed, you always achieve best results – together with considerable savings of time and costs.

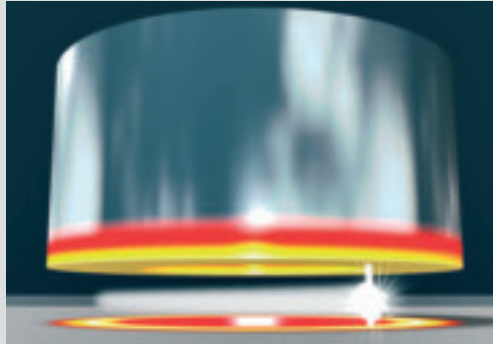
Gas-tight and spatter free joints can be achieved with a high welding cycle time of up to 10 welds/minute. This is especially suited for thin metal sheets from 1 mm upwards.

MARC 1 provides the access to a new future to international trusts, medium-sized companies as well as to crafts enterprise.

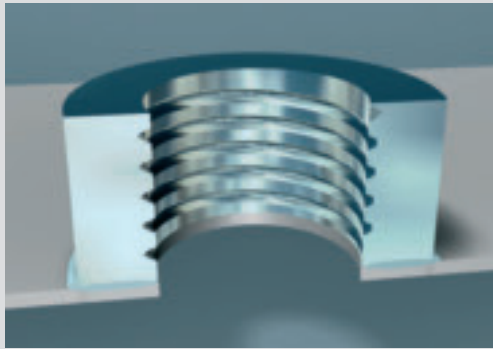
Optimum results, efficiency and a convincing price/performance ratio provide advantages with view to competition



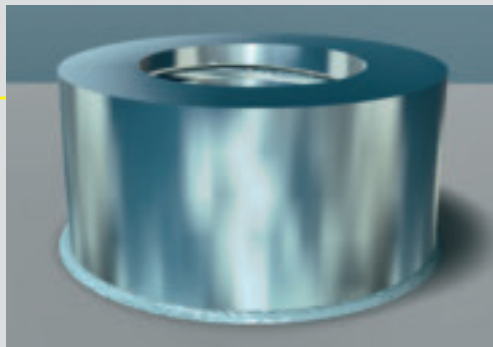
Joining of pad-type welding elements up to M12.



A burning ARC is put into rotation in a controlled way. A ring-shaped weld pool is generated where the pad is plunged in.



The very precise and clean welding process does require any subsequent machining of the work piece or welding element (e.g. caused by distortion or welding spatters at the thread).



Based on a very short welding time and low energy consumption, extraordinary welding results are achieved featured by high process stability and best economical efficiency.



Results in a matter of seconds

To equip metal sheets, tubes and profiles with threads meant a difficult drilling and thread milling or costly welding using classic procedures with stationary machines. MARC revolutionizes that standard welding methods, especially with thin metal sheets.

MARC not only provides clear investment cost savings and improved flexibility compared with stationary machines, but also clear technical advantages, e.g. a up to 100% higher cycle time with a lower heat input.



HBS provides individually developed pads guaranteeing high positioning accuracy and gas tightness.

Also suitable for hexagon nuts to DIN 934 (for simple joining jobs).

Totally on top:

- Compact and mobile
- Requires only one-sided access to the work piece
- Very short welding time (≤ 1 sec) and high cycle time
- No subsequent machining of the work piece/ welding element
- Small and even welding bead
- Gas-tight joints are achievable
- No welding commodities required
- Low energy consumption
- Even and minimum heat input (low distortion)



A System to Success

MARC 1 A

Value orientated model with air cooled field former.

Power unit: IT 1002

Welding gun: AM 30 A

MARC 1 W

With water cooled field former for higher welding rate.

Power unit: IT 1002

Cooling unit: CU

Welding gun: AM 30 W

MARC 1 CW

Water cooled and controlled field former. Especially suitable for special application (system on request).

	MARC 1 A	MARC 1 W
Welding range	M6-M10	M6-M12
Welding rate	4 pieces/min*	10 pieces/min*
Wall thickness	up to 2,5 mm**	up to 2,5 mm**
Welding current	1,000 A	1,000 A
Weight	29 kg (IT 1002)	29 kg (IT 1002) 24 kg (CU)

* depending on pad diameter and type of material
** higher plate thickness on request

Due to a possible replacement of the manual welding gun, the unit is also suitable for manual stud welding. The system is featured by excellent welding results, e.g. reduction of blow effects.

**MARC 1 systems can be used
in all metal working
industries**

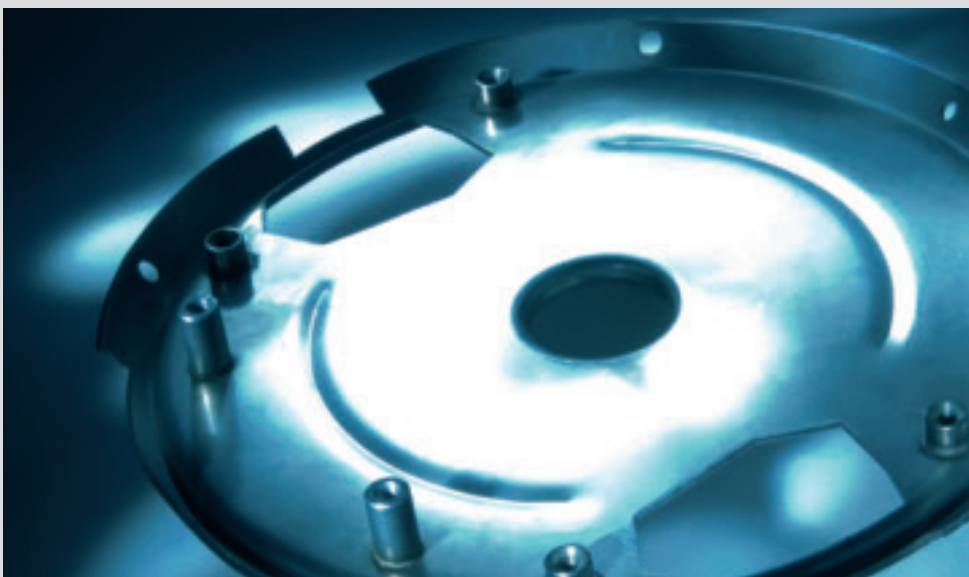




MARC

**Best
solution
for best
results**

**With MARC 1:
Welding of
pads and
nuts on punched
and unpunched
metal sheets,
on even and
curved surfaces
up to gas-tight
requirements.
Applications
are e.g.
sprinkler systems,
ventilation
tubes, hinges,
pressure vessels,
exhaust systems.**





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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