

Spitfire – Welding wire preheating using induction in the submerged arc welding process

Thanks to decades of experience and the use of innovative technologies, **AWS Schäfer** is setting new standards in the SAW process with the **Spitfire**. The Spitfire process makes it possible, through inductive welding wire preheating, to significantly increase the deposition rate within a submerged arc welding process without investing in any additional individual wires on the welding head.

Spitfire increases the deposition rate in a submerged arc welding process by inductively preheating one or more welding wires, regardless of whether they are powered actively or passively. The energy yield to be brought in via the welding power sources per wire is kept constant through the selection of the welding parameters, thus avoiding an excessive heat load on the welding head. The deposition rate to be achieved is reflected in more weld metal volume per unit of time. The advantages result from a higher volume per cross-section at a constant feed rate or constant volume in the cross-section with a higher feed rate at the same time. Both advantages can be combined and can therefore be optimally adapted to your needs and your process.

Contact us!



3-Wire Spitfire Welding Process



3-Wire Reference Welding



Here, you can also find the product information on our website.

AWS-Factsheet I203/EN

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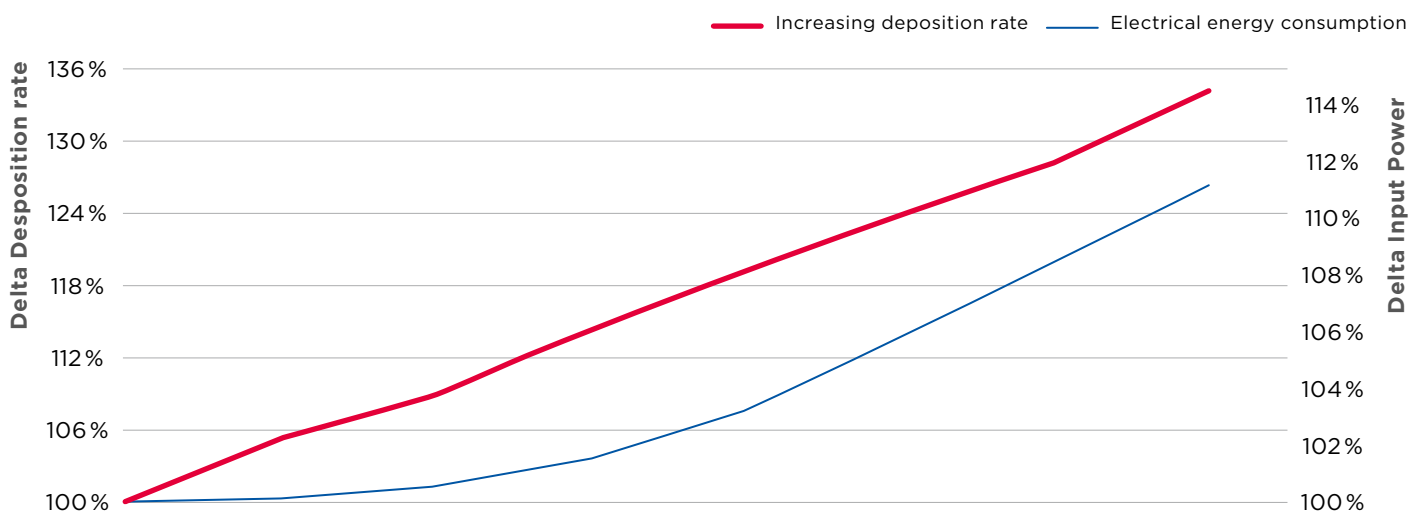
The Pipe Technologists



More benefits and quality for you through:

- One or more welding wires are preheated inductively.
- No limitations on the number of wires to be preheated per head.
- The welding parameters to be selected for each welding wire can be selected independently and freely from one another – including the welding wire temperature of up to 700 °C.
- No extended wear of contact tips or other wire guide elements of the welding head.
- Easy to attach to an existing system.

Increasing deposition rate vs. electrical energy consumption



Measured data test welding machine (3 Head configuration)

Up to 35% increased deposition rate with disproportionately low additional energy input.

Spitfire: Increased efficiency as well as savings in welding process consumables and productive time.

AWS Schäfer:
Your commercial and ecological added value!