



# Submerged Arc Welding Technology

For several decades now, **AWS Schäfer** has been designing and manufacturing single or multi-wire submerged arc welding systems, which are customised exactly to the requirements of each customer. Whether it is the production of longitudinally welded large-diameter pipes (LSAW) or the manufacture of foundation structures (monopiles and transition pieces) for the offshore wind industry, our experience in the fields of **submerged arc welding technology** means that we know exactly how your final product is manufactured and the requirements that it must ultimately meet.

On this basis, you receive a submerged arc welding system perfectly designed for rough production operations, which brings with it very high process stability as well as high-quality mechanical engineering with the latest control and regulation technology. In addition, all our welding systems have the AWS ONE Master Control welding and system control, which guarantees you a clear and coherent operating concept for our systems. Thanks to the integrated remote maintenance module, we can support you online at any time. Innovation is a top priority at **AWS Schäfer** and that is why we are constantly developing our submerged arc welding technology for you as regards energy efficiency and deposition rate.



Naturally, every submerged arc welding solution from **AWS** also comes with the appropriate pipe handling equipment. Everything from one single source! In addition to new submerged arc welding systems, we also offer you our retrofit service, in which we examine your existing welding system on site and check whether it can be brought up to a better standard both mechanically and electrically. Of course, we always take the cost-benefit factor into account.

**We will be happy to advise you - feel free to contact us!**



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

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**AWS  
SCHÄFER**

The Pipe Technologists



## The right welding solution for every industry:

### Longitudinally welded large-diameter pipes (LSAW)

Internal and external submerged arc longitudinal and circumferential welding systems with up to 7 submerged-arc welding heads for:

- Oil and gas line pipes  
Ø 406.4 mm (16") to Ø 1,574.8 mm (62")  
Wall thickness up to 25.4 mm (1")  
Length 6,000 mm to 13,200 mm
- Thick-walled construction pipes  
Ø 609.6 mm (24") to Ø 2,540 mm (100")  
Wall thickness up to 75 mm (3")  
Length 6,000 mm to 13,200 mm
- Conductor Pipes  
Ø 406.4 mm (16") to Ø 1,066.8 mm (42")  
Wall thickness up to 25.4 mm (1")  
Length 12,000 mm

### Tank and vessel construction

Submerged arc welding machine carrier for internal, external, longitudinal and circumferential welding with up to 3 submerged arc welding heads for:

- Tanks and containers  
Ø 609.6 mm (24") to Ø 4,000 mm (158")  
Wall thickness up to 150 mm (6")

### Offshore wind industry

Submerged-arc welding systems, internal and external longitudinal and circumferential submerged-arc welding systems with up to 4 submerged-arc welding heads for:

- Monopiles  
Ø 5,000 mm (197") to Ø 12,000 mm (472")  
Wall thickness up to 150 mm (6")  
Length up to 120,000 mm  
Weight up to 2,500 t
- Transition Pieces  
Ø 5,000 mm (197") to Ø 10,000 mm (394")  
Wall thickness up to 150 mm (6")  
Length up to 35,000 mm
- Pin Piles  
up to Ø 4,000 mm (158")  
Wall thickness up to 75 mm (3")  
Length up to 60,000 mm

### Your advantages at a glance

- From design engineering in 3D to circuit diagram creation, software programming, assembly and pre-commissioning at the AWS plant, right through to delivery, assembly, commissioning and training on the system at your site.
- Single and multi-wire submerged arc welding systems with consideration of customer-specific requirements
- Development of special solutions
- Wide-ranging expertise from the welding task to the final product
- Central control of all system functions via a control panel
- Welding data recording, job memory, error logging
- Remote maintenance access for rapid online support
- Retrofit service
- Reproducibility, innovation, flexibility and sustainability
- Assured quality of "Made in Germany"