

Osland Piping Supply

Submerged Arc Welding (SAW)



Submerged Arc Welding (SAW) is a common, often preferred welding process. The molten weld and arc zone are protected by being “submerged” under a blanket of granular fusible flux. This thick layer of flux completely covers the molten metal thus preventing spatter and sparks as well as suppressing the intense ultraviolet radiation and fumes that are a part of the shielded metal arc welding (SMAW) process.

Normally SAW is operated in the automatic or mechanized mode. Deposition rates approaching 100 lbs/hr are normal compared to 10 lbs/hr for SMAW process.

On standard steel pipe, the root pass is performed using metal inert gas (MIG) welding and the filler and cover passes are performed using submerged arc (SAW) welding. Pictured above is SAW welding with a Pandjiris weld positioner and a Pandjiris rail mounted manipulator capable of handling pipe up to 36” diameter.

To view a video of the submerged arc weld process:
<http://www.youtube.com/watch?v=LD8vntp39uA>