

## Classifications

AWS A5.23 / SFA-5.23

EN ISO 14171-A

EA2TiB

S2MoTiB

## Characteristics and typical fields of application

**Union S 3 MoTiB** is a coppered solid wire for submerged arc welding of unalloyed and low alloyed fine grain steel grades.

The wire is alloyed with Molybdenum and micro-alloyed with Titanium and Boron to obtain a fine grained structure in the weld metal. It is not recommended for multi-pass welding procedures.

It is recommended for typical welding procedures with high dilution rates (e.g. > 55%), like two run technology used for longitudinal and spiral pipes, or back welding in pipelaying (double joint). Suited for single and multi wire configurations with high heat-input (e.g. > 40 kJ/cm). High CTOD values and charpy values are obtained at -40°C / -60°C.

### Recommended SAW flux:

UV 309 P

UV 310 P

UV 418 TT

## Base materials

Steel grades with higher strength level (YS > 580MPa; TS > 680 MPa) like API-5L: X60-X80

## Typical analysis

	C	Si	Mn	Mo	B	Ti
wt.-%	0.07	0.30	1.2	0.55	0.013	0.14

## Operating data

### Dimension mm

3.0

4.0

4.8

## Approvals

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