

## AX-904L AX-4539

Material-No.: 1.4519

### Standards

EN ISO 14343-A:	W 20 25 5 Cu L / G 20 25 5 Cu L
EN ISO 14343-B:	SS385
AWS A5.9:	ER385

### Properties

TIG-rod/solid wire for highly corrosion-resistant joints and coatings on similar austenitic CrNiMoCu steels/steel castings as well as for similar CrNiMo steels, also in combination with each other. The weld metal is fully austenitic and has a pronounced resistance to pitting corrosion and crevice corrosion in chloride-containing media. High resistance to sulphuric, phosphoric, acetic and formic acid, sea and brackish water. Very good resistance to stress corrosion cracking due to the high Ni content.

Cleanliness of the workpiece in the weld seam area is a requirement for a crack-free connection.

### Important base materials / Important applications

1.4539 X1NiCrMoCu25-20-5, 1.4537 X1CrNiMoCuN25-25-5, 1.4439 X2CrNiMoN17-13-5, 1.4438 X2CrNiMo18-15-4.

ASTM A 182 Gr. F317L, F904L; A 213 Gr. TP317L; A 312 Gr. TP317L, UNS N02986;

A 403 Gr. WP317L; A 813 Gr. TP317L; A 988 Gr. UNS 31307.

### Typical composition of welding rod / solid wire in %

C	Si	Mn	Cr	Ni	Mo	Cu
0,01	0,4	1,8	20,0	25,0	4,3	1,4

### Mechanical properties of all-weld metal (typical values)

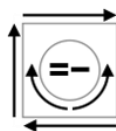
Yield strength $R_{p0,2}$	[MPa]	420
Tensile strength $R_m$	[MPa]	650
Elongation A ( $L_0 = 5d_0$ )	[%]	38
Impact work KV	[J]	120 at +20°C

Shielding gas: 100% Argon, PWHT: untreated

### Operating data

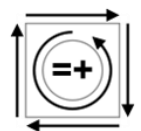
#### TIG:

Shielding gas: I1 (100%Argon)  
acc. to ISO 14175



#### GMAW:

M12 (e.g. Ar+20%He+0,5%CO<sub>2</sub>)  
Ar+20-30%He+max.2%CO<sub>2</sub>



Interpass temperature max.150°C. Pulse arc technique is recommended for welding of solid wires.

### Approvals

(Please ask for current scope)

### Packaging and available sizes

Spools	Ø mm	0,8	1,0	1,2	1,6		
Rods	Ø mm x 1000mm	1,0	1,6	2,0	2,4	3,2	

Other dimensions on request.