

Classifications

EN ISO 3580-A	AWS A5.5
E CrMo9 1 B 4 2 H5	E9015-B9

Characteristics and typical fields of application

Creep resistant, resistant to scaling up to 600 °C (1112 °F). Suited for joining and surfacing applications with quenched and tempered 9 % Cr steels, particularly for matching creep resistant parent metal T91 / P91 according to ASTM.

Base materials

1.4903 – X10CrMoVNb9-1;
ASTM A199 Gr. T91; A213/213M Gr. T91; A355 Gr. P91 (T91)

Typical analysis of all-weld metal (wt.-%)

	C	Si	Mn	Cr	Mo	Ni	V	Nb	N
wt-%	0.09	0.3	0.5	9.0	0.9	0.7	0.2	0.05	0.04

Mechanical properties of all-weld metal

Heat-treatment	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
760 °C / 2 h	550	680	17	47

Operating data

	Polarity:	Redrying:	ø (mm)	L mm	Amps A
	DC (+)	300 – 350 °C / 2 h (572 – 662 °F)	2.5	250	60 – 80
			3.2	350	90 – 120
			4.0	350	110 – 140
			5.0	450	150 – 180

Approvals

TÜV (09168), CE