

Classifications

EN ISO 14174	EN ISO 14343-A	AWS A5.9 / SFA-5.9
S A FB 2 AC	S Z 17 15 Mn W	-

Characteristics and typical fields of application

Thermanit 17/15 TT - Marathon 104 is a wire-flux combination for SAW welding. Suitable for joining applications with cryogenic austenitic CrNi(N) steels / cast steel grades and cryogenic Ni steels; suitable for quenching and tempering. Good toughness at subzero temperatures as low as -196 °C (-321 °F).

Marathon 104 is an agglomerated fluoride-basic welding flux without Cr support and neutral metallurgical behaviour. For information regarding this sub-arc welding flux see our detailed data sheet.

Base materials

1.5662 – X8Ni9; 1.4311 – X2CrNi18-10

Typical analysis

wt.-%	C	Si	Mn	Cr	Ni	W
wire	0.20	0.4	10.2	17.5	14	3.5
all-weld metal	0.18	0.5	9.3	17.2	14.0	3.4

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J	
	MPa	MPa	%	+20°C	-196°C
u	> 430	> 620	> 30	80	50

u untreated, as welded

Operating data

Polarity	DC+	Dimension mm
		2.4
		3.2

Approvals

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