

Classifications			
EN ISO Norm A	EN ISO Classification A	AWS/SFA Norm A	AWS/SFA Classification A
EN ISO 17632-A	T 46 4 P M21 1 H5	AWS A5.20 / SFA-5.20	E71T1M/T-9M/T-12M JH4
Characteristics and typical fields of application			
Short Description	Key Features	Typical Applications	
Seamless rutile flux cored wire for single- or multilayer welding of Carbon, Carbon-Manganese steels and similar types of steels including fine grain steels with Argon-CO2 shielding gas or pure CO2. Main features: excellent weldability in all positions with high performance welding speed, very low spatter losses, good bead appearance, fast freezing and easy to remove slag. This wire is especially suitable for ship building, structural steel work or wherever good bead appearance is required. D1.8 Seismic Supplement approved. This product can be used in sour gas applications. (HIC tested acc. to NACE TM-0284). Test values for SSC are available upon request. Typical hydrogen value 2.5 – 3.5ml/100g weld metal.	Excellent weldability in all positions with high performance welding speed, very low spatter losses, good bead appearance, fast freezing and easy to remove slag.	Especially suitable for ship building, structural steel work or wherever good bead appearance is required. D1.8 Seismic Supplement approved. This product can be used in sour gas applications. (HIC tested acc. to NACE TM-0284). Test values for SSC are available upon request.	
Typical analysis (Chemical Composition)			
C	Si	Mn	
0.06 %	0.4 %	1.45 %	
Mechanical Properties - Condition 1			
Condition	Yield Strength Re	Tensile Strength Rm	Elongation A (L0=5d0)
u	500 (>= 460) MPa	590 (550 - 660) MPa	26 (>= 22) %
Temperature 1	Impact value 1 ISO-V KV	Temperature 2	Impact value 2 ISO-V KV
-46 °C	50 (>= 27) J	-40 °C	70 (>= 47) J
Temperature 3	Impact value 3 ISO-V KV	Footnote	
-20 °C	100 (>= 47) J	u: untreated, as welded - shielding gas M21; u1: untreated, as welded - shielding gas C1; s1: stress relieved 620°C/1 hour - shielding gas M21	

Mechanical Properties - Condition 2			
Condition	Yield Strength Re	Tensile Strength Rm	Elongation A (L0=5d0)
u1	470 ($\geq$ 460) MPa	560 (550 - 660) MPa	28 ($\geq$ 22) %
Temperature 1	Temperature 2	Temperature 3	Impact value 3 ISO-V KV
-46 °C	-40 °C	-20 °C	80 ($\geq$ 47) J
Footnote			
u: untreated, as welded - shielding gas M21; u1: untreated, as welded - shielding gas C1; s1: stress relieved 620°C/1 hour - shielding gas M21			
Mechanical Properties - Condition 3			
Condition	Yield Strength Re	Tensile Strength Rm	Elongation A (L0=5d0)
s1	510 ($\geq$ 460) MPa	590 (550 - 660) MPa	26 ($\geq$ 22) %
Temperature 1	Impact value 1 ISO-V KV	Temperature 2	Temperature 3
-46 °C	41 ($\geq$ 27) J	-40 °C	-20 °C
Footnote			
u: untreated, as welded - shielding gas M21; u1: untreated, as welded - shielding gas C1; s1: stress relieved 620°C/1 hour - shielding gas M21			
Details welding consumables			
ABS	BV	CE	CLASS AWS
4Y400 H5	SA4Y40 HHH	X	E71T1M/T-9M/T-12M JH4
CLASS EN ISO	CWB	DB	DNV-GL
T 46 4 P M21 1 H5	X	X	IV Y40MS(H5) / II YS
LR	NORM AWS	NORM EN ISO	RINA
DXVud0-BF-4Y40S-H5-NA	AWS A5.20 / SFA-5.20	EN ISO 17632-A	4Y 40 S H5
TÜV			
X			