



XTR R45

AWS A5.2 R45

Description:

R45 is a general purpose, copper coated, oxyfuel gas welding rod used for welding most low carbon steels. It is a great selection when ductility and machinability are most important. You do not need a flux when brazing with this product, but "puddling" of the molten metal will bring any scale or impurities to the surface.

While R45 & R60 seem like similar alloys, they were originally developed for oxyfuel welding, however they can be used for TIG welding in some applications. These alloys do not carry enough de-oxidizers typically needed with the GTAW process; therefore, it is not recommended.

Typical Applications:

XTR RG45 is typically used on steel plate not exceeding 0.25" in thickness, sheet and pipe where high strength is not required, this product can also be used for some smaller wrought iron applications. RG45 deposits a ductile and easily machinable lower strength weld.

Chemistry:

	Typical	AWS Spec. <small>Single values are max.</small>
Carbon (C)	0.065	0.080
Manganese (Mn)	0.250	0.500
Silicon (Si)	0.080	0.100
Phosphorus (P)	0.035	0.035
Sulfur (S)	0.040	0.040
Copper (Cu)	0.220	0.300
Chromium (Cr)	0.030	0.200
Nickel (Ni)	0.020	0.300
Molybdenum (Mo)	0.010	0.200
Aluminum (Al)	0.008	0.020



Mechanical Properties: (As Welded)

	Typical	AWS Spec. <small>Single values are min.</small>
Tensile Strength	52,500 psi	ns
Elongation in 2" (%)	16	ns
Melting Point	2,800°F	-

Welding Positions:

H, V

Recommended Procedures:

1. Be sure to clean all areas to be joined or built-up thoroughly. Bevel cracks or heavy sections
2. Joint clearances should not exceed 0.13mm
3. Using a slightly neutral flame, Pre-heat normally not necessary as your torch will preheat during your process.
4. Flux is not necessary, but "puddling" of the molten metal will bring any scale or impurities to the surface.
5. Allow the part to cool slowly before removing any slag, then use a wire brush to clear
6. Repeat as necessary to fill your joint



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Ver. 9.30.2021