

COR® MET STAINLESS STEEL FLUX COATED TIG WIRE

DESCRIPTION

A 20" stainless steel TIG wire with a flux coating that allows TIG welding open root passes, and eliminates the need for backing or purging. All wire is identified with the grade marked on the end of rod.

APPLICATIONS

QWP308H For welding 18Cr/8Ni Stainless Steels, 0.04 Minimum Carbon
 QWP308L For welding 18Cr/8Ni Stainless Steels, Low carbon grade
 QWP309L Highly alloyed to join Dissimilar/same alloys
 QWP316L For welding 316L Stainless Steel
 H = 0.04 Minimum Carbon

PROCEDURE

Flux Coated TIG will produce a protective slag on the inside of the plate/pipe that will protect the weld from oxidation. It will eventually be released and may not be easily accessible to be removed. We recommend that you conduct your own qualification procedure, and as you may not be able to use flux coated TIG on critical applications, if you cannot remove the slag from the inside of the fabrication. See additional procedure information on second page.

WELDING PARAMETERS

Wire Size	Tungsten Size	Amperage	Current	Optional
3/32"		80-200	DCEN	Pulse Current
1/8"		90-250	DCEN	Pulse Current

TYPICAL CHEMISTRY AND MECHANICAL PROPERTIES

Grade	C	Si	Mn	P	S	Ni	Cr	Mo	T/Str.	% El
QWP308H	.060	.06	1.0	.04	.02	10.0	19.0	0.2	80,000	35
QWP308L	.025	.06	1.0	.02	.006	10.0	19.0	0.2	75,000	35
QWP309L	.025	.37	1.0	.02	.006	13.5	23.0	0.2	75,000	30
QWP316L	.025	.37	1.0	.02	.006	12.0	19.0	2.2	70,000	30

CLASSIFICATION

No AWS specification applies to this product. The weld deposit will conform to the AWS A5.22 chemistry limits.

ADDITIONAL PRODUCTS AVAILABLE

QWP2209 QWP625 QWP82 QWP80SB6 QWP80SB8
 Please inquire for other alloys.

ADDITIONAL PROCEDURE INFORMATION AND WELDING TIPS

Eliminate the need for purging or backing with a “one step” process

If the pieces to be welded with flux coated TIG wire are thicker than 12 Ga., they must be beveled. The amperage to be used will depend on the thickness of the weldment and diameter of the tungsten.

One example of parameters for using the QWP flux coated TIG wire in a particular application is as follows:

Position: 3G
Base Material: 1/4" Pipe
Filler Metal: QWP308L 3/32"
Volts: 13
Amps: 123

(This example is only meant to be a guide for you to zero in on the parameters you will need to test/evaluate/qualify for your own specific application.)

The gap between the two pieces to be joined must be at least as wide as the diameter of the flux coated TIG wire being used. The base materials that are being joined must also be tacked at enough places so that the gap remains open. If the gap “sucks” closed you will not succeed with the QWP flux coated TIG wire. The gap is very important in this process.

When the process is started, always begin on the tack. Do not dip the rod too fast, because if you do, the filler metal may lay and freeze on the top only. To weld out of position with this wire, you will need to vary your amperage.

“Walking the Cup” is the torch procedure most used by our customers. It produces the oscillation needed to allow the flux to flow to the back side of the weld. This is recommended for the best results.

NOTE: This product will produce a protective slag on the inside of the pipe or the backside of the plate that will protect the weld from oxidation. It will eventually be released and may not be easily accessible to remove. We strongly recommend you test and evaluate this product for your application before using it. There is no AWS specification for this product, and you may have to conduct your own qualification procedure. You will still need to use an outer shield gas, this is usually argon.

CALL FOR MORE INFORMATION - Our Flux Coated TIG wires are now available in almost all grades of stainless, and chrome-molys, and nickels.

Cor-Met, Inc.: Ph: 810 227 3251 or 800 848 2719
 Fax: 810 227 9266

	Number of 20" rods per lb
3/32"	24
1/8"	12