

## Description and Application

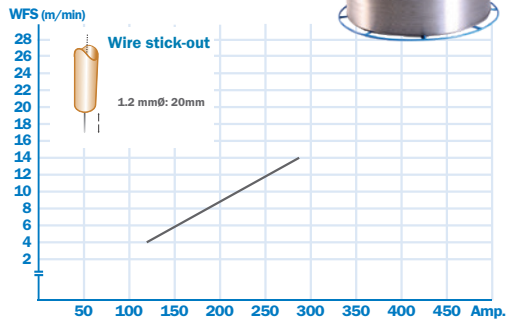
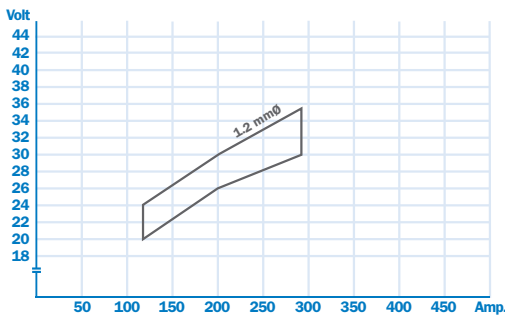
This rutile flux cored wire welds with a stable and almost spatter free arc to produce a shiny, bright, smooth weld bead surface with self-releasing slag.

Excellent crack resistance is due to a combination of high alloy and high ferrite content, which gives extreme tolerance to dilution on a wide range of hardenable and alloy steels with minimum or no preheating. The weld deposit also work-hardens and provides good wear and friction resistance.

**DW-312** is applied for welding medium and high carbon hardenable steels, of known or unknown specifications, for example tool steels, shafts, free-cutting steels, dissimilar alloy combinations, overlaying, buffer layers prior to hard facing.



### Recommended Parameter Range, for flat position\*



### Typical Chemical Analysis (wt. %)\*

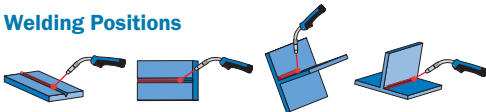
C	Si	Mn	P	S	Ni	Cr	Mo	N	Nb	FS	FN	FNW
0.12	0.60	1.20	0.018	0.006	10.2	28.4	-	-	-	60.0	>18.0	50.7

### Typical Mechanical Properties\*

	R <sub>e</sub> (MPa)	R <sub>m</sub> (MPa)	A <sub>5</sub> (%)	CV(J)°C
	580	740	23	-
Guaranty	min.450	min.660	min.15	

\* The above values and parameters are for all weld metal produced using Ar+CO<sub>2</sub> shielding gas

### Welding Positions



### Approvals

LR	DNV GL	BV	ABS	R.M.R.S	Others
-	-	-	-	-	-