



**MANUFACTURERS OF A DIVERSE RANGE OF
ADVANCED WELDING CONSUMABLES**

**SECTION
13**

WI-0304 DS173A NS-630R, Rev. 0, Date 01.06.2009

NS-630R	TIG WELDING ROD FOR WELDING 17-4PH STAINLESS STEEL			DATA SHEET NO. 173A								
SPECIFICATION	AWS A5.9											
CLASSIFICATION	ER630											
APPLICATION	Suitable for welding high strength martensitic stainless steels, precipitation hardened by additions of copper. Typical applications include pump, shafts, impellers, hydraulic equipment used in oil and gas industries, petrochemical, marine and nuclear engineering.											
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Cr	Ni	Mo	Mn	Si	P	S	Cu	Nb	Fe
	MIN	-	16.0	4.5	-	0.25	-	-	-	3.25	0.15	
	MAX	0.05	16.75	5.0	0.75	0.75	0.75	0.03	0.03	4.0	0.30	
	TYPICAL	0.03	16.4	4.75	0.25	0.55	0.4	0.02	0.01	3.6	0.2	Bal.
ALL-WELD WELD METAL PROPERTIES	<u>PROPERTY</u> Tensile strength 0.2% Proof stress Elongation	<u>UNITS</u> N/mm ² N/mm ² %	<u>TYPICAL</u> 940 730 10	750 °C/2h then air cool to 15 °C; then 550 °C/2h and air cool								
OPERATING PARAMETER	SHIELDING GAS		CURRENT									
	Argon		DCEN									