

430 LNb/Ti

CATEGORY GMAW-GTAW Solid wires

TYPE Double stabilized ferritic filler metal for welding critical applications in exhaust manufacturing.

APPLICATIONS 430LNb/Ti is developed and designed for the Automotive industry and used for production of exhaust systems and catalytic converters.. The wire should be used when there is a need for good resistance to corrosion and thermal fatigue. Stabilised ferritic stainless steels, Austenitic stainless steels and in both homogeneous and heterogeneous sheet metal configurations (sheets of different grades welded together)

PROPERTIES Stabilization with niobium and titanium gives it the advantages of both these ferritic structure stabilizers: Titanium minimizes grain growth in Weld Metal zones (WM) due to titanium nitride (TiN) precipitation in the still liquid metal in these zones, thus avoiding the risk of brittleness, which may sometimes occur when very thick welds are made (> 3 mm of sheet metal to be welded). Niobium traps the residual C and N through its transfer of between 85 and 95% in the welding arc under all standard welding conditions, thus avoiding any risk of inter granular corrosion in the WM.

CLASSIFICATION

AWS	A 5.9: ER 430 Nb (mod)
EN ISO	14343-A: G ZCr18 NbTiL
DIN: W.Nr.	1.4509
DIN	8556:

SUITABLE FOR 1.4509, 1.4510, 1.4511, 1.4512, etc.

APPROVALS CE approved

WELDING POSITIONS:



WELD DEPOSIT WEIGHT % (TYPICAL)

C	Mn	Si	Cr	Ni	Mo	Nb	Ti	Cu	P	S
<0.030	<0.8	<0.5	18-19	<0.5	<0.5	0.4-0.6	0.3-0.5	<0.5	<0.03	<0.015

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HB
				-20°C	-40°C	-60°C	
AW	990	1100	3				140

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A)	spooling type	kg / spool / drum	kg / pallet
0.8	12-24	55-160	B-300 / drum	15 / 250	1080 / 1000
1.0	15-28	80-240	B-300 / drum	15 / 250	1080 / 1000
1.2	15-29	100-300	B-300 / drum	15 / 250	1080 / 1000

REDRYING TEMPERATURE not required

GAS ACCORDING EN 14175: M12 (2-8% Co₂)