

# 995N

## CLASSIFICATION

Flux	Flux/wire		
<b>ISO 14174</b>		<b>AWS A5.23</b>	<b>ISO 14171-A : TR</b>
S A AB 1 67 AC H5	<b>995N / LNS 140A</b>		S 4T 2 AB S2Mo
	<b>995N / LNS 140TB (LA-81)</b>	F9TA6-G-EA2TiB	S 5T 5 AB S2MoTiB
	<b>995N / LNS 133TB</b>	F9TA6-G-EG	

## GENERAL DESCRIPTION

Neutral agglomerated flux designed for longitudinal multi-arc welding pipe mill station  
 High end pipe mill applications up to X80  
 Outstanding welding characteristics and bead profile  
 Better results on pipe thickness over 12mm  
 Nitrogen controlled weld metal providing good impact toughness on arctic grade pipes  
 Very low diffusible hydrogen level in the weld deposit

## CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

Base material	Wire grade	C	Mn	Si	P	S	Mo	Ti	B	N
X65	LNS 140A (L-70)	0.07	1.45	0.3	<0.025	<0.025	0.2	-	-	0.005
X80	LNS 140TB (LA-81)	0.06	1.6	0.35	<0.025	<0.025	0.2	0.015	0.002	0.004

Remark: the chemical composition from butt welds in pipe depends on the chemical composition of base material.  
 Proceed : tandem AC/AC application on X65 plate 12,7 mm thick.

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)				Hardness
					-20°C	-40°C	-50°C	-60°C	
Procedure 1									
LNS 140A (L-70)	TR	580	680	30	95	65			230
LNS 140TB (LA-81)	TR	630	700	27	115	75	50		235
Procedure 2									
LNS 140TB (LA-81)	TR	600	720	25	100	65		45	220-235
Procedure 3									
LNS 133TB	TR	600	700	27		120		90	

Remark: the mechanical properties from butt welds in pipe depends on the chemical composition of base material.  
 Procedure 1: tandem in 12,5mm X65; Procedure 2: multiwire weld (4/5 wires) in 19-25mm X65 ; Procedure 3 : AWS test plate

\* TR : Two-run

995N: rev. C-EN25-15/07/15

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## EXAMPLES OF MATERIALS TO BE WELDED

Code	Type / Steel grades	Two-run		
		LNS 140TB (LA-81)	LNS 140A (L-70)	LNS 133TB
<b>Ship plates</b>				
	A to E	✓	✓	✓
	A 32 to FH40	✓	✓	✓
<b>General structural steels</b>				
EN 10137	500 to 550 A & AL	✓	✓	✓
EN 10025 part 3/4	S275 to S460 all qualities	✓	✓	✓
EN 10149	S315 to S650 all qualities	✓	✓	✓
EN 10025 part 2	S185 to S355 all qualities	✓	✓	✓
	E295 to E360	✓	✓	✓
<b>Boiler &amp; pressure vessel steels</b>				
EN 10028	P235 to P460G all qualities	✓	✓	✓
	P235 to P275		✓	✓
	A37 to A52 all qualities	✓	✓	✓
	PF24 to PF36 all qualities	✓	✓	✓
	P265 to P460 all qualities	✓	✓	✓
	A37 to A52, CP	✓	✓	✓
	X42 to X70	✓	✓	✓
	X42 to X80	✓		✓

## FLUX CHARACTERISTICS

Current type	DC / AC
Basicity (Boniszewski)	1.3
Solidification speed	Medium
Density (kg/dm <sup>3</sup> )	1.0
Grain size (ISO 14174)	2 -20

## SUGGESTIONS FOR USE

One run on each side in one or multi wire systems for high welding speed and excellent mechanical properties.

## PACKAGING AND AVAILABLE SIZES

Unit	Net weight (kg)
Bag	25
Sahara ReadyBag™ (SRB)	25
Big Bag	500 / 600 / 1000