

Flux

Classification

Flux 782	EN 760 :	S A AR/AB 1 76 AC H5	
Flux/wire	AWS A5.17 / A5.23	EN 756 : MR	EN 756 : TR
782 / L-60		S 42 A AR/AB S1	S 4T A AR/AB S1
782 / LNS 135	F7AZ-EM12		S 4T 0 AR/AB S2
782 / L-61	F7AZ-EM12K	S 46 0 AR/AB S2Si	S 4T 0 AR/AB S2Si
782 / L50M (LNS 133U)		S 45 0 AR/AB S3Si	S 5T 2 AR/AB S3Si
782/ LNS 140A (L-70)		S 46 0 AR/AB S2Mo	S 5T 2 AR/AB S2Mo

General description

Active flux for limited pass welding

Good bead shape with optimum wetting

High speed on thin plates

Single & multi-electrode welding; butt and fillet welds

Optimal flux for tin-tube welding, especially with the fine grain formulation

Approvals

Wire grade	BV	ABS	DNV	RINA	TÜV
L50M (LNS 133U)	4YT	4Y400T	4YT	3YT	
LNS 135					X

Chemical composition (w%), typical, all weld metal

Wire grade	C	Mn	Si	P	S	Mo
L-60	0.07	1	0.6	<0.030	<0.025	-
LNS 135	0.07	1.15	0.7	<0.030	<0.025	-
L-61	0.07	1.15	0.8	<0.030	<0.025	-
L50M (LNS 133U)	0.06	1.7	1	<0.030	<0.025	-
LNS 140A (L-70)	0.07	1.2	0.7	<0.030	<0.025	0.4

Mechanical properties, typical, all weld metal

Wire grade	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Impact ISO-V(J)	
				0°C	-20°C
L-60	TR	>420	> 520	45	
LNS 135	TR	>420	> 520	55	
L-61	TR	>420	> 520	60	
L50M (LNS 133U)	TR	>460	> 550	65	50
LNS 140A (L-70)	TR		>600	70	50

TR: two-run

782 / 782-FG: rev. EN 23

Liability: All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request

Suggestions for use

Wire	Characteristics	Applications
LNS 135	Limited hardness	Fillet weld, lap joint
L-61	Good properties	<ul style="list-style-type: none"> • truck wheels
L50M (LNS 133U)	Very high speeds	<ul style="list-style-type: none"> • gas bottles • Tube to fin fillet weld • Boiler tubes

Materials to be welded

STEEL / STANDARD	TYPE	Limited passes	
		LNS135	L61
Ship plates			
	A, AH32 to AH40		x
General Structural steel			
EN 10149	S315 to S460 MC	x	x
EN 10025 part 2	S185 to S355 quality, JR(G1&G2)	x	x
	S185 to S355 quality, JR(G1&G2), J10		x
	E2956 to E360	x	x
Boiler & pressure vessel steel			
EN 10028	P235 to 275 GH		x
	P355 to P460M		x
A36-601 & NF A36-605	A37 to A52 (CP)		x

Flux characteristics

Current type	DC / AC
Basicity (Boniszewski)	0,4
Solidification speed	High
Density (kg/dm ³)	1,4
Grain size	782-FG : 1-16 782 : 1-20

Packaging and available sizes

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