8500

CLASSIFICATION

Flux	Flux/wire			
ISO 14174		**AWS A5.17 / A5.23**	**ISO 14171-A : MR**	**ISO 14171-A : TR**
S A FB 1 54 AC H5	**8500 / L-61**	F7A6/F6P8-EM12K	S 38 4 FB S2Si	S 4T 0 FB S2Si
	8500 / L-50M (LNS 133U)	F7A6/F7P8-EH12K	S 42 6 FB S3Si	S 4T 2 FB S3Si
	8500 / LNS 140A	F8A6-EA2-A2	S 46 4 FB S2Mo	
	8500 / LNS 160	F7A8/P8-ENi1-Ni1	S 42 5 FB S2Ni1*	
	8500 / LNS 162	F7A8/P8-ENi2-Ni2	S 42 6 FB S2Ni2*	
	8500 / LNS 165 (LA85)	F8A8/F7P8-ENi5-Ni5	S 50 6 FB SZ	
	8500 / LNS T55		S 50 5 FB TZ	

* Nearest classification

GENERAL DESCRIPTION

Basic flux designed for carbon and low alloy steels
Excellent welding characteristics over a wide range of welding procedures
Superior mechanical properties
Impact properties are consistent throughout the weld joint, including the cap location
Excellent CTOD values

APPROVALS

Wire grade	BV	ABS	LRS	DNV	GL	RMRS
L-61					3YM/2YT	
L-50M (LNS 133U)	A3YT/A5YM	3YT/5YM	5Y40M/3Y40T	5Y40M/3Y40T		
LNS 140A (L-70)		3YM			3Y40M/4Y40T	3YM/4YT

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

Wire grade	C	Mn	Si	P	S	Mo	Ni
L-61	0.08	1.0	0.2	<0.02	<0.015		
L-50M (LNS 133U)	0.07	1.4	0.3	<0.02	<0.015		
LNS 140A (L-70)	0.08	0.9	0.2	0.03	<0.025	0.4	
LNS 160	0.07	1.0	0.1	0.02	0.015		1.0
LNS 162	0.08	1.0	0.1	0.02	0.015		2.0
LNS 165 (LA 85)	0.07	1.3	0..2	0.02	0.015	0.2	0.9
LNS T55	0.08	1.7	0.7	<0.015	<0.015		

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (N/mm^2)	Tensile strength (N/mm^2)	Elongation (%)	Impact ISO-V(J) -20°C	-40°C	-60°C
L-61	MR	430	510	28	150	100	50
L-50M (LNS 133U)	MR	440	540	28		110	
	SR	>420	>500	30		150	
LNS 140A (L-70)	MR	440	540	28		55	
LNS 160	AW	430	510	30		150	50
	SR	400	510	30		150	50
LNS 162	AW	470	560			150	50
	SR	450	530			150	50
LNS 165 (LA 85)	AW	530	600	25		120	50
	SR	480	580	30		120	50
LNS T55	AW	530	620		120	80	
	SR	500	570			70	

* MR : Multirun - TR : Two-run - AW : As welded - SR : Stress relieved

8500: rev. EN 24

8500

MATERIALS TO BE WELDED

Code	Type / Steel grades	Multirun											
		L-61	L-50M (LNS 133U)		LNS 140A (L-70)		LNS 160		LNS 162		LNS 165		LNS T55	
		AW	AW	SR	AW	SR	AW	SR	AW	SR	AW	SR	AW	SR
Ship plates														
	A to E	✔	✔	✔									✔	✔
	AH(32),DH(36), EH(36)	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
General structural steel														
EN 10025 part 2	S185, S235, S275	✔	✔	✔									✔	✔
	S355	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Cast steel														
EN 10213-2	GP240R	✔	✔	✔									✔	✔
Pipe materials														
EN 10208-2	L210, L240, L290	✔	✔	✔									✔	✔
	L360	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
	L415		✔		✔	✔					✔	✔	✔	✔
	L445, L480										✔	✔		
API 5LX	X42, X46	✔	✔	✔										
	X52	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
	X56, X60		✔		✔	✔					✔	✔	✔	✔
	X65, X70										✔	✔		
EN 10216-1/10217-1	P235, P275	✔	✔	✔									✔	✔
	P355	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Boiler & pressure vessel steel														
EN 10028-1	P235GH, P265GH, P295GH	✔	✔	✔	✔	✔								
Fine grained steels														
EN 10025 part 3/part 4	S275	✔	✔	✔									✔	✔
	S355	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
	S420		✔		✔	✔					✔	✔	✔	✔
	S460										✔	✔		

FLUX CHARACTERISTICS

Current type	DC/AC
Basicity (Boniszewski)	2.8
Solidification speed	Medium
Density (kg/dm^3)	1.3
Grain size (ISO 14174)	2 - 20

SUGGESTIONS FOR USE

- Suitable for deep groove
- Low temperatures requirements
- Highly restrained constructions
- Single and multi-wire systems
- Off-shore and on-shore applications
- Nuclear components

PACKAGING AND AVAILABLE SIZES

Unit	Net weight (kg)
Bag	25
Sahara ReadyBag™ (SRB)	25
Metal drum	250