Flux

Classification

Flux 761	EN 760 :	S A CS/MS 1 88 AC H5	
Flux/wire	AWS A5.17 / A5.23	EN 756 : MR	EN 756 : TR
761 / L-60	F7A2-EL12	S 38 2 CS/MS S1	
761 / L-61	F7A2-EM12K	S 42 2 CS/MS S2Si	S 4T 0 CS/MS S2Si
761 / LNS 140A	F9A0-EA2-G	S 50 0 CS/MS S2Mo	S 4T 2 CS/MS S2Mo
761 / L-70	F9A0-EA1-G	S 50 0 CS/MS S2Mo	S 4T 2 CS/MS S2Mo

General description

High current capacity
Active flux for limited pass welding
High restraint cracking resistant
Suitable for rusty/dirty plates (at high current)
Applicable for low quality steels
Coarse grain flux more suitable with the most rusty and dirty plates

Approvals

Wire grade	ABS	BV	CRS	DNV	PRS	GL	LRS	RINA	RMRS	TÜV
L-61	3YM/2YT	A3YM/A2YT	3YM/2YT	2YT	3YM/2YT	3YM/2YT	3YM/3YT	3YM/2YT	2YT	X
LNS 140A	2YTM	A3YM/A3YT		2Y40M/3Y40T	3YM/2YT	3YTM	2YM/2YT	3YM/3YT	2YM/3YT	X
L-60										X
LNS 135										X
L-70										X

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

Wire grade	C	Mn	Si	P	S	Mo
L-60	0.05	1.5	0.7	<0.03	<0.025	
L-61	0.08	1.7	0.9	<0.03	<0.025	
LNS 140A	0.06	1.7	0.8	<0.03	<0.025	0.4

Mechanical properties, typical, all weld metal

Wire grade	Condition	Yield strength (N/mm^2)	Tensile strength (N/mm^2)	Elongation (%)	Impact ISO-V(J) 0°C	Impact ISO-V(J) -20°C
L-60	MR	380	500	28	80	50
L-61	MR	440	530	28	100	50
	TR	>420	>540		65	
LNS 140A	MR	480	600		80	40
	TR	>440	>540		100	55

MR: multi run
TR: two-run

761 / 761-CG: rev. EN 23

Suggestions for use

Wire	Characteristics	Applications
L-60	To prevent defects from organic components	Flat fillet, large throat
L-61	Reliable properties	Butt joints in two passes, in medium and thick plates
LNS 140A	For good impact toughness in two-run as welded	Flux backing, modified series arc-welding Low quality steels

Materials to be welded

STEEL / STANDARD	TYPE	Limited runs		
		L60	L61	LNS140A
Ship plates				
	A to D, A (H) 32 to D(H) 36	x	x	x
General Structural steel				
EN 10025 part 6	500 A			x
EN 10025 part 3/part 4	S275 to S420, N,M	x	x	x
EN 10149	S315 to S420, MC	x	x	x
	S315 to S420, NC	x	x	x
	S460, MC & NC			x
EN 10025 part 2	S185 to S355, E295 to E360, JR(G1 & G2), J0, J2 (G3&G4)	x	x	x
Boiler & pressure vessel steel				
EN 10028	P235 to P420, GH N, NH, M, Q & QH	x	x	x
	P235 to P460, GH, N, NH, M, Q & QH	x	x	x
	P500, GH, N, NH, M, Q & QH			x
	P235 S, P265 S	x	x	x
	A37 to A52, CP, AP	x	x	x

Flux characteristics

Current type	DC / AC
Basicity (Boniszewski)	0,8
Solidification speed	Low, slag viscous
Density (kg/dm3)	1,2
Grain size	761 : 1-16 761-CG : 1-20

Packaging and available sizes

Unit	Net weight (kg)
Bag	25
Sahara ReadyBag™ (SRB)	25
Steel drum	250
Big Bag	1000