

Flux

Classification

Flux P230	EN 760 :	A AB1 67 AC H5	
Flux / wire	AWS A5.17 & A5.23	EN756 MR	EN756 TR
P230 / LNS135	F7A4-EM12	S 38 4 AB S2	S 4T 2 AB S2
P230 / L61	F7A4-EM12K	S 38 4 AB S2Si	
P230 / L50M (LNS133U)	F7A5-EH12K	S 42 4 AB S3Si	
P230 / L70 (LNS140A)	F8A4-EA1-A2	S 46 4 AB S2Mo	S 4T 4 AB S2Mo
P230 / LNS160	F7A8-ENi1-Ni1	S 46 4 AB S2Ni1*	
P230 / LNS162	F7A8-ENi2-Ni2	S 46 6 AB S2Ni2*	

General description

Neutral aluminate basic agglomerated flux

Low hydrogen content and extra moisture resistant

One flux to combine with a wide range of wire electrodes

Good impact toughness in two-run and multi-run technique

Very consistent properties

Selection of wires provides application possibilities from -40 to +400°C

Approvals

Wire grade	LR	BV	ABS	DNV	GL	Controlas	TUV	DB	UDT	DWI	RMRS	RINA
LNS 135			x	x	x	x	x	x	x			
L61	x		x		x	x	x	x	x			x
L50M (LNS133U)	x	x		x		x	x	x	x			
L70 (LNS 140A)	x		x		x	x	x	x	x		x	x
LNS160	x	x	x	x		x	x		x			
LNS162		x	x	x		x	x		x			

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

Wire grade	C	Mn	Si	P	S	Mo	Ni
L61	0.07	1.4	0.4	<0.030	<0.020		
LNS135	0.07	1.4	0.25	<0.030	<0.020		
L70 (LNS140A)	0.07	1.9	0.3	<0.030	<0.020	0.5	
L50M (LNS133U)	0.07	1.3	0.4	<0.030	<0.020		
LNS160	0.07	1.4	0.25	<0.030	<0.020		1.2

Mechanical properties, all weld metal

Wire grade	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Impact ISO-V(J)	
				-20°C	-40°C
LNS135	MR	400	500	50	
L61	MR	450	520	100	
L50M (LNS133U)	MR	480	580		80
L70 (LNS140A)	MR	540	620	100	
L70 (LNS140A)	TR		620		50
LNS160	MR	490	570		120
LNS162	MR	500	590		120

TR : two run

P230: rev. EN 15

Suggestions for use

Application

LNS 140A is applicable in multirun and two run technique
Flux can be used in one- and tandem wire application

Materials to be welded

	LNS135	L61	L50M (LNS133U)L70	(LNS140A)
A to D	X	X	X	X
AH32 to DH40	X	X	X	X
500 A				X
S275 to 355 N & M	X	X	X	X
S275 to 420 N, NL, M & ML		X	X	X
S275 to 460 N, NL, M & ML			X	X
S315 & S355 MC & NC	X	X	X	X
S315 to S420MC & NC		X	X	X
S315 to S460MC & NC			X	X
S315 to S500MC & NC				X

Flux characteristics

Max current, one wire (A)	700
Current type	DC (+,-) / AC
Basicity (Boniszewski)	1.6
Solidification speed	high
Density (kg/dm ³)	1.2
Grain	1 - 16

Packaging

Unit	Net weight (kg)
Bag	25