

AS 589

TOP FEATURES

- Excellent Impact toughness and CTOD properties
- Low diffusible hydrogen
- Excellent slag removal

CLASSIFICATION

Flux	EN ISO 14174: SA FB 1 55 AC H5	
Flux/wire	AWS A5.17	AWS A5.23
AS 35	F7A6/F6P8-EM12K	
AS 37LN	F7A8/F7P8-EH12K	
AS 40A		F8A4/F8P4-EA2-A2
AS 66		F9A8/F9P8-EF3-F3
AS 67		F8A10/F8P10-ENi6-Ni6
AS Cr1Mo		F8P4-EB2R-B2
AS Cr2Mo		F8P2-EB3R-B3

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

Wire grade	C	Mn	Si	Cr	Ni	Mo
AS 35	0.07	0.9	0.2	-	-	-
AS 37LN	0.07	1.6	0.3	-	-	-
AS 40A	0.07	0.9	0.2	-	-	0.5
AS 66	0.07	1.5	0.3	-	0.95	0.5
AS 67	0.07	1.3	0.3	-	0.9	0.2
AS Cr1Mo	0.07	0.9	0.3	1.0	-	0.5
AS Cr2Mo	0.08	0.6	0.3	2.2	-	1.0

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)			
					0°C	-20°C	-40°C	-60°C
AS 35	AW	≥360	450-550	≥28	≥160	≥100	≥50	
AS 37LN	AW	≥450	530-630	≥25	≥180		≥100	≥70
AS 40A	AW	≥470	550-680	≥24	≥120	≥100	≥50	
AS 66	AW	≥550	650-750	≥20	≥120	≥90	≥70	≥47
	PWHT 600°C/2h	≥540	630-730	≥22	≥140	≥120	≥90	≥70
AS 67	AW	≥500	560-680	≥22			≥145	≥70
	PWHT 600°C/2h	≥470	540-660	≥24			≥160	≥70

*AW = As welded; PWHT = Post weld heat treatment

FLUX CHARACTERISTICS

Current type	AC, DC+
Basicity (Boniszewski)	3.1
Grain size (EN ISO 14174)	2-20
Redrying	300-350°Cx2-4h

PACKAGING AND AVAILABLE SIZES

Packaging	Weight (kg)	Item number
DRY BAG	25.0	W000280315

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing.
Please refer to www.lincolnelectric.eu for any updated information.