

# Superflux 55ULT X H-14

Type : Neutral



## Conformances

AWS A5.17/ ASME SFA5.17 F7A(P)8-EH14  
 JIS Z3352 SA FB1  
 EN ISO 14174-S A FB 1 / EN ISO 14171-A-S4  
 KR 4Y40M H5 (-60°C ≥41 J)  
 ABS 5Y400M H5, 4YT  
 LR 4YT, 4Y40M H5  
 BV A5Y40M HHH, A4YT  
 DNV-GL VY40M H5, IVYT / VYT (T:t≤20mm)

NK KAW54T, KAW54Y40M H5  
 (-60°C ≥41 J)  
 TÜV EN ISO 14174 - S A FB 1  
 EN ISO 14171-A - S4  
 DB DIN EN 7ISO 14174-S A FB1  
 DIN EN ISO 14171-A-S4  
 CE  
 RINA 5Y40M, 4YT  
 RS 5YT, 4Y40T, 5Y40M H5

## Applications

- Offshore
- Shipbuilding
- Cryogenic applications

## Features

- Good impact value and CTOD at low temperature
- Low hydrogen content
- Tandem, multi-electrode applicable
- Density : 1.2g/cm<sup>3</sup>

## Current

AC, DC +

## Basicity Index

2.5

## Packages (Flux)

Tin Can 20kg(44lbs)  
 PE Bag 20kg(44lbs)

## Flux Composition

Consumable	Chemical Composition, wt%			
	SiO <sub>2</sub> + TiO <sub>2</sub>	CaO + MgO	Al <sub>2</sub> O <sub>3</sub> + MnO	CaF <sub>2</sub>
Superflux 55ULT	20	40	20	15

## Diameter / Packaging

Diameter mm (in)	Spool			Basket						Coil				Pac				
	20kg (44lbs)	25kg (55lbs)	100kg (220lbs)	25kg (55lbs)	100kg (220lbs)	200kg (440lbs)	250kg (551lbs)	300kg (661lbs)	500kg (1102lbs)	200kg (440lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)	400kg (881lbs)				
1.6 (1/16)	✓			✓							✓			✓				
2.0 (5/64)	✓			✓	✓	✓	✓					✓						
2.4 (3/32)	✓	✓		✓	✓	✓												
3.2 (1/8)		✓		✓	✓	✓	✓	✓				✓	✓	✓				
4.0 (5/32)		✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓				
4.8 (3/16)	✓			✓	✓			✓	✓									
6.4 (1/4)				✓	✓													

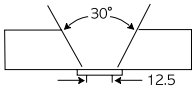
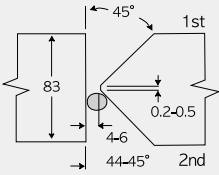
Typical Chemical Composition of All-Weld Metal(%)

Wire	C	Si	Mn	P	S	Ti	B	BM	Th.(mm)
H-14	0.09	0.21	1.34	0.019	0.012	0.018	0.0015	SS400	25
	0.08	0.26	1.40	0.020	0.009	0.020	0.0018	EH36-TM	83

Typical Mechanical Properties of All-Weld Metal

Wire	YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Position of fracture	CVN-Impact Value J (ft.lbs)		BM	Th.(mm)
					-40°C (-40°F)	-62°C (-80°F)		
H-14	530 (76,900)	580 (84,200)	30	-	-	120 (88)	SS400	25
	510 (74,000)	570 (82,800)	32	-	150 (110)	110 (81)	EH36-TM	83

Typical Welding Parameters

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks			
H-14	4.0	25		1-13	570	30	40	AWS A5.17			
H-14	4.8	83		1	220	25	21	(FCAW)			
				2	270	30	25	(FCAW)			
				3	550	30	35	Both Side Multi-pass			
				4-27	650	34	40				
				Back Gouging				28	550	30	35
								29-51	650	34	40

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX