THE LINDE GROUP

LINDE Welding Wires

Non- and low-alloy steels. Technical Properties

		SG 1	SG 2	SG 3
Classification	EN ISO 14341	G2 Si	G3 Si 1	G4 Si 1
	DIN 8559	SG 1	SG 2	SG 3
	AWS A5.18	ER 70 S-3	ER 70 S-6	ER 70 S-6
Chemical Composition of Wire - %	C	0.06 – 0.14	0.06 – 0.14	0.06 – 0.14
	Si	0.5 – 0.8	0.7 – 1.0	0.8 – 1.2
	Mn	0.9 – 1.3	1.3 – 1.6	1.6 – 1.9
Mechanical Properties	Yield Strength (N/mm^2)	min. 420	min. 460	min. 500
	Tensile Strength (N/mm^2)	500–640	530–680	560–720
	Impact Strength (ISO – V/40°)	min. 47 J	min. 47 J	min. 47 J
	Elongation ($L_0=5D_0$) (%)		min. 27	min. 25
Welding Parameters, wire type and Dimension	Welding Position	All position (PA, PB, PC, PE, PF, PG)		
	Welding wires Ø mm	0.8 (0.9)	0.8 (0.9)	0.8 (0.9)
		1.0	1.0	1.0
		1.2 (1.4)	1.2 (1.4)	1.2 (1.4)
		1.6	1.6	1.6
	Welding wire types:	Coated or Copper free		
Packing:	Wire spool	5 kg – 15 kg	5 kg – 15 kg	5 kg – 15 kg
	Drum (Bigpack)	15 Kg	50/250/450/500 kg	50/250/450/500 kg

Applications and Features

SG 1

S235, S355, P235GH, P265GH, P255NH, P295GH, P355GH
P235TR2, P355T2, P235G1TH, P255G1TH
L210, L290MB
S255N, S355N, P255NH, P355NH
GE200
Welding of thin walled parts
Root pass welding
For making galvanized coating
TIG welding of pipes

SG 2

S235, S355, E295, E360, P235GH, P265GH, P255NH, P295GH, P355GH
E235, P355T1, P235TR2, P355T2, P235G1TH, P255G1TH
P255NH, P420NH, S255NH, S420N
GE200
Steel construction and machinery production
Welding of ships, boiler tanks, pipe parts
Welding of thin walled steels
Thin sheet welding in automotive industry

SG 3

S235, S355, E295, E360, P235GH, P265GH, P255NH, P295GH, P355GH
P235TR1, P355TR1, P235G1TH, P255G1TH
P235G1TH, P255G1TH
GE200
Used for the same welding purposes as SG2
Its resistance is increased by Si-Mn
Low spatter although used under CO_2 atmosphere
Excellent wire feeding capability

Approvals

(TÜV, DB, BV, ABS, LLOYD'S, RINA, CWB)

TÜVRheinland:	EN 440 in VdTÜV-Kennblatt 1000 / VDTÜV 1153:2006
	EN 13479Annex ZA
ABS:	Certificate No.: NP 1093110
DB:	135 DIN EN ISO 4063
IQNet:	UNI EN ISO 9001:2000
Lloyd's Register	