

SG CuMn13Al7

CATEGORY GMAW-GTAW Solid wires

TYPE Solid high strenght CuMnAlNi alloyed welding wire.

APPLICATIONS Joint welds or building up of aluminum bronze. Cladding components undergoing metal to metal wear under high pressure. Especially suited for marine environments. The addition of manganese and nickel improves hardness and strength. Excellently suitable for joining and cladding of copper alloys, unalloyed and low-alloy steels and grey cast iron

PROPERTIES Highest grade of the Al-Bronze-types. Seawater-resistant copper-aluminum alloy without Zn with high toughness and improved hardness. "Very good weldability compare to the more common Al. bronzes. "

CLASSIFICATION

AWS	A 5.7: ER CuMnNiAl
EN ISO	24373: 14700: S Cu1
DIN: W.Nr.	2.1367
DIN	1733: SG CuMn13Al7

SUITABLE FOR Ship propellers, copper, brass, pumps, seawater, desalting equipment, marine, pulling tools, shafts, guide grooves, sliding surfaces, cast iron, pully, UNS : C62300 - C63000, DIN : CuAl10Fe3Mn2 - CuAl10Ni5Fe4 - G-CuAl10Fe, Mat n° : 2.0936 - 2.0966 - 2.0940, CuNiAl, superston etc..

APPROVALS ABS in progress.

WELDING POSITIONS:



WELD METAL ANALYSIS %

Ni	Mn	Fe	Al	Cu
2-2.5	12-14	2-3	7.5-8.3	rem

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	Elongation (%)	Impact Energy (J) ISO-V -20°C	Impact Energy (J) ISO-V -40°C	Melting range (°C)	Hardness HB
AW		880	10			945-985	200-240

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A)	spool type	kg / spool	kg / pallet
1.2	27-28	185-245	K-300 / D-300	15	1080
1.6	28-30	250-400	K-300 / D-300	15	1080

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1, I3