

### CLASSIFICATION

EN ISO 1071 : E Ni-CI 2      DIN 8573 : E Ni-BG 22  
AWS A5.15 : ENI-CI

### GENERAL DESCRIPTION

LC-100 is a nickel cored electrode. It enables welding with drop arc metal transfer. It is used for the welding of all types of cast irons. It gives a very stable arc and a negligible amount of slag that can easily be removed. Heat effected zone is very narrow. Porosity free weld metal can be easily machined. It has excellent resistant to cracking.

### APPROVALS

GOST, SEPRO, TSE

### APPLICATIONS AND MATERIALS TO BE WELDED

LC-100 is particularly used for the joining and build up welding of gray cast iron, nodular cast iron and malleable cast iron parts. It is an ideal electrode for the joining of cast iron pieces to monel alloys, stainless and ordinary steels. It can also be used for filling up cavities in castings, or cavities that might form after machining.

When welding cast iron without preheat, the smallest possible electrode diameter should be selected to limit the width of the heat effected zone that might occur due to excess heating. When welding thick pieces, a preheating to 150-300°C and slow cooling is recommended.

### CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

C	Ni
1.00	balance

### MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Yield Strength	: 300 N/mm <sup>2</sup>
Tensile Strength	: 380 N/mm <sup>2</sup>
Elongation (L=5d)	: 8 - 10 %
Hardness	: 120 - 140 HB

#### Gray Cast Irons

DIN EN 1561	W. Nr.
GG 10	0.6010
GG 15	0.6015
GG 20	0.6020
GG 25	0.6025
GG 35	0.6035

#### Blackheart Malleable Cast Irons

DIN EN 1562	W. Nr.
GTS 35-10	0.8135
GTS 45-06	0.8145
GTS 55-04	0.8155

#### Whiteheart Malleable Cast Irons

DIN EN 1562	W. Nr.
GTW 35-04	0.8035
GTW 40-05	0.8040
GTW 45-07	0.8045

### WELDING PARAMETERS / PACKING AND DIAMETER INFORMATIONS / WELDING POSITIONS

Current Type and Polarity : AC min 40 V ; DC ( - )

Diameter [ mm ]	Length [ mm ]	Current [ A ]	Electrode Weight [ g/100 pcs ]	Box Weight [ kg ] Quantity [ pcs/box ]	Export BoxBox Weight [ kg ]
2.50	300	65 - 100	1810	0.6 / 35	2.0
3.25	300	90 - 130	2830	0.7 / 25	2.0
4.00	350	110 - 160	5082	2.8 / 55	2.5



**Liability** : All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance.  
**Fumes** : Consult information on Welding Safety Sheet, available upon request.

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