LoTherme

Estd. 1966
DH sécheron
Complete Welding Support

LoTherme - 701

Unique formulation gives Spray transfer to seal the porosities on Cast Iron. Non-machinable deposits.

Characteristics :

The special flux formulation of LoTherme-701 electrode produces a quick freezing deposit. Spray transfer to seal porosities on Cast Iron, preventing oil coming out during welding. It is ideally suited for buttering layer before joining oil-soaked Cast Iron.

Applications:

LoTherme-701 is highly suited repair & maintenance for welding of cast iron, cast steel machine parts, equipments, etc. For repair of defective castings in steel foundry. Where repair welding of rusty, dirty or greasy castings are involved, LoTherme-701 is the appropriate electrode.

Welding Technique :

Dry the electrode at 150°C for one hour before use. Use low current, short weld runs followed by peening.

Current Conditions : AC / DC(-)

Size (mm) Dia x Length	5x350	4x350	3.15x350	2.5x350
Current Range (Amps)	160-200	130-160	80-120	55-85

Estd. 1966
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Complete Welding Support

LOTHERME

50 YEARS

LoTherme - 702

A low heat input, Ni-Cu alloy (monel) type electrode for machinable welding of cast iron.

Characteristics :

LoTherme-702 is a nickel-copper alloy electrode for low heat input welding of cast iron without preheating. The welds are sound, strong and easily machinable. The electrode displays a soft and steady arc, which is easy to strike and restrike and ability to operate on low currents.

Applications:

LoTherme-702 is suited for joining of broken cast iron parts, repairing defects in cast iron foundry and repairs of fractured iron parts in all welding positions. Typical applications include **rebuilding of worn out surface, gear teeth, pump impellers, etc.**

Typical Mechanical Properties Of All Weld Metal:

ULTIMATE TENSILE STRENGTH	:	34 Kgf/mm^2
HARDNESS	:	160 BHN

Welding Technique :

Dry the electrode at 150°C for one hour before use. Clean the base material thoroughly free of any surface contamination. Use short weld runs followed by peening. In case of repair welding on castings, remove entire defective portion to sound metal prior to welding.

Current Conditions : AC / DC(+)

Size (mm) Dia x Length	5x350	4x350	3.15x350	2.5x350
Current Range (Amps)	140-170	100-130	80-100	50-70

LoTherme - 703

Low heat input electrode for high-strength machinable deposit. Highly suitable for crack-free joining of Cast Iron to Steel.

Characteristics :

LoTherme-703 produces high strength, machinable welds and overlays on grey and alloy cast irons. Deposits are even crack-free on joints of Cast Iron to Steels. A stable arc and evenly rippled, smooth beads are some of the many pleasant features of the electrode.

Applications:

LoTherme-703 is used for :

1. Welding grey cast iron, malleable iron and S.G. iron ;
2. Welding cast iron to steel and to nickel alloys and ;
3. Repair welds and rectification of defects in castings.

Typical applications include engine heads, pump castings, impellers, rope drums, ingot moulds and a variety of cast iron machine parts. Due to the high strength and ductility, LoTherme-703 is ideal for welding heavy and highly stressed cast iron sections.

Typical Mechanical Properties Of All Weld Metal:

ULTIMATE TENSILE STRENGTH	:	43 Kgf/mm^2
HARDNESS	:	190 BHN

Welding Technique :

For joining bevel the edges to 75-90° in single or double 'Vee' groove according to thickness of the parts. For repair of cracks, drill holes at the two ends of the crack to arrest its further propagation. Remove entire cracked material to sound metal by chipping, gouging or machining.

Clean the weld area free of grease, oil, paints, etc. prior to welding. Weld short beads not exceeding 50 mm at a time. Each bead should be peened when still hot. For large and heavy sections pre heating of the job may be necessary. After the welding is completed, the castings should be covered completely with a layer of asbestos or dry lime until it attains room temperature.

Current Conditions : AC / DC(-)

Size (mm) Dia x Length	5x350	4x350	3.15x350	2.5x350
Current Range (Amps)	130-170	100-130	85-120	50-70

LoTherme - 704

A low heat input, high nickel electrode for better machinability deposit on cast iron.

Characteristics :

LoTherme-704 is a low heat input electrode, which deposits a very high nickel alloy. The arc is stable even at low current ranges, and this minimises dilution of weld metal with harmful elements present in the parent metal. Slag coverage is complete and slag detachability is excellent. The deposit bonds soundly with the parent metal and the beads are smooth and dense. The welds are machinable.

Applications:

LoTherme-704 is ideally suited for sound, crack-free welds on grey cast iron, S.G. iron, malleable iron and for joining cast irons to steels and to nickel-copper alloys. It is equally good for corrosion resistant overlays, filling and building up of worn out parts and joining broken sections. Typical applications are repair welding on machine bases, motor blocks, heavy castings, valve bodies, sprockets, pumps castings and gears.

Typical Mechanical Properties Of All Weld Metal:

ULTIMATE TENSILE STRENGTH	:	35 Kgf/mm^2
HARDNESS	:	140 BHN

Welding Technique :

Redry the electrode at 150°C for one hour before use. Clean weld area free from any surface contamination. Bevel broken parts or cracks to 70-80° Vee. Use a short arc and as low a current as possible. Deposit short weld beads not exceeding 25 mm. Peen the weld to relive internal stresses and allow the work-piece to cool slowly to room temperature. Pre-heating of the part is generally not necessary.

Current Conditions : AC / DC(+)

Size (mm) Dia x Length	5x350	4x350	3.15x350	2.5x350
Current Range (Amps)	125-165	95-125	65-95	45-65

Estd. 1986
DH sécheron
Complete Welding Support

LOTHERME

50 YEARS 1960 - 2010

LoTherme - 704 N

Universally applicable electrode with a specially designed bimetallic core wire having high penetration even on oil soaked C.I.

Characteristics :

The electrodes have a stable arc and produce a flat seam. Particularly for fillet welds an optimal seam structure is achieved. Due to the bimetallic core wire, the current carrying capacity and the deposition rate are excellent. The weld deposit is highly crack resistant and easily machinable.

Applications:

LoTherme-704N is suitable for joining and surfacing of grey cast iron, nodular cast iron (spheroidal cast iron) and malleable cast iron as well as for joining these materials each other or with steel and cast steel.

Typical Mechanical Properties Of All Weld Metal:

ULTIMATE TENSILE STRENGTH	:	40 Kgf/mm^2
HARDNESS	:	200 BHN

WELDING INSTRUCTIONS :

LoTherme-704N is preferably welded on DC (-) or on AC. When welding on DC (-) a deep penetration is reached in fillet welds. Position welding are easier with AC. Prior to welding, remove the casting skin. Hold electrode vertically and with short arc. When welding crack susceptible cast iron grades, the deposit may be peened.

Current Conditions : DC(-) / AC

Size (mm) Dia x Length	5x350	4x350	3.15x350	2.5x350
Current Range (Amps)	140-170	110-130	90-110	65-80

LOTHERME

Estd. 1966
DH sécheron
Complete Welding Support

LoTherme - 705

Low heat input electrode producing outstanding quality machinable welds on cast iron.

Characteristics :

LoTherme-705 flux formulation is so chosen that the electrode produce extremely soft arc which is essential for low heat input and avoiding dilution of weld metal with harmful elements present in the parent metal. The electrode produces crack free machinable welds.

Applications:

LoTherme-705 is ideally suited for sound, crack free welds on grey cast iron, spheroidal iron, malleable cast iron to themselves, to each other, to steel, or to monel or copper alloys. Equally good for cladding, filling, surfacing and building up of worn-out parts or broken sections. Repair welding of valve bodies, sprockets, engine blocks, pump casings, gears, machine base and defective castings are some of the various applications of LoTherme-705.

Typical Mechanical Properties Of All Weld Metal:

ULTIMATE TENSILE STRENGTH	:	35 Kgf/mm^2
HARDNESS	:	150 BHN

Welding Technique :

Dry the electrode at 150°C for one hour before use. Clean weld area free of all surface contamination. Bevel broken parts or crack areas to about 70° Vee. For cold welding, use as low a current as possible and deposit short weld beads not exceeding 50 mm. Peen the welds. Pre-heating of the part is not necessary.

Current Conditions : AC / DC(+)

Size (mm) Dia x Length	5x350	4x350	3.15x350	2.5x350
Current Range (Amps)	125-165	95-125	65-105	45-65

Estd. 1966
D&H sécheron
Complete Welding Support

LOTHERME

50 YEARS

LoTherme - 707

Highly Machinable Nodular Deposit Provides Crack Free Weld Metal on Cast Iron and Carbon Steel.

Characteristics :

LoTherme-707 is all position electrode designed for repair welds as well as for joining components of various types of cast irons, including grey and nodular cast irons and for welding them to steel and some ferrous and non-ferrous materials.

Applications:

LoTherme-707 is the right electrode for repair welds as well as for joining components and parts made out of various of various types of cast irons, rectification of defective casting in cast iron foundry, engine heads, pump casings, housings, impellers rope drums, ingot moulds and a variety of cast iron machine parts and equipments.

Tensile Strength : 40 Kgf/mm^2

Current Conditions : AC / DC (-)

Size (mm) Dia x Length	5x350	4x350	3.15x350	2.5x350
Current Range (Amps)	130-170	100-130	85-120	50-70

Precautions :

Keep the electrode dry. In case of moisture pick up, they should be re-dried at 200-250°C for one hour. Clean weld area thoroughly free of any foreign matter. Use low current, short arc, skip weld sequence and stringer beads. Peen to relieve stresses. Allow to cool slowly.