

PRODUCTS FOR METALLURGIC INDUSTRY FOUNDRIES AND STEELWORKS



družba za proizvodnjo, inženiring, zastopstvo in trgovino



FOUNDRIY COATINGS

Refractory coatings are applied to sand moulds and cores in foundries (steel castings, grey cast iron and ductile iron, and non-ferrous metals).

By creating a high temperature barrier over the entire coated surface between casting and substrate (mould or core), these coatings reduce the thermal shock caused by sand substrate.

Coatings ensure a smooth mould surface, improve its strength, reduce reactions between the substrate and melt, and provide homogeneous/smooth surface of castings. Applying refractory coating also prevents certain faults, i.e. segregations, burnt-in sand, bulges/recesses and others.

Different applying processes can be used for our coatings - dipping, spraying, pouring and applying with brush - providing flexible use in production processes specific to individual foundries.

Efficient coating must provide the following features:

- Sufficient refractory quality to prevent melt ingress into substrate
- Good adhesiveness to substrate and good covering characteristics
- Do not cause scaling, blistering or cracking in drying process
- Good suspension and mixing characteristics
- Good storage stability
- Good adhesiveness



WATER BASED COATINGS

Aquadur
CPX
graphite

Aquadur
M-15
aluminosilicate

Aquadur
ZG
zircon,
graphite

Aquadur
ZP
zircon

Aquadur
ASK
silicate,
graphite

ALCOHOL BASED COATINGS

Exo coating
BBE
graphite,
silicate

Exo coating
ABBE
alumina

Exo coating
BBE/BG
graphite,
silicate

Exo coating
ZBBE/G
zircon,
graphite

Exo coating
EP-02
zircon, olivine

Exo coating
ZBBE
zircon

Exosol
MO
magnesite

Exo coating
ABBE/M
aluminosilicate,
alumina

Exo coating
L 25 ORANGE
aluminosilicate

Exo coating
ZG-3V
graphite, zircon,
silicate

DILUENT AGENTS

Exo Coating
diluent

For diluting alcohol-based
coatings.

Exo coating
TP-01
alumina

ALUMINIUM CASTS Coppers Casts LAMELLAR GRAPHITE CAST IRON
SPHEROIDAL GRAPHITE CAST IRON STEEL CASTINGS MANGANESE STEELS

FOUNDRI COATINGS

RANGE OF FOUNDRY INDUSTRY COATINGS

BINDERS

Vezivo MX
- R, -7,
-11, -15

With the additive for
decomposition after casting

Silicate binders for the CO₂ process based on high quality water glass, with or without additives for better decomposition after casting. Binders with different additives are made for the foundry industry, which can be used with different types of sand and casting.

Vezivo M

No decomposition
additive

Betasil 10

The additive for
decomposition after casting

RELEASE AGENTS

RELEASE
AGENTS
FOR
METAL
FORMS

For moulds in
automated moulding

TEXOL A

For warm tools

LOČILEC
GS/C

These are release agents used in mould and core production. The release agent creates a thin film, preventing the product from sticking to the mould or core box and facilitating the excellent releasing of made moulds or cores.

ALUTIL
AMF
for cool tools

ALUTIL
MOP 417
for hot tools

ALUTIL
MOP 461
for hot tools

OTHER PRODUCTS

KITEX-C

Kit for repairing sand
moulds and cores

POPEX

Adhesive for
moulds and cores

CO₂ PROCESS
HOT BOX

CRONING PROCESS
BENTONITE MOULDS

COLD BOX
ZINC ALLOYS



THERMAL INSULATING MATERIALS FOR STEELWORKS

Thermal insulating coverings are pre-formed highly refractory models for thermal insulation of heads in classic ingot casting.

They are made on the basis of highly refractory fillers, fibres and binders. For special needs and requirements of our customers, we develop and produce **INSULATION COVERINGS** in insulation or exothermic-insulation quality, adjusted to required shape, dimensions and functionality.

We divide our thermal insulating products in three groups:

- ◆ **INSULATION COVERINGS**
- ◆ **CAST STREAM PROTECTION COVERINGS**
- ◆ **EXOTHERMIC INSULATING COVERINGS**



THERMAL INSULATING MATERIALS FOR STEELWORKS

EXOTHERMIC INSULATING AGENTS

The exothermic insulation agent in feeder, or ingot head, reacts highly exothermically in contact with melt. dissipating heat to inner side of the feeder or head. Residual after burning is highly porous, ensuring good insulation characteristics. Our exothermic insulation agents are produced in different forms, i.e. covers or powders.

EXOTHERMIC INSULATING COVERS



EXOTHERMIC INSULATING COVERINGS

LUNKERIT



LUNKERIT
L 303

LUNKERIT
L 250

LUNKERIT
L 150

GREY CAST IRON

STEEL CASTINGS

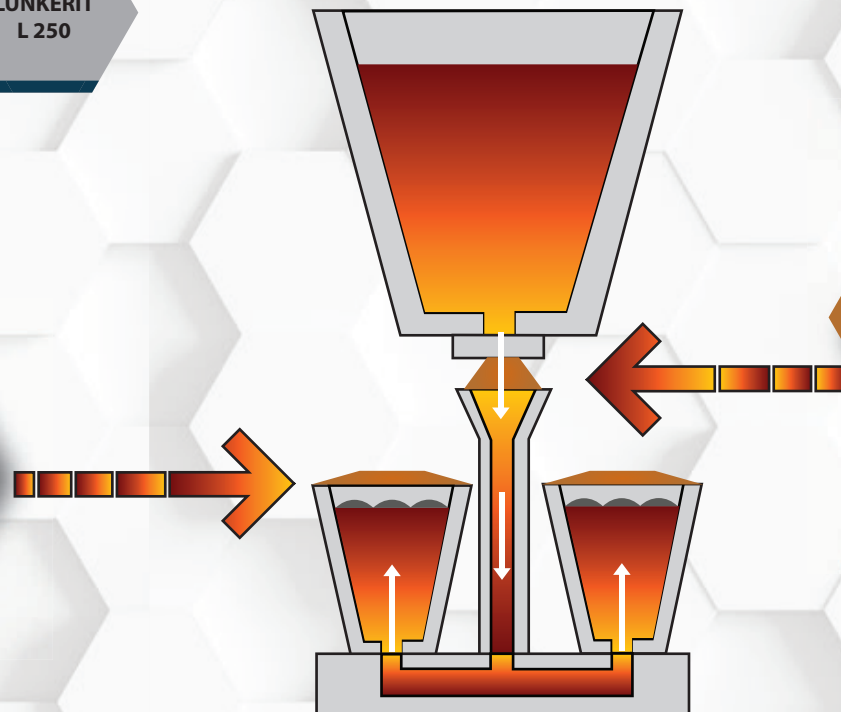
DUCTILE IRON

Insulation protective caps are pre-formed refractory coverings that serve as thermal insulation and protection of casting stream in classic ingot mould casting.

They are made of highly refractory fillers, fibres and binders. For special needs and requirements of our customers, we develop and produce protection coverings adjusted to required shape, dimensions and functionality.

CAST STREAM PROTECTION COVERINGS

KAPA ARGON



OTHER PRODUCTS

RECARBURISERS

Our KARBURITs are recarburisers that dissolve in melt to increase the carbon content. They are used to carburise the melt of iron alloys and steel.

KARBURIT NG

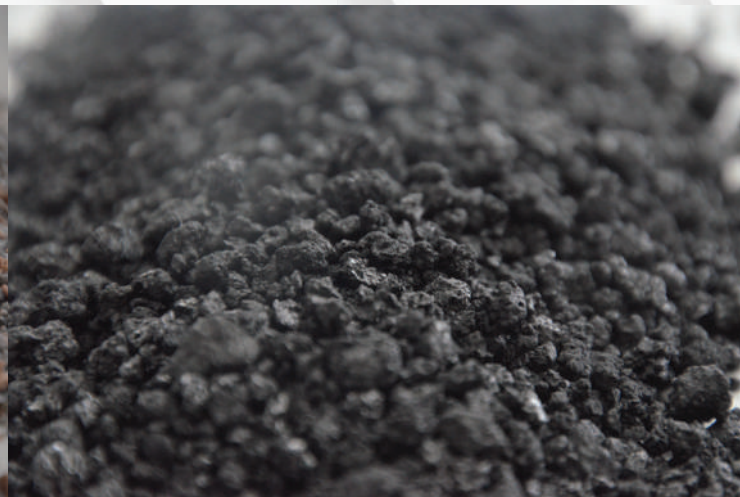
KARBURIT NL

KARBURIT PK

■ STEEL CASTINGS ■ DUCTILE IRON ■ GREY CAST IRON ■ MALLEABLE CAST IRON

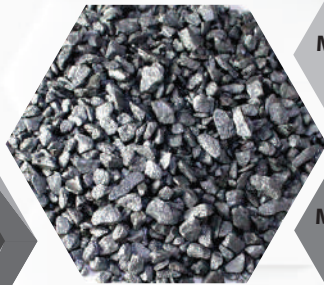
KARBOSIL is used to add silicon and to carburise the melt in induction furnaces. It is also used in production of synthetic alloys, where lower sulphur and nitrogen values are required.

KARBOSIL SiC



OTHER PRODUCTS

INOCULANTS



GRAY CAST IRON

MODIFIKATOR
SL 6 Ba

MODIFIKATOR
SL 3

The inoculation of grey cast iron is a process where melt is added to an agent to cause changes in crystallisation during the setting of the melt. These are significantly greater than what could be expected, due to changes in chemical composition caused by the additive. The most efficient inoculants contain elements with strong desulphurisation and deoxidization action (aluminium, calcium, barium, magnesium, strontium or zircon). Products of melt deoxidization with these elements represent new crystallisation nuclei for graphite deposition.

FERRO ALLOYS



OTHER EXOTHERMIC COVERINGS

FeSiMg5

FeSiMg6

FeSiMg9

NODULATORS

- STEEL CASTINGS
- DUCTILE IRON
- GREY CAST IR
- MALLEABLE C
- Al / Cu ALLOY

TERMEX 15

TERMOTOP US

LUNKERITI

TERMEX B

PEŽE

SLAG
SKIMMING
AGENT

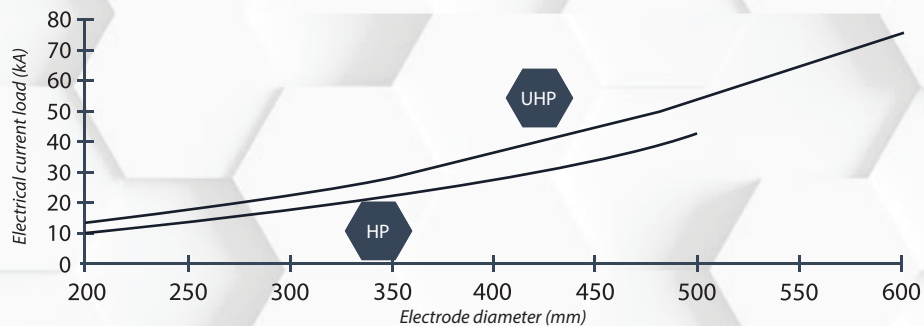
SALES REPRESENTATIVE

HENSCHKE

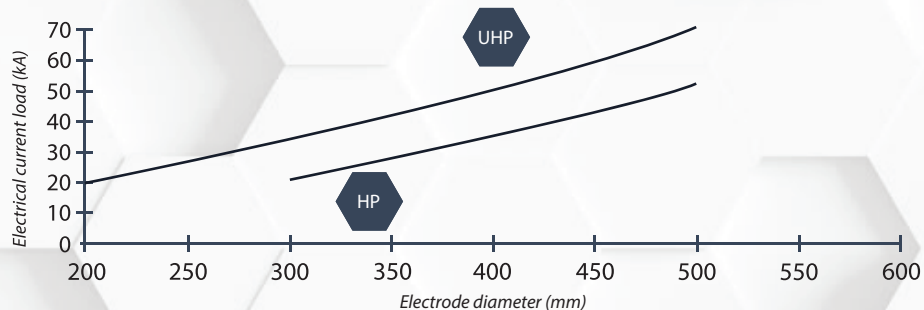
INTERNATIONALE INDUSTRIEVERTRETUNGEN

HENSCHKE GmbH is our international partner for graphite electrodes and graphite products and intermediate products.

MAXIMUM ELECTRIC CURRENT FOR ELECTRIC ARC FURNACES

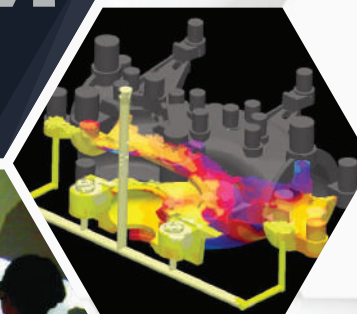


MAXIMUM ELECTRIC CURRENT FOR LADLE FURNACES



MAGMA

EXOTERM-IT d.o.o. is the exclusive representative of the MAGMA GmbH Company, Germany, for the MAGMASOFT® software kit in Slovenia, Croatia, Serbia, Bosnia and Herzegovina, Montenegro and Macedonia.



MAGMASOFT® is a comprehensive and efficient optimisation tool for improving the quality of the casting process, optimising process conditions and decreasing production costs. Virtual test planning (DoE) and autonomous optimisation methodology allows for the identification of robust process parameters and to optimise founding technology to all types of melts and casting processes, including heat treatment and melt metallurgy - both efficiently and comprehensively.

The MAGMASOFT® software kit enables automated achieving of the optimal balance between different quality requirements and costs.