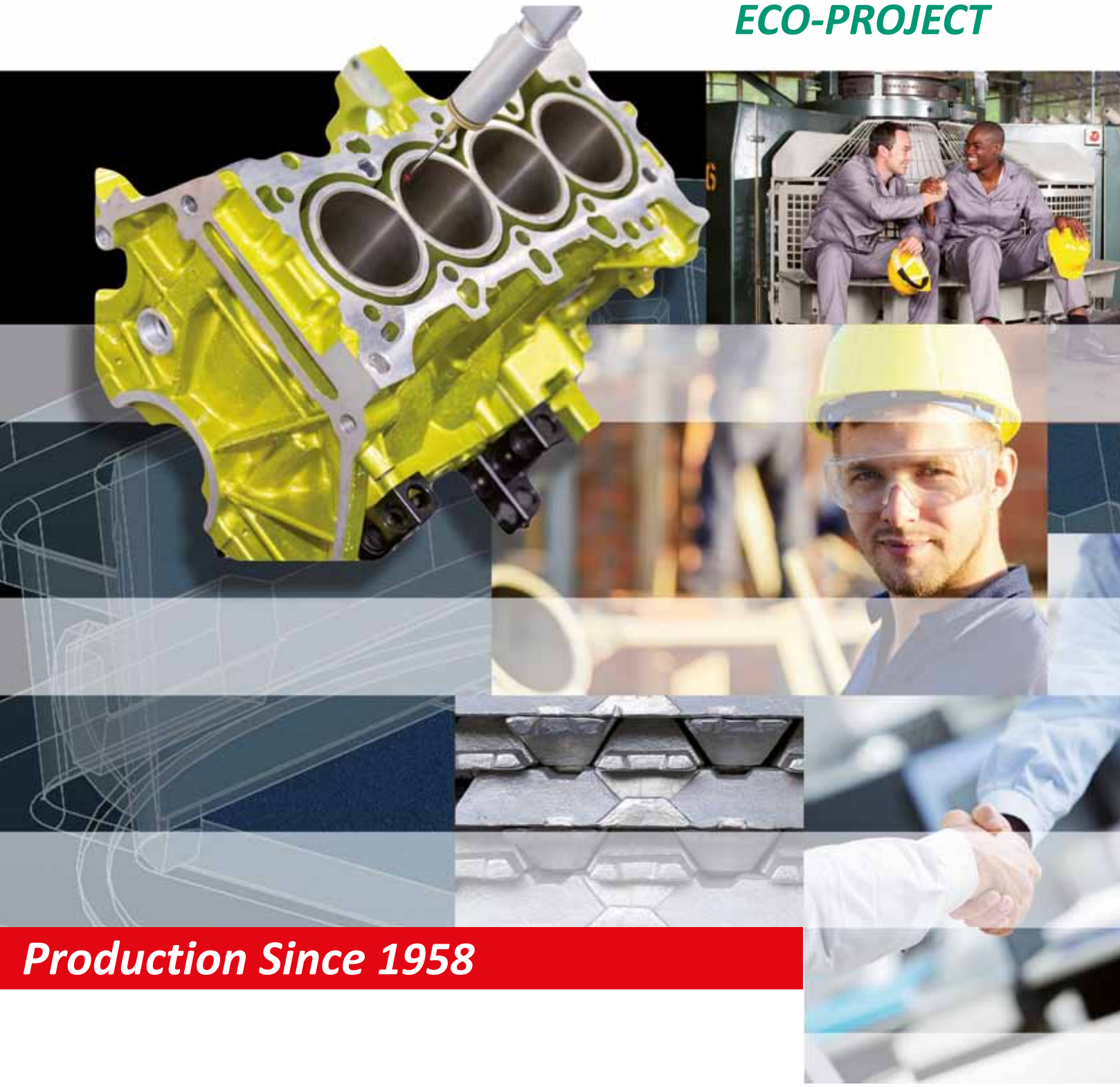
Jodovit
Chemical Group

SOLUTION FOR

NON-FERROUS FOUNDRY

ECO-PROJECT

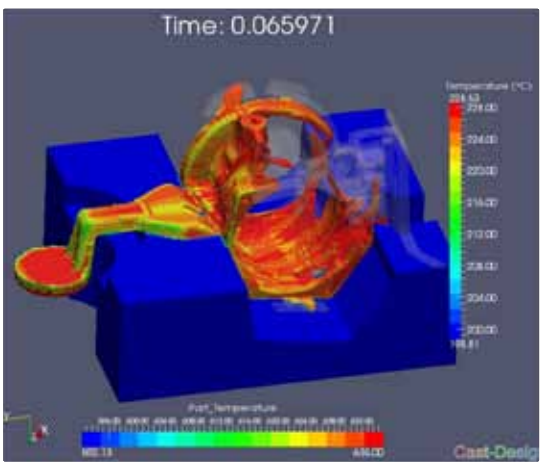


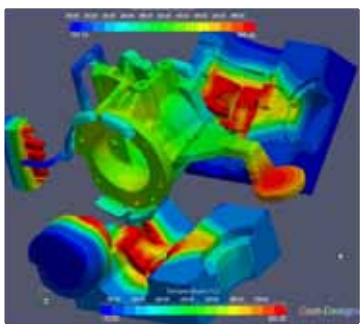
Production Since 1958

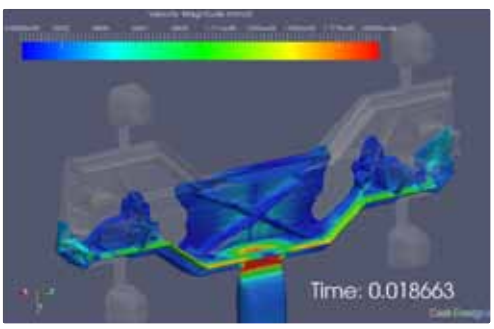
SOLUTION FOR NON-FERROUS FOUNDRY

Jodovit's activities are oriented to the continuous development of products and services to increase the quality and efficiency of productive processes for alluminium foundry.

The close collaboration with our customers and an efficient technical assistance on the main markets characterize our company from than 50 years.



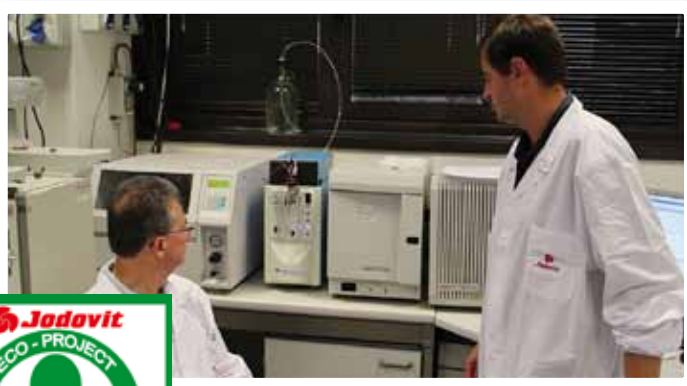




Jodovit has an exclusive advanced simulation software of alluminium casting.

CAST DESIGNER is among the best products in the market.

Jodovit has own research and development laboratories and produces directly in Italy all range of its materials.

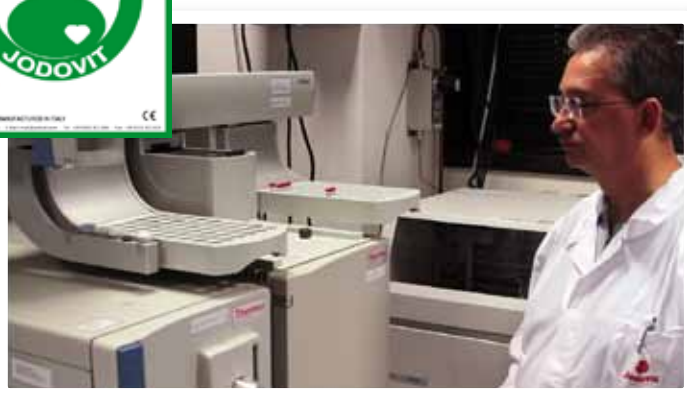


The result of these experiences guarantees:
- high technical efficiency of products
- optimization cost-benefit
- specific assistance for areas of competence
- presence on new markets
- development of products and specific solutions
- assistance after sales

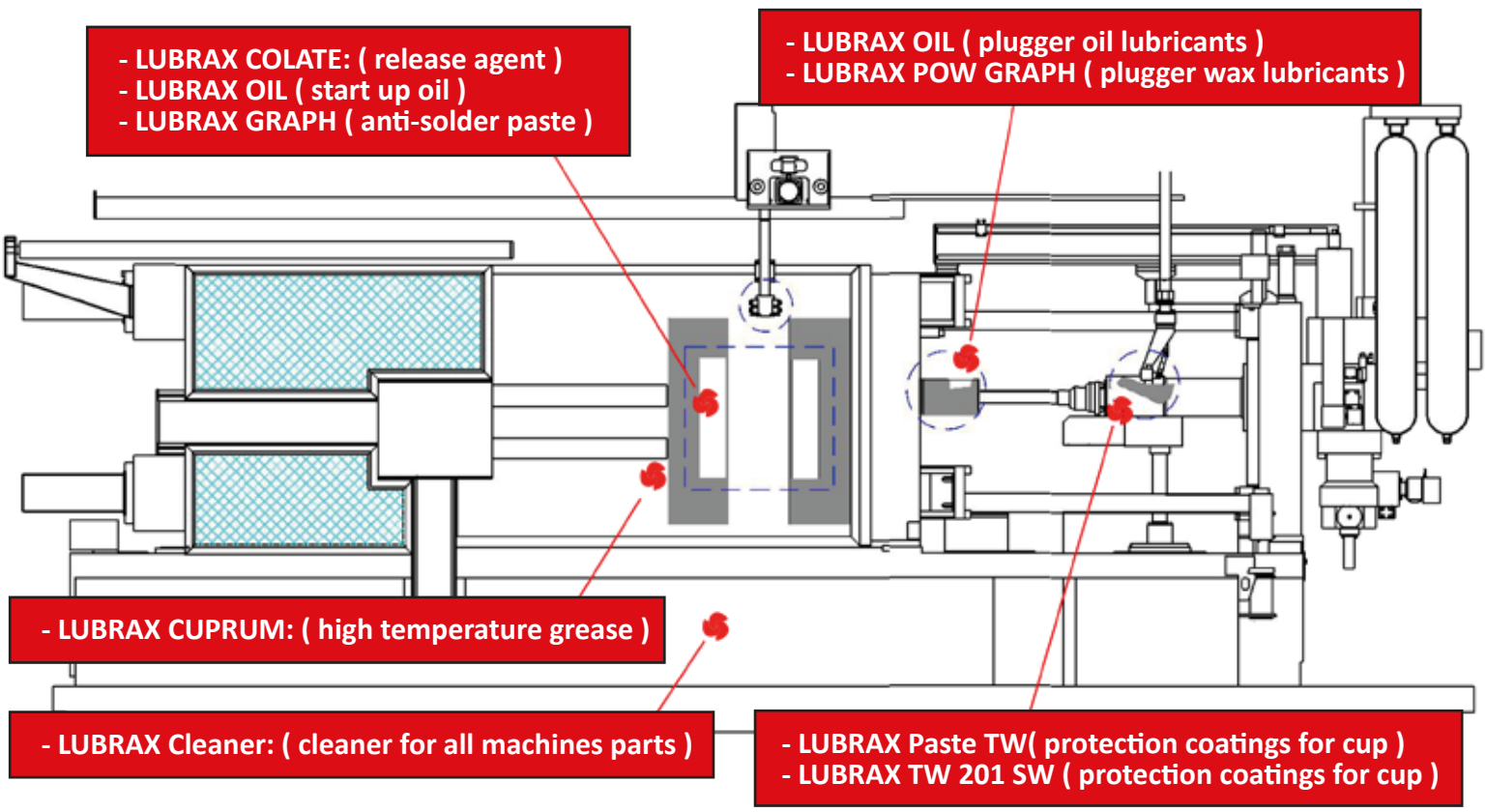
Since 2008 Jodovit has started the ECO-PROJECT programme in order to reduce dangerous substances in products to protect health.

The whole range of JODOVIT materials for non-ferrous foundry is totally free from:

- nonylphenol formaldehyde
- fluorine



LUBRAX SOLUTION FOR HIGH PRESSURE DIE CASTINGS



LUBRAX

New generation of Lubricants for he production of Alluminium castings in high and low pressure die-casting.

Benefit:

- improvement of casting efficiency
- *reduction of impact on casting porosity*
- increase shot component life
- *Lower usage rates to minimize costs*
- High degree of thermal stability
- *Smooth defect free surfaces*

ALKALIS REMOVING FLUX

ELIMINAX

Innovative formulated flux for the removal of Alkalis and Magnesium from alluminium alloys in the most modern Alluminium refineries.

Benefit:

- low environmental impact
- *low fumes emission*
- high performace
- *replacement of chlorine furnace fluxes*
- reduction of melt loss
- *removal of non-metallic inclusions when mixed into the melt*

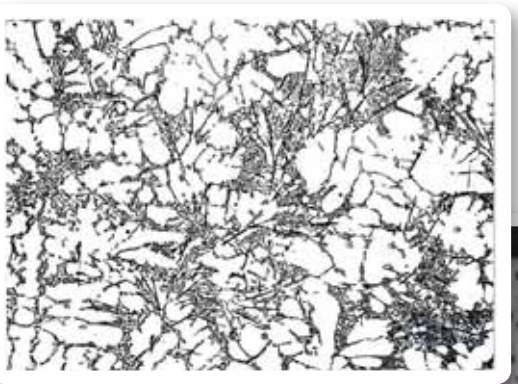
MAINTENANCE AND CLEANING OF FURNACE'S WALL

PULEX

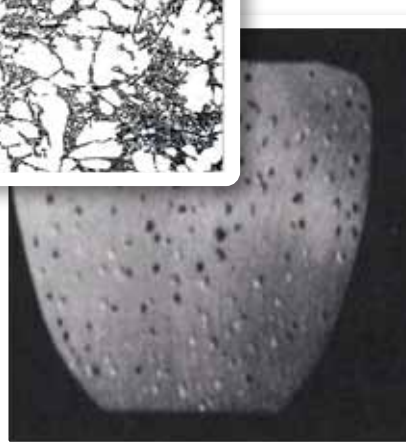
Flux in powder or tablet for the cleaning and the removal of oxides (corundum) and slag from the refractory walls of the melting furnace.

Benefit:

- low fumes emission
- *simple removal of corundum*
- simple application
- *reduction of maintenance operatons*
- increase of refractory walls' life



The structure of hypoeutectic alloy is improved after Jodovit flux treatment.



SAMPLE WITHOUT DEGASING TREATMENT

PRODUCTS FOR CLOSING AND TRANSFER

VOLUMIX B

CONE

White pre-formed with insulating compound suitable for isolation of feeders casted with any alloy and for little ladles of casting.

Benefit:

- low thermic conductivity
- *high mechanical resistance*
- low linear retreat

TAL TREATMENT

SCOREX GR/AFFINAX GR

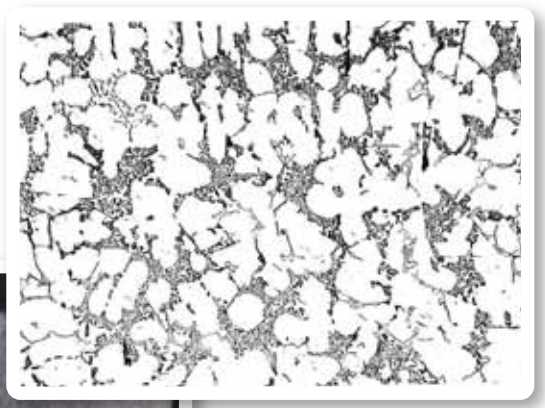
SCOREX GR/AFFINAX GR

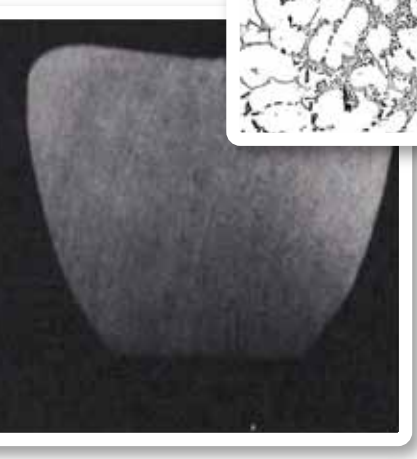
Granular fluxes for the treatment of liquid metal. Ecological fluxes to optimize the treatment of aloy. New developed products for modern needs. A complete and specific range for the type of alloy: alluminium and alloys – Magnesium and alloys – Copper and alloys – other non ferrous alloy. These fluxes are suitable for the reduction of surface's oxidation and removal of oxides in the liquid metal.

Benefit:

- Less quantity to use
- *Elimination of fumes in the environment*
- Easy dosage due to better disposition of the grains
- *Reduction of lacks due to non metallic inclusions in the alloys*
- Modification of the eutectic in the alluminium-silicon's alloys

NITROGEN DEGASSING TREATMENT





SAMPLE WITH DEGASING TREATMENT

The crystalline structure of hypoeutectic alloy is improved after Jodovit Pulex treatment.

DEGAFFEX

Chemical degassing system (self-sinking or standard tablets) in order to remove hydrogen from the molten metal.

Benefit:

- low fumes emission
- *low environmental impact*
- usage everywhere you need
- *no maintenance costs*
- simple application

LUBRAX DEGASER

Mechanical degassing system to remove hydrogen and slag from the molten metal.

Benefit:

- improvement of casting quality by removing oxides, hydrogen and other impurities
- *reduction of the alluminium quantity in the dross*
- usage of Nitrogen or Argon inert gas
- *easy control and quick operator training*
- usage in ladle or channel

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COATING FOR GRAVITY – LOW PRESSURE

VERNIX AL

Innovative formulated coatings with high performance to paint the shell mold for the production of alluminium with low pressure and gravity process.

Benefit:

- Water based
- *no volatile organic compounds (VOC)*
- improvement of the quality of the casting's surface
- *high protection of the shell mold*
- good sliding of melted metal

COATING FOR MOLDS AND CORES

VERNIX TX

Coatings alcohol or water based for molds and cores for immersion, spray, brush and washing process. There is a large range of refractory coatings according to the different casts that can be produced. They are suitable for all application types. They are applied for the removal of surface's lacks and cast's finishes.

Benefit:

- Excellent refractory's property
- *Excellent fluidity*
- Good surface's finish of casts
- *Time's reduction of cast's drool and costs*
- Good stability of conservation in the warehouse

SPECIAL COATING FOR CERAMIC

LUBRAX BORON COMPOUND

Innovative boron nitride coating for the protection of permanent mold and channels for continuous casting production.

Benefit:

- reduction of maintenance costs
- *extension of refractory life*
- easy application with brush or spray equipment
- *no corundum and dross growth*

TRANSFER AND DOSING METAL

CERAMICS

Several grades and types of advanced insulating refractory boards for molten metal applications such us: Billet / ingot floats, Transition plates and headers, Trough (launder) liners, Furnace linings, Head boxes for continuous casters.

Benefit:

- Non-wetting
- *Asbestos-free*
- Low thermal conductivity
- *Resistant to thermal shock*
- Excellent machining properties

INORGANIC BINDERS

Following environmental and quality requirements many core manufacturers and foundries are looking for alternatives to organic binder systems.

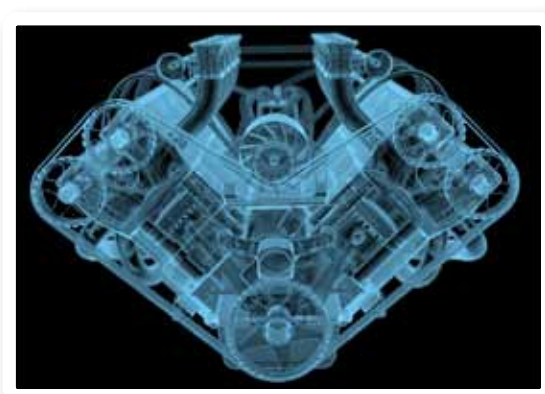
Jodovit has developed a new Inorganic system with a significantly lower emissions during pouring, cooling and shakeout compared to organic core binder processes.

The Jodovit inorganic binders are in the foundry process an alternative to organic binder systems.

Not only the environment but also the foundry workplace is improved: filtration, extraction and exhaust systems can be minimized.

Benefit:

- Emission and odor reduction up to 95%
- Reduction of energy and plant costs
- Clean, healthy air in the workplace
- Increase of production due to reduction of waste and shell maintenance operation
- Easy reclaiming
- Improvement of mold and equipment life
- Good flow properties and shooting at the core production
- Gas errors are reduced
- Good mechanic properties and reduction of porosity on casts
- Good thermal resistance
- Reduction of environmental investments



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