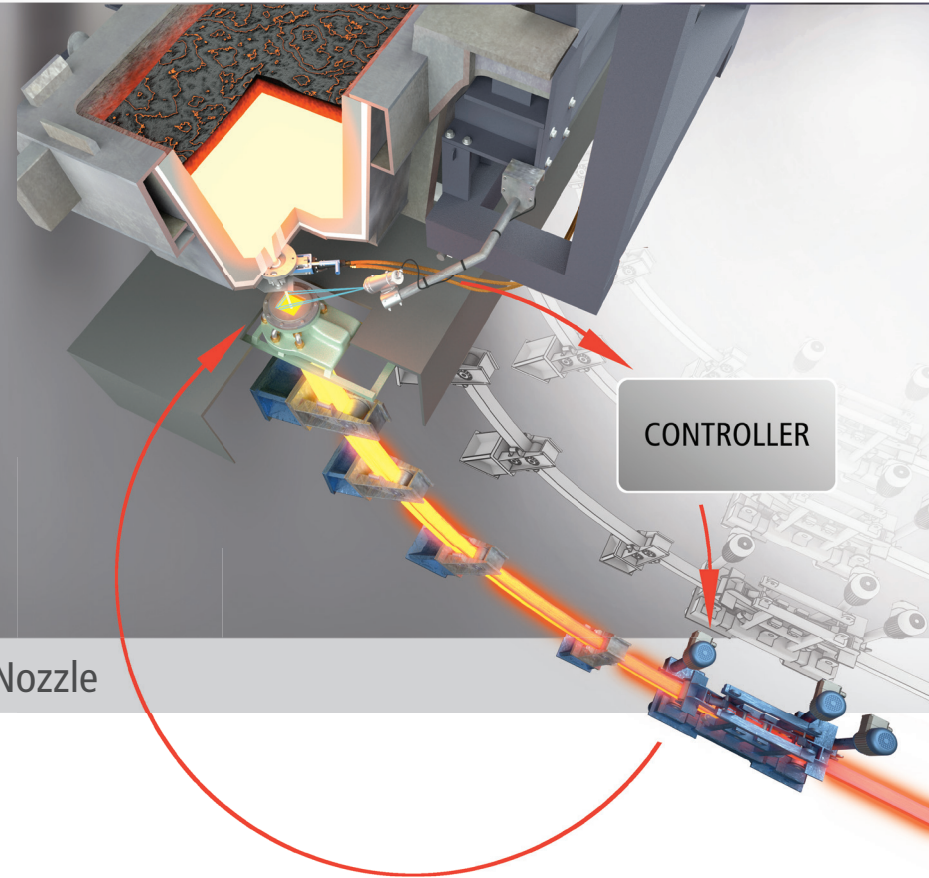


AMLC-Opto™

Automatic Mould Level Control with Calibrated Nozzle



Automatic Mould Level Control with Calibrated Nozzle (Billet Casters)

AMLC-Opto is a full package solution offering a high performance proven system that is safe, easy to implement and operate. The system is designed for automatic mould level control on a continuous casting machine producing billets with calibrated nozzle.



AMLC-Opto Features

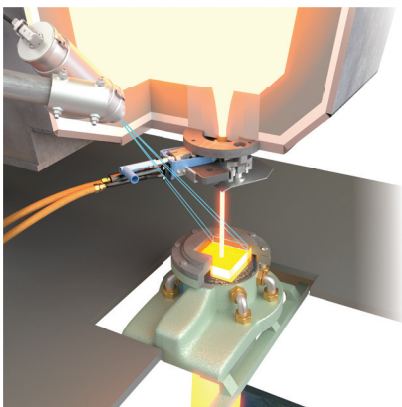
- Automatic extraction speed control
- Optical sensor with image analysis software for mould level measurement
- Measurement of the whole meniscus level at mould backside (and not only spot measurement)
- Accurate measurement and fast response time
- Easy adaptation to various mould sizes
- Intricately designed optical sensors incorporating digital filters to reduce interference from mould conditions such as fumes and flames
- No measurement dead zone at top of mould
- Constant sensitivity for any steel level within the measuring range

AMLC-Opto Benefits

- Possibility of high meniscus setting to reduce the stream impact
- Typically one sensor for one strand
- Casting different mould sizes without sensor manipulation
- Non radioactive technology => safe for user and no radioactivity management cost
- Includes remote view of steel level in mould
- Possibility to demonstrate performance in one day trial without disturbing production

OptoNum™ Mould Level Sensor Performances

Typical range of measurement (ROM), depending on lens and position to target	0-150 mm (from top of copper)
Distance from sensor unit to ROM	800-1500 mm
Typical resolution	0.5% of the ROM (= 0.5 mm for 100 mm ROM)
Framerate	40 ms



Engineering Options

- to automate stream deflection launder
- for automatic emergency strand shutoff by CNC Nozzle Changer

Possible Interface with CNC2™ & SYS120™ Calibrated Nozzle Changers

- Reduced tundish cost (refractory, manpower, energy)
- Extension of casting sequence for increased casting yield
- Improved operator safety
- Change of nozzle diameter and / or casting speed whenever requested
- Casting interruption / restart of individual strand
- Safe nozzle change < 0.2 s
- Safe emergency shut-off using a blank plate



Detailed Components of AMLC-Opto Solution

OptoNum™ Mould Level Sensor	Supervision panel with monitors and control pad	Adaptation plate with AMLC control elements for integration in existing operator panel	Main control cabinet with PLC for AMLC	Monitor with measurement overlay



For more information on this product and on our complete package of solutions please contact our local service center :

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VESUVIUS reserves the right to modify and/or improve the equipment as described and specified in this leaflet, at any time according to the state-of-art. CNC – patent applied for in various countries.

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