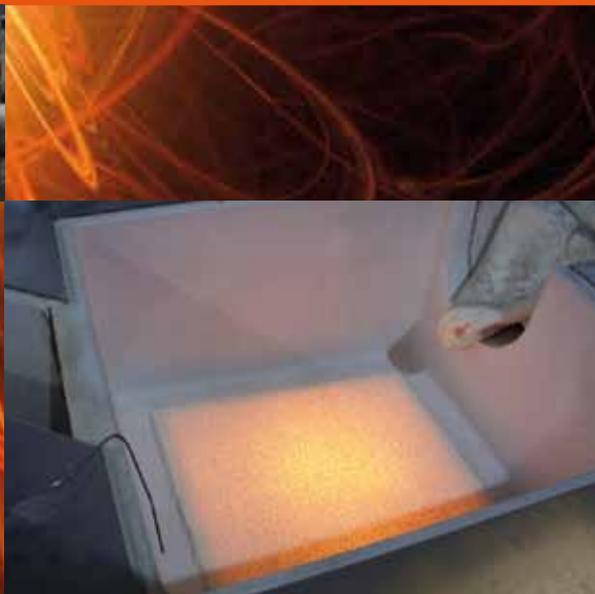
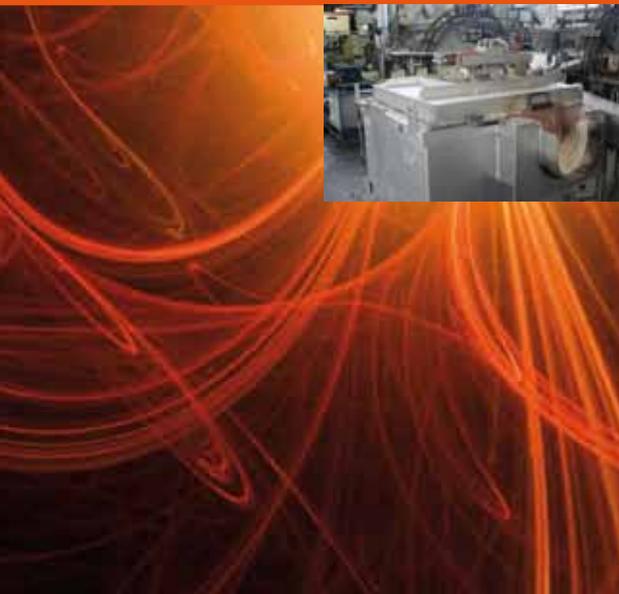


Heating of Launderers and Filterboxes for a better process control



- + no loss of temperature / no freezing of the melt
 - + no overheating of the furnaces
 - + increased durability of the refractory materials
-
- + reduced energy consumption
 - + increased product quality
 - + lower costs

Σ ROI < 12 months

No loss of temperature / no freezing of the melt
 The extremely uniform heating of the refractory surface and of the filters prevents an uncontrolled cooling of the melt.

No overheating of the furnaces
 The heat loss from the furnace to the casting station can be reduced / prevented so far, that an unwanted overheating of the furnaces can be avoided.

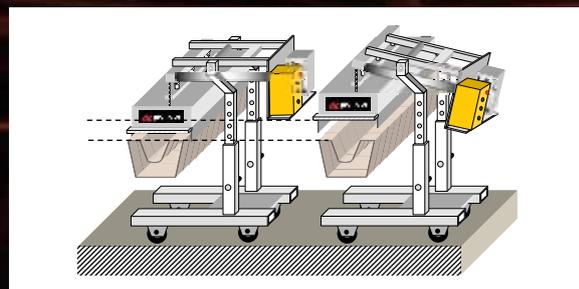
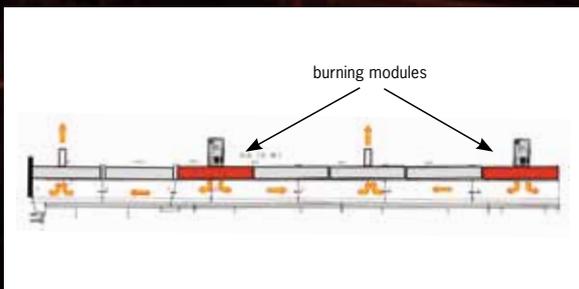
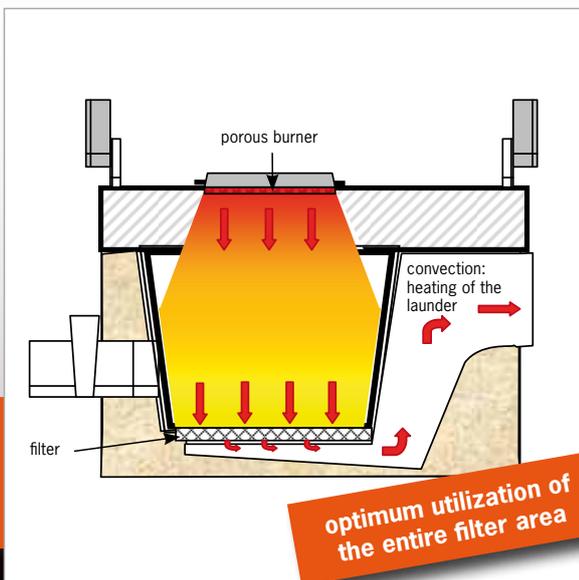
Increased durability of the refractory materials
 So called "hot spots" that are due to local fire or flames as well as the non-uniform heating of the launders and filters are completely avoided. Thereby the thermo-mechanical loading is significantly reduced and the lifetime of the material is increased.

Reduced energy consumption
 An overheating of the furnaces is not necessary.

Increased product quality
 The material is melted, prepared, transported and casted at an optimum metallurgical temperature.

Lower costs
 The savings of energy costs and the avoidance of "warm casting / tapping" lead to lower operating costs without plant down-times and thus to higher productivity.

ROI < 12 Months
 Usually your investment is recovered within a period of max. 12 months. We will compile you with a detailed amortization calculation with every offer you receive from us.



top: outline of the functional principle
 below: principle of heating launders with a porous burner

Mobile laundry heating for complex launder systems

Heating and Preheating Individually Tailored

The transport launders and filterboxes which are lined with refractory material are heated to the required target temperature prior to the start of each cast. For this purpose geometrically adjusted burners are integrated into the insulated covers of the systems. The heat is transferred onto the refractory surface or the filter medium via infrared radiation as well as convectively in a gentle and homogeneous manner. **The homogeneous and flame-free heating of the filter allows for the first time the utilization of the entire filter area for the filtration of aluminium, whereby the flow rate and the process control are optimized.** Because of the absence of open flames and the prevention of so called “hot spots”, the durability of the refractory material and the applied filters is increased. **Optional heating during the casting process ensures optimum process reliability and homogeneous casting temperatures for the whole duration of each single casting process.**

Retrofitting is easily possible; on request promeos supplies you with complete systems

Thanks to their modularity, the continuously variable controlling of the “burner-in-cover” systems offers a flexible retrofitting capability enabling them to be easily integrated into already existing structures. On request, promeos provides you with complete cover systems. Besides our permanently installed heating solutions we offer you mobile systems as well, which ensure an ideal heating of the launders even at different places of ex-

traction and are applicable even for the most complex launder systems. We are able to design and to deliver even complete launder systems and filterboxes.

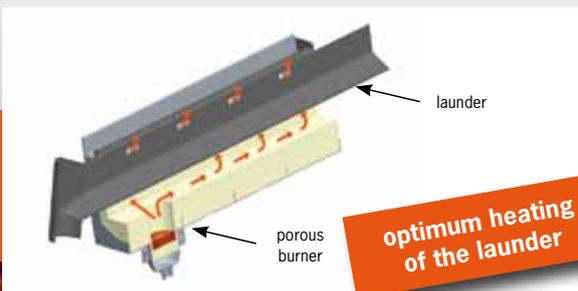
The Future of Casting Technology is Now

Indirectly/continuously heated launders for die casting systems

In order to prevent the freezing of liquid metal on the usually not insulated and unheated metal launders in die casting systems, promeos has developed a heated launder that is heated by a permanently installed burner that always maintains the ideal temperature. This launder guarantees you maximum protection from unnecessary down-times and associated losses of production.

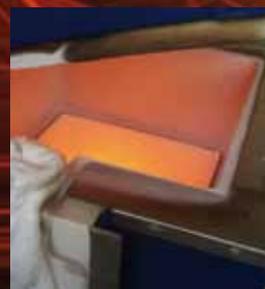
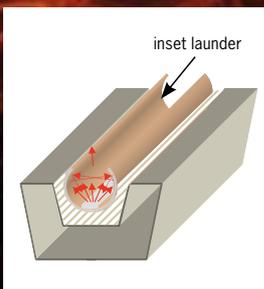
Launder-in-launder-system for increased energy efficiency

The cooling down of the liquid metal on its way from the furnace to the user is basically caused by radiation losses of the metal surface to the environment. Therefore promeos together with its partner duotherm Stark developed a cylindrical launder that captures part of this radiating energy and reflects it back to the metal. These launder modules are manufactured as ceramic shaped parts that are characterized by their good non-wetting properties against molten metal. They can be easily integrated into existing steel launders according to the “launder-in-launder-principle” without extensive restructuring – a minor modification causing “Stark” effects.



promeos offers

heating solutions for all types of launders and filterboxes. Size, form, material or branches do not play any role.



top: principle of a launder with an integrated heating
below: launder-in-launder-system for minimum heat losses

Filterbox

Launder heating viewed from above

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