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## MasterCooler SMART® Split Pipe design

#### MasterCooler SMART Split Pipe design

For nozzles with extension pipes longer than appr. 300 mm it is recommendable to install nozzles of the "Split Pipe" version allowing to seperate the front part carrying the nozzle tip and nut only. The nozzle's vertical plate together with the remaining part of pipe can be retained. The position of the joint between the two pipe ends can be designed as per request. A self aligning design also secures the correct spray direction at this point. A cost saving feature interesting enough especially for top segments near the mould. In case of a break out only the extension pipe

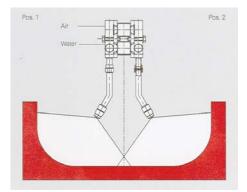
In case of a break out only the extension pipe with the tip has to be replaced.

### **Beam-blank casters**

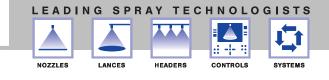
Depending on the beam-blank dimensions complicated header pipes, small specially bent fluid feed pipes and a fluid distributor have to be individally designed to accomodate standard air mist nozzles. Correct nozzle alignment, mounting and maintenance is difficult, time consuming and expensive.

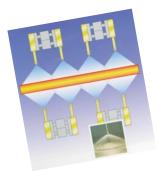
The nozzle and header pipes with the vertical plate connection are also an ideal solution for beam-blank casters. The advantages described above are also true here. The bends of the nozzle extension pipes can be made to suit. With the aid of the "Split pipe" design the two nozzles on either side can be identical with the front pipe turned by 180°.





Header design with square air and water pipes for MasterCooler SMART and Split Pipe design. Two nozzle positions with only one nozzle type. Split extension pipe offset by 180°.







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In modern slab casters a combination of different nozzle types are installed. They can be different in flow rate / size, spray angle and in extension pipe shape. In order to prevent misassembly Lechler offers a variety of different shapes of the extension pipe / nozzle joints.

Shapes allowing a 180° turn for beam-blank caster as discribed on the front page are possible (Photo 1). Other shapes only allow assembly in a position making in 100% failure proof (Photo 2). The joint can be positioned along the pipe on request. The hex size of the joint depends on size and, hence the pipe diameter of the nozzle. The joints shown guarantee a very rigid and durable connection (Photo 3).

#### The special features:

- Only extension pipe needs to be replaced after a break out.
- Very rigid and durable connection.
- For beam-blank casters one nozzle type can serve two nozzle positions.
- Failure proof system due to a variety of the different joint shapes.

### The benefits:

- Reduced maintenance costs.
- Improved operation safety.
- Reduced compexity of stock logistics due to reduced number of nozzles types in case of beam-blank casters.





Photo 1





Split Pipe

Photo 3

