



# Feed Chute

Chute with closed cooling circuit

| FEED CHUTE        |   |
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| <b>Solution</b>   | - The feed chute with closed cooling circuit  |
| <b>Size</b>       | - For all systems and sizes   |
| <b>Materials</b>  | - Coating with composite materials against abrasion and corrosion<br>- Selected in specific thicknesses up to 5 mm  |
| <b>Handling</b>   | - Easy assembly due to modular design   |
| <b>Advantages</b> | - Modular design<br>- Corrosion and wear resistant materials<br>- Closed cooling circuit<br>- Dosing of corrosion inhibitors and biocides possible<br>- Uniform flow through each segment<br>- Monitoring of temperature and flow<br>- Temperature monitoring per segment, reliable early indication and localisation of a back fire enabling timely initiation of countermeasures<br>- Additional safety through automatic replenishment of cold fresh water in the event of a sharp rise in temperature<br>- Rapid reduction of temperature peaks<br>- Various fire extinguishing systems as option |

### Water-cooled feed chutes in waste-to-energy plants

Water-cooled feed chutes are often used as an important component of the “waste feed” subsystem. Here, the heat that arises in the event of a possible backfire is dissipated via the water-cooled outer walls. Experience has shown that common cooling systems are not able to cope with all operating conditions. For example, steam bubbles can form during back fires, leading to local thermal overheating and deformation of the inner and outer walls. The stringent requirements regarding corrosion and abrasion are also not always met.

### Thermal stresses due to backfiring

Backfiring often results in very high local thermal stresses leading to deformations. With an insufficient cooling, there is also the risk of damage due to steam formation and steam hammering in the cooling system. Cooling systems without forced circulation are prone to fail under these circumstances. If steam bubbles form in these systems, the cooling capacity will be locally reduced significantly. Material overheating and damage can be the result.

### Biological contamination of the cooling water

Bacteria can develop in cooling water, posing a health risk on contact. Biocides prevent this development, but they are only economically applicable in closed systems.



**Please contact us  
for more information!**

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