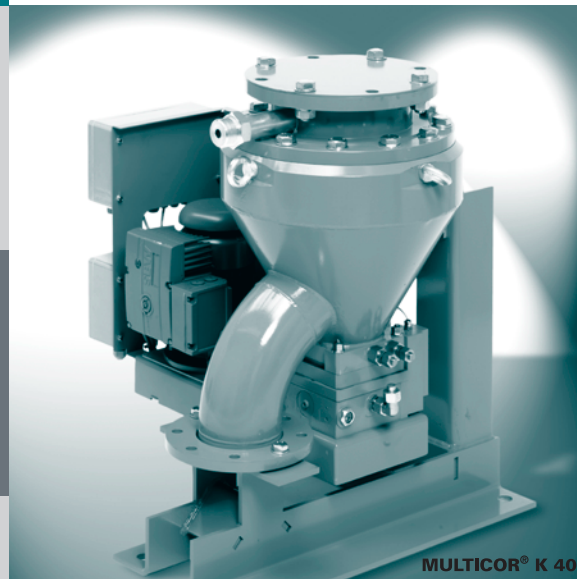


MULTICOR® K and MULTICELL

The pressure-proof mass flow feed system using the Coriolis principle with a horizontal star feeder – an unbeatable team



Optimal Pulverized Coal Feeding

Economical, high-quality, reliable pulverized coal feeding results from the interplay of overall system engineering, material discharge, feeding, and pneumatic material transport. System components that are perfectly matched to each other are a must for success.

1. Pulsation-free silo extraction

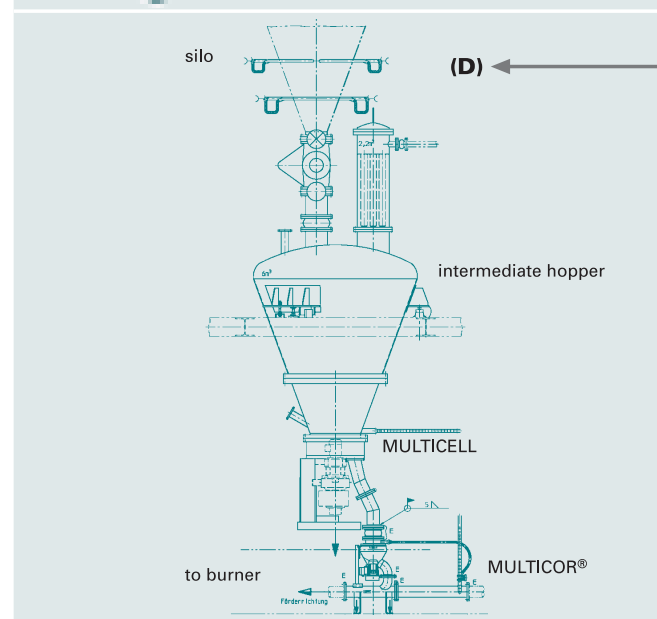
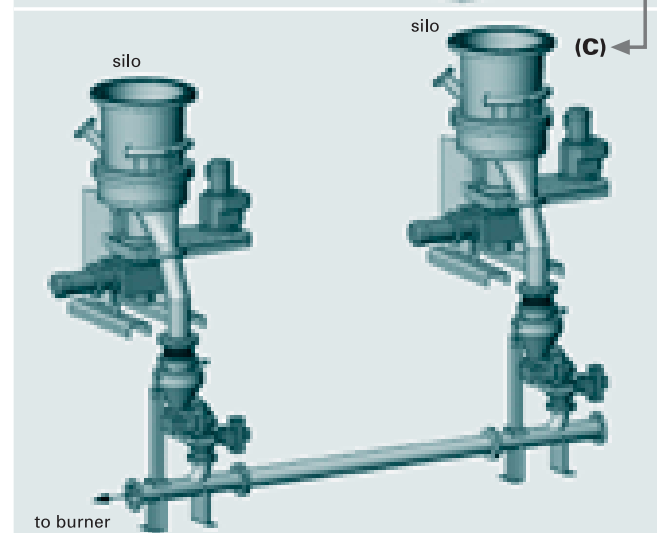
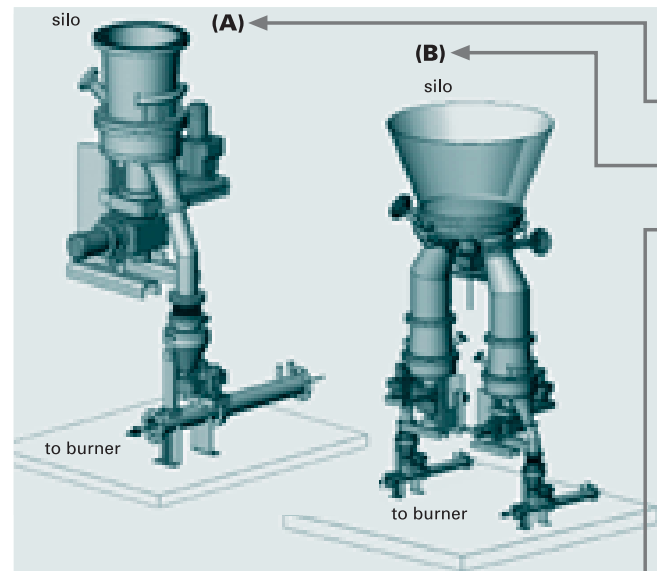
At the beginning of the process chain, Schenck Process Silo Engineering stands for mass flow. The large silo outlet and the agitation system integrated into the horizontal star feeder ensure the homogenization of the material and its pulsation-free discharge from the silo.

2. Exact measurement – excellent feeding performance

The material flow is measured quickly and precisely using the Coriolis principle, which is unaffected by outside influences. The MULTICELL horizontal star feeder's speed control performs the direct mass flow measurement. This ensures that the actual feed rate corresponds exactly to the specified nominal value.

3. Pulsation-free transport

Schenck Process Engineering ensures that the pneumatic conveyor line is laid out in an ideal fashion. The required amount of air and the conveyor cross-section are calculated to ensure optimal transport of the fuel from the feeder to the burner. The exact design pressure and intake volume of the blower are also determined.



Advantages

- ☒ Pulsation-free feeding
- ☒ High feeding constancy = high product quality and efficient kiln operation
- ☒ Feeding is unaffected by outside influences
- ☒ Engineering, material discharge, feeding and measurement from a single source
- ☒ High-quality materials for all contact parts provide excellent wear resistance

System variations depending on the plant concept:

Direct discharge and direct infeed

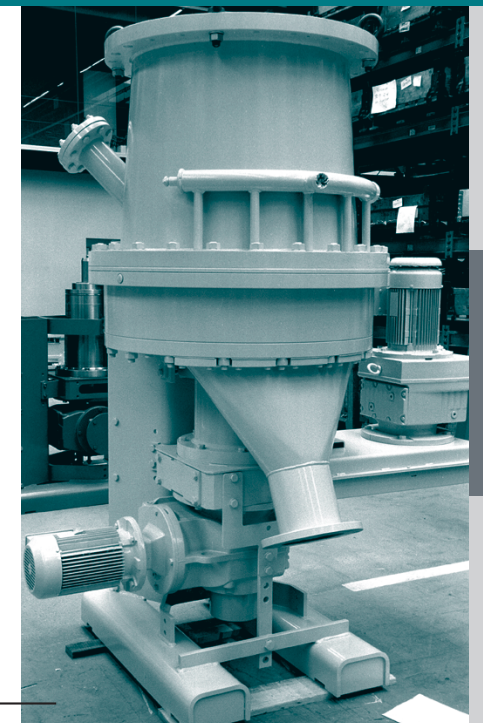
- ☒ Single feeding (A)
- ☒ Multiple feeding of the fuel from a silo to several burners (B)
- ☒ Infeed to a common conveying line; feeding of different fuels to a single burner (C)

Feeding with intermediate hopper

- ☒ Single feeding (D)
- ☒ Multiple feeding, but using an intermediate hopper
- ☒ Infeed to a common conveying line, but using an intermediate hopper

Options

- ☒ Infeed using a pump or star feeder is possible at high conveying pressures
- ☒ Manual shut-off gate at the silo discharge for trouble-free feeder maintenance
- ☒ Automatic check measurement device for online checking and correction of feeding system parameters when needed
- ☒ Blower, silo technology, pneumatic conveying system



MULTICELL and MULTICOR® K Combinations

MULTICELL (MC)/MULTICOR® combination	MC 640/20 K 50	MC 640/34 K 40	MC 800/50 K 40	MC 800/70 K 40	MC 640/20 S 40D	MC 640/34 S 40D	MC 800/50 S 40D	MC 800/70 S 40D	MC 800/50 S 160D	MC 800/70 S 160D	MC 1000/80 S 160D
Technology											
Max. feed rate [t/h] [metric]	5	9	14	20	8	12	16	20	20	25	35
Features											
Adjustment range 1:10	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Feeding accuracy ±0,5%	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Feeding constancy ±1%	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Application											
Single feeding/direct infeed											
Multiple feeding/direct infeed	☒	☒	☒	☒							
Multiple infeed											
Single feeding dust pump/star feeder					☒	☒	☒	☒	☒	☒	☒
Multiple feeding dust pump/star feeder											
Intermediate hopper	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Options											
Shut-off gate											
Check measurement device	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Silo technology, blower, pneumatic transfer system	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒