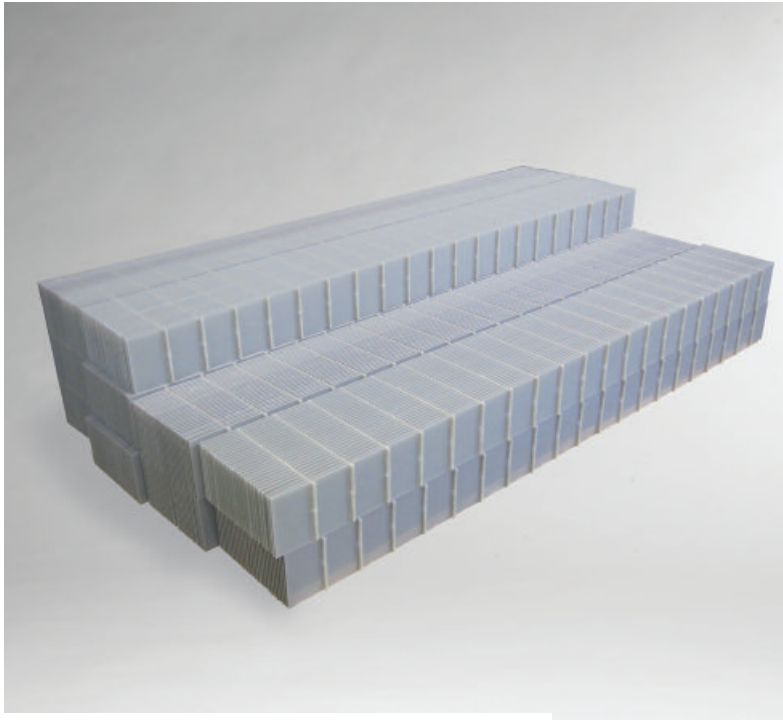


Cold-side packs (C-pack)

For regenerative gas-gas heater systems



For increased operation time of the gas-gas heater

- Low pressure loss; low energy consumption
- Excellent cleaning behaviour
- No clogging of the heat exchanger packs
- Minimized corrosion and erosion of the expensive heat exchanger packs
- Increased lifetime of the heat exchanger packs
- High self cleaning effect due to vibration of the plates
- Increased service intervals
- High stability makes stepping on possible
- High temperature resistance of up to 100 °C

The reheating of treated flue gases from the scrubbing tower, before discharge to the stack, plays a vital role in the operating costs of flue gas desulphurisation plants (FGD) working on wet processes.

The operating conditions in FGD plants are generally highly corrosive and have a high scaling tendency, which could cause high maintenance and replacement costs of the GGH or parts of them.

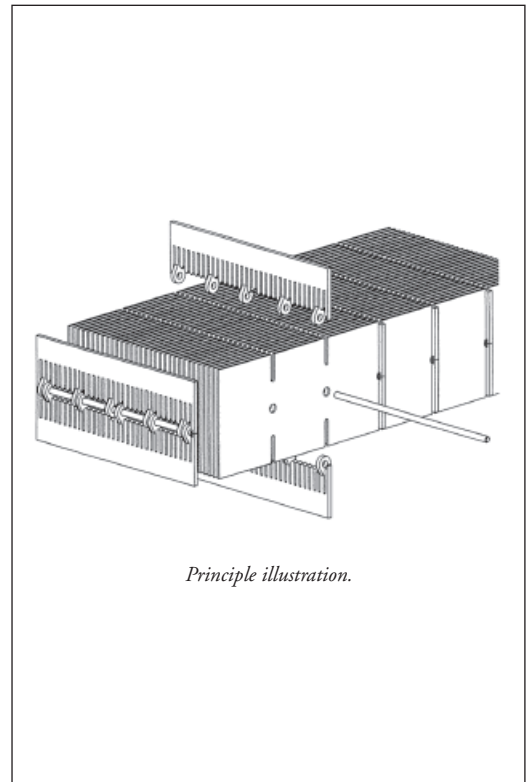
Depending on the operating conditions of the FGD and the GGH, it makes sense to install a totally corrosion-resistant plastic separation element at the cold side. This C-pack may be used when a high liquid load or fly ash content in the treated gas is expected, e. g. due to continuous water washing of the booster fan. The plastic surface properties prevent a bonding of deposits to the material and the high expansion coefficient and the vibrations of the single plates cause a »self-cleaning« effect.

C-pack extends both the service life of the GGH and also prolongs the interval between servicing. In doing so it reduces losses in energy output caused by constant growth of pressure drop and also contributes to improved downstream performance and overall process stability.

Typically, the enameled heating elements are washed with air or water pressure of 80 bar and more. Due to this high pressure the enamel surface, especially the sharp edges facing the cleaning devices, will be damaged. Additional manual cleaning with high pressure cleaning devices also causes damage to the surface of the heating elements.

The Munters C-pack protects the heating elements from the hard treatment thereby increasing the lifetime of the whole GGH system.

Munters Euroform can supply either full-scale erection services or – as an alternative – offer the assistance of a qualified and experienced supervisor for the erection carried out with local personnel, according to the customer's requirements.



Our Cold-side packs are successfully used by:

EnBW

KW Heilbronn Since 2002, 300 mm
KW Mannheim Since 2000, 150 mm

E.ON

KW Bremen-Farge Since 1998, 150/300 mm
KW Mehrum Since 1999, 300 mm
KW Wilhelmshaven Since 2000, 300 mm

EPZ

KW Borssele (NL) Since 2005, 300 mm

GKV

KW Veltheim Since 1997, 150 mm

Mark E

KW Werdohl-Elverlingsen Since 1998, 150 mm

RWE

KW Ibbenbüren Since 1996, 300 mm
KW Frimmersdorf Since 1998, 150 mm
KW Westfalen Since 1994, 150 mm
KW Werne Since 2003, 150 mm

STEAG

KW Herne Since 1994, 150/300 mm
KW Lünen Since 1996, 300 mm
KW Voerde Since 1995, 150/350 mm
KW Walsum Since 1996, 150 mm
KW Bergkamen Since 2000, 300 mm

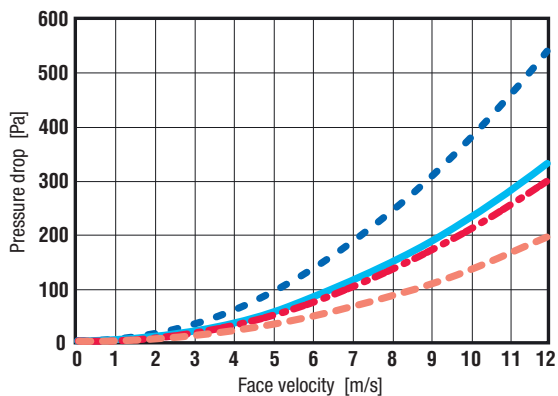
Swb

KW Hastedt Since 1997, 150 mm
KW Hafen Since 1998, 150/300 mm

Vattenfall

KW Wedel Since 1997, 150 mm

Pressure drop Cold-side pack



— Cold side pack 6 – 150 mm
- - Cold side pack 6 – 300mm
— Cold side pack 8 – 150 mm
- - Cold side pack 8 – 300mm



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