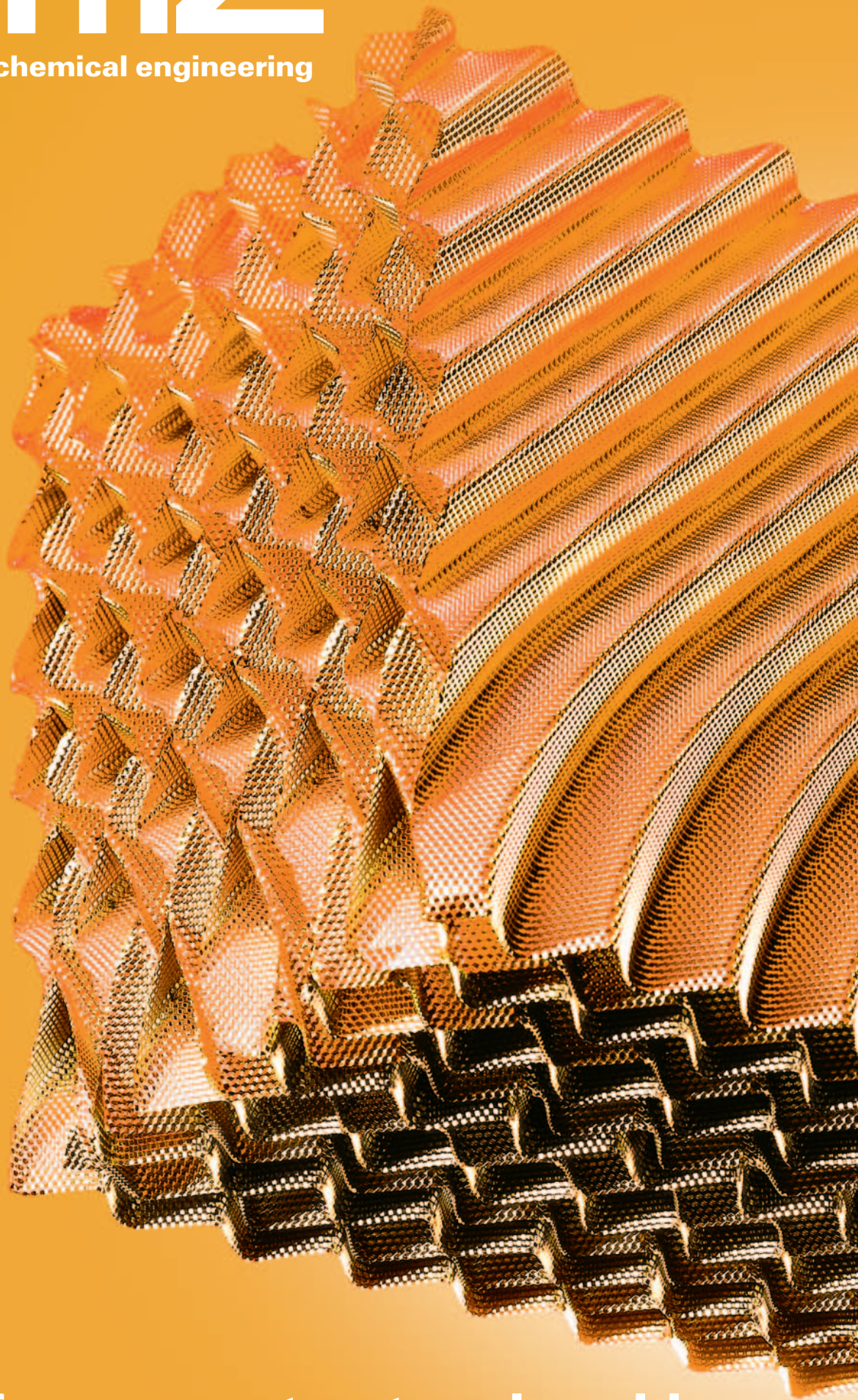


MONTZ

Your partner in chemical engineering



High performance structured packing

Montz-Pak Type M / MN

The new high performance packing

The Montz-Pak Type M and Type MN are further developments of the tried and trusted Montz structured packing Type B1, A3 and BSH with its own patent coverage.

The optimized crimp geometry creates two packing types, that meet the demands for high separation efficiency and throughput exceptionally well:

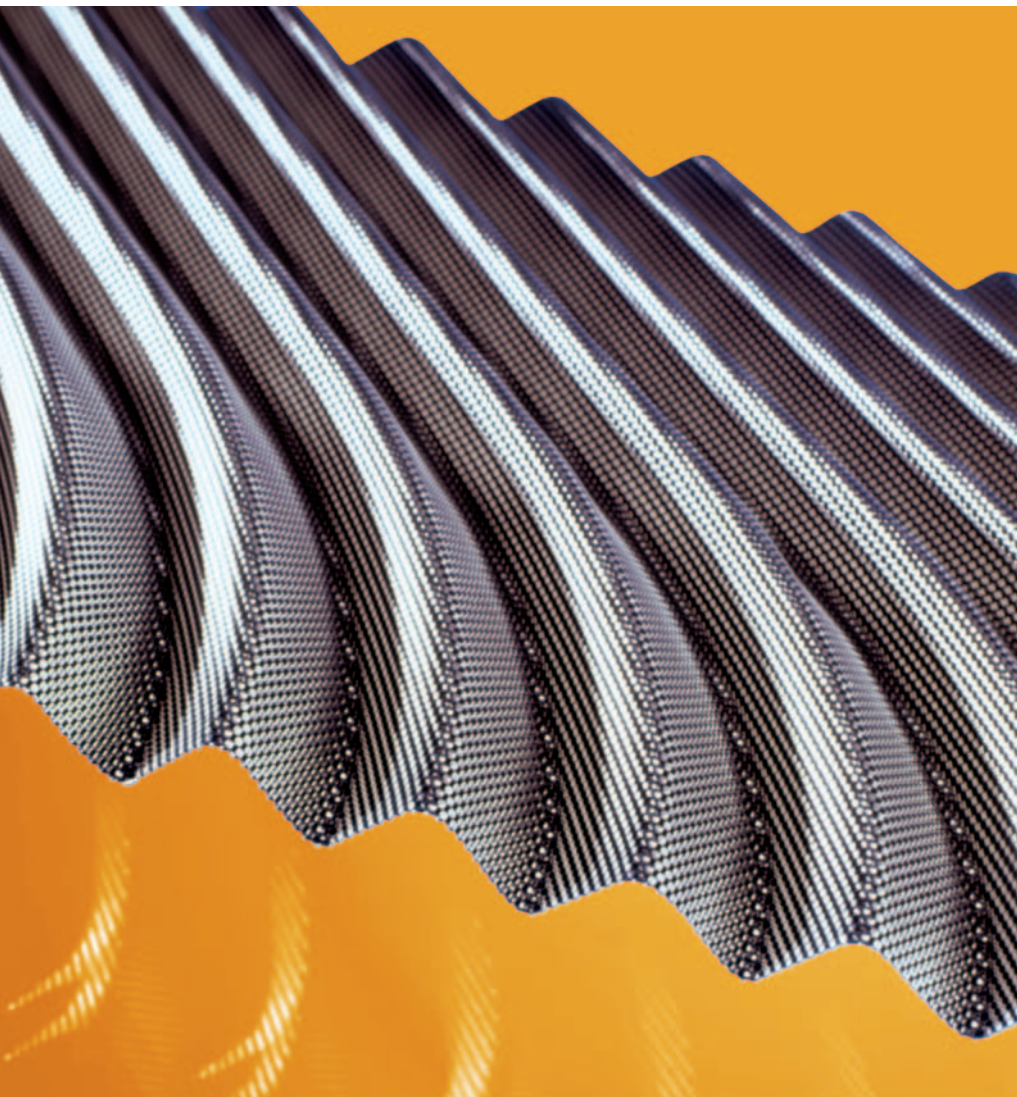
The new Type MN-series gives 30% more separation efficiency along with

higher throughput capacity compared to standard packing crimps. Higher purities, smaller column heights, and simple tower debottlenecking are now possible.

The Type M-series allows throughput increases of 30% compared to columns equipped with standard packing types due to the reduced pressure drop. This packing only offers the same efficiency as standard packing types.

Both packing types are patented in USA and Europe. Layer height depends on crimp shape, which prevents liquid hold-up at the lower end of the packing layer at high gas loads.

The field of applications comprises new columns as well as tower revamps. Revamps from standard packed columns to the new high performance packing types consistently deliver outstanding performances.



Characteristics Type M

- maximized capacity
- lowest pressure drop
- same separation efficiency compared to standard packing types

Characteristics Type MN

- higher capacity
- lower pressure drop
- highest separation efficiency

Available packing types

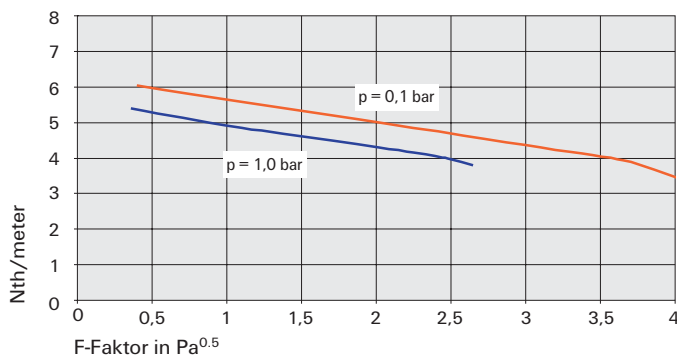
PAK-Type	Surface area (m ² /m ³)
• B1-250M	250
• B1-350M	350
• B1-250MN	250
• B1-350MN	350
• B1-500MN	500

Type MN

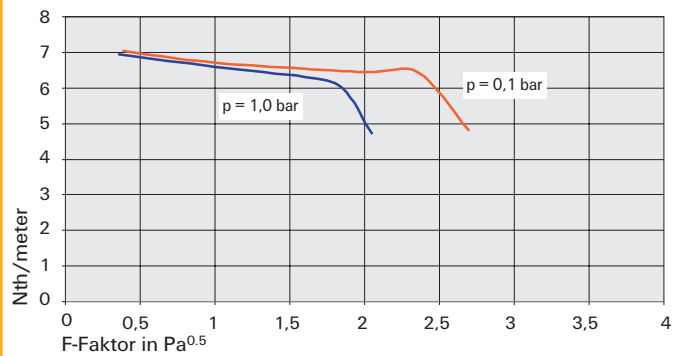
Separation efficiency increase of 30%

Performance data of a test distillation unit DN 600

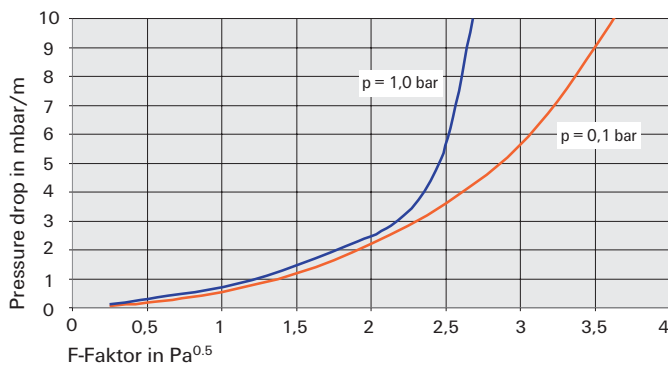
Separation efficiency in system chloro- / ethylbenzene for Montz-Pak B1-350MN



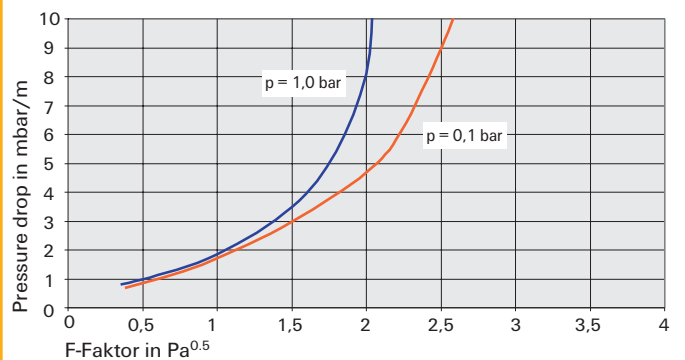
Separation efficiency in system chloro- / ethylbenzene for Montz-Pak B1-500MN



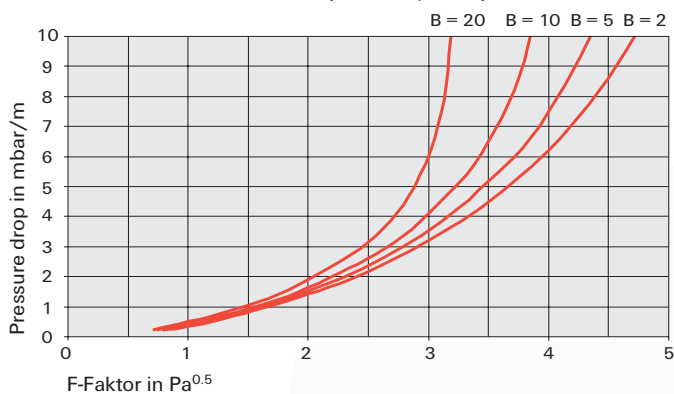
Pressure drop in system chloro- / ethylbenzene for Montz-Pak B1-350MN



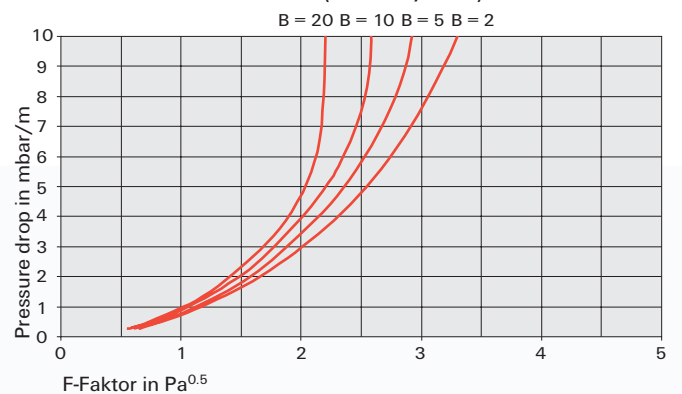
Pressure drop in system chloro- / ethylbenzene for Montz-Pak B1-500MN



Pressure drop in system air / water for Montz-Pak B1-350MN (B in m³/m²h)



Pressure drop in system air / water for Montz-Pak B1-500MN (B in m³/m²h)

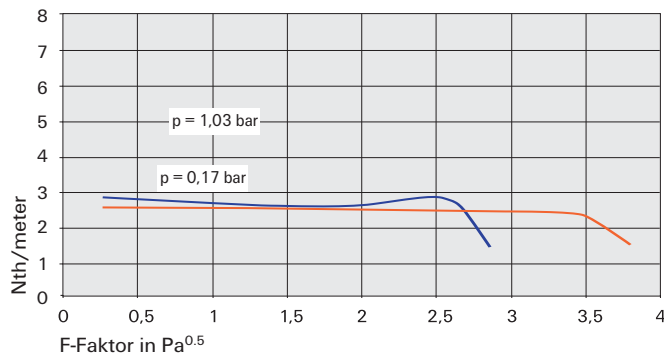


Type M

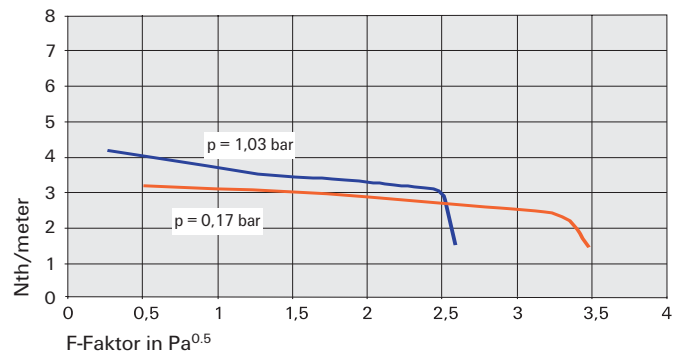
Throughput increase of 30%

Performance data of a test distillation unit DN 450

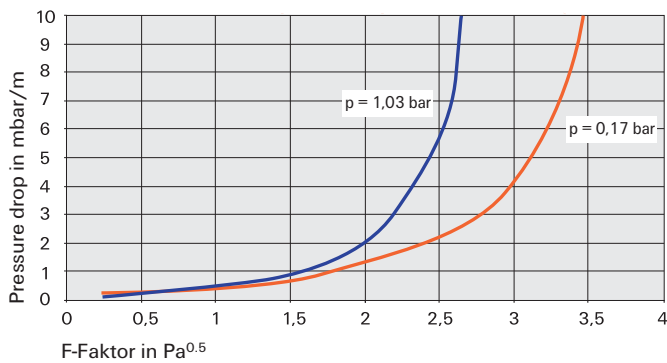
Separation efficiency in system cyclohexane / n-heptane for Montz-Pak B1-250M



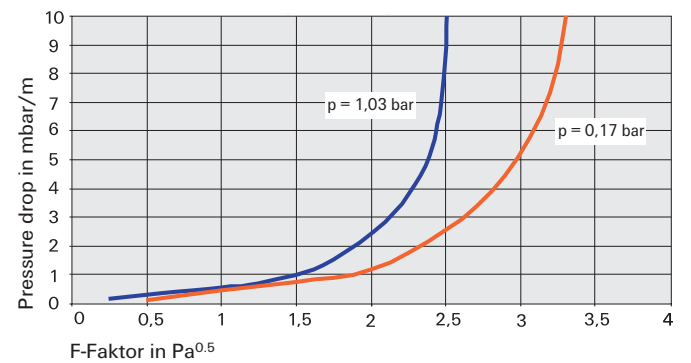
Separation efficiency in system cyclohexane / n-heptane for Montz-Pak B1-350M



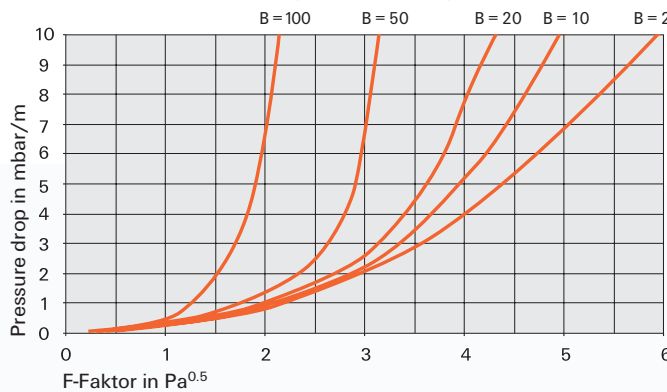
Pressure drop in system cyclohexane / n-heptane for Montz-Pak B1-250M



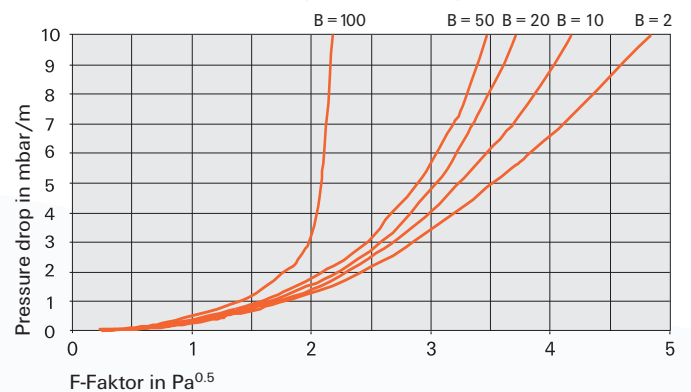
Pressure drop in system cyclohexane / n-heptane for Montz-Pak B1-350M



Pressure drop in system air / water for Montz-Pak B1-250M (B in m³/m²h)



Pressure drop in system air / water for Montz-Pak B1-350M (B in m³/m²h)



Montz-Pak Type A3-500M

Lowest pressure drop at high efficiencies

The new A3-500M offers a reduced pressure drop of 20% compared to the standard packing A3-500.

Due to the optimized crimp geometry higher throughputs, lower total pressure drops and smaller tower diameters and tower debottlenecking applications are possible. The A3-500M suits applications under high vacuum along with the smallest liquid distribution densities.

Characteristics

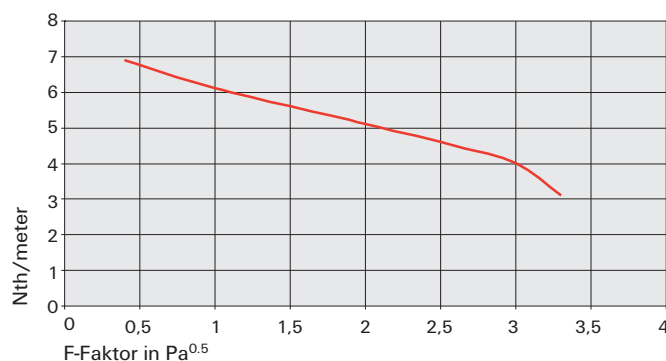
- lowest pressure drop per theoretical stage
- higher capacity
- equal separation efficiency to A3-500

Applications

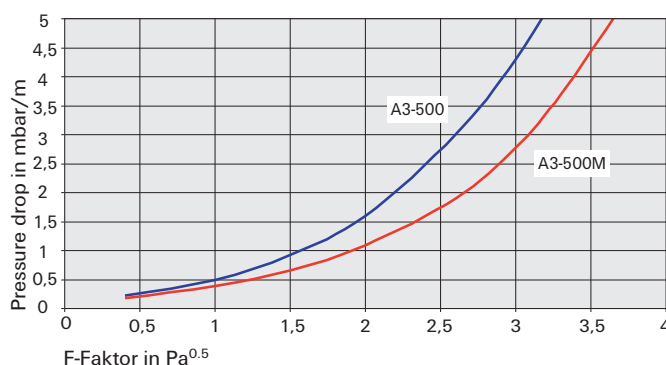
The main applications are the separation of thermal unstable products, which are separated under high vacuum up to 0,5 mbar.

- essential oils
- isomer mixtures
- vitamins
- fatty acids
- fatty alcohols
- isocyanates

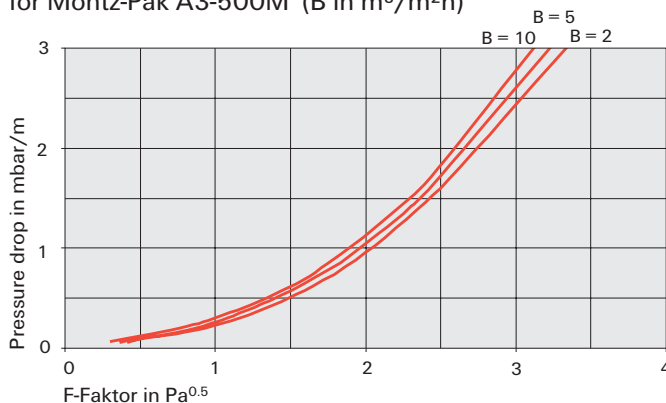
Separation efficiency in system chloro- / ethylbenzene for Montz-Pak **A3-500M**



Pressure drop in system chloro- / ethylbenzene for Montz-Pak A3-500M und A3-500



Pressure drop in system air / water for Montz-Pak A3-500M (B in m³/m²h)



Addresses and Services

This list shows you where you can find our range of products and services along with our world-wide agencies and representative:

Range of products offered by Montz:

Apparatus, turn-key plants, engineering;
Rectification (pressure and vacuum),
distillation, absorption, extraction,
falling film evaporators, heat
exchangers

Column internals:

- Structured packings:
B1 packing
BSH expanded metal packing
A3 wire gauze packing
C1 PTFE packing
M / MN high performance packing
- Liquid distributor systems
- Mass transfer trays:
Montz Thormann® trays
Montz tunnel trays
Cross-flow trays type KSG
Sieve and bubble cap trays
- Reflux splitter

Materials:

stainless steel, aluminium, copper,
nickel, Hastelloy, titanium, tantalum,
zirconium, etc.

Assembly and installations:

- industrial installations
- revamps
- repairs
- Glühbehandlungen von
Apparaten

Inspections and technical codes:

TÜV, Lloyd's, Stoomwezen, ANCC,
Service des Mines, AIB-Vinçotte,
ASME etc.

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