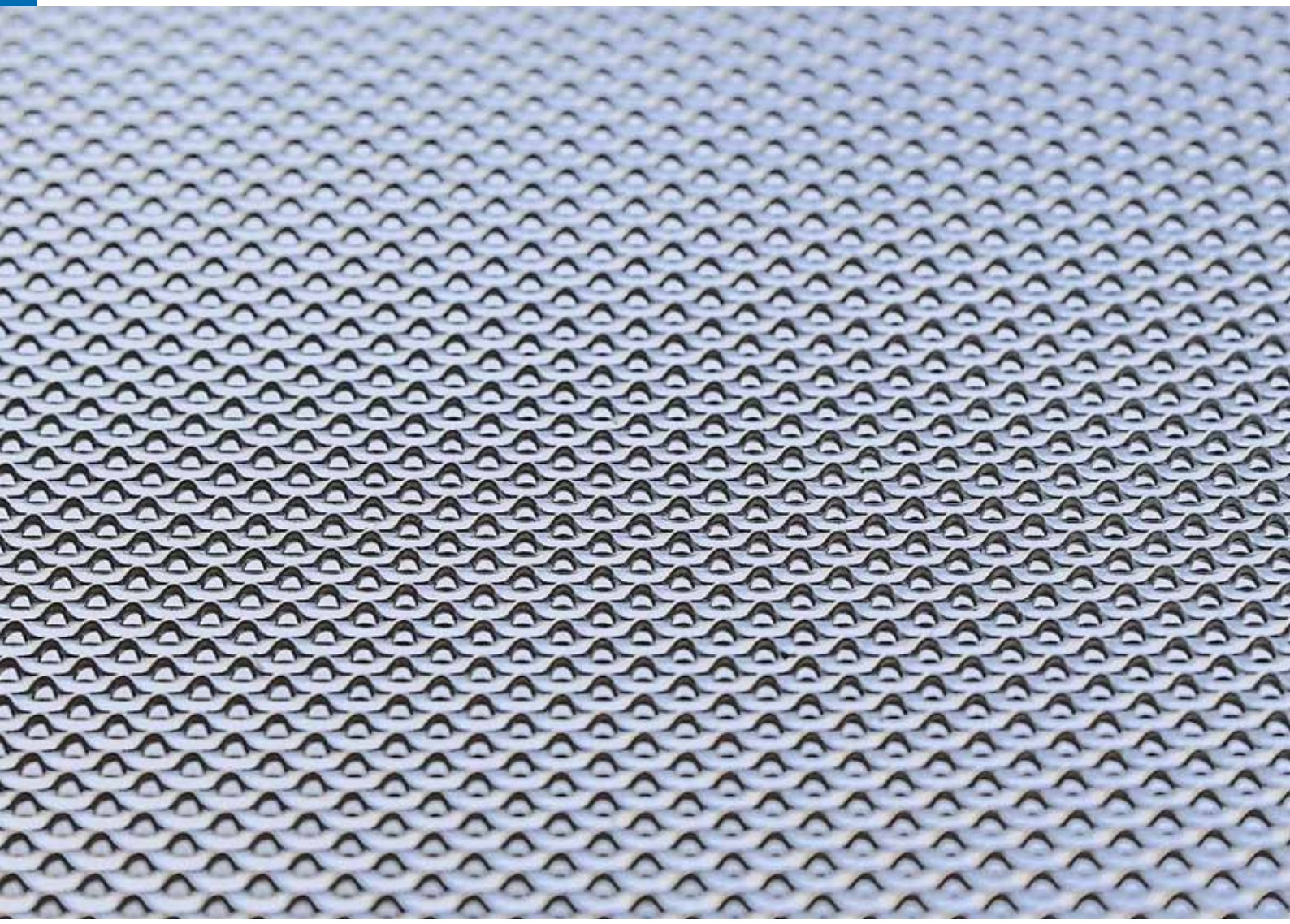
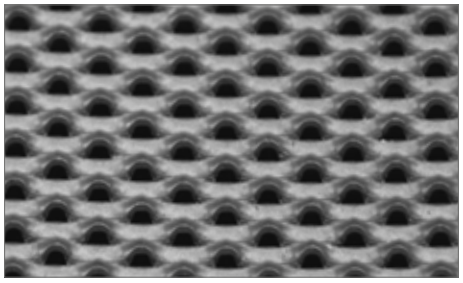
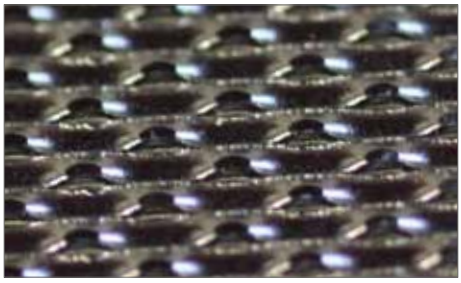
ConiPerf

Multi-talented fine perforated plates



The challenge:
Finest perforations in thick plates


ConiPerf triangular perforation hardened


ConiPerf triangular perforation electropolished


ConiPerf slot perforation

Breaking the critical ratio with ConiPerf

ConiPerf is a specific perforation technology, in which the plate thickness can be many times as thick as the openings are large.

Ratios between plate opening and thickness of up to 1:10 are achievable.

Surface Treatment

Strong rolling of the ConiPerf perforation will smooth the rough surface.

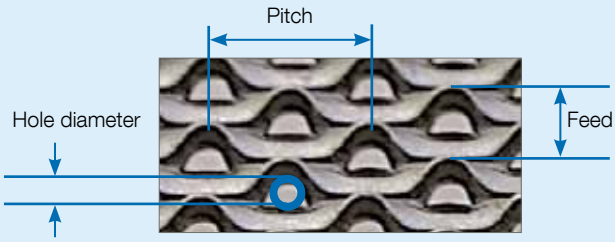
A higher degree of polishing will be achieved by grinding of the ConiPerf surface. The ground ConiPerf perforation prevents plugging of the openings and the process stock will be conserved.

We obtain maximum smoothing of the ConiPerf perforated plates by electropolishing of the plate surfaces and the hole openings. Your ConiPerf perforated plate guarantees less adhesion, and therefore provides a trouble-free operation as well as higher throughput.

Resistance to wear

The strain hardening process provides ConiPerf with extreme wear-resistance. Additional treatment can further improve durability. ConiPerf products are therefore ideal for separation and grinding processes where there is high abrasion. The steep taper of the openings actively prevents plugging.

The measurement of the ConiPerf manufacturing parameters



The biggest possible hole diameter will be measured, independent of the adjusting angle of the pin gauge.

Benefits

- **Openings up to 10 times smaller than plate thickness**
- **High Resistence to wear**
- **High Stability**
- **Conicity of the openings**
- **Directed flow**
- **Documented pressure loss measurements**

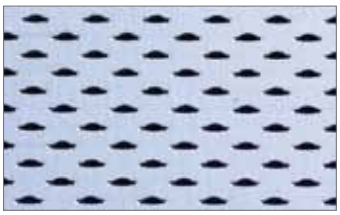
ConiPerf
Specifications

ConiPerf triangular perforation

The openings of the ConiPerf triangular perforation have a triangular to half elliptical form, as well as showing a strong conicity. With rolling of the triangular perforation, the rough surface will be smoothed as requested, producing a slightly changed hole shape but its conicity remains the same.

Material	Plate thickness (mm)	Hole width (mm)
Stainless steel	0,40–1,50	0,10–4,00
Unalloyed steel	0,50–2,00	0,10–6,00

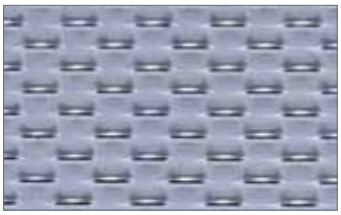
ConiPerf triangular perforation

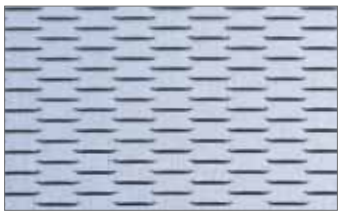

ConiPerf triangular perforation ground

ConiPerf slot perforation

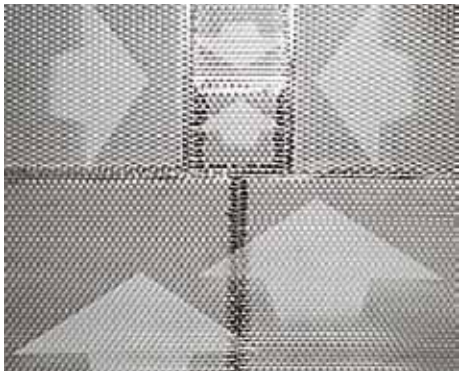
Clearly greater open areas as with the ConiPerf triangular perforation will be realized by the oblong openings of the ConiPerf slot perforation.
According to your requirement, the ConiPerf slot perforations show open areas from 5% to 27%.

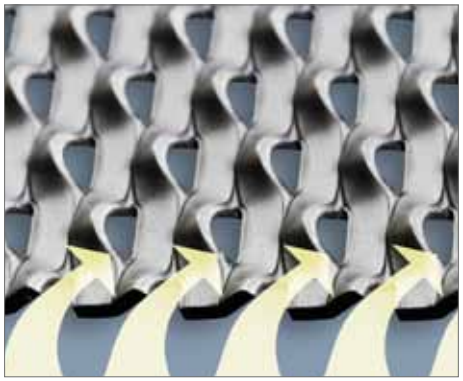
Material	Plate thickness (mm)	Hole width (mm)
Stainless steel	0,40–1,00	0,1 x 2,0 - 0,5 x 4,0
Unalloyed steel	0,50–1,00	0,1 x 2,0 - 0,5 x 4,0

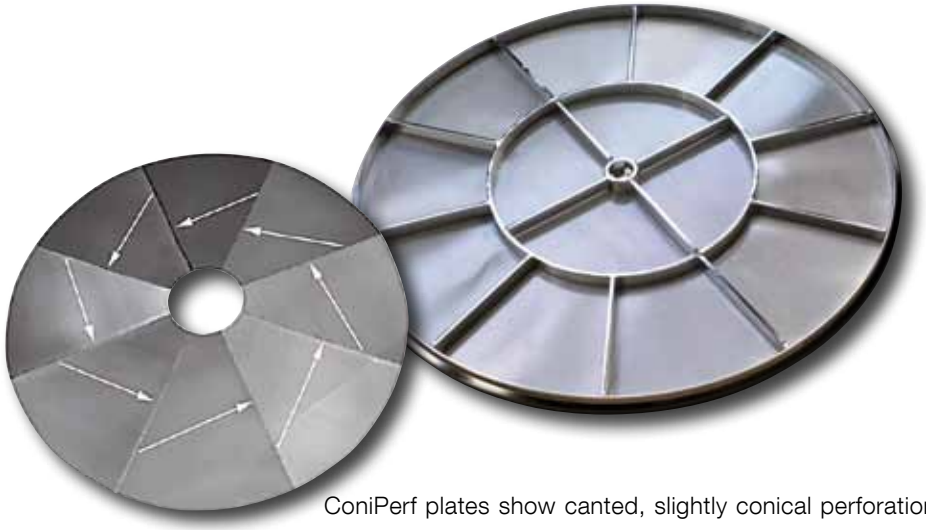

ConiPerf slot perforation rolled


ConiPerf slot perforation ground

ConiPerf as distribution beds in the fluidized bed application

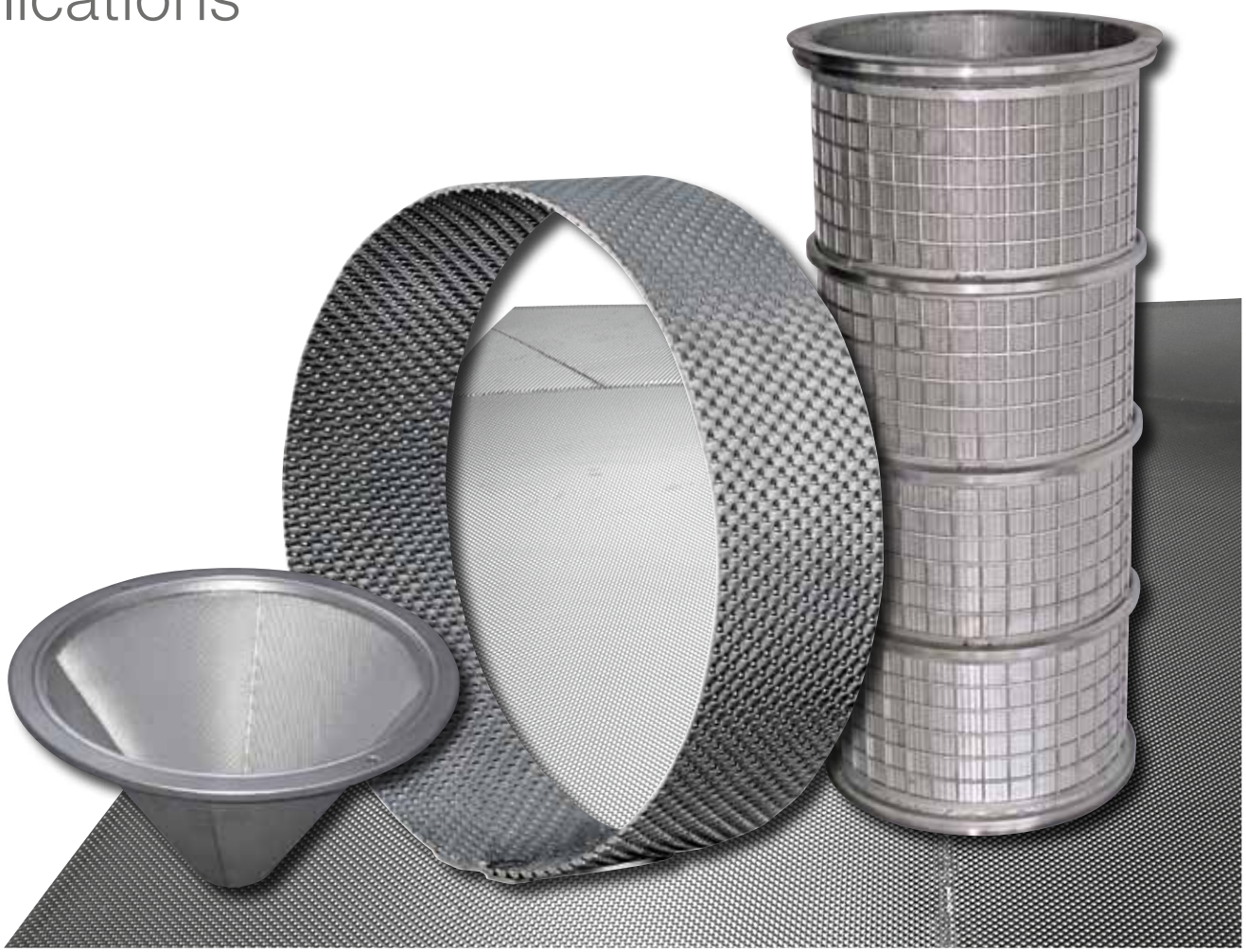






ConiPerf plates show canted, slightly conical perforations in pass-through direction. The hole pattern causes a component stream, which is parallel to the plate surface. ConiPerf perforated plates will be manufactured in diverse versions, offering various hole widths and feed.
In combination with different velocities in blower stream, different pressure losses are realizable with the fluidic operation of the plates.
We check and report, if required, the fluidic data with our pressure loss measuring apparatus.

ConiPerf
Applications



General Applications

- aeration bottoms in silo and bunker towers
- pneumatic conveyor bottoms
- screen bottoms for coal fines centrifuges

Food industry

- working screens for sugar and starch flour centrifuges
- drainage screens in centrifuges
- mill screens
- air or gas distribution beds in fluidized bed dryers and coolers.

Chemical industry

- in centrifuge screens for ammonia, ferrous sulphate, Glauber´s salt, crystal soda, sodium chloride, sodium sulphate, calcium, pot ash and so on.
- in mill screens for crushing processes

Processing technology

- plastic crushing
- drying and cooling of foundry sand
- producing wood splint for chipboards

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