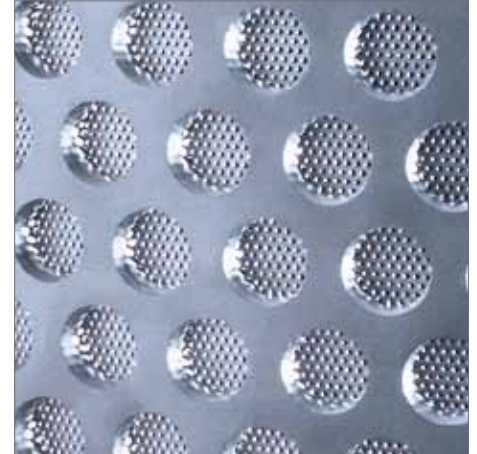


**Short and sweet:**  
Energy-saving sugar screens



# The challenge:

## Less energy consumption during each campaign



ANDRITZ Fiedler drilled screens for the sugar industry offer the best dewatering — allowing you to reduce energy costs and maintenance requirements.

A maximum number of holes and the correct hole geometry minimize the risk of clogging and delivering the best dewatering results with the lowest energy consumption for drying.

In addition to the number of holes, another important aspect of dewatering is the correct gap between the screw and the screens in the press.

ANDRITZ Fiedler drilled screens have a long life and are very stable, minimizing deformation. This is due to the structural design and the proper selection of wear-resistant stainless steel alloys to perfectly match your process requirements.

### Economically punched screens for sugar pulp presses

Punching is the most economical perforating technology.

Pulp press screens have hole diameters down to 1 mm with a maximum punched plate thickness of 1 mm. The thinness of these plates is compensated for by adding supports to the frame. However, these frames also reduce the open area of the screen, reducing the dewatering efficiency when compared to a drilled screen.

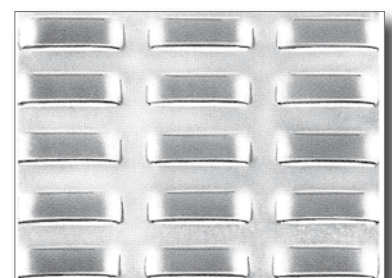
The following punched screens are available for common types of sugar pulp presses:

- Thin screens with small hole diameters
- Supporting screens in thick material with large punched holes
- Deaeration screens with large open area and different hole shapes, e.g. flapped holes (see below).



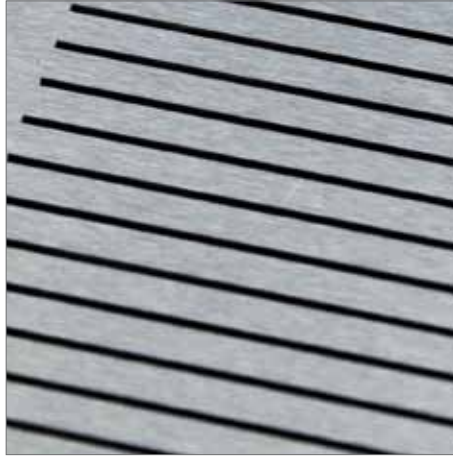
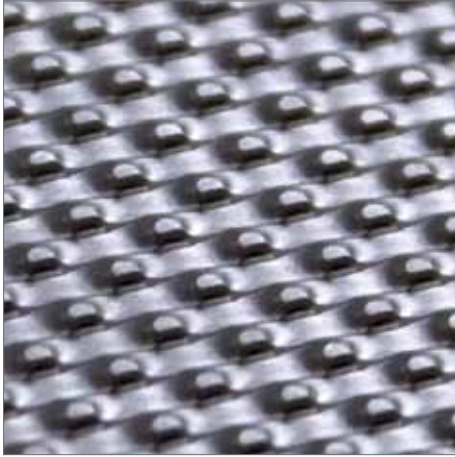
## Benefits

- **Optimized effective open area for maximum dewatering**
- **Correct geometry of drilled holes to reduce risk of clogging**
- **Carefully selected materials for higher stability and longer life screens**
- **Non - perforated zones and bridges for higher stability and less deformation**



# The solution:

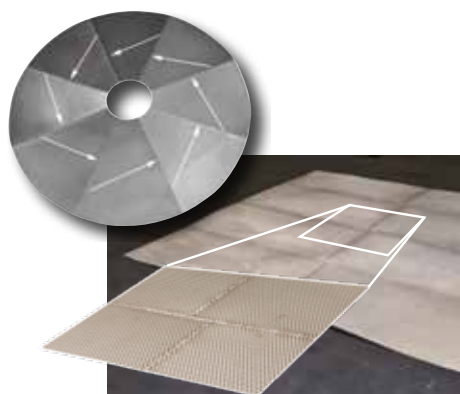
## ANDRITZ screens for sugar pulp presses



### ConiPerf distribution beds for fluid bed dryers

Distribution beds made of ConiPerf plates are the first choice in any fluid bed application (e.g. sugar dryers or coolers).

- ConiPerf is different than other perforations, because it is a type of covered hole. The cover ensures that sugar is directed in a defined path and will not fall through the holes.
- Combinations of different plates or segments with defined flow directions can be arranged within one distribution bed.
- ConiPerf plates are supplied to match the pressure drop required by the process.
- The operation of a fluid bed dryer with ConiPerf distribution beds is smoother: producing less damage to sugar crystals and creating less powder.



### Screens for extraction towers type DDS

Screens for extraction towers type DDS are either produced in punched, drilled, or slot-milled segments. The most common are milled segments with slots of 1,2 x 190 mm in 4 - 5 mm thickness or drilled segments with conically drilled holes with 2:3 mm diameter in plates of 2,5 - 3 mm thickness.



### Screens for crystallization centrifuges

MicroPerf screens made of chrome-plated stainless steel with slots 0,06 or 0,09 mm wide are a slightly more expensive, but significantly more efficient alternative to galvanized chrome-nickel screens used in crystallization centrifuges.

MicroPerf screens feature additional benefits:

- Free open area of up to 9 %
- Longer lifetime: 400-800 %
- Improved molasses yield / improved sugar yield



# Experts in perforation technology

## Customized drilled plates for sugar pulp presses



ANDRITZ Fiedler is an expert in virtually every perforating technology and also in the further processing of perforated metal. For that reason ANDRITZ Fiedler is the right partner to supply customized screens for all types of screw presses to meet your business and process requirements.

ANDRITZ Fiedler draws upon many years of experience with engineered wear products.

We have the applications knowledge to not only replace wear products, but also to optimize the performance of the screening system.

Sugar plants will significantly profit from this optimization: increased capacity, reduced energy demand, higher efficiencies, higher product quality, longer equipment life, and reduced maintenance costs.



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