

TEMA ISENMANN

Multotec Trommel Screens



Screening & Wear Solutions

Trommel Screens

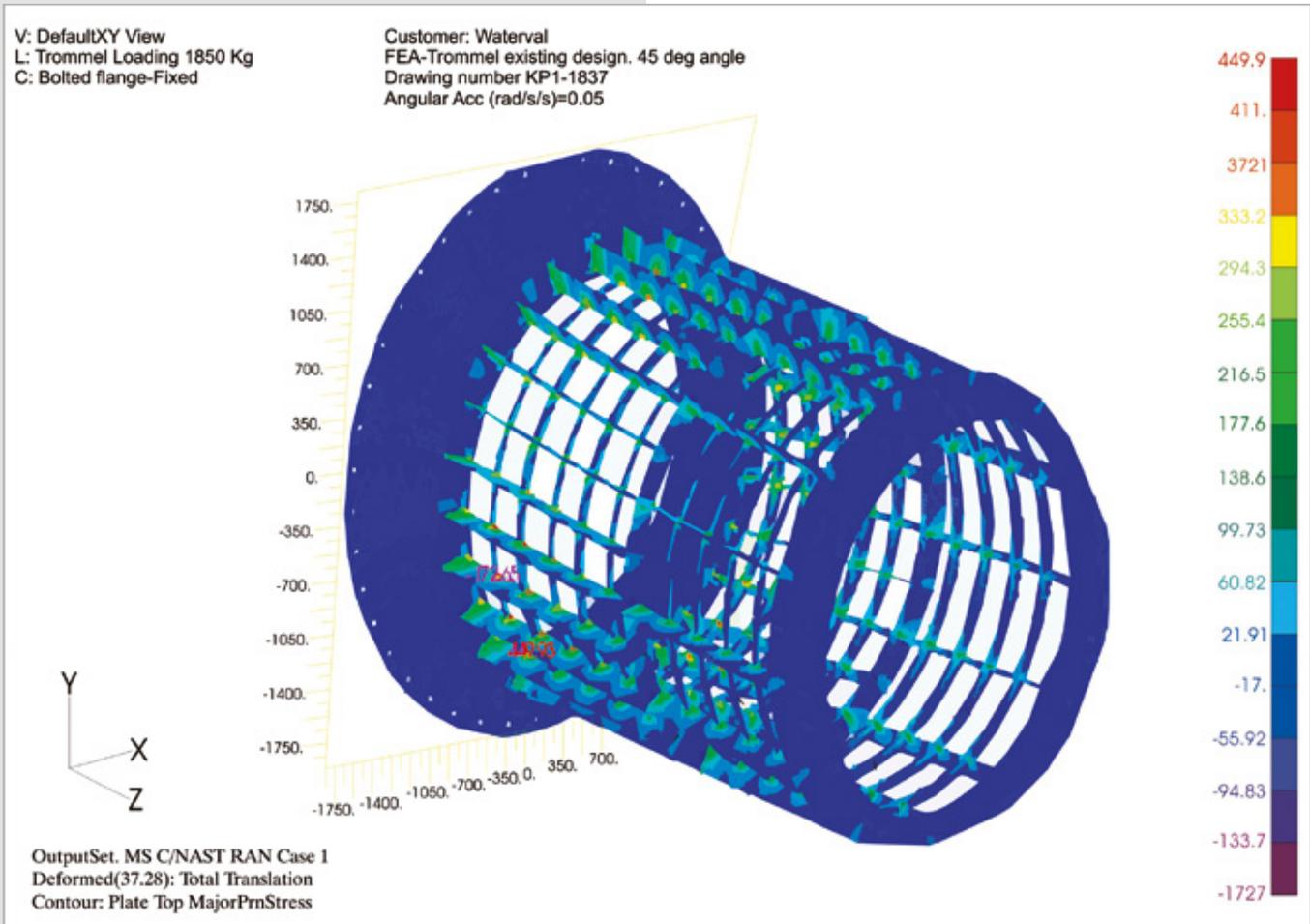
Trommel Screens are attached to the end of grinding mills and scrubbers to perform a variety of screening functions. The trommel screen comprises the rubber lined steel frame and replaceable screening surface.

Multotec has been supplying trommel screens since 1982. The product line ranges from 950 mm to 5 500 mm diameter and from 1 220 mm to 6 000 mm in length with a mass of 800 kg to 30 000 kg.

All trommel frames are vibratory and thermal stress relieved. Welds are NDT tested prior to rubber lining.

Multotec has the process capabilities to size trommels to suit your application. Process guarantees are supplied with all trommels sized by Multotec.

Trommels are designed using the latest Finite Element Analysis techniques to reduce fatigue stresses and improve trommel frame life. Factors such as loading in the trommel, the oversize, particle size distribution, solids SG and operating conditions are taken into account during the design phase.



A number of parameters are considered when the steel frame is designed:

- The feed end flange is designed to be compatible with the mill or scrubber flange. The flange has a machined face with a compatible bolting arrangement to the mill / scrubber discharge trunnion flange.
- The internal diameter of the feed end flange or feed end liners is designed to be the same diameter as the mill discharge or mill discharge liners. The trommel feed end liners can also have a slightly larger diameter to create an outward step to compensate for wear of the mill discharge liners.



Trommel Screens with Modular Panels

Trommel screens below 2 500 mm in diameter use modular 305 mm x 305 mm polyurethane panels. The trommel frames are rubber lined steel units designed to support the modular panels on all four sides.

Modular polyurethane panels, each with their own internal frame, are secured to the trommel frame by means of loose pins and sleeves. The panels can incorporate various scroll and weir bar configurations to suit the application.



950 mm diameter by 1 220 mm long Trommel Screen



5 000 mm diameter by 5 500 mm long Trommel Screen

Large Trommel Screens with Cast Polyurethane Panels

On large trommel screens (above 2 500 mm in diameter), it is more cost-effective to install heavy-duty cast polyurethane panels that are either bolted or pinned into position.

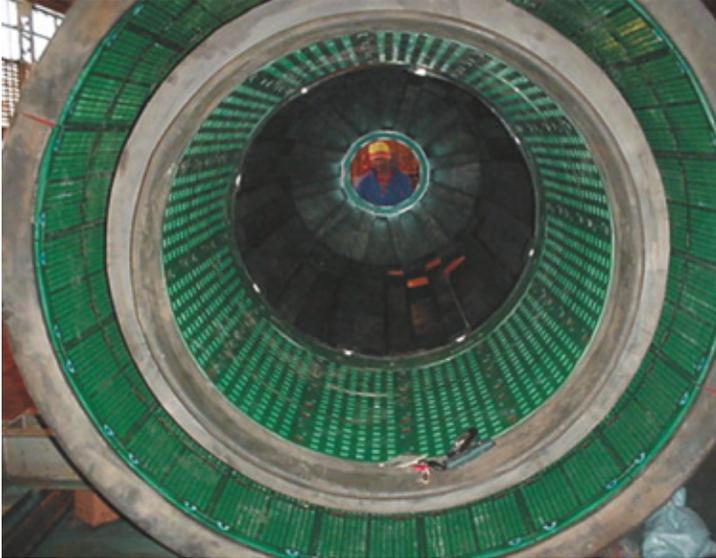
- Superior abrasion resistance of cast polyurethane
- Panels with small apertures can be repaired using Spaltoflex and Forsiplast inserts
- Reduces the mass of the trommel frame
- Bolt-on scrolls / weir bars are used to increase / decrease the retention time of the pulp through the trommel



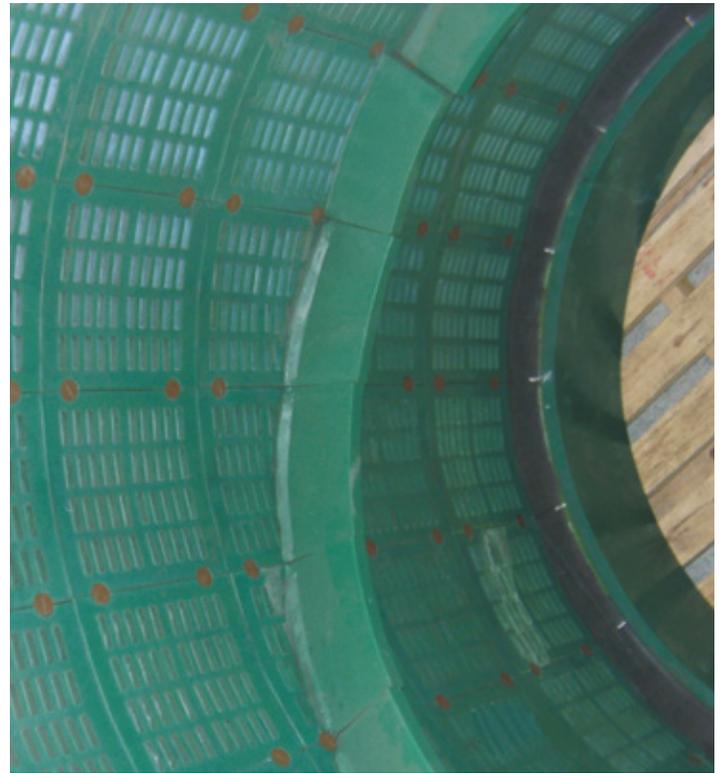
Double Trommel

A range of double trommels is available to produce multiple products.

- Attached to the end of a scrubber
- All the benefits of modular polyurethane and rubber screen panels
- Special mounting flange designed to assist with installation and removal of outer trommel panels
- Designed using Finite Element Analysis



Modular Polyurethane Panels with Integral Scroll / Weir Bar



Trommel Screen Panels

Multotec offers a range of polyurethane screen panels as well as a range of rubber panels. These can be supplied in the modular or heavy-duty bolt-down form to suit any application, from high impact to sliding abrasion.

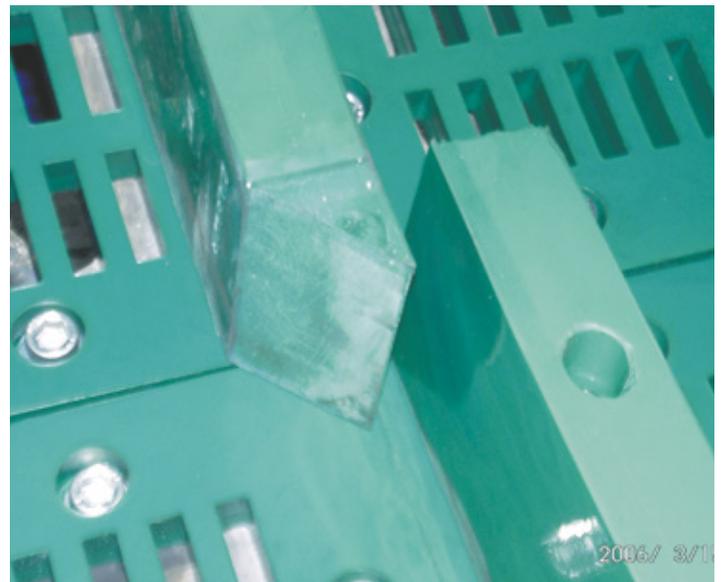
Hand Cast Polyurethane Panel



Bolt-on Rubber Panel

Bolt-on Scroll

- Panels available in injection moulded or hand cast polyurethane to suit the duty
- The polyurethane is also available in high temperature and anti-bac materials
- Available in forward or reverse scroll executions
- Layout of scroll / weir bar designed to minimise the number of different panels
- Different pitches and number of starts can be supplied to improve retention time
- Different scroll / weir bar heights are available to suit pulp depth



The trommel is designed for optimal balance between capacity and life.

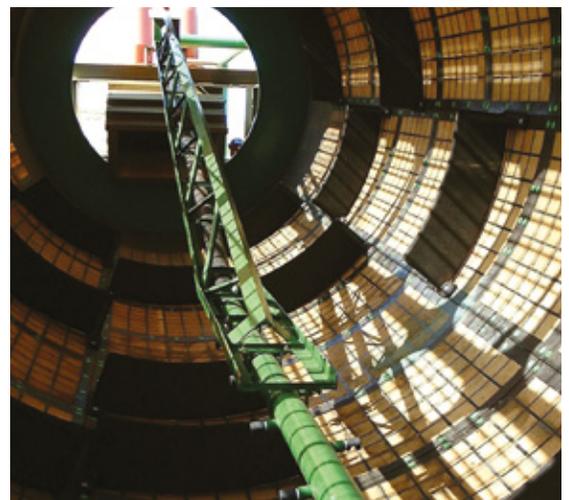
Self Driven Trommels



Hydraulic or electric drive on centre shaft at discharge end	or	Motor and gearbox driving support wheels
Steel shell with cut outs	or	Steel beams with runners
Large bolt-down polyurethane panels	or	Modular polyurethane panels with well-proven pin and sleeve attachment system
Bolt-on scrolls	or	Panels with integral scroll sections
Square apertures	or	Slotted apertures

A full range of self driven trommel screens is available from 1 000 mm to 4 000 mm in diameter and from 3 000 mm to 15 000 mm long, engineered to suit the required duty.

- Advanced Finite Element Analysis used to design the trommel frame
- Frame stress relieved and NDT tested
- Frame rubber lined for extended life
- Direct drive through the discharge end of the trommel either with fixed speed electric motor through a gearbox or variable speed hydraulic drive
- Screen panels either modular or bolt-down in a wide selection of apertures
- Scrolls / weir bars available in different height configurations to suit the pulp volume
- Scrolls / weir bars manufactured either integral to the panel or bolt down
- Can be supplied complete with feed and discharge arrangement to suit requirements





TEMA ISENMANN

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Visit www.temaisenmann.com to learn more!