# Polyurethane Screens





## Polyurethane-Screens

#### The STEINHAUS GmbH company

STEINHAUS GmbH is an almost 100-year-old, dynamic, well set-up, middle-sized company headquartered in the Ruhr area.

Rational production methods, modern plant & equipment, its own product development and a dynamic in-house and field sales & marketing team with a large number of domestic and foreign affiliated companies are guarantees of reliable quality products and proficient specialist support for our customers in all parts of the world.

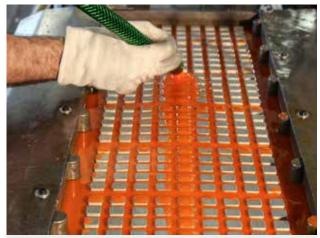
STEINHAUS-POLYURETHAN screen panels have been a byword for reliability and long service life for many years.

In 1968 STEINHAUS GmbH brought out the first industrially produced polyurethane screen panel. This in turn was followed in 1976 by a world original: the first modular screen panel.

Wherever technically possible, elastic screens made from polyurethane have replaced wire screens.

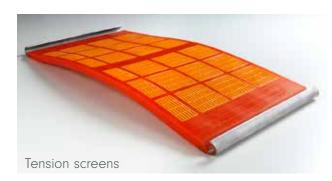




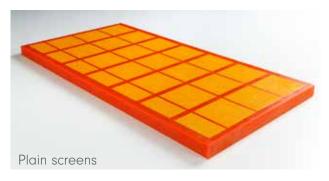


Production - casting a plastic screen

#### Screen Designs

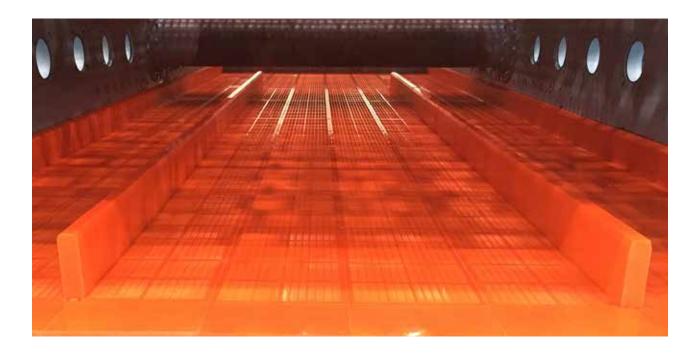








## **Modular Screens**



#### Efficient fitting

The fast fitting and demounting of our handy screen components reduces downtimes and enables only the actually worn part of a screen fitting to be changed.

#### Application-specific series

The demands made of a screen panel vary considerably according to application: if you need an extremely large screen area, choose our HE (high efficiency) series; standard is the RG (regular) series, while our LL (long-life) series is exceptionally robust. We offer the optimum screen for every purpose – often different series are combined on a screening machine.

#### Highly wear-resistant

Steinhaus uses only polyurethanes with the best possible wear-resistant properties by brand manufacturers. A refined production system enables precise and economic production.

#### Available hole widths

There are several hundred different hole widths in different hole shapes available for polyurethane screens. At present we can manufacture slit perforations from  $0.1 \times 5.6$  mm up to  $15 \times 110$  mm and square perforations from 0.8 mm up to 150 mm.

#### Available material hardnesses

Depending on the material to be screened and the parameters of the screening machine, softer screens help securely prevent clogging with terminal grains. For this we offer our polyurethanes with the following degrees of hardness in the perforated areas: 35, 45, 65 or 85 Shore A.

#### Noise-damping

The noise-damping properties of polyurethane reduce noise emission. Official requirements with regard to environmental and occupational safety and health can therefore be met more easily.

#### Temperature resistance

Polyurethanes can normally be used at temperatures of up to approx. 80  $^{\circ}$ C. We offer special products that can be used up to a sieved material temperature of 120  $^{\circ}$ C and even up to160  $^{\circ}$ C.

## Modular Screens

#### Whipping screens

For products that are hard to screen we recommend our polyurethane whipping screens. A thin elastic screen mat is fastened to a frame so as to be able to vibrate freely. This can prevent deposits of sticky sieved material from building up.



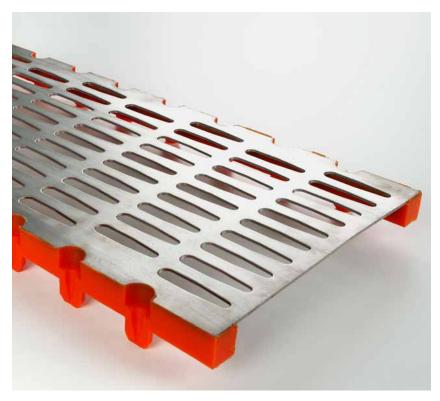
#### TeePee

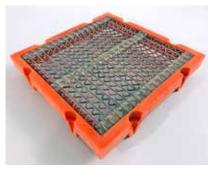
Our TeePee screens dewater in the third dimension. TeePee screens have a considerably larger open screen area. The tips protrude into the material to be dewatered, so dewatering characteristics, especially those of hard-to-drain products, are massively improved.



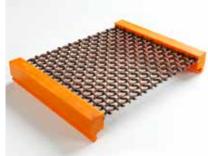
#### Steel hybrid screens

Wear-resistant perforated sheets, welded slotted screens, wire cloths, harp-mesh screens, welded wedge wire screens or even bar screens - we can make any required screen as a modular screen. The uniform module size enables all screen types to be combined.







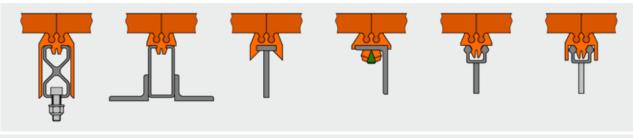


## **UNI 2000 Modular Screens**

#### UNI 2000 - Our All-Rounder

Fastening is a fairly easy matter with our proven tongue-and-groove connector system. The polyurethane adapter strip guards the long bar against wear and forms the groove to receive the screen components. The screen components have the appropriate tongue, likewise of polyurethane, cast onto them. It takes very little effort to insert the screens into the adapter strips and so prevent them from vibrating.



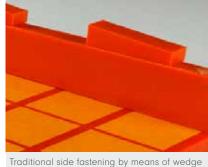


Support structure: UNI 2000 can be fitted to all common long-bar profiles (examples).

#### Side fastening slat / Side wear quard

Optimally achieved by the use of our side wear guard strip with Jordahl profile and adapter:

- The screen cloth can be fitted and demounted without demounting the side strip
- No sieved material can be carried over the front end and damage the screening machine
- The side strip cannot detach itself from the side wall, so avoiding damage
- The Jordahl profile enables the screw connections of the side strip to be individually positioned
- No support and wedge brackets are required on the screening machine



Traditional side fastening by means of wedge strips and wedges is also possible





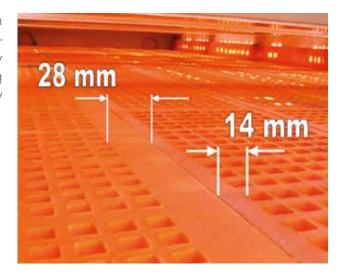




## **UNI 2000 Modular Screens**

#### Benefits and Possibilities

Because of the considerably narrower blind zone on the UNI 2000 this system offers a considerably larger open screen area than any other commercially available modular screens that use standard long bars. Offsetting of components can therefore mostly be dispensed with.



It is possible to cast an additional adapter strip straight into the upper side of the screen components. By fitting an adapter strip a further screen deck can be retrofitted onto the existing screen deck.

This enables fitting space and cost to be saved when designing a new screening machine. Instead of a further screen deck impact bars, for example, can also be fitted into these adapters.















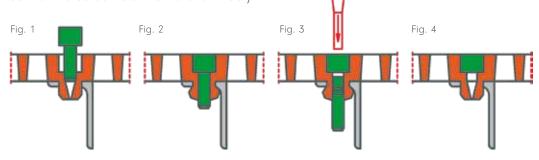




#### KOMBIPLAST® - Classic

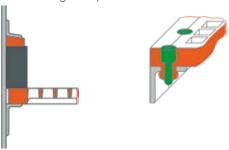
KOMBIPLAST® is our modular screen cloth, which has been proving its worth since 1967 and is fastened to the screening machine by means of an expansion peg system without an adapter strip. The components are inserted into the support structure with no effort whatsoever. The fixing pins are then knocked in so that the screen cloth is vibration-freely

attached to the screening machine. To demount a screen cloth, the inner part of each fixing pin can be knocked out with a punch. The expansion peg will then be exposed and the screen cloth can be demounted with very little effort.



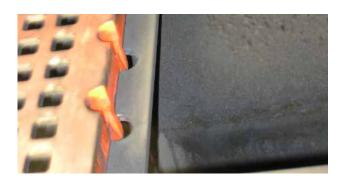
#### Side fastening / Side wear guard

The side is fastened in the traditional way using a wedge strip and wedges. Alternatively, thin edge strips can be fitted using the push-fit system; so, when changing the screens, it is not necessary to demount the wedge strips.



#### Support structure

An L profile provided with a hole every 150 mm (or every 75 mm for especially heavy applications) is used as a support structure.



#### Benefits and Possibilities

Instead of fixing pins, stop bars or deflector pins can simply be fitted on the half-anchor grid. With an anchor peg spacing of 75 mm even 15 mm thick perforated sheets can be securely fastened.



The screens can be stacked very space-savingly and securely in the storage area.



## **Delivery Program**

#### Screen Panels

Screen panels made of polyurethane & steel System screen modules Wire mesh Perforated plates

#### **OPTIMA**

Wedge wire panels
Plain sieve panels
Sieve bends
Slotted screen baskets
High precision filter tubes
Industrial filter media

#### Wire Mesh Conveyor Belts

Woven & braided wire mesh belts Rolled baking oven belts (Z-belts) CLEANBELT device for belt cleaning

#### LuCoTec Air Spring System

Air spring systems for screening machines & other vibrating machines

#### **MULTOTEC** - Process Equipment

Slurry Pumps Cyclones Spirals

The information given and images in this catalogue are non-binding and represent an approximate description only. They are no guaranteed properties. Alternative designs are possible on request. Subject to alteration serving technical progress.

Contact us for **on-site consultation** by our experienced **field engineers**.



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