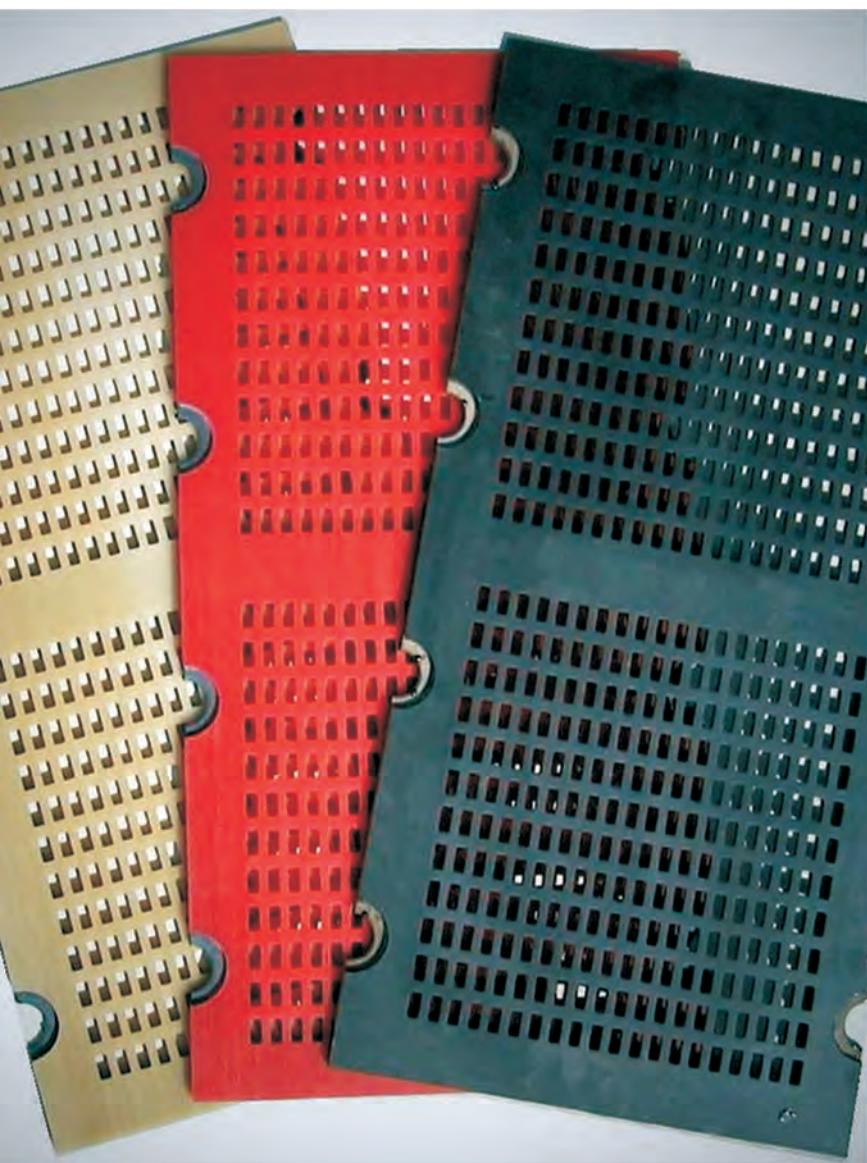


TIP TOP REMASCREEN screen mats



High performance screens
for the bulk-material handling industry



Table of contents

| | |
|---|------------|
| Table of contents | page 2 |
| All about us | page 3 |
| Seven advantages of TIP TOP REMASCREEN screen mats | page 4-5 |
| Standard aperture shapes for TIP TOP REMASCREEN screen mats | page 6 |
| Open screen areas | page 7 |
| TIP TOP REMASCREEN material types | page 8 |
| Application examples / Cost-benefit comparison | page 9 |
| TIP TOP REMASCREEN delivery programme | page 10-11 |
| Transversely or longitudinally tensioned TIP TOP REMASCREEN mats | page 12-13 |
| TIP TOP REMASCREEN plane screen mats with steel support frames | page 14 |
| TIP TOP REMASCREEN on sectional iron frames | page 15 |
| TIP TOP REMASCREEN modular screen system made of rubber or polyurethane ... | page 16-17 |
| Fastening system 1 and fastening system 2 | page 18-19 |
| TIP TOP REMASCREEN Hammer-Modular-System HMS | page 20-23 |
| TIP TOP REMASCREEN as loose punched mats | page 24-25 |
| TIP TOP REMASCREEN accessories / optional special provisions | page 26-27 |
| TIP TOP REMASCREEN Varyspray-nozzles | page 28-29 |
| TIP TOP REMASCREEN traverse protection profiles | page 30-31 |
| TIP TOP REMAMODUL modular system for round classifier | page 32-33 |
| REMA TIP TOP punched belts made of rubber or PVC | page 34-35 |



All about us:



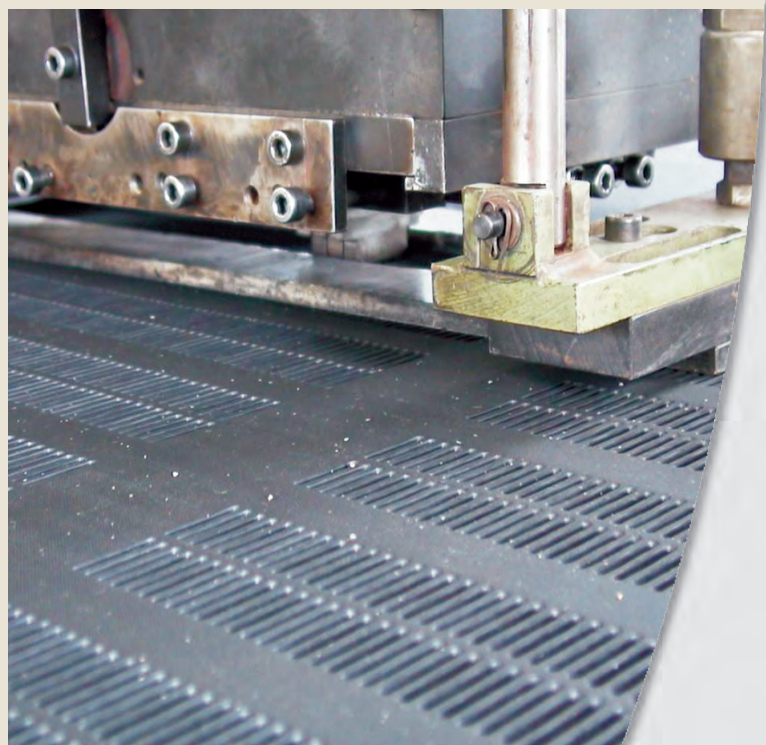
We, the TIP TOP Jörns GmbH company in Bromskirchen-Somplar, form part of the STAHLGRUBER group; our aim is to be your preferred partner in the fields of materials-handling technology and wear and corrosion prevention as well as in the supply of a comprehensive range of screen surfaces.

The STAHLGRUBER company has over 150 agencies worldwide, so that we can ensure expert service for our screen surfaces.

Our speciality is the manufacture of punched industrial screen mats made of elastic materials such as rubber or polyurethane (Thelan® or Vulkollan®), which give significant advantages in most processtechnology applications.

We manufacture the majority of screen systems (transversely and longitudinally tensioned screen mats, modular screens, plane screen mats on flat iron frames or self-supporting angle or sectional iron frames, flip-flop screen mats, the Hammer-Modular-System and loose punched mats); therefore we are in a unique position to supply custommade screen mats for every screen machine without any need for modification.

All shapes and sizes of apertures can be manufactured without any problem, starting from 1 mm in width, so that all grain sizing limits can be achieved together with the required oversizes and undersizes tolerances. Just-in-time production also ensures extremely short delivery times.



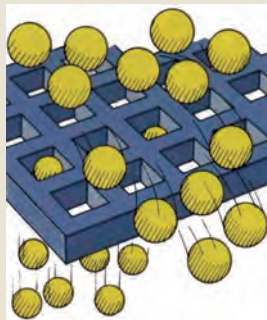
Seven advantages of TIP TOP REMASCREEN screen mats

1st advantage Service life



Thanks to highly wearresistant grades of rubber or polyurethane, TIP TOP REMASCREEN mats last on average 6 to 10 times longer than steel screen mats. The service life may even be 20 to 50 times longer in certain applications.

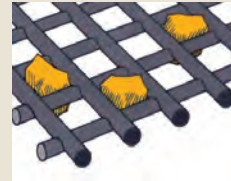
2st advantage Screening



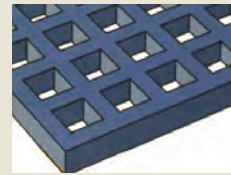
State-of-the art production methods and highquality rubber and PUR make it possible to produce maximum open screening areas. If all the necessary technical specifications are known, we will guarantee specified screening, if required, for example according to the TL

Min-StB 94 or DIN 4226 part 1 standards or in accordance with specific agreements. (In particular, we can guarantee compliance with oversize and undersize tolerances without any reduction in the feed capacity).

3st advantage Cleaning



Steel screen mat



REMA SCREEN mat

Pegging is counteracted by the elasticity of the screen surface material and the realivelly low thickness of the screen mats well as by the „diabolo“-shape of the apertures, which is achieved by means of special punching tools. Due to the smooth top surface of the screen mat, passing material tends to catch less easily on fabric plies or steel reinforcing bars than on wire screens.



Moulded PUR-screen mats with over 50% pegging material efficiency is due to the loss of open screening area, drastically reduced.

4st advantage Self-cleaning



Steel screen mat shows 100% caking.



TIP TOP REMASCREEN stays almost completely clean thanks to its high selfcleaning effect.

The dryscreening of materials with a high fines content and critical humidity often leads to caking, which may considerably reduce the efficiency of the screening system. TIP TOP REMASCREEN mats have a high selfcleaning effect, due to their elasticity, their natural vibration and the special shape of the apertures (e.g. rectangular apertures or elongated apertures). Caked materials automatically disperse when the screen is in operation; this makes screening possible even under extreme conditions where rigid screen systems would very quickly fail.

5st advantage Noise reduction



Unlike steel screens, REMASCREEN mats help to actively reduce noise: i.e. elastic screen mats produce much less noise (5 - 20 dB (A) depending on the screen machine! Therefore savings can be made in costs that would

normally be incurred with the introduction of noise prevention measures such as screen housing or noise protection dams. Through the rubber covering of feed, side tension and discharge plates noise levels can be further reduced.

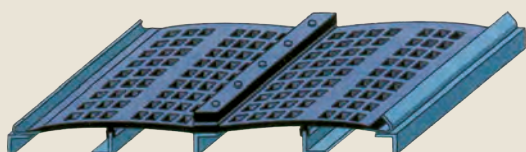
7st advantage Service

We have gained many years' experience in equipping a wide variety of screen machines (from the majority of screen machine manufacturers) with our REMASCREEN rubber screen mats; therefore, we are able to give you optimum technical advice. An established distribution network with 22 agencies in Germany and over 50 agencies throughout Europe enables us to be close to our customers and to offer them efficient after-sales service. It goes without saying that our REMASCREEN products meet high quality standards and have short delivery times (less than 3 weeks).

6st advantage Installation and maintenance

REMASCREEN mats are custom made to suit each screen machine; this is why the construction of the screen machines need not be modified. The service life of REMASCREEN mats is significantly longer than that of steel screen mats, which results in extended intervals between the necessary inspection and maintenance jobs. (i.e. cost- and timesavings).

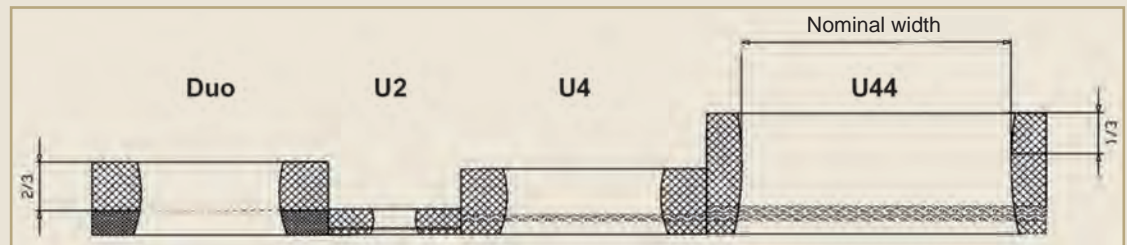
Blind areas in the screen mat, cover the cross arms and longitudinal bracings of the screen machine thus protecting them from wear without reducing the open screening area. This helps to preserve the value of a screen machine for a much longer period of time.



Wear to longitudinal bracings with a steel screen mat.



Standard aperture shapes for TIP TOP REMASCREEN mats



A special shape of aperture in the REMASCREEN mats ensures specified screening over the entire service lifetime.

Square apertures



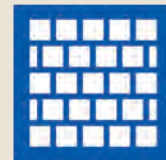
QR



QRV



QV



QVH

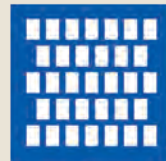
Rectangular apertures



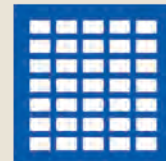
RER



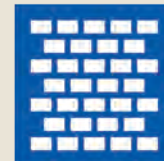
RERV



REV

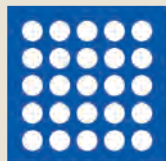


REQ



REQV

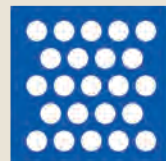
Round apertures



RUR



RURV



RUV

Elongated apertures



LR



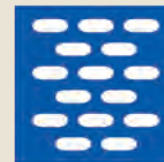
LRV



LV



LQ



LQV

Hexagonal apertures



SR



SRV











SV

CONVEYING DIRECTION





TIP TOP REMASCREEN



Open screen areas

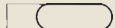
| Aperture (mm) | Divider width (mm) | Mat thickness Reference value (mm) | Fo (%)  | Fo (%)  | Fo (%)  | Fo (%)  | Fo (%)  6 mm | Fo (%)  12,5 mm | Fo (%)  25 mm | Fo (%)  40 mm |
|------------------|--------------------------|--|---|---|---|---|---|---|--|--|
| 1,0 | 1,5 | 2, 3 | - | - | - | - | 20 | 31 | 36 | - |
| 1,5 | 1,5 | 2, 3 | - | - | - | - | 22 | 35 | 41 | - |
| 2,0 | 1,5 | 2, 3 | - | - | - | - | 25 | 38 | 46 | - |
| 2,5 | 1,5 | 2, 3 | 39 | - | - | - | 29 | 42 | 50 | - |
| 3,0 | 1,5 | 2, 3 | 44 | 50 | - | - | 33 | 45 | 54 | - |
| 3,5 | 1,5 | 2, 3 | 49 | 54 | - | - | 35 | 45 | 56 | - |
| 4,0 | 2,0 | 2, 3, 4 | 44 | 50 | - | - | 40 | 45 | 52 | - |
| 4,5 | 2,0 | 3, 4 | 48 | 53 | - | - | 42 | 47 | 53 | - |
| 5,0 | 2,0 | 3, 4, 5 | 51 | 56 | - | - | 44 | 49 | 54 | 60 |
| 5,5 | 2,0 | 3, 4, 5, 6 | 53 | 59 | - | - | - | 48 | 56 | 61 |
| 6,0 | 2,5 | 3, 4, 5, 6 | 50 | 55 | 45 | 50 | - | 48 | 51 | 58 |
| 6,5 | 2,5 | 4, 5, 6 | 53 | 58 | 47 | 53 | - | - | 52 | 59 |
| 7,0 | 2,5 | 5, 6, 7 | 54 | 60 | 49 | 54 | - | - | 53 | 60 |
| 7,5 | 2,5 | 5, 6, 7 | 56 | 61 | 51 | 56 | - | - | 54 | 61 |
| 8,0 | 2,5 | 5, 6, 7 | 58 | 63 | 53 | 58 | - | - | 55 | 62 |
| 8,5 | 3,0 | 5, 6, 7 | 55 | 60 | 50 | 55 | - | - | 50 | 60 |
| 9,0 | 3,0 | 6, 7, 9 | 56 | 61 | 51 | 56 | - | - | 52 | 61 |
| 9,5 | 3,0 | 6, 7, 9 | 58 | 63 | 52 | 58 | - | - | 56 | 62 |
| 10 | 3,0 | 6, 7, 9 | 59 | 64 | 54 | 59 | - | - | 56 | 64 |
| 11 | 3,5 | 7, 9, 11 | 58 | 63 | 52 | 58 | - | - | 51 | 62 |
| 12 | 3,5 | 7, 9, 11 | 60 | 65 | 54 | 60 | - | - | 54 | 64 |
| 13 | 4,0 | 7, 9, 11, 13 | 59 | 64 | 53 | 59 | - | - | - | - |
| 14 | 4,0 | 9, 11, 13 | 61 | 65 | 55 | 61 | - | - | - | - |
| 15 | 4,5 | 9, 11, 13, 15 | 59 | 64 | 54 | 59 | - | - | - | - |
| 16 | 4,5 | 9, 11, 13, 15 | 61 | 66 | 55 | 61 | - | - | - | - |
| 17 | 5,0 | 11, 13, 15 | 60 | 65 | 54 | 60 | - | - | - | - |
| 18 | 5,5 | 11, 13, 15 | 59 | 64 | 53 | 59 | - | - | - | - |
| 19 | 5,5 | 11, 13, 15, 18 | 60 | 65 | 55 | 60 | - | - | - | - |
| 20 | 5,5 | 13, 15, 18 | 62 | 66 | 56 | 62 | - | - | - | - |
| 22 | 6 - 9 | 13, 15, 18 | 61 | 65 | 55 | 61 | - | - | - | - |
| 24 | 6 - 10 | 13, 15, 18, 20 | 64 | 69 | 58 | 64 | - | - | - | - |
| 26 | 6 - 10 | 13, 15, 18, 20, 23 | 66 | 70 | 60 | 66 | - | - | - | - |
| 28 | 7 - 11 | 13, 15, 18, 20, 23 | 64 | 69 | 58 | 64 | - | - | - | - |
| 30 | 8 - 12 | 15, 18, 20, 23, 25 | 62 | 67 | 57 | 62 | - | - | - | - |
| 32 | 8 - 13 | 18, 20, 23, 25 | 64 | 69 | 58 | 64 | - | - | - | - |
| 34 | 9 - 14 | 18, 20, 23, 25 | 63 | 67 | 57 | 63 | - | - | - | - |
| 36 | 9 - 14 | 20, 23, 25, 28 | 62 | 68 | 57 | 63 | - | - | - | - |
| 38 | 10 - 15 | 20, 23, 25, 28, 30 | 63 | 67 | 57 | 63 | - | - | - | - |
| 40 | 10 - 15 | 20, 23, 25, 28, 30, 33 | 64 | 69 | 58 | 64 | - | - | - | - |
| 45 | 12 - 17 | 23, 25, 28, 30, 33, 35 | 62 | 67 | 57 | 62 | - | - | - | - |
| 50 | 13 - 20 | 25, 28, 30, 33, 35, 38 | 63 | 68 | 57 | 63 | - | - | - | - |
| 55 | 15 - 20 | 25, 28, 30, 33, 35, 38 | 62 | 67 | 56 | 62 | - | - | - | - |
| 60 | 16 - 23 | 28, 30, 33, 35, 38, 40 | 62 | 67 | 57 | 62 | - | - | - | - |
| 65 | 17 - 25 | 30, 33, 35, 38, 40, 43 | 63 | 68 | 57 | 63 | - | - | - | - |
| 70 | 18 - 27 | 33, 35, 38, 40, 43, 45 | 63 | 68 | 57 | 63 | - | - | - | - |
| 75 | 20 - 30 | 33, 35, 38, 40, 43, 45 | 62 | 67 | 56 | 62 | - | - | - | - |
| 80 | 22 - 33 | 35, 38, 40, 43, 45, 48 | 62 | 66 | 56 | 62 | - | - | - | - |
| 85 | 24 - 36 | 38, 40, 43, 45, 48, 50 | 63 | 68 | 57 | - | - | - | - | - |
| 90 | 26 - 40 | 40, 43, 45, 48, 50, 53 | 62 | 67 | 57 | - | - | - | - | - |
| 100 | 28 - 45 | 40, 43, 45, 48, 50, 53 | 61 | 66 | 55 | - | - | - | - | - |
| 110 | 30 - 50 | 43, 45, 48, 50, 53, 58 | 62 | - | - | - | - | - | - | - |
| 120 | 30 - 50 | 43, 45, 48, 50, 53, 58 | 64 | - | - | - | - | - | - | - |
| > on request | | | | | | | | | | |

The open screen areas and the divider widths shown above are for Duo mats only.

The divider widths for mat types U2, U4 and U44 are approx. 50% grater.

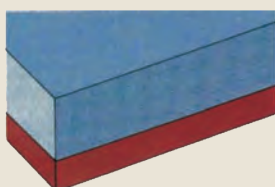



N  N = Nominal width

TIP TOP REMASCREEN

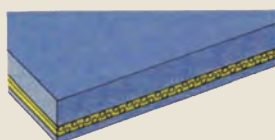
Open screen areas

Rubber developed in line with state-of-the art rubber technology is used in the manufacture of our screen mats. TIP TOP REMASCREEN mats are manufactured from four types of rubber sheet and two PUR grades:



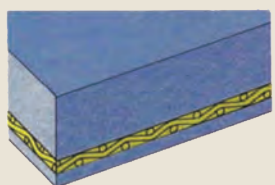
Duo

Double-layer rubber, top side, highly wear-resistant rubber (65° Shore A / 40 mm³ abrasion according to DIN 53516).
Underside: hard tear-resistant rubber with stabilizing and oscillation attenuating characteristics (80° Shore).



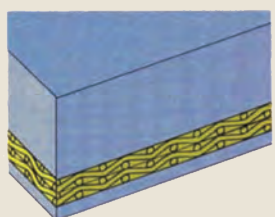
U2

Single-layer rubber with a polyester-cord ply, rubber highly wear-resistant (65° Shore A / 40 mm³ abrasion according to DIN 53516).
Fabric insert of lowextension chemical fibre fabric (200 N/mm) with 0.5% elongation up to the permanently elastic range.



U4

Single-layer rubber with polyester-cross-ply fabric, rubber highly wear-resistant (65° Shore A / 40 mm³ abrasion according to DIN 53516).
Fabric insert of lowextension chemical fibre fabric (400 N/mm) with 0.5% elongation up to permanently elastic range.



U44

Single-layer rubber with double polyester-cross-ply fabric, rubber highly wear-resistant (65° Shore A / 40 mm³ abrasion according to DIN 53516).
Fabric inserts of low-extension chemical fibre fabric (800 N/mm) with 0.5% elongation up to permanently elastic range.



PU Yellow (D15)
PU Green (D44)

PU Red (T290)
PU Blue (D15M)



Single-layer polyurethane mat of highly wear-resistant quality for tensioned and plane screen mats from 2 mm to 9 mm in thickness. For use in special applications (resistant to oil and chemicals).

| Thickness | Duo | U2 | U4 | U44 | PU |
|-----------|-----|----|----|-----|----|
| 2 | ● | ● | | | ● |
| 3 | ● | ● | | | ● |
| 4 | ● | ● | | | ● |
| 5 | ● | ● | | | ● |
| 6 | ● | ● | | | ● |
| 7 | ● | ● | | | ● |
| 9 | ● | ● | ● | | ● |
| 11 | ● | ● | ● | | |
| 13 | ● | | ● | | |
| 15 | ● | | ● | | |
| 18 | | | ● | | |
| 20 | ● | | | | |
| 23 | | | ● | | |
| 25 | ● | | | | |
| 28 | | | ● | | |
| 30 | ● | | | | |
| 33 | | | | ● | |
| 35 | ● | | | | |
| 38 | | | | ● | |
| 40 | ● | | | | |
| 43 | | | | ● | |
| 48 | | | | ● | |
| 50 | ● | | | | |
| 53 | | | | ● | |
| 58 | | | | ● | |
| 60 | ● | | | | |

Application

line of business:
Gravel industry in germany

Type of screen machine:
single-deck circular free swinging

Bulk size of feed material: natural gravel

Grain size of feed material: 0 – 4 mm

**Grain size
of screened material:** 0 – 2 mm

Feed rate 1.200 t / day

Problem:
high wear of steel screens and pegging

Cost-benefit comparison

Service life steel screen mats:
8 weeks at 12 working hours per day

Service life TIP TOP REMASCREEN rubber screen mats:
135 weeks at 12 working hours per day

Ratio: 16,9 : 1

Purchase price of steel screen mats:
EUR 64,— / piece

Purchase price of TIP TOP REMASCREEN rubber screen mats:
EUR 753,— / piece

Ratio: 1 : 11,7

Further cost savings:
saving on 15 screen changes

Calculation:
2 men, EUR 15,— / hour = EUR 460,—

Results:
running costs for 1 rubber screen mat = EUR 783,—
running costs for 15 Steel screen mats = EUR 1.540,—

Ratio: 1 : 1,97

Savings: 49%

Note:

In addition to a saving of 49%, specific screening was achieved at the required throughput. The whole open screening area has been utilized thanks to the high self-cleaning action of the TIP TOP REMASCREEN rubber screen mats.

Transversely tensioned REMASCREEN rubber screen mats have been used (1750 Spa x 1000 Fl x 4 mm. Apertures 3 mm QR)

Photo:

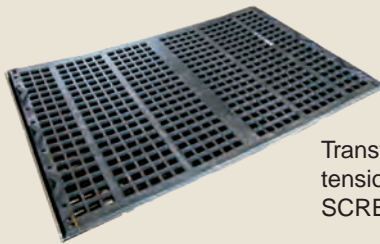
A longitudinally tensioned TIP TOP REMASCREEN mat with a blind impact area and a double reinforcement at the feed point.

This special version considerably extends the service life of the rubber screen mats.

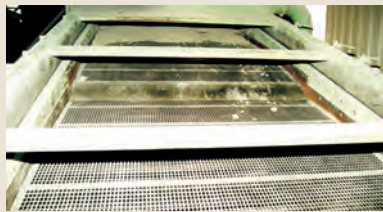
Special versions are specifically adapted to suit the local conditions.



TIP TOP REMASCREEN delivery programme



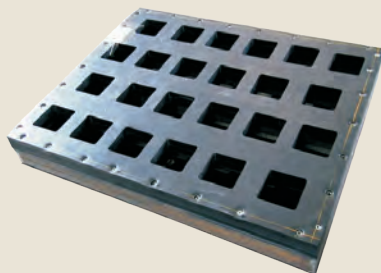
Transversely
tensioned REMA-
SCREEN mat



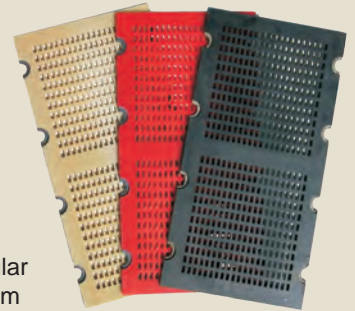
Longitudinally tensioned
REMASCREEN mat



REMASCREEN mat on flat iron frame



REMASCREEN mat on sectional iron frame

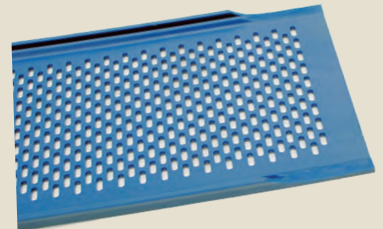


REMA modular
screen system

HAMMER modular system
(HMS)



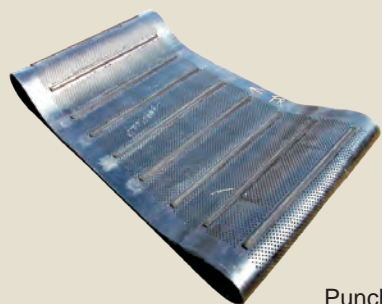
Flip-Flop screen mats
with fastening profiles



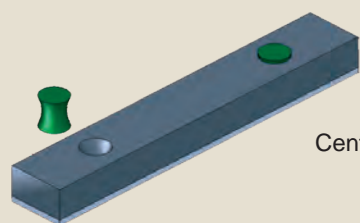
Flip-Flop screen mats
with mounting holes



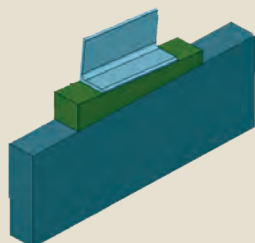
Industrie



Punched belts



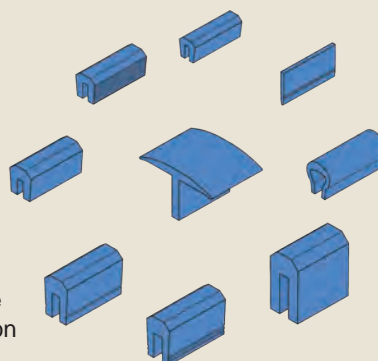
Centre fastenings



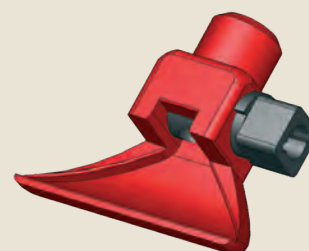
Side clamps



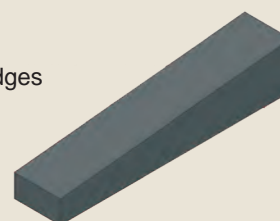
Pneumatic
rubber cutting machines



Traverse
protection
profiles



Spray nozzles

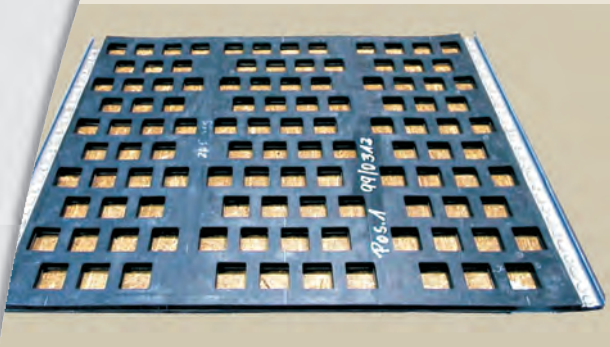


PE fastening wedges



Rubber balls for ballbeating devices

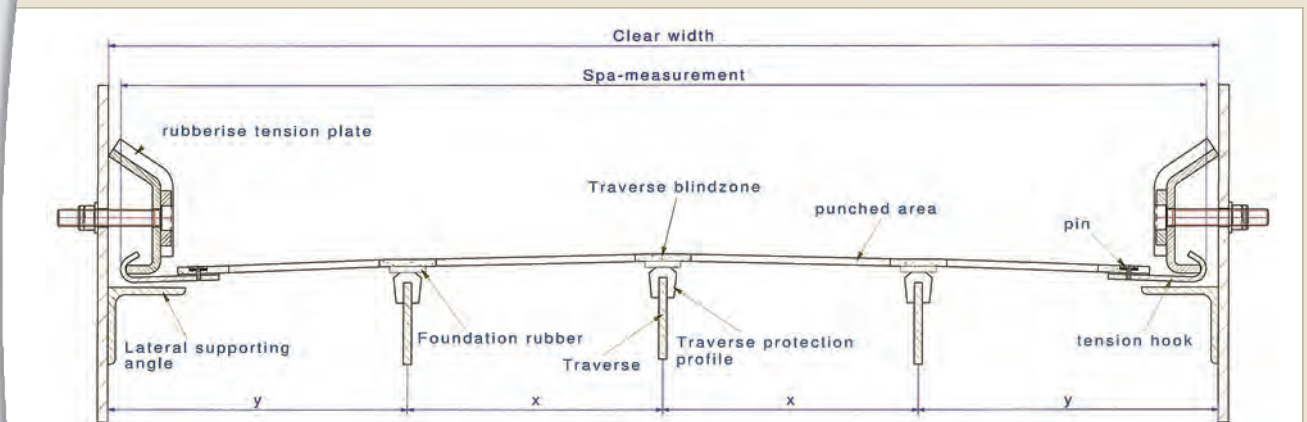
Transversely or longitudinally tensioned TIP TOP REMA-SCREEN mats



Transversely tensioned screen mat with two traverses and a B5SE tensioning edge.



Longitudinally tensioned screen mat for the wet-screening of gravel.



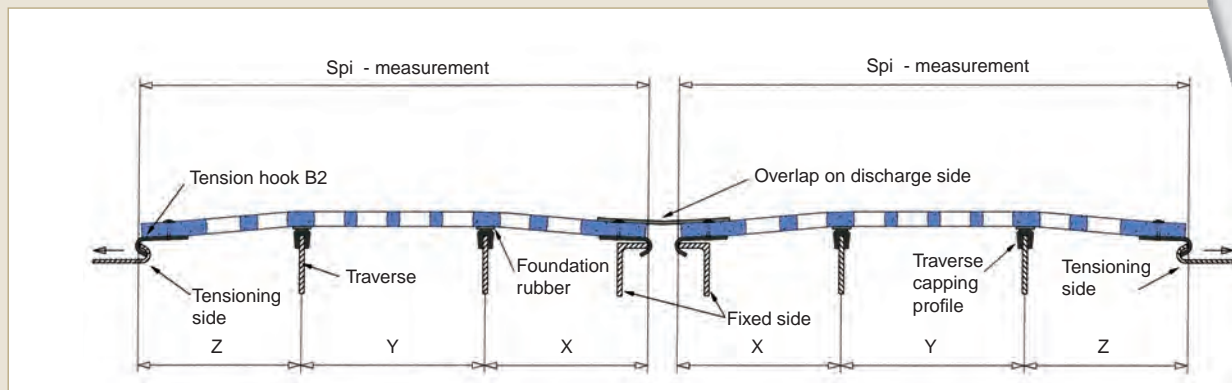
For transversely and longitudinally tensioned screen mats all sizes of apertures, rubber grades and thicknesses can be manufactured to suit the customer's requirements.

All current tensioning edges are available. (Special tensioning edges are available on request).



TIP TOP REMASCREEN

Longitudinally tensioned screen mat:



Transversely and longitudinally tensioned screen mats are manufactured in the following versions:

- D4, Double layer rubber with tension bands (without fabric)
- U2, Single layer rubber with EP 200 fabric ply
- U4, Single layer rubber with EP 400 fabric ply
- U44, Single layer rubber with two EP 400 fabric plies

made of polyurethane

- PU PU4(G) Single layer polyurethane mat 90° Shore with tension bands (yellow)
- PU4(R) Single layer polyurethane mat 90° Shore with tension bands (red)

Installation and maintenance of **TIP TOP REMASCREEN** tensioned screen mats

We guarantee the service life and the specified sizing of the material. Please observe the following instructions in order to avoid problems and to ensure that the service life guaranteed by us is attained or even exceeded:

Installation:

In principle, **REMA TIP TOP** screen mats are installed in the same way as steel screen mats. They have to be tightly stretched over the longitudinal or transverse supports. In such a way that they are precisely centred over the traverses. Generally, the screen has to be checked for optimum tension by hand. As **TIP TOP REMASCREEN** mats last much longer, the traverse protection profiles have to be in good condition. For this purpose, we recommend our specifically designed traverse protection profiles.

Maintenance:

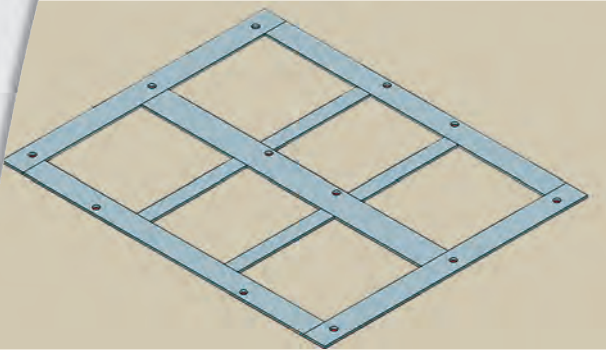
As the tensioning bands are made of rot-resistant low-extension polyester fabric, they may stretch by up to max. 0.5% during initial operation. This is why they need re-tensioning within the first three weeks. During the general inspection of the system, you should check whether the tensioning bands of the screen mats are tensioned sufficiently, and whether the traverse protection profiles are seated correctly. Damaged profiles should be replaced immediately; otherwise damage may occur to the underside of the screen mat.

It is essential for the screen mats to have the camber specified by the screen machine manufacturer in order to ensure that their undersides are not damaged on the traverses.

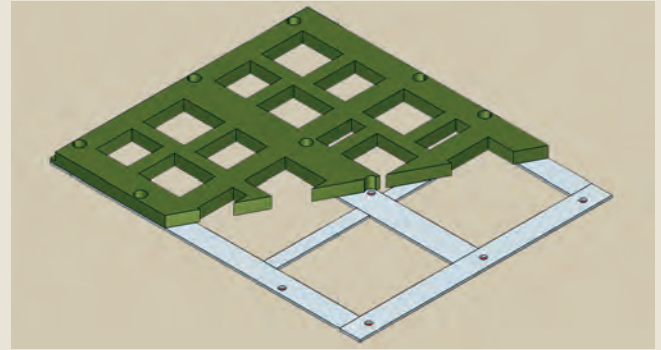
If the screen mats are completely or partially damaged because of failure to observe these instructions, our guarantee will be forfeited. Repairs can then be carried out only at the customer's expense.

TIP TOP REMASCREEN plane screen mats with steel support frames

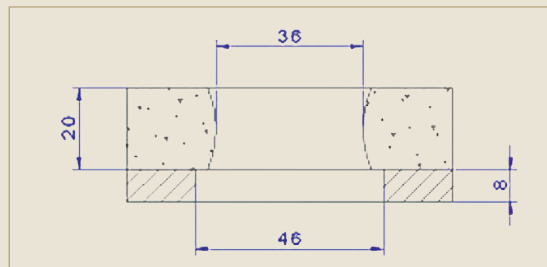
Flat iron frames have to be fastened to the machine subframe so as to ensure a homogeneous fit. For this purpose screws or wedges can be used. If subjected to high stress, the flat iron frame can be additionally reinforced by means of flat iron supports laid on their edges.



Flat iron frame

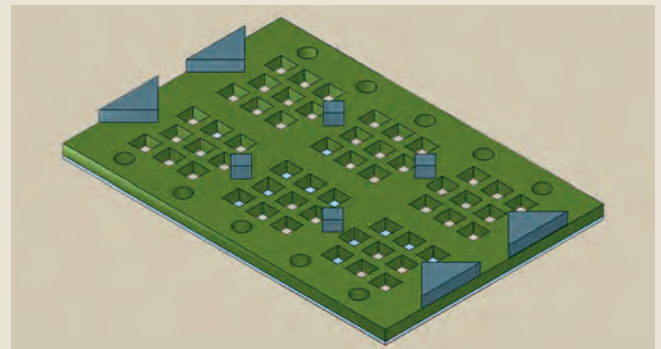
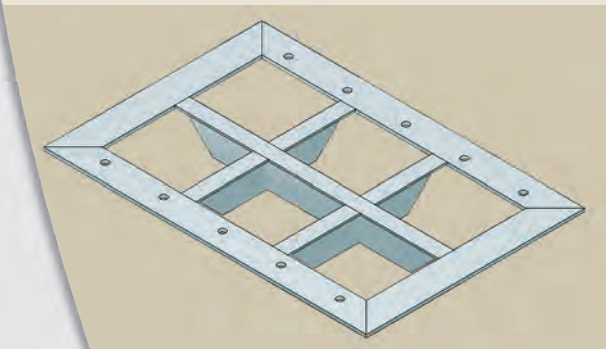


For perforated plates, the hole in the steel has to be 10 mm wider than in the rubber so as to avoid pepping.

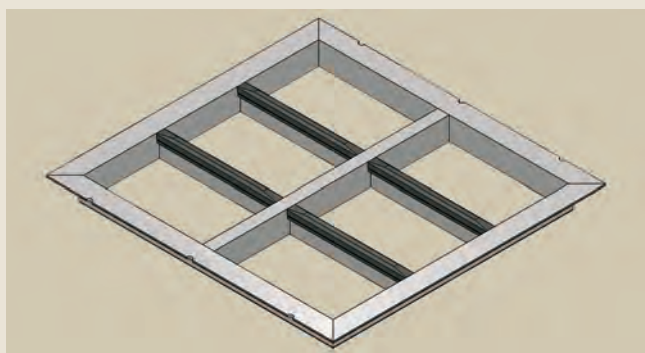


Perforated plate (not rubberlined)

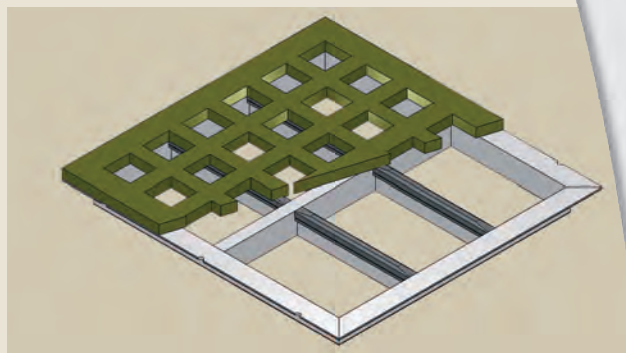
If critical materials have to be screened, the internal structure of the frame has to be equipped with flat iron supports laid on their edges. These flat irons are covered with traverse protection profiles. This gives the screen mat the necessary camber to avoid flapping. However, the inner area is so flexible that caked materials and pepping are eliminated again and again by the relative movement of the screen surface; thus the screen mat is kept clean automatically. In the outer area, the screen mat is bonded and additionally fastened with pneumatically driven steel nails.



TIP TOP REMASCREEN on sectional iron frames



Angle iron frame



Angle iron frame with 33 mm U44 cross-section

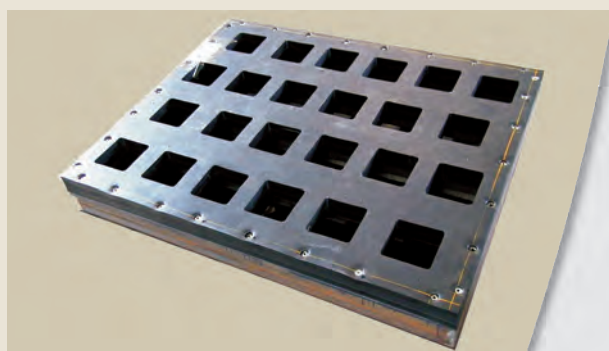
Angle or sectional iron frames are selfsupporting constructions which are used under high stress conditions or if there are no longitudinal or transverse supports. Normally, such frames rest on the lateral supporting angles where they are bolted or wedged.

The inner area, however, is flexible enough to dampen to a high degree the impact energy of the screened material, thus achieving far greater service lifetimes.

The frames manufactured by specially qualified metalworkers are extremely durable. (Sectional iron frames can even be reused!).



Sectional iron frame (U-iron)





TIP TOP REMASCREEN modular screen system made of rubber or polyurethane



- The ideal alternative for standard screening processes
- The solution to pegging and caking problems

Best suited:

For retrofitting to older plants and equipping of new plants.

Alternative to currently operating modular screen systems (without changes to the support frame).

Wide variety of screen surface materials (polyurethane, rubber with or without fabric, Vulkollan®, special materials available on request).

Modular screen system used on modern screen machines offer the following advantages with regard to installation and process technology:

In the case of partial wear, the worn-out parts can be replaced in a cost-effective way thanks to small exchangeable screen units.

Installation and removal is easy and can be carried out by one person.

Plane screen surfaces located in and across the conveying direction ensure optimum material distribution and a constant transport speed of the bulk material.

The screen mats are made of highly wear-resistant materials.

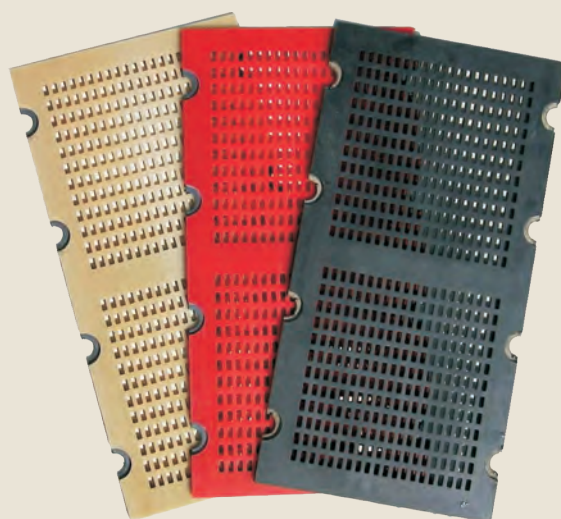
Strong market presence.

The TIP TOP REMASCREEN modular screen system offers further advantages:

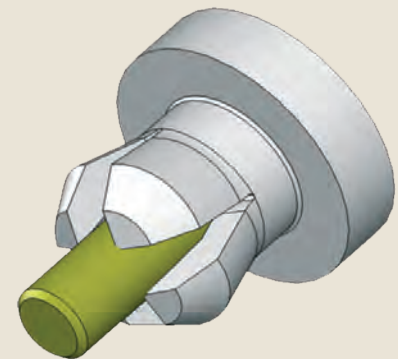
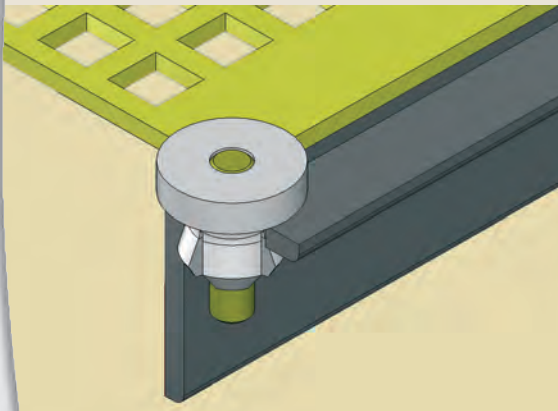
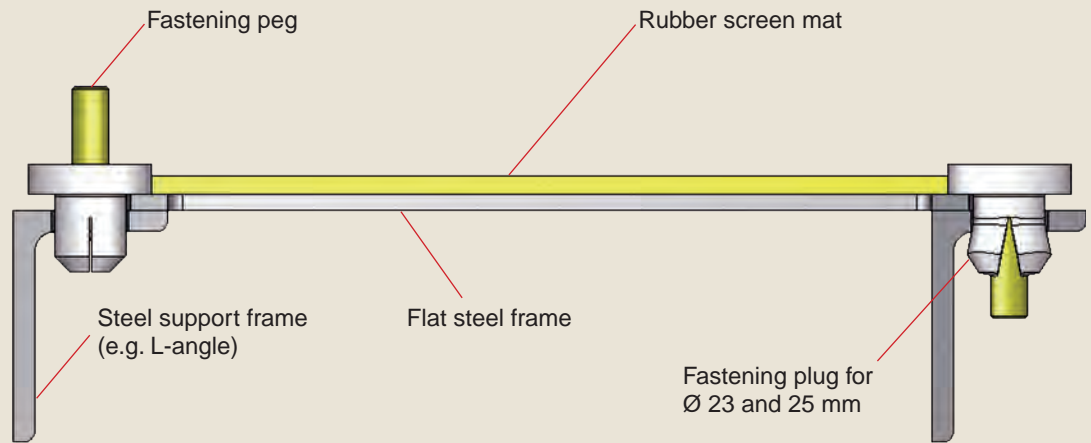
All the frame sizes can be delivered at short notice (delivery time approx. 2-3 weeks), thanks to our flexible manufacturing system. We can manufacture all the necessary shapes and sizes of apertures necessary to attain the required grain sizing limits together with the necessary screening precision.

The thickness of the screen mat can be specifically adapted to suit the screened material.

The use of thin and flexible mats are manufactured (rubber with or without fabric, Polyurethane, Vulkollan®) can be specifically adapted to suit the screened material.



Fastening system 1



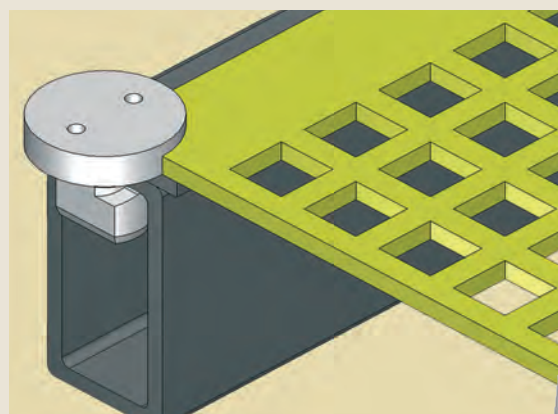
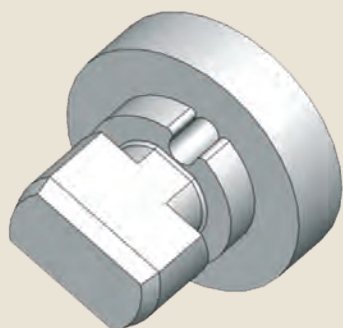
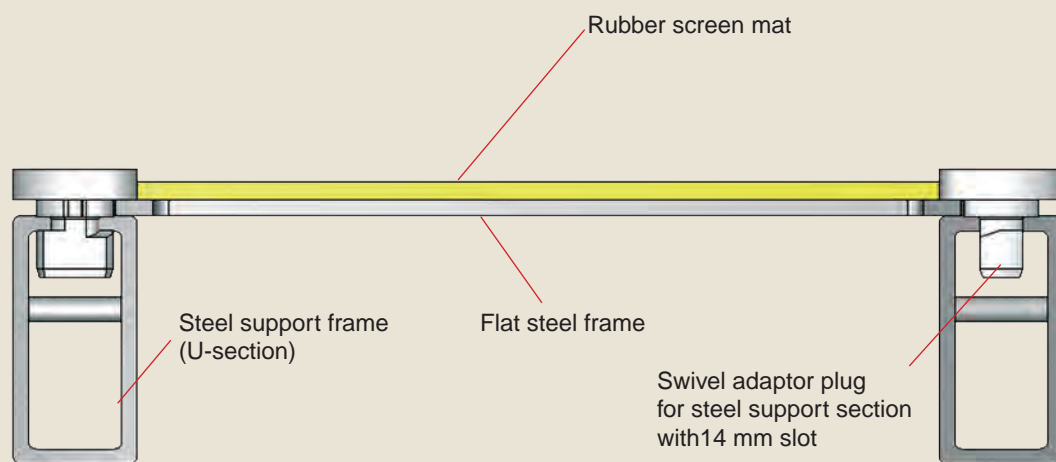
Standard fastening (Ø 23 and 25 mm)

TIP TOP REMASCREEN modular screen mats are specifically designed to be fastened to the support frame using only fastening plugs made of highstrength polyurethane.

There is no requirement for special mounting or demounting tools. The fit to the steel support frame is homogeneous and absolutely reliable. You can remove the screen modules quickly and easily with a screwdriver (or a hammer together with a punch) without damaging or deforming them.



Fastening system 2



Fastening to steel support section with a 14 mm slot

TIP TOP REMASCREEN modular screen mats can also be fastened to rectangular hollow section frames manufactured with a 14 mm slot which have been designed for other modular screen systems. For this purpose, special swivel adaptor plugs are used. Thus the advantages of the **TIP TOP** standard fastening system are preserved. This makes it possible for the operator to use different modular systems at the same time and to utilize the advantages of our effective and cost-saving modular system.

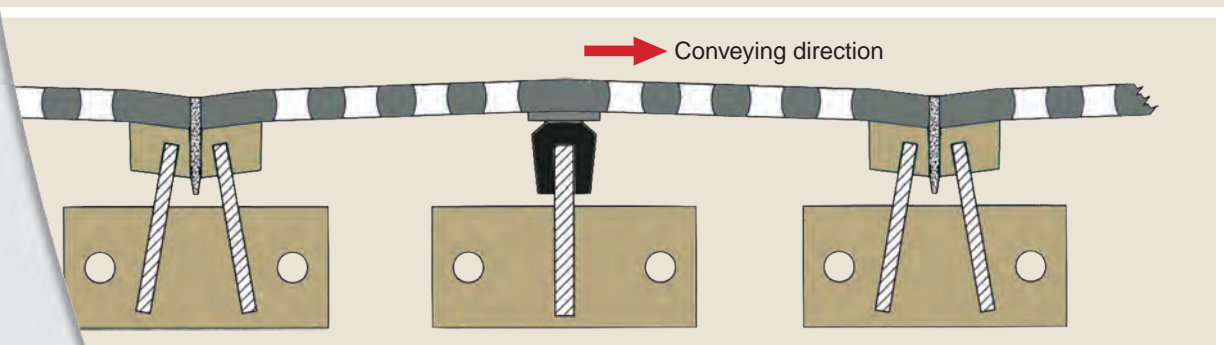




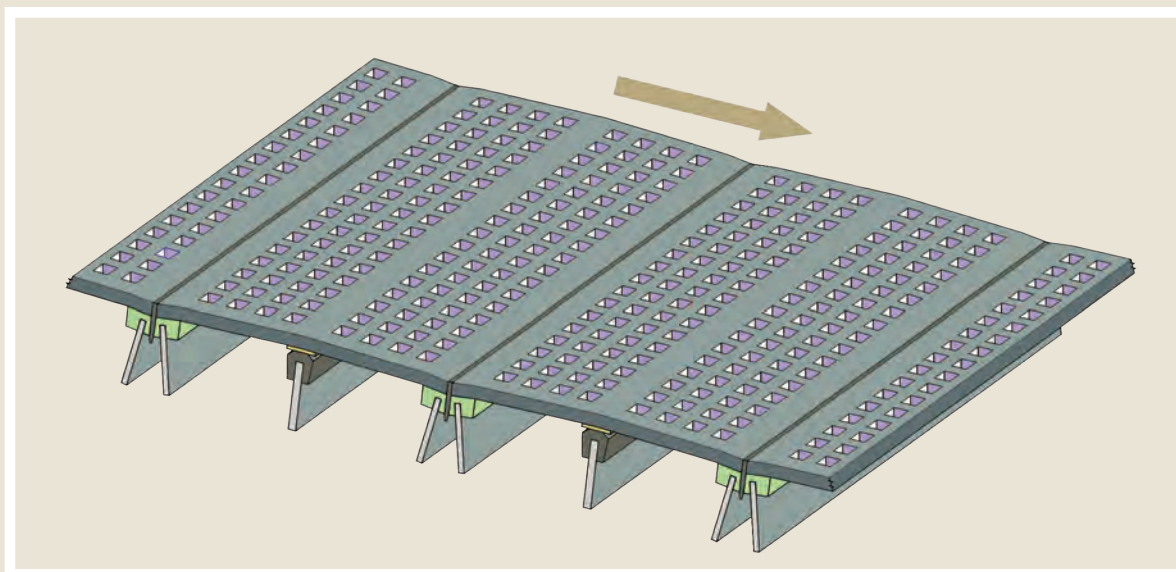
TIP TOP REMASCREEN Hammer-Modular-System HMS The slightly different modular system...



... ensures: higher through put - shorter downtime - higher self-cleaning action



The new type of modular screen system made of wear-resistant rubber or polyurethane mat segments has clear advantages over other modular screen systems!



High open screening area (up to 47%).

The width of the screen machine can be almost completely utilized.

No fastening elements located in the flow of feed material.

No blind areas in the conveying direction.

Lightweight screen mats without steel reinforcement.

High selfcleaning effect thanks to flexible screen mats.

Plane screen surface across the conveying direction ensuring optimum material distribution.

Quick and easy replacement of the mats.

Relatively small and inexpensive screen mats.





Support frame:

Longitudinally installed flat irons serve as supporting elements for the mat supporting profiles and centre supporting irons. The longitudinal bracings are bolted or welded to the cross beams of the screen machine.



Initial installation:

The support frame is normally supplied preassembled. After it has been installed in the screen machine, the side wall is rubber-lined to protect it against wear. The rubber lining should be slightly higher than the maximum expected bed depth. Blind feed and discharge areas should also be rubberlined to protect them against wear and to reduce noise.



Screen mats:

The screen mats are manufactured by means of a punching process. Various grades of rubber or polyurethane (rubber 65° Shore A, fabric-reinforced; polyurethane 90° Shore A without fabric) are used for production. To fasten the screen mats to the steel frames, special fastening profiles of high-strength polyurethane are bonded onto the undersides of the screen mats.



Installation of screen mats:

The screen mats are installed across the conveying direction. They extend over the whole width of the screen machine. A rubber wedge (90° Shore A) is driven in between the HMS screen mats; thus the mounting lips are pressed onto the steel frame, and the screen mat is secured to cope with even the most arduous operating conditions.

Features of HMS:

suitable for equipping both older and newer plants

suitable for grain sizing limits from approx. 1 - 56 mm

screen mats available in thicknesses ranging from 2 - 38 mm

The screen mats can be manufactured in all widths and lengths

The steel supporting structure and the size of the screen mats are customized to suit the existing plant

Example:

Location: South-Tyrol
Screened material: hard rock
Solution to problems: service life, throughput

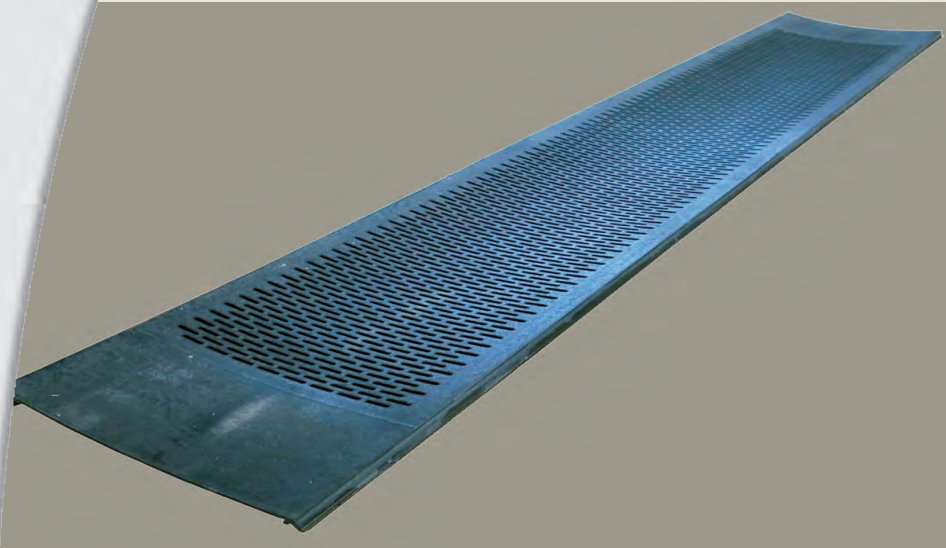


Example:

Location: Austria
Screened material: limestone
Solution to problems: cleaning (pegging), throughput, noise



TIP TOP REMASCREEN as loose punched mats

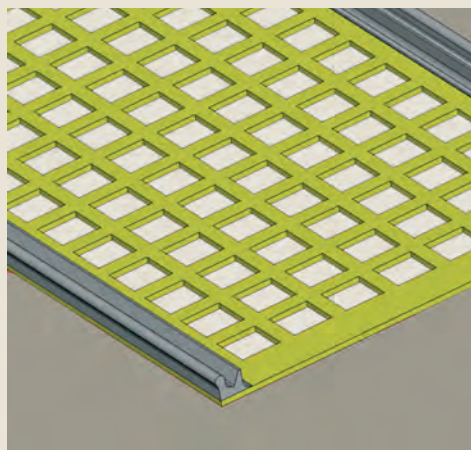
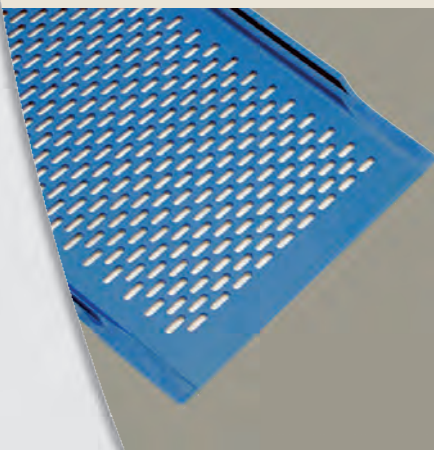
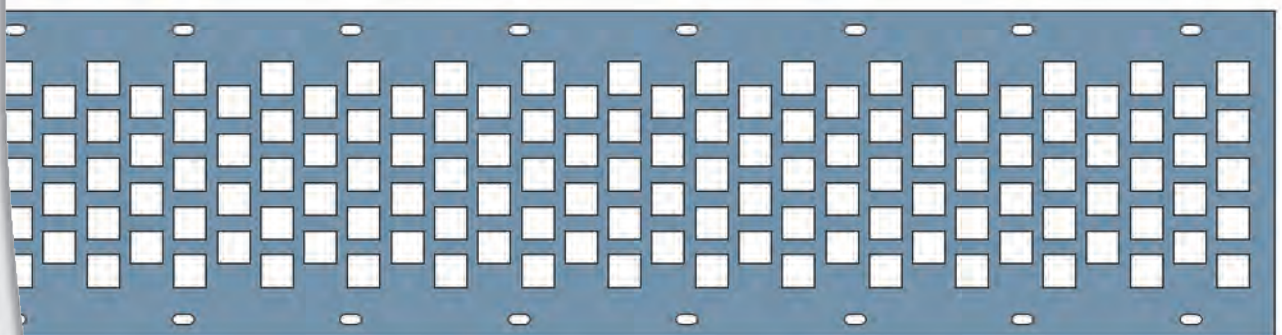


We manufacture flip-flop screen mats for all known types of screen machine. The screen mats are available with fastening profiles or with mounting holes, and are usually manufactured from polyurethane.

Simple punched mats are also manufactured to suit the customers' requirements.



Fixing holes



We can produce all shapes and patterns of apertures at the customers' request.

Just-in-time production helps to ensure extremely short delivery times.



A traditional modular system showing almost 100% pegging.



TIP TOP REMASCREEN mats are kept clean thanks to their high flexibility.

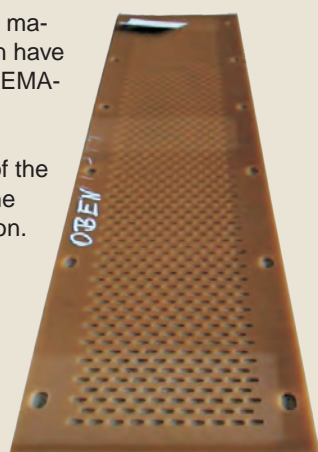
The screen mats can be custom-made to the specifications of the support frames. It is possible to protect the steel support frames from wear by means of integrated blind areas. This helps to considerably extend the service life of the support frame and therefore save costs.

Furthermore the price per m² of TIP TOP REMASCREEN mats for flip-flop screen machines is much lower than that of traditional screen modules.



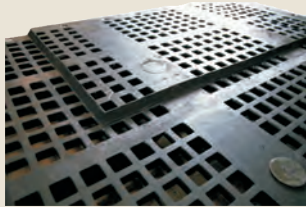
In a screening plant, 16 screen machines of identical construction have been equipped with TIP TOP REMASCREEN mats.

Problems with the service life of the screens have been solved to the customer's complete satisfaction.

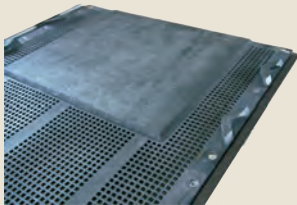


TIP TOP REMASCREEN accessories

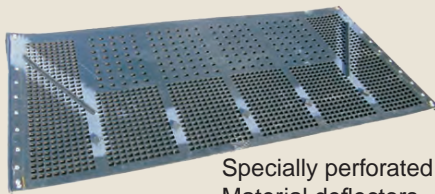
Optional special provisions for REMASCREEN mats



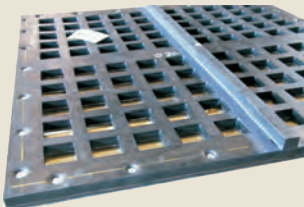
Reinforced impact
area (perforated)



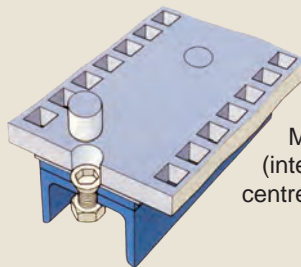
Reinforced blind
impact area



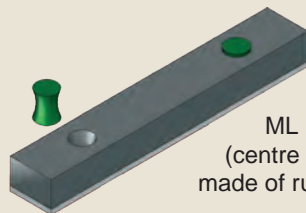
Specially perforated areas
Material deflectors



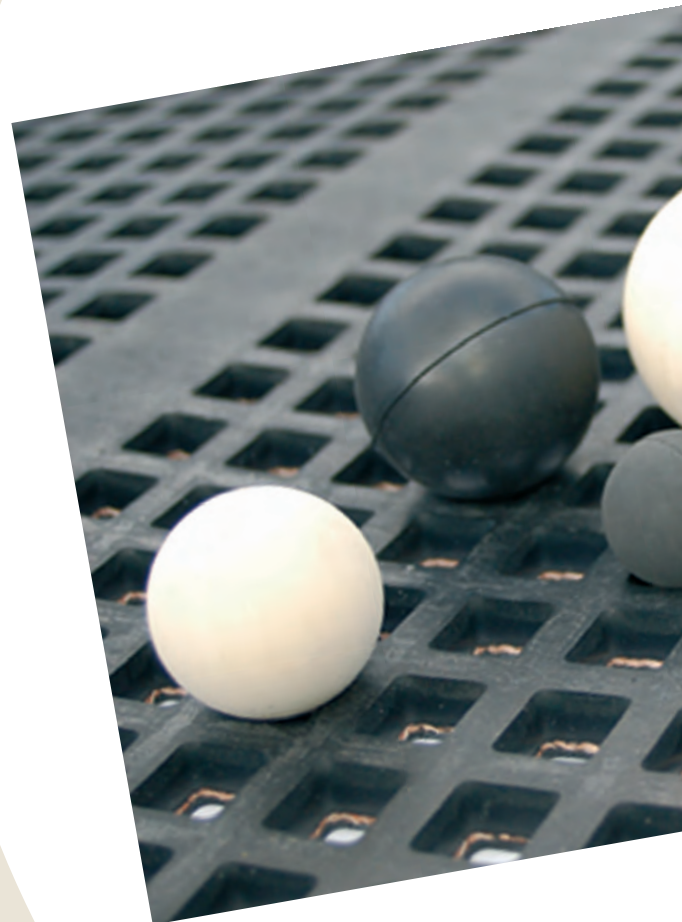
Material dams



MLU
(integrated
centre fastening)

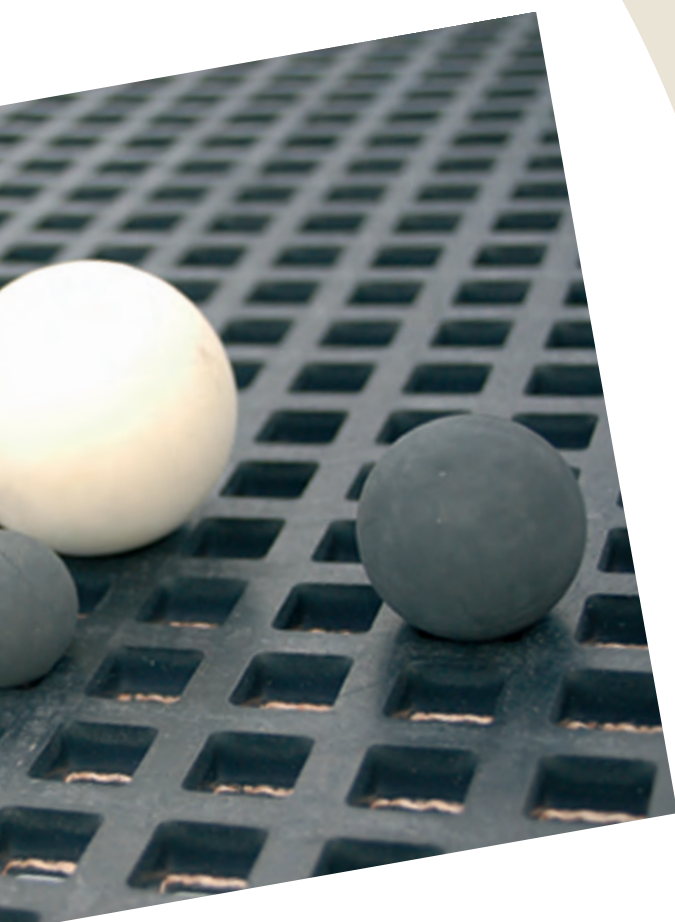


ML
(centre fastening
made of rubber or PE)



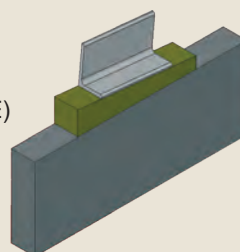


Industrie

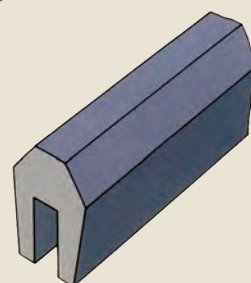


Rubber balls of different shore hardness for ballbeating devices

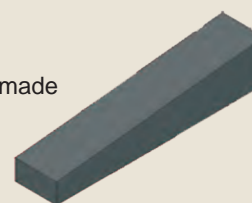
SK (lateral wedges
made of rubber or PE)



Traverse protection
profiles



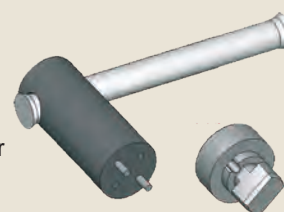
Fastening wedges made
of PE



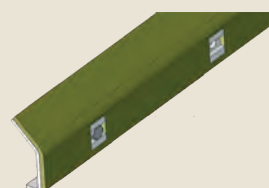
Screwed PE wear plates
for screen machine side
walls



Turning device fo
14-mm-slot swivel adaptor
plugs



Screen mat bonded onto
steel plate



REMA TIP TOP Varyspray - nozzles



Are made of highly wear-resistant polyurethane and guarantee a long service life.

The special shape of the fan-type back plate produces a wide and even spray jet which is ideal for highly efficient washing of all kinds of minerals and bulk materials.

Simple screw fastening with R3/4" external thread.

Adjustable valve core for regulating the flow rate and for quick, easy cleaning.

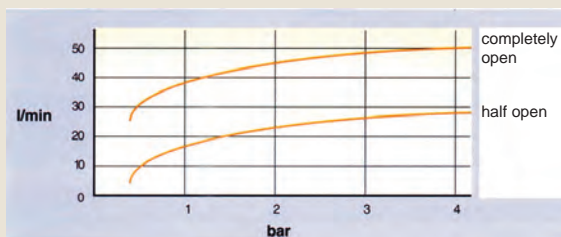


Robust fan-type back plate for the even distribution of water.

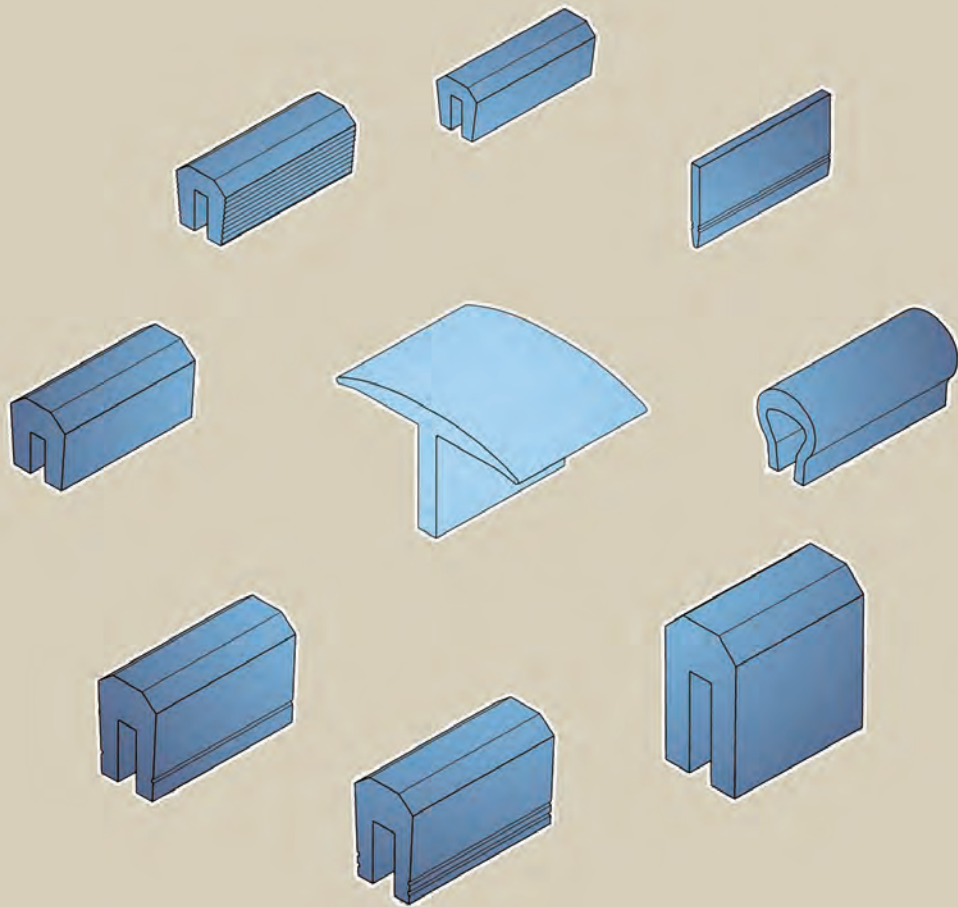
Low overall height (important for use in lower decks).



Varyspray flow diagram



REMA TIP TOP traverse protection profiles provide optimum protection for screens and screen mats



Tight fit on the traverses.

Flat top side for optimum support of rubber and PUR screen mats.

Available for traverse widths of 6, 7, 8, 10, 12 and 20 mm.

Available in different heights:

- to conform with different uses and stresses
- to compensate for insufficient camber.

Excellent dampening properties due to the relatively large volume and geometry of the profiles.

Bevelled edges for problem free installation of screens.

Wearresistant 65° Shore A rubber ensures a long service life.

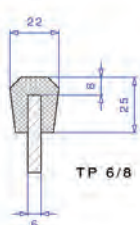
In addition to traverse protection profiles, we also offer various special profiles of different rubber grades, e.g.: fastening wedges in a 90° Shore A rubber quality for special screen mats.

Covering profiles for weighbridges to prevent the ingress of dirt.

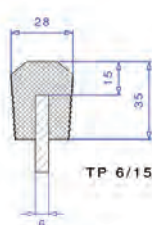
We also supply special profiles upon request if ordered in sufficient quantities.



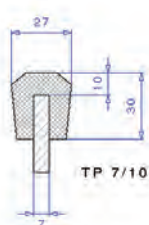
Industrie



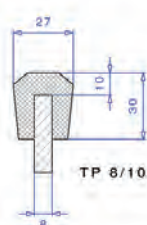
TP 6/8



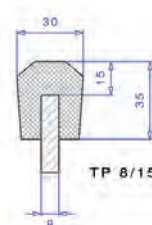
TP 6/15



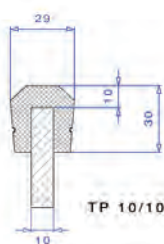
TP 7/10



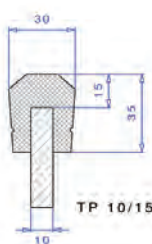
TP 8/10



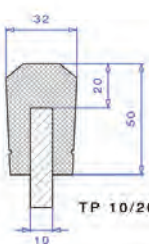
TP 8/15



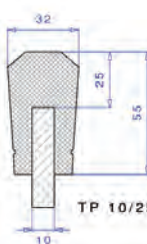
TP 10/10



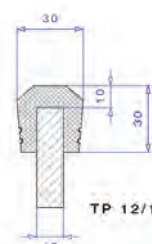
TP 10/15



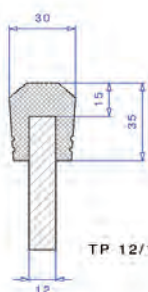
TP 10/20



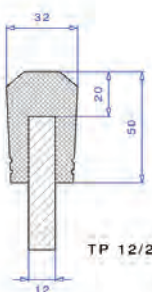
TP 10/25



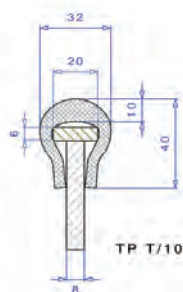
TP 12/10



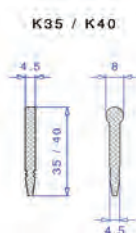
TP 12/15



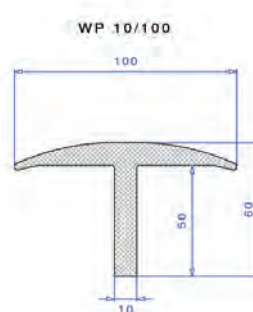
TP 12/20



TP T/10



K35 / K40



WP 10/100

TIP TOP REMAMODULE

Modular screen system for round classifier



Easy and quick installation of the screen units.

Small and handy screen units.

Partial removable.

Cost saving concerning installation and spare part procurement.

Good circulation of the material and increase of throughput due to polygonal construction

Noise reduction

System can be easily adapted to each part circle diameter and each drum length

High self cleaning action due to soft and flexible rubber material

Advice, construction and production of the drum body, screen modules and first installation from a single source

Function principle:

Drum screens are fixed as preliminary classifier in single or double cylinder designs at the end of an washing drum. The screening material is heavily mixed with water in the drum and if necessary sprayed for a better cleaning. Due to the rotation of the screen body the screening material rolls over the screen openings and is classified by size. Drum screens tend to pegging because the screen units don't vibrate nor oscillate. This leads to the use of flexible rubber screens. The screening material is only led to the end of the screen drum from the rotation and the steadily running material flow. To increase the flow velocity some times shovels are mounted.

Conventionell screen mats:

Usual screen drums are equipped with large perforated plates. These plates are screwed together as self-supported half shells. To change a screen unit a crane is absolutely necessary. Some times it's necessary to turn down the screen house.

TIP TOP REMAMODUL for round classifier:

To mount this new modularscreen system a special support frame is necessary. This frame is to be fitted at the washing drum and the periphery. The screen units are mounted into the basic body and fixed with polyurethane fixing plugs - fast, uncomplicated and absolutely reliable. This fixing technique is adequate to the usual REMA Modul system for vibration screen machines and is therefore a 1000 times approved and a 100 % reliable. The support frame is protected from the blind zones of the screen units and stays at the washing drum while changing the screen units. Only the damaged screen units are changed in a very short time and are replaced by new units.

Advantages:

By the resulting polygon the screening material is circulated ideally. This causes a significant improvement of the screening quality and an increase of the throughput. Furthermore the running costs of drum screen machines are reduced substantially when using REMAMODUL screen system.

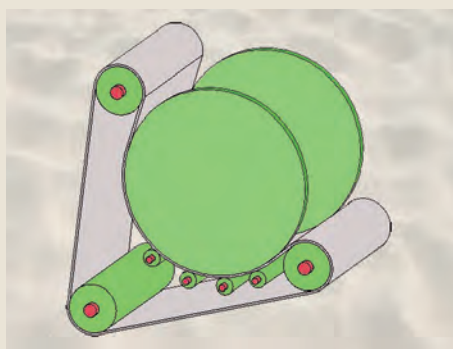
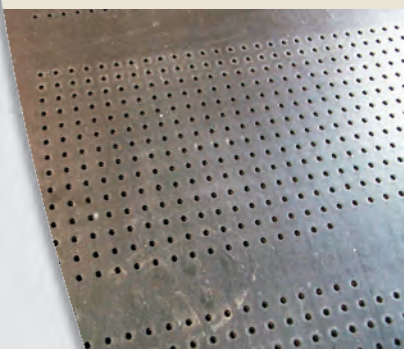
In the case of partial wear or force damage small screen units can be replaced in a cost-effective way. Replacement can be carried out by one person. No special tool or lifting tool is necessary. High service Life by highly wear-resisting rubber materials.



REMA TIP TOP punched belts made of rubber or PVC



Belt for sand blasting



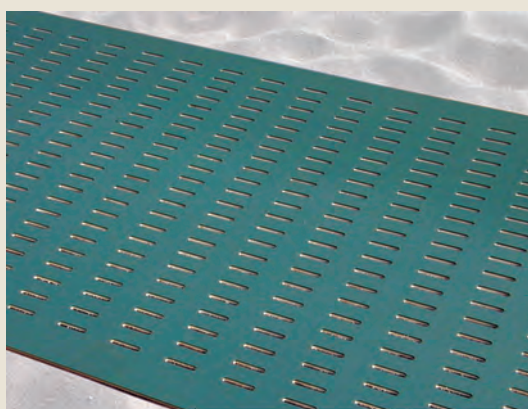
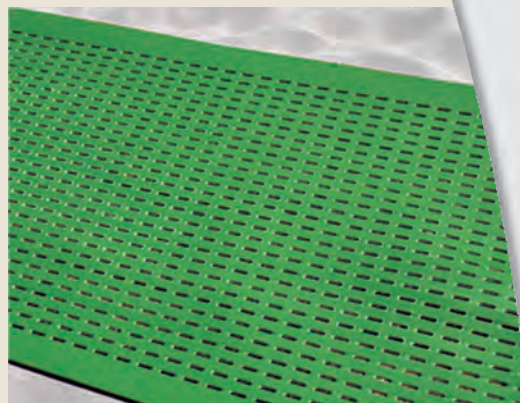
Sand blasting construction

We manufacture punched belts made of rubber or PVC, transversely stable belts for shotblasting systems, perforated belts of standard quality, drainage belts made of PVC etc., all according to customer specifications.

The punched belts can be manufactured in an endlessspliced or nonspliced version. We can supply hot or cold splices, and apply cleats when required.

State-of-the art punching technology and qualified specialists enable us to punch nearly every required size and shape of aperture.

We can supply belts of almost any quality, and perforate them according to customer specifications.



We also make the necessary holes in belts for bucket elevators to enable customers to attach their own buckets.





Production plant:

JÖRNS GmbH

Am Rück 25
D 59969 Bromskirchen-Somplar

Phone: ++49 2984 9209-0
Fax.: ++49 2984 908510
E-Mail: info@tiptop-joerns.de
http: www.tiptop-joerns.de

Sales:

REMA TIP TOP GmbH

Gruber Strasse 63
D-85586 Poing

Phone: ++49-8121-707-245
Fax: ++49-8121-707-222
E-Mail: info@tiptop.de
http: www.rema-tiptop.com

