

# LOW-STRESS Trommel and Screen Media

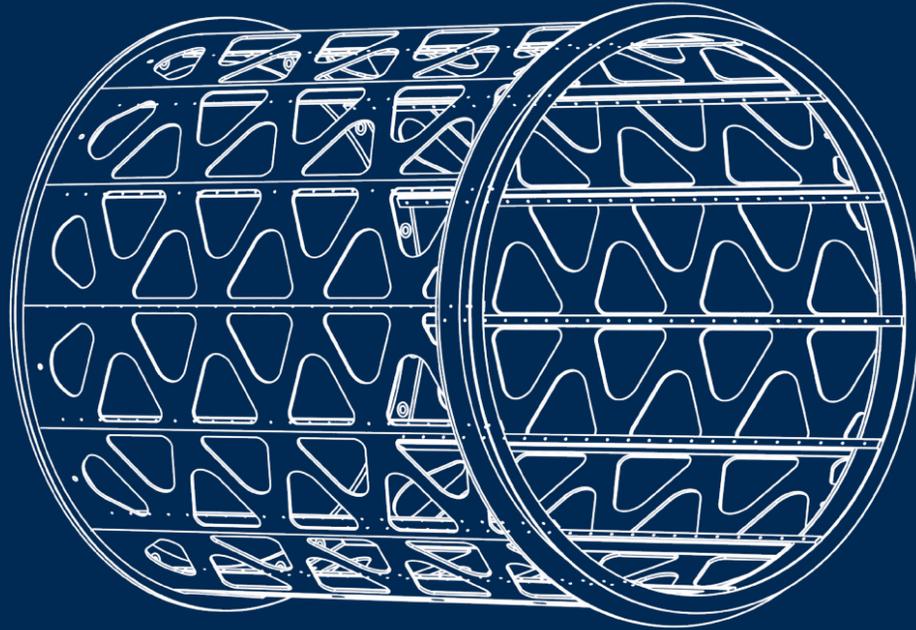
Lower costs, easy and  
safe to maintain



**FLS**

# Market-leading design backed by superior support

Our new range of LOW-STRESS trommel frames and screen media will get you the most out of your SAG mills, ball mills and scrubbers. We are your partner in productivity.



## Key benefits

- Designed to increase structural life
- Improved screening efficiency and availability
- One partner for trommel, media and mill
- Easy and safe to install and maintain
- Lowest total cost of operation

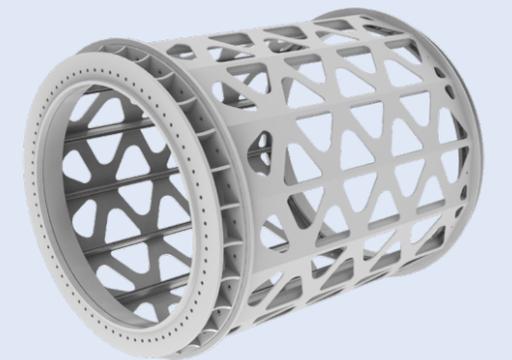
# Reduce operational stress with LOW-STRESS

Join some of the most productive mines around the globe by letting our LOW-STRESS Trommel and media designs improve your process. We bring our in-depth equipment knowledge to your unique application to exceed your expectations.

## Advanced trommel design

Our LOW-STRESS trommel frames give you the most safety and the lowest fatigue stress, which translates into lower stress for you. Rest assured that your high-quality equipment is designed to increase your uptime and provide safe handling because of its strong yet lightweight engineering.

We manufacture our trommel frames and screen media in FLS fabrication centres around the globe. We use internationally accepted engineering standards and procedures to get you shorter lead times for your orders.



## Unparalleled designs

Our combination of process and structural experts offer custom solutions for each site to improve performance. An improved factor of safety in the trommel frame design allows us to decrease the structural mass. Having a lower structural mass gives you lower structural and fatigue stresses and improved mill throughput. Performance enhancement leads to an improved screening return on investment.

Moreover, our new LOW-STRESS trommel design is safer, holds up better in the field and is quicker to manufacture. Between our smarter design and the global FLS supply chain, we have shortened lead times to get trommels to you faster.

## Strong and durable

To extend and maximise your asset life, we verify the structural design of our trommel frames through finite element analysis (FEA). This guarantees the engineering behind all components. Complete design verification by FEA includes static and fatigue/strength assessment, as well as strength assessment on the bolts.

We stress relieve your trommel frame after fabrication and before machining. We also apply protective lining on each frame in the areas that are likely to be exposed to erosive and abrasive wear.

## Lower operating costs

Trommels are chosen for their ability to provide efficient, vibration-free screening. Our LOW-STRESS Trommel range adds a third expectation—exceptional wear life. Under normal cycles and with a stable plant and minimal surge cycles, the LOW-STRESS Trommel has a longer life with minimal maintenance.

With our customised adaptors and wear liner designs, the entire system is easy to install for both brownfield and greenfield projects.

No two operations are exactly the same. We have screening experts who assist customers like you in finding a customised solution for the screen media that will have the longest wear life and be most efficient for their circumstances.

# The LOW-STRESS Trommel advantage

Exceptional features and accessories

## Optional systems and customisations

Our optional washing system is custom-designed and manufactured to deliver efficient washing and recovery of fines that adhere to oversize material. If the fines are left with oversize material, they can interfere with and affect downstream processes, such as pebble crushing.

Material dispersion, pulp depth and retention time is optimised with accessories including scrolls, impact pads / blanks and discharge lips.

Trommel frame protection is available in polyurethane and rubber.



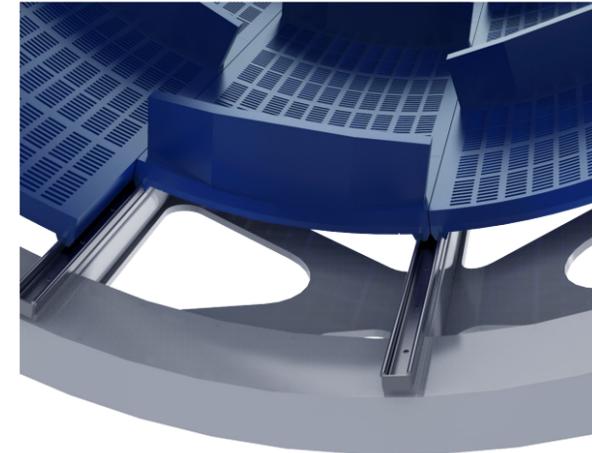
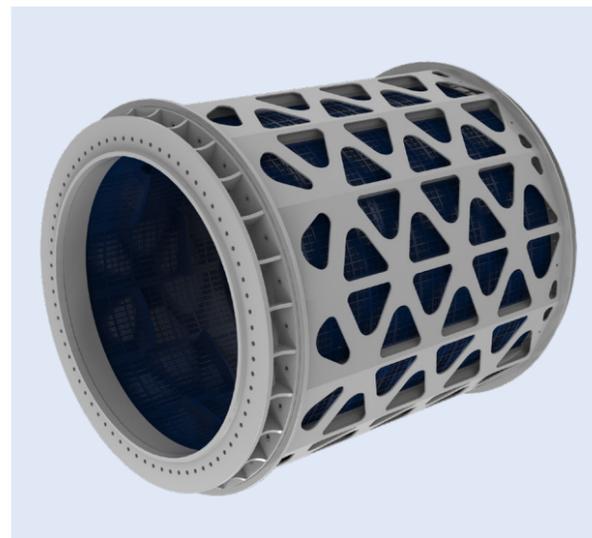
# Industry-leading screen media

Improve performance and drive down cost with market-leading features

## Modular screening media

Our modular screen media gives you industry-leading wear life and more open area than comparable media. Available in rubber and polyurethane material, our modular screening media is suitable for all mineral-sizing applications. It is designed to optimise operational life and is easy to maintain. To get even longer out of the already-extended wear life of our panels, they can be conveniently rotated.

To ensure rapid delivery and streamline inventory management, our screening media is available in two standard sizes and in a number of thickness combinations. Non-standard sizes are available upon request. Our standard dimensions allow us to supply your media from any FLSmanufacturing centre and guarantee your media will conform to our unparalleled quality requirements and material specifications, while providing equal fabrication reproducibility.



Polyurethane trommel screen panel shown above, also available in rubber.

## Easy and safe handling installation

We designed our trommel frame with friction-grip clip rails to make maintenance easy and safe. Our modular screen media panels clip into position without any bolts or pins so you can quickly get back into operation. If desired, different fastening systems are available upon request.

Handling the screen media panels is easy, too. Our standard size modular panels weigh less than 25 kg (55 lbs) each.

## Screen media securing system

- Clip-on/clip-out design securely fixes screen media panels to structure rails
- No special tools or installation components required for installation or maintenance
- System reduces downtime for panel removal and replacement

## Screen panel features

- Full range of panel thicknesses in polyurethane or rubber formulations, built to suit high-top-size-impact, high-abrasion situations and pulp depth, and tailored to any ore type
- Customised material dispersion and retention time
- Optional riders bars for greater wear resistance
- Optional modular spirals manufactured in a customisable helix angle for your application, and configured for your specific flow-advance or flow-retard requirements
- Optional lifters and deflectors to aid in material dispersion and consistency of the trommel flow
- Blanks and discharge spout for maximum wear life and impact resistance
- Circumferential dams to ensure better breakdown of daming material
- Custom designed using discrete element modeling (DEM)

## Improved screening efficiency and availability

A customised LOW-STRESS Trommel configuration improves screening efficiency and runs longer between maintenance shutdowns. Add to that screen media that has been optimised for your specific needs, and you will be surprised at how well and how long your equipment runs.

## Longer wear life

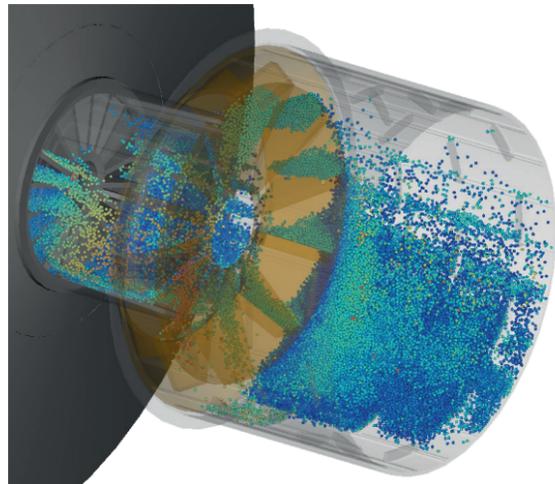
Our media optimisation services match you with the liners that will best handle your feed conditions and other operating parameters. The simple and inexpensive step of ensuring you have the right liners for the job increases productivity and lowers maintenance expenses.

# Advanced analysis

Our experienced engineers are committed to finding the best solutions. We examine every aspect of your screening process to help ensure efficient pulp flow characteristics, proper separation, and maximum equipment uptime.

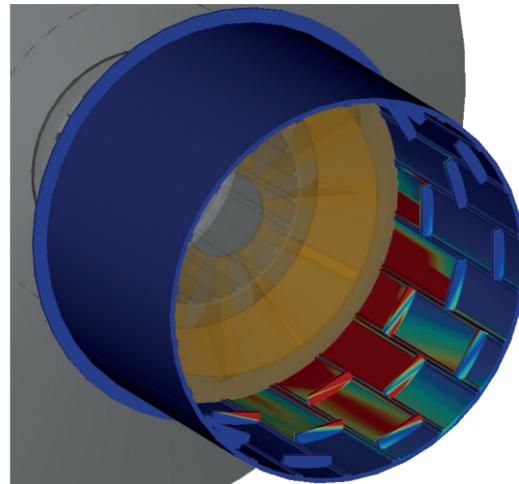
## Pulp flow

We use our state of the art discrete element modelling (DEM) software to simulate your trommel performance. We then model, predict, optimise and enhance your assets for the highest recoveries and efficiencies possible.



## Screening media configuration

Using DEM software, we analyse your trommel's material distribution in order to optimise your screening media configuration.



## Optional deflectors

Installed between the mill discharge trunnion and the trommel, deflectors provide a homogenous and controlled feed of the mill discharge pulp onto the trommel screening surface. This allows maximum use of the available surface area. The deflectors assist in improving pulp distribution to improve screening efficiency. Deflectors also contribute to improved screening media life.



As your partner in productivity, we combine our in-depth knowledge of equipment and applications, providing a comprehensive approach to improve your processes. We have engineered a new range of trommel frames and screen media for SAG Mills, ball mills and scrubbers. *Learn more*

**Follow us here**



[flsmidth.com/linkedin](https://flsmidth.com/linkedin)



[flsmidth.com/twitter](https://flsmidth.com/twitter)



[flsmidth.com/facebook](https://flsmidth.com/facebook)



[flsmidth.com/instagram](https://flsmidth.com/instagram)



[flsmidth.com/youtube](https://flsmidth.com/youtube)

**Contact us**

**FLSmidth A/S**

2500 Valby  
Denmark  
Tel. +45 3618 1000  
[info@flsmidth.com](mailto:info@flsmidth.com)

**FLSmidth Inc.**

Salt Lake City Operations  
Midvale, UT 84047-5559  
USA  
Tel. +1 801 871 7000  
[info.sl.c@flsmidth.com](mailto:info.sl.c@flsmidth.com)

**FLSmidth, Pty Limited**

Pinkenba QLD 4008  
Australia  
Tel: +61 7 3121 2900  
[info.australia@flsmidth.com](mailto:info.australia@flsmidth.com)



[flsmidth.eco/contact](https://flsmidth.eco/contact)

Copyright © 2023 FLSmidth A/S.  
All Rights Reserved. FLSmidth and FLS are (registered) trademarks of FLSmidth A/S. This brochure makes no offers, representations or warranties of any kind (express or implied), and information and data contained in this brochure are for general reference only and may change at any time. FLSmidth does not guarantee or make any representation regarding the use or the results of the information or the data provided in the brochure in terms of its correctness, accuracy, reliability or otherwise, and shall not be liable for any loss or damage of any kind incurred as a result of the use of the information or data provided in the brochure.