

# LASERFILTER

The high-performance filter system.  
For continuously high melt throughputs.

**New:** now even more efficient thanks to innovative scraper technology.

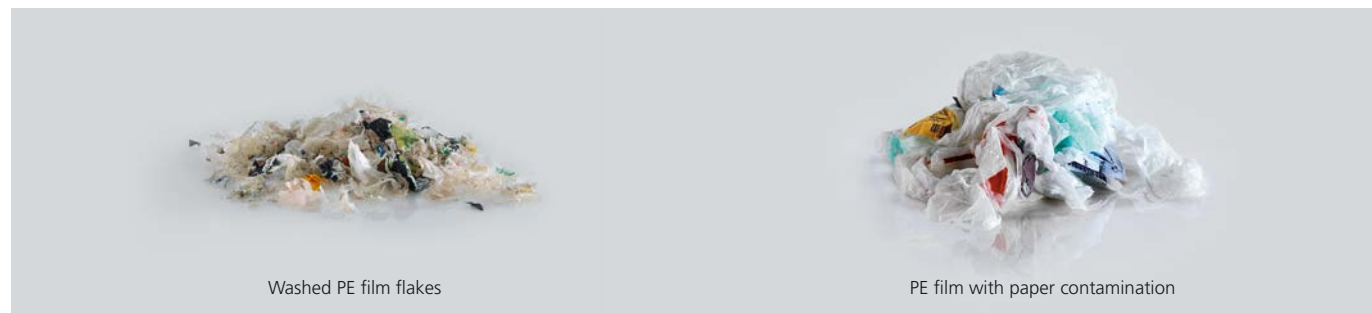
CHOOSE THE NUMBER ONE.

# More throughput. More thickening. More quality.

EREMA Laserfilter.  
Now featuring new innovative scraper technology.

The EREMA Laserfilter is a high-performance filtration system.

Thanks to its ingenious technology it **ensures remarkably high throughput rates with outstanding melt quality**. It is a specialist for high contamination contents when pellets in film quality are required and for a number of other tasks which conventional melt filters cannot handle.

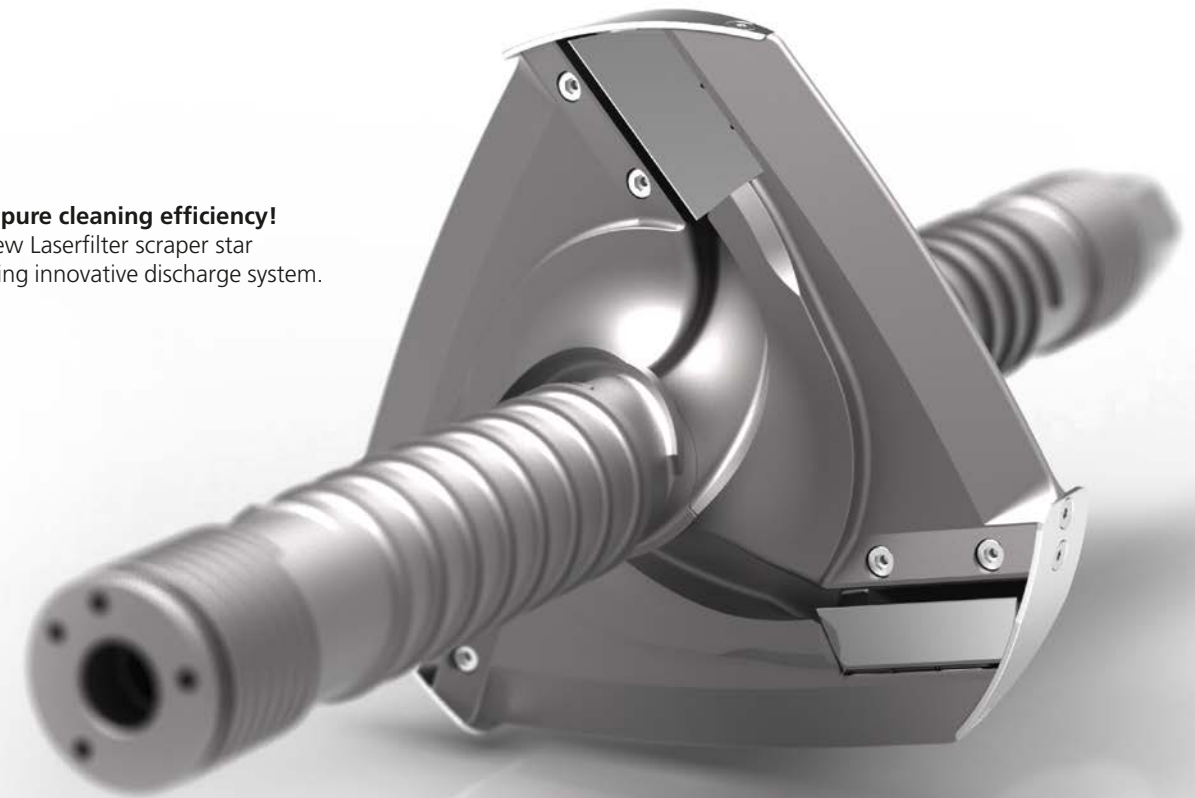


Removes contaminants even faster and more thoroughly.

With the high-capacity EREMA Laserfilter you have proven technology which has now been enhanced with a further boost of innovation: thanks to the new scraper geometry and discharge system design the contaminants which are filtered

out are removed even faster and more thoroughly. **This results in first-class cleaning efficiency, discharge capacity and thickening.** Service life is also extended at the same time.

**New: pure cleaning efficiency!**  
The new Laserfilter scraper star including innovative discharge system.



## Technical benefits

- Self-cleaning filter system with rotating scraper disc enables **days and weeks of continuous filtration**
- **Greater discharge capacity** for contaminants such as paper, wood, aluminium, copper
- **Top filtration reliability:** perfectly sealed system prevents any filtered out contaminants from getting into the high-quality plastic melt
- **New! Enhanced cleaning efficiency** through redesign of scraper geometry and discharge system – for even faster removal of contaminants
- **Fully automatic, constant pressure operation**

## Economic benefits

- **Continuously high filtration performance ensures high melt throughput together with outstanding melt quality**
- **Considerably higher screen service life** through increased cleaning efficiency
- **Simple and fast screen disc changeover**
- **Less labour required** thanks to longer screen change intervals
- **Minimum melt losses** through increased thickening up to 50 %

# High performance. Continuously.

EREMA Laserfilter for thermoplastics.  
The high-capacity system.

Clean melt. Through and through. This is how the Laserfilter works.

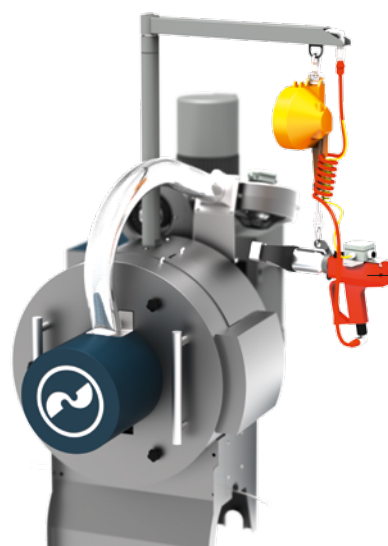
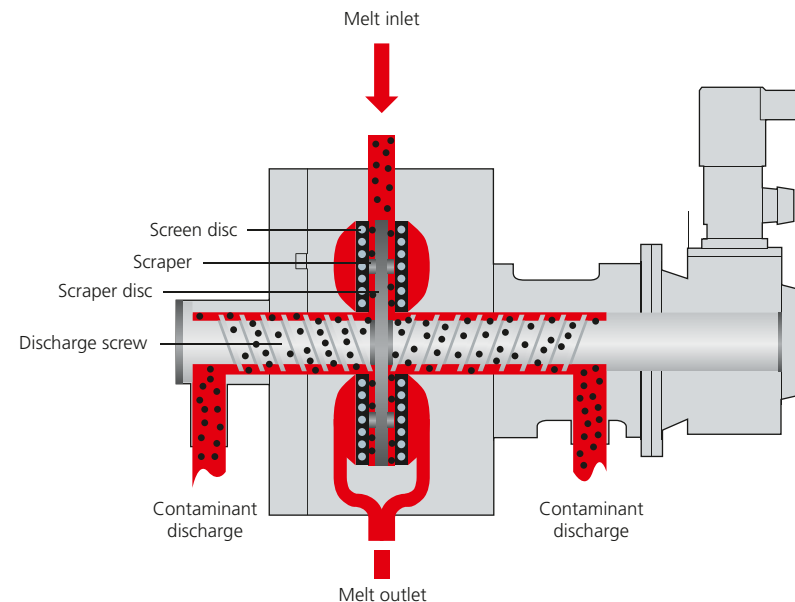
The contaminated plastic melt is pressed through two laser bored screen discs in a parallel configuration. A scraper disc rotates between these screen discs. Their purpose is to remove the filtered contaminants from the screen immediately and forward them instantly to the discharge system. Continuously, thoroughly and as fast as possible.

**The new scraper star is a considerable boost to efficiency.** Thanks to its innovative scraper geometry and the new directly connected discharge channels any contaminants are lifted from the screen immediately and forwarded to the coaxial discharge screw. The contaminants are removed under control and with a minimum of melt via this likewise optimised discharge system. The scraper and discharge screw speeds depend on the pressure and is controlled fully automatically ("constant pressure operation").

## Static screen, rotating disc: maximum filtration reliability

Unlike many conventional filters the EREMA Laserfilter has a rotating scraper rather than a rotating screen. This is a considerable advantage in terms of the system being leak-free. The static EREMA screen is perfectly sealed and prevents any filtered out contaminants from getting into the high-quality plastic melt. In short: EREMA Laserfilter – reliable filtration at its finest.

## How the LF2/354 works:



## Practical feature:

The torque screwdriver is always to hand for fast screen changeover.

The fine difference. Laser technology gives you the edge.



The centrepiece of the Laserfilter is the filter screen, which is where the name comes from. It features ultrafine boreholes which are lasered into the hardened special steel of the screen discs using extremely modern laser technology. **A self-cleaning effect is achieved through the conical shape of the holes.** Your quality bonus: the screen discs are made at EREMA's subsidiary 3 S.



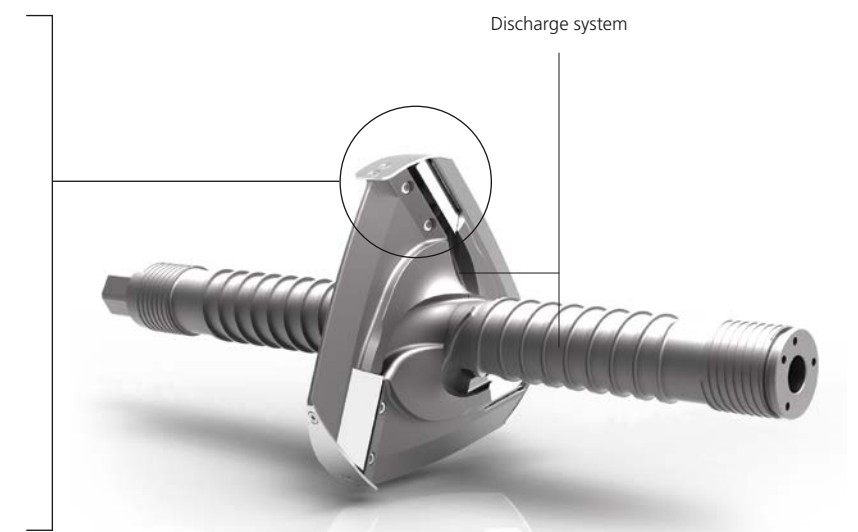
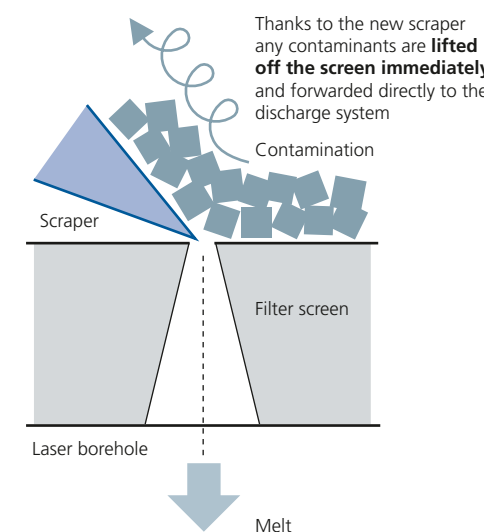
Hardened, lasered filter screen

NEW

Innovative scraper technology for fastest possible contaminant removal.

- **Continuous filtration over days and weeks** with enhanced cleaning efficiency
- **Contaminants lifted off screen continuously** and forwarded efficiently to discharge system
- Increased discharge capacity – **lowest melt losses through increased thickening**

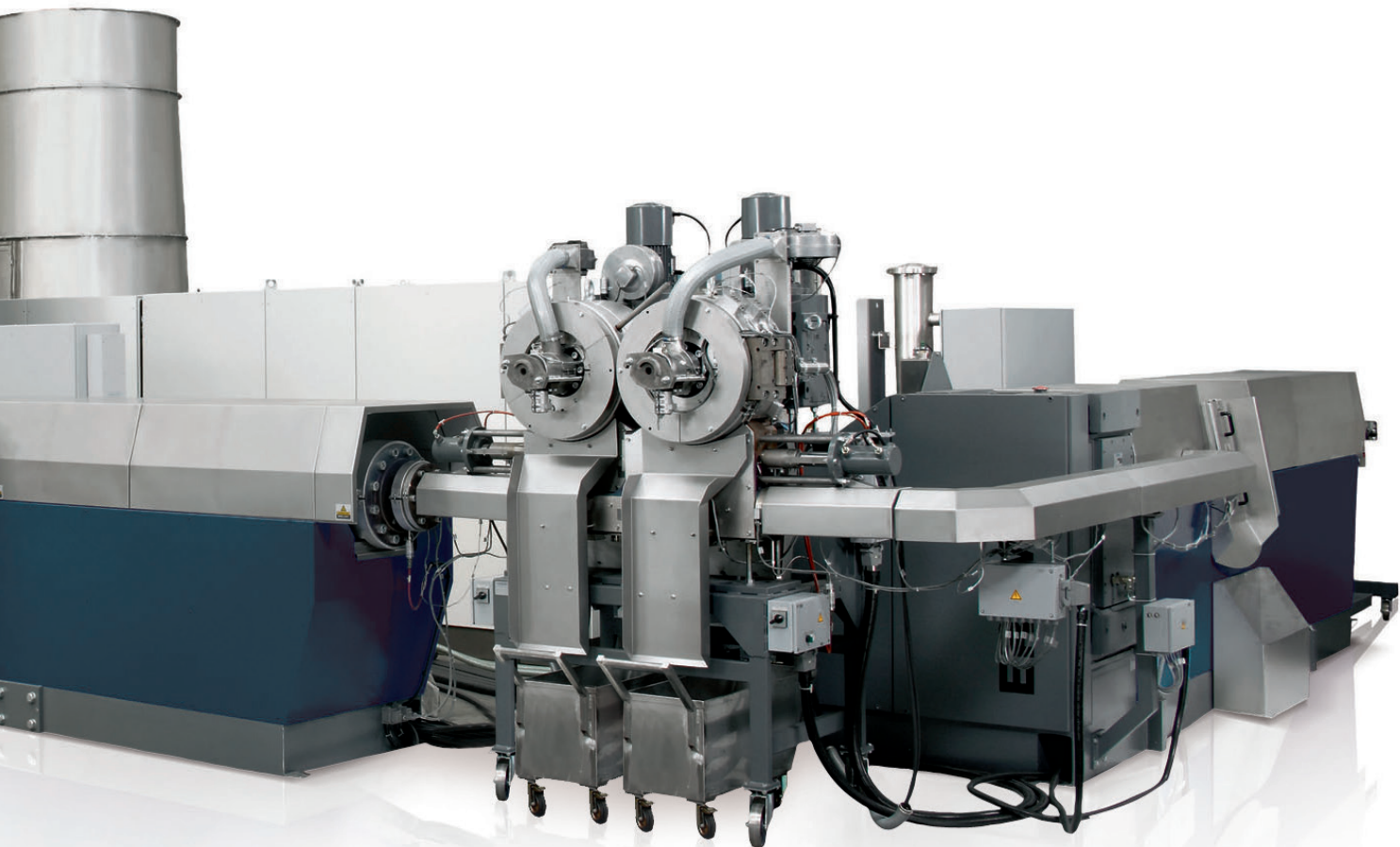
- **Considerably higher screen service life** through increased cleaning efficiency
- **Top-quality scraper elements** manufactured from highly wear-resistant material





# 2,300 kg/h. Clean performance.

Top filtration capacity. An example.



LF 2/354 TWIN in parallel configuration  
for high throughput capacity

### Application example

**Filtration of plastic melts with non-melting content** such as paper, wood, aluminium, copper etc.

**INTAREMA 2021 TVEplus with LF 2/354 TWIN in parallel configuration (filtration 130 µm)**  
Throughput 2300 kg/h (see picture on left)

Input	PE washed shreds with 2 to 3 % residual contamination (PET, aluminium, paper, wood)
Filtration	Thickening 41 % – <b>contamination removal with lowest melt loss!</b>
Output	PE recycle in film quality



Thickening 41 % – **contamination removal with lowest melt loss!**



Film with conventional filter



Film with new EREMA Laserfilter

### Technical data Laserfilter

Laserfilter type	LF 2/354	LF 2/354 TWIN
Total filter area (cm²)	1470	2940
Number of heating zones	7	14
Heating capacity (kW)	23	66
Drive power (kW)	4	8
Scraper disc speed (rpm)	1-8	1-8
Max. operating pressure (bar)	350	350
Throughput capacity (kg/h)	600-1800	1800-3500

Filter units available						
90 + 20 µm	110 + 20 µm	130 + 20 µm	150 + 30 µm	180 + 30 µm	230 + 30 µm	400 + 30 µm

# The specialists in plastic recycling systems

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## More questions?

### We would be pleased to answer them!

Your EREMA advisor will be pleased to attend to your request personally and quickly. If you are interested in a demonstration or a test run with your specific material it would be a pleasure for us to make an appointment and welcome you to our EREMA Customer Centre at the headquarters in Ansfelden, near Linz in Austria.

We look forward to seeing you at EREMA!

### For worldwide representatives please visit [www.erema.at](http://www.erema.at)

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English