

Plastic Recycling

Sugar Processing

Water Treatment

Food & Beverage

Industrial Chemicals

EPS, Resins & Plastics

Mineral & Petrochemical

Pigments & Powders

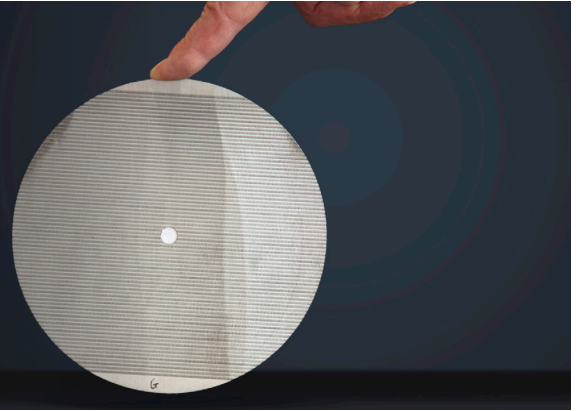
Centrifuge Applications

- + High performance laser-drilled products
- + World leader in stainless steel filter screens and tubes
- + Custom laser perforations for end-users and OEMs



ActionLaser has unique capabilities using patented processes to produce finely perforated sheet and tubular products.

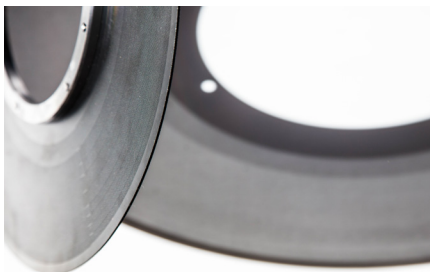
These include high performance, laser-drilled stainless steel screens (LaserScreens), sieves, aerators, support grids and a wide range of other products.



ActionLaser screens and filters are widely used in centrifuges and self cleaning filtration systems. Robust and hard wearing, optimising the life of the screens.



Tofu Screens (pictured) improve product quality and texture. ActionLaser screens are also used in filtration, milling and grinding applications in the food industry, including mustards.



Recycling is key to a better world. ActionLaser MeltFilter discs for the plastic recycling industry lead the way in flow, life and re-usability after cleaning. Improved productivity and a lower OPEX are key benefits.

GET MORE FOR YOUR BOTTOM LINE

ACTIONLASER

ActionLaser pioneered and commercialised laser drilling technology to improve yield, quality and productivity in the sugar processing industry.

Laser drilling was developed in the late 1980's by Australia's CSIRO (Commonwealth Scientific and Industrial Research Organisation), a global leader in technology development. Initially developed at the request of the Australian sugar industry.

ActionLaser continues to push boundaries in development of filtration and separation applications by introducing this technology to many industries, including water, foods, mineral processing, aerospace, chemical, plastic recycling and more.

LASERSCREENS

Laser drilling technology can be used for various metals and ceramics. Stainless steel is often used and can be unchromed or hard chrome plated.

Characteristics of LaserScreens include hole or slot dimension (down to 0.03mm) in thin materials. These offer improved productivity and greater wear resistance that delivers a longer life (up to 9 times) thus resulting in less downtime. This reduces maintenance requirements and operating costs.

We offer greater flexibility in screen shape and design. Perforated area can be up to 2 metres in length and the design can include both perforated and unperforated regions.





Sugar

LaserScreen technology was first developed for use in the centrifugal operations at Australian sugar mills in the late 1980's. Soon these screens were adopted globally due to their increased wear resistance. The tougher materials prevent enlargement or stretching of slots and are less likely to clog or corrode. Improve Yield. Reduce downtime.

Food, Beverage and Food Chemicals

LaserScreens are increasingly sought after, delivering benefits in improved hygiene, ease of cleaning, chemical inertness and strength, giving optimal performance in fibrous, acidic, alkaline and abrasive environments.

Aeration Applications

Aerators and other perforated tubes benefit from laser drilling through improved aeration due to the greater number of finer bubbles produced. Benefits of tailored and improved bubble distribution are seen in applications from sugar production to yeast and brewing.

The Jigger Tube is a specialised sugar industry application designed by Sugar Research Institute (Australia) and made by ActionLaser, improving vacuum pan operations.



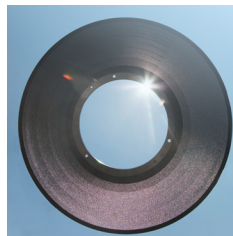
Improvement in yield and throughput means optimal productivity

Greater lifespan means less down time and reduction in operating costs

Applications

ActionLaser LaserScreens are widely used in equipment from centrifuges to self cleaning filters to water treatment, chemical and mineral processing and even aerospace. In fact wherever filtration and separation applications exist a LaserScreen can be used, bringing the benefits of an extended life of a consumable component, ease of cleaning and maintenance as well as improving productivity (flow or yield) and reducing operating costs.

LaserScreens can be shaped into cones, arcs or tubes as well as flat screens that can be made into any shape. Many applications benefit from the inclusion of LaserScreens.



Recycling

Plastic Recycling Industry

Melt filters are critical components at the heart of the process. ActionLaser MeltFilters are high flow, long life, reusable discs boosting productivity and reducing operational costs.

Water

Water recycling and 'polishing' of water in energy plant applications benefit from LaserScreens that have close tolerances on hole dimensions, high open area, low pressure drop, and high strength characteristics. LaserScreens are also used in dewatering of source materials, effluents and slurries.

Process Industries and Other

Mineral Processing, Pulp and Paper & Petrochemical

These applications draw on the benefits of ActionLaser LaserScreens for inertness of materials used, increased lifespans, durability and strength.

Pan filtration systems in the alumina and nickel industries process aggressive materials, requiring heavy duty screens. With LaserScreens, maintenance costs are substantially decreased, whilst safety and throughput are improved. ActionLaser screens are used as support grids for ion exchange resins and catalysts.

EPS Bead Industry

Drying of EPS beads benefits from increased throughput and reduced operating temperature, lowering emissions of volatile organic compounds. LaserScreens resist clogging, seal better, have a longer life and are easy to install.

Airslides & Fluidised Beds

LaserScreens deliver longer life (almost limitless) resulting in dramatically reduced maintenance costs compared to other media.

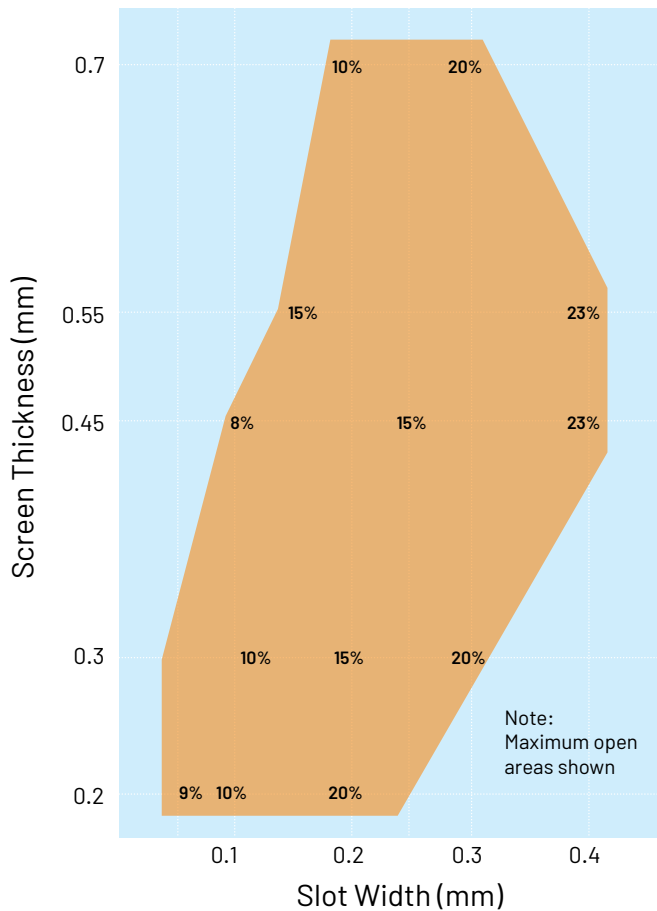
Aerospace & Engine Air Intakes

These applications benefit from the use of LaserScreens through improved air distribution and noise reduction.

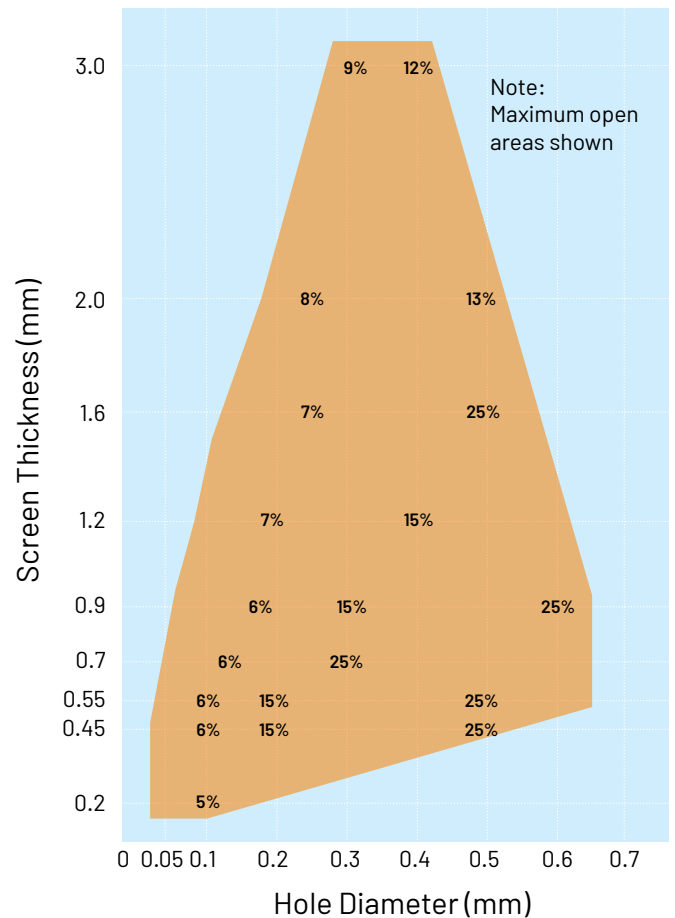
STANDARD LaserScreen Perforations

More information on request

LASER-DRILLED SLOTS



LASER-DRILLED CIRCULAR HOLES



GENERAL

Materials: Stainless steel, non ferrous metals, hard coated metals, tool steel, ceramics.

Aspect ratio: Commonly from 1:1 up to 1:15+ (deeper than wide). Application Dependent.

Working Footprint: Sheet size max. 1000 x 2000 mm; Perforation max 800 x 2000mm; Tubes Ø to 200 mm.



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