



Applications for the feed industry

**Premium perforated solutions  
for maximum productivity**



# Hammer mill screens for feed milling

The hammer mill screen has the highest level of wear and tear in the hammer mill, and is often the most obvious and seemingly expensive maintenance item. However, considering the cost of energy and feed ingredients, the hammer mill screen cost per ton is quite low and still a vital part of the milling process.

**Our product range within hammer mill screens**

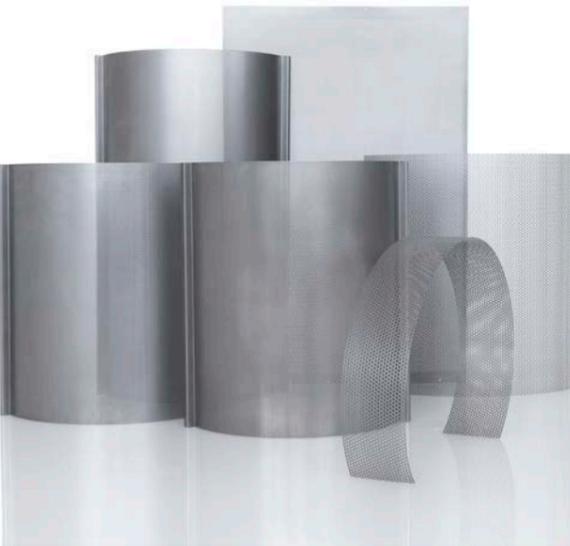
- Hole size from 0.50 mm
- Hole sizes smaller than the material thickness
- Optimal open areas with each type of hole size
- Optimal hole layout for highest throughput
- Quality steel used for the longest lifetime
- Screens ready to install

Studies show that various features of the screens' design influence the production costs. In order to ensure optimal milling quality, RMIG Solutions prioritise the following:

1. The optimal physical screen characteristics (hole size, open area, material thickness)
2. The highest possible throughput per hour with the lowest possible energy consumption
3. The longest possible lifetime of the screens (hammers) without compromising on product quality and energy cost

**RMIG hammer mill screens solutions**

Our hammer mill screen solutions are based on 120 years of experience servicing the milling industry. We know from our customers how the correct screen characteristics will influence and improve efficiency (cost and throughput) within the different types of feed milling.



# Contributing to your competitive edge

The global feed industry is extremely competitive and places high demands on precision and uniform processing to maintain quality and productivity. Experienced partners can make a big difference to the competitiveness of feed millers.

As the world's largest manufacturer and supplier of perforated metal products, RMIG Solutions has been supplying high-quality perforated screens for more than 120 years. Today, you can benefit from our extensive industry knowledge and track record.

**We listen, we understand, we support**

Our perforated product offering is based on decades of long-term collaboration with innovative people and companies within the feed industry in areas such as:

- Aquaculture feed
- Pet food
- Livestock and poultry feed

The utilisation of perforated products is a particularly important part of the feed process, from post-harvest handling of cereal and grains, to milling and the final drying before storage.

**Feed milling**

RMIG Solutions offers you more to choose from. Our selection is unique and the widest in the world. It spans from specialised perforation types developed with our customers to all common types of perforated solutions. We know that precision, uniformity and optimal efficiency are essential when manufacturing perforated screens for feed production.

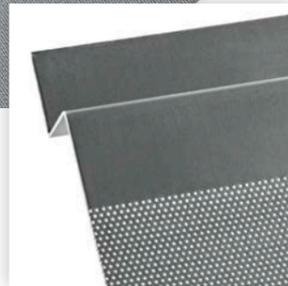
Combined, these factors make RMIG Solutions a competent, innovative and dependable partner and supplier of perforated solutions that support the increasing global demand for feed.

**RMIG Solutions – Facts and figures**

- Products used by feed millers all over the world
- State-of-the-art production facilities in Europe
- Certification according to EN ISO 9001: 2015
- More than 30,000 perforation tools available
- Own R&D and tool development departments
- Local presence and support across the world
- Products sold in more than 70 countries

How screen parameters influence the milling process					
	Capacity / h	Down time	Milling quality*	Particle size	Cost / kg**
Correct screen dimension and shape	•	•	•		•
Hole size	•		•	•	•
Hole shape	•		•	•	•
Hole orientation / Layout on screen	•			•	•
Side of screen (hole entry / exit)	•		•	•	•
Screen opening (open %)	•	•			•
Screen thickness	•	•	•	•	•
Screen conditions (worn)	•	•	•		•
Steel quality (durability)	•	•			•

\*Particle size distribution. \*\*Cost per kg = Milling processing cost / kg.



## Hammer mill screens for aquaculture feed

The hammer mill screens have considerable influence on the milling quality throughput per hour and energy consumption. The fit of the screen (tolerances and shape) is especially important to prevent any oversized particles from bypassing the edges of the screen, creating quality and production problems / stops later in the process.

### Our unique product range

At RMIG Solutions, we are specialised in supplying and developing screens for coarse and fine grinding of aquaculture feed.

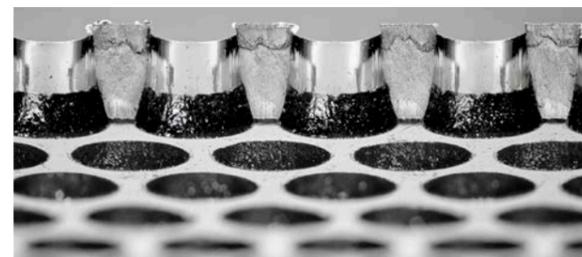
We have developed a unique range of RMIG Premium Perforation screens for fine grinding with small holes (down to 0.50 mm) which places high demands on the screens with regard to throughput and lifetime. Together with feed millers, we have therefore developed a range of screens with small hole sizes where the material thickness exceeds the hole diameter and screens with small hole sizes and high open areas.

### RMIG Premium Perforation range

- Holes size down to 0.50 mm
- Holes smaller than the material thickness
- High open areas without compromising durability

### Premium perforation advantages

- Longer lifetime of fine coarse screens
- Higher throughput per production hour
- Fewer maintenance stops
- Ensures the expected required granularity



Example of RMIG Premium Perforation:  
1 mm holes in 1.25 mm thick material.

### Examples of RMIG patterns with holes $\leq$ thickness

Pattern	Hole size (R)	Open area	Thickness
R0.8T1.5	0.80 mm	25.8 %	1.00 mm
R1T2	1.00 mm	23.0 %	1.25 mm
R1T1.75	1.00 mm	30.0 %	1.25 mm
R1.25T2	1.25 mm	35.4 %	1.25 mm

## Pet food milling

As with extruded aquaculture feed, the milling of ingredients for pet food is an essential operation that affects pellet quality and further production processes.

RMIG Solutions supplies the full range of hammer mill screens for pet food solid ingredient milling:

- Standard hammer mill screens
- Premium hammer mill screens
- Rasping hammer mill screens

### RMIG rasping hammer mill screens

These are unique products, due to the specially shaped holes designed with small entrances and large exits that allow particles to pass through the screen. The design of the holes is like small louvres similar to the surface of a cheese grater giving a very rough surface that grinds or rasps the solid raw materials.

This type of pattern can also offer a smaller hole size than material thickness, giving a longer lifetime compared to a screen with a 1:1 ratio for hole size and plate thickness.

Rasp screens from RMIG Solutions are often used for fine grinding with hole sizes down to 0.20 mm but they can also be supplied with large holes up to 3 mm. This type is also used for other applications such as cereal grinding and wood grinding.

Our rasping screens are supplied as standard with our extra durable surface treatment, RMIG SurfacePlus (see page 7).

### RMIG rasp milling screens

- Hole sizes from 0.20 mm
- Rasp effect
- Rough surface
- RMIG SurfacePlus for extra durability



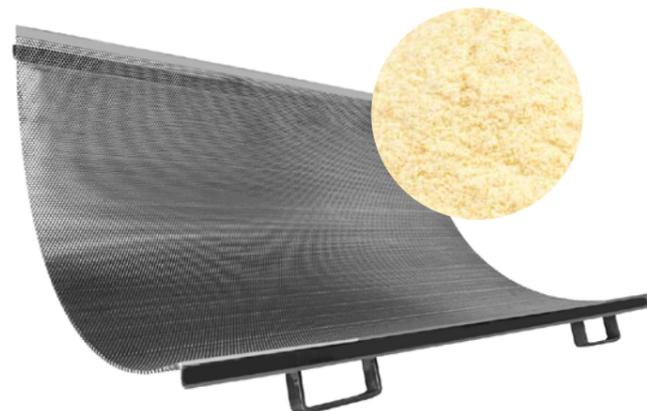


## Livestock and poultry feed milling

The growing global demand for protein puts pressure on the livestock and poultry sector worldwide to maximise output and reduce usage of resources.

### Key focus areas are among others

- Feed to weight gain ratios
- Minimising cost of production
- Maximising feed production efficiency in a sustainable way



RMIG Solutions offers the widest range of high-quality products to cover your needs for screens for coarse or fine grinding of feed raw materials. With more than a century in the business supplying customers all over the world, we know what it takes to make the optimal screen.

We supply screens in all sizes and shapes ready to install. All our screens are manufactured to achieve maximum throughput. We continuously develop new patterns with our customers to optimise results and meet new requirements.

### Examples of RMIG patterns with high open areas

Pattern	Hole size (R)	Open area	Thickness
R2T3	2.00 mm	40.3 %	2.50 mm
R3T4	3.00 mm	51.0 %	3.00 mm
R3.5T4.7	3.50 mm	50.3 %	3.00 mm
R4T5.4	4.00 mm	49.8 %	3.00 mm

### We offer

- Widest range of hammer mill screens from one supplier
- Screens produced to optimise precision, productivity and lifetime
- Tailor-made screens for specific needs and specifications

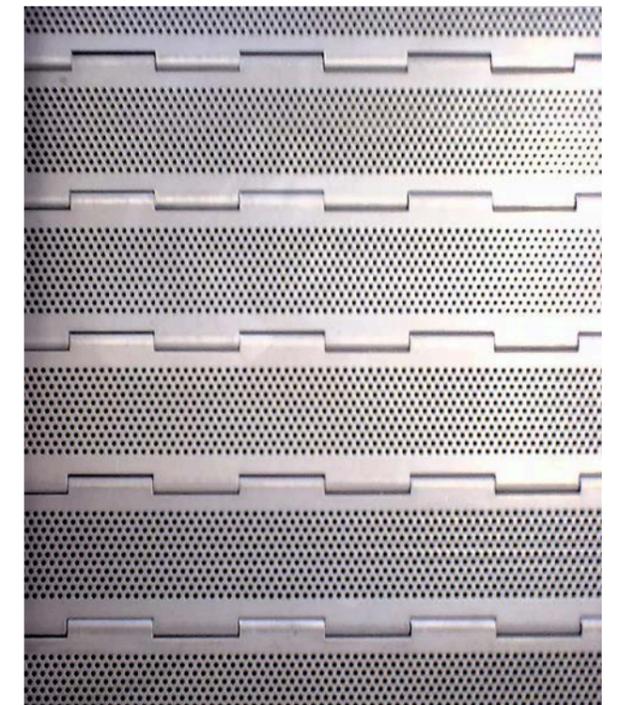
## Perforated lamellas for belt dryers

RMIG Solutions recognises the importance of the drying process in the aquaculture feed and pet food industry. Our accumulated expertise in the field is used to develop and deliver solutions that live up to the industry's high requirements, and therefore the range also includes products for this part of the process.

RMIG Solutions provides the industry with the perforated lamellas used in the belt dryers and offers various perforation types and open areas according to your current specifications or adapted to your specific product and process needs.

### Your advantages

- Perforated lamellas for aquafeed, pet food and similar products
- Products ready to be installed
- High open areas
- Perforation patterns according to your needs
- Steel and stainless steel lamellas
- Uniform products and global supply
- New designs on request, tailored for your needs



## RMIG SurfacePlus

The solution for extreme durability and the long life of your screens. RMIG Solutions offers you various types of hammer mill screens with a specially hardened surface that will provide increased wear resistance and make screens more durable: We call it RMIG SurfacePlus.

The wear and corrosion-resistant layers are created in a thermochemical process, giving the screens a hard surface and subsequently a longer lifetime.

### Benefits

- Surface hardness minimum 500 Vickers (HV0.025) and minimum layer of 10µm
- Increased wear resistance
- Increased corrosion resistance
- Non-toxic surface treatment
- Can be applied on all types of hammer mill screens

Get in touch to learn more about the possibilities.



**AUSTRIA**

Tel. +43 2256 62482  
info.at@rmig.com | rmigsolutions.at

**BELGIUM**

Tel. +32 53 76 77 40  
info.be@rmig.com | rmigsolutions.com

**DENMARK**

Tel. +45 44 20 88 00  
info.dk@rmig.com | rmigsolutions.dk

**FRANCE**

Tel. +33 4 72 47 43 43  
info.fr@rmig.com | rmigsolutions.fr

**GERMANY**

Tel. +49 34 906 50 0  
info.de@rmig.com | rmigsolutions.de

**ITALY**

Tel. +39 010 740 3939  
info.it@rmig.com | rmigsolutions.it

**THE NETHERLANDS**

Tel. +31 184 491 919  
info.nl@rmig.com | rmigsolutions.nl

**NORWAY**

Tel. +47 33 33 66 66  
info.no@rmig.com | rmigsolutions.no

**POLAND**

Tel. +48 61 88 63 270  
info.pl@rmig.com | rmigsolutions.pl

**SPAIN**

Tel. +34 617 349 857  
info.es@rmig.com | rmig.es

**SWEDEN**

Tel. +46 501 682 00  
info.se@rmig.com | rmigsolutions.se

**SWITZERLAND**

Tel. +41 62 287 88 88  
info.ch@rmig.com | rmigsolutions.ch

**UNITED KINGDOM**

Tel. +44 1925 839 610  
info.uk@rmig.com | rmigsolutions.co.uk

**OTHER LOCATIONS**

Tel. +45 44 20 88 00  
info@rmig.com | rmigsolutions.com

**Passion for perforation**

