

# MEISER U-Channel Shelf Gratings

The strong alternative



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**MEISER**



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## Product Specifications for U-Channel Shelf Gratings

MEISER has always been at the forefront for reliability and progress. In our most recently developed product, the U-Channel grating, these two characteristics were impressively combined. MEISER has developed a grating which is capable of bearing up to 200\* times its own weight.

This shelf grating was specifically developed for handling cardboard boxes. This patented design makes it possible to move these boxes on the deburred U-Channels without damaging them.

\* Best theoretical ratio of distributed load in [kg / m<sup>2</sup>] to weight in [kg].

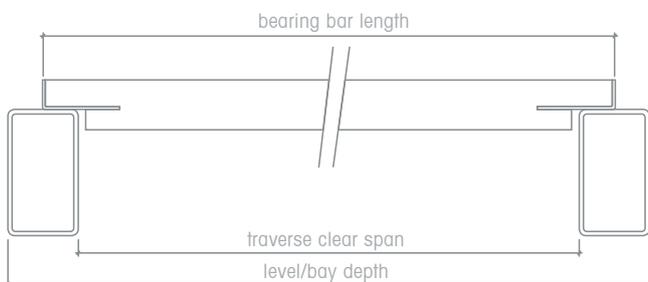
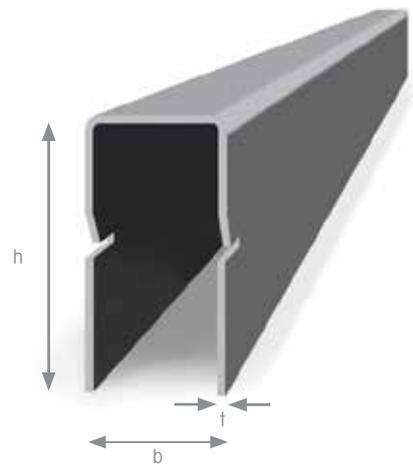


### The U-Channel

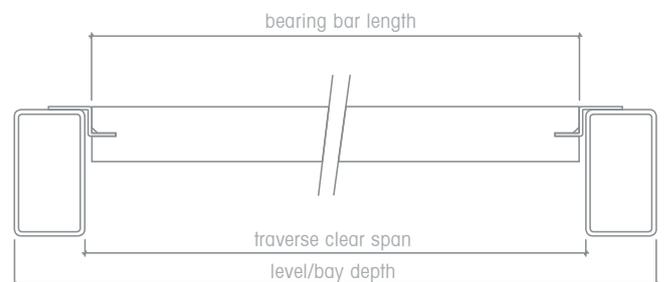
Bending strength and safety are crucial criteria in the construction of shelving or racking systems. The U-Channel undoubtedly lives up to these demanding standards.

The example below shows the U-Channel 20x30x1.

Width  $w$  = 20 mm  
 Height  $h$  = 30 mm  
 Thickness  $t$  = 1 mm



Loose-fitting shelf gratings



Inlaid shelf gratings

**Loose-fitting** product versions are only offered with a pre-galvanized surface.

**Inlaid** product versions with z-profile are only offered with a hot-dip galvanized surface.

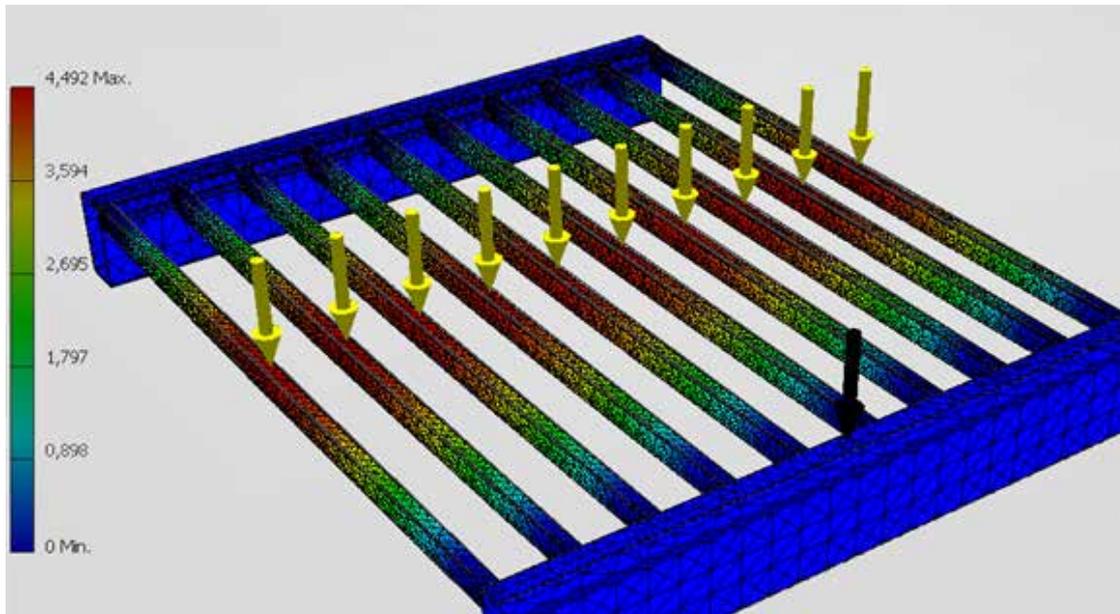
## Grating Dimensions

The length describes the dimension of the U-Channel and corresponds to its clear span. This dimension is usually underlined. U-Channels are available in dimensions between 925-1200 mm.

The width corresponds to the overall level / bay width or a section thereof. This dimension will be determined by the quantity of the U-Channels and the required spacings in-between. Most shelf levels / bays consist of two or three grating panels. The shelf gratings are available in width dimensions between 100-1200mm.

The spacing between the U-Channels is determined by distance from centre to centre of every U-Channel and is at least 35 mm. The clear span between the U-Channels is minus 20mm. However the position of the U-Channel is still adaptable. By creating smaller and bigger gaps within the grating, the U-Channels can act as a support where the load is likely to be at its highest.

## Load table and Standard Dimensions



clear level/bay depth	300 kg/m <sup>2</sup> *	500 kg/m <sup>2</sup> *	1000 kg/m <sup>2</sup> *
945 x 890	(10) - 20x30x1	(11) - 20x30x1	(11) - 20x40x1
945 x 1190	(13) - 20x30x1	(13) - 20x30x1	(15) - 20x40x1
995 x 890	(10) - 20x30x1	(10) - 20x35x1	(12) - 20x40x1
995 x 1190	(13) - 20x30x1	(14) - 20x30x1	(16) - 20x40x1
1195 x 890	(10) - 20x30x1	(10) - 20x40x1	(17) - 20x40x1
1195 x 1190	(13) - 20x30x1	(14) - 20x35x1	(23) - 20x40x1

\* Allowed values for distributed payloads in [kg / m<sup>2</sup>], and [kg / grating] are valid. Requirements of DIN EN 15635 of a deflection  $\leq L / 200$  are met. The value in the brackets () is the number of U-Channels on the shelf grating.

## Safety

If you choose to opt for a U-Channel shelf grating, you can be certain to receive a sophisticated product. Thanks to our own product development department there will be no weak points. Prior to every order our structural engineers calculate the optimal structure of the grating and test it under real-life conditions to ensure its safe usage.

## Layout and Performance

The new shelf grating not only looks good but also brings with it additional advantages:

- Open cross-section > 70%
- Perfect drainage for use in sprinkler-systems
- Ideal for handling loose cartons and boxes
- Variable dimensions possible
- Flat surface
- Low net weight
- High safety in case of accidental overload
- Simple installation



You need a shelf system that has to meet special requirements?

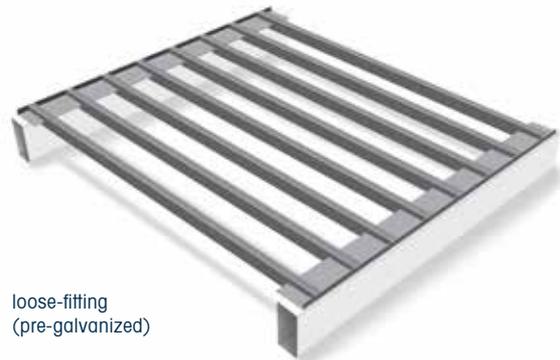
**We develop tailor-made solutions based on your specifications.**

## Product Variations

We've developed numerous versions of the U-Channel shelf grating to fulfill the various requirements of our customers.

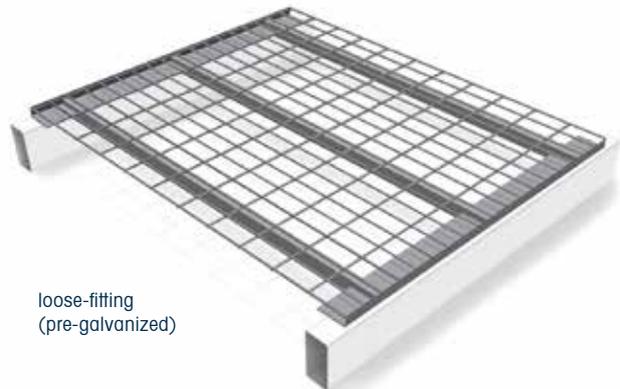
### Standard-Version

This grating was specifically developed to store cardboard boxes with loads up to 1000 kg UDL. The height of the loose-fitting version is always 20 mm.



### Grid-Version

This grating is particularly suitable for the storage of small packages and cardboard boxes with low weight. The height of the loose-fitting version is always 27mm.



### Palett-Version

This grating was specifically designed to support the weight of a euro-pallet and is only available as an inlaid version. It guarantees safe storage of pallets with a load up to 1000 kg UDL.



Please don't hesitate to contact us with your enquiries or requests.  
We are pleased to help you!

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