

A photograph of a large industrial warehouse interior. The scene is dominated by a mezzanine flooring system, featuring a network of blue steel beams and railings that create a second level. The ground floor is a polished concrete surface, reflecting the overhead lights. In the background, rows of industrial shelving units are visible, some with red accents. The lighting is bright and even, highlighting the structural elements of the facility.

# MEZZA- STOW®

Mezzanine flooring system.

# MEZZA-STOW® FLOORING SYSTEM

The mezza-stow® system has been developed for the construction of system floors. Unlike conventional steel constructions, it can be easily expanded, moved or modified for future requirements. Combined with a full range of accessories, such as staircases, handrails and safety gates, it lends itself to use in almost any situation: multitier flooring systems, shelving and pallet racking systems combined with flooring, etc. Using the modular components of the mezza-stow® flooring system a wide variety of span lengths are possible, with loads from 350 to 1000 kg/m<sup>2</sup>.



## COMPLETELY REDESIGNED

Optimised bracing  
**Easier to install**  
Extended beam design  
**Increased free height**

1. Column
2. Main beam
3. Secondary beam
4. Beam connector
5. Bracing profiles
6. Floor: wooden decking / grating
7. Hand rail

## FINISH

Standard galvanized finish for beams and powder coating RAL 5015 (sky blue) or NCS 4005 (grey) for columns. The finish of all painted parts is an Epoxy-powder coating polymerized at 180°C.

## FLOOR

### Wooden decking

Types of 38mm thickness chipboards available:

- Normal high density chipboard - topside natural - bottom white melamine.
- High density chipboard with anti-slip top coating - bottom white melamine.

### Grating

As an alternative, grating is available. Variable mesh sizes (30x30, 30x40 or 30x60) together with appropriate panel height (25 to 35mm) and grating bar thickness are determined to fulfill the requested load condition.



### ( CLEAR BENEFITS FOR EVERY APPLICATION )

- › Complies with the European FEM and EN regulations quality assured to ISO 9001.(BQA N° 019 QMS)
- › Computer aided design ensuring the best solution for every application, including static calculation

- › All components have been thoroughly tested in specialized laboratories.
- › Fully automated production to a high quality standard and in a cost-effective way





## COMBINED WITH PALLET RACKING

The mezzanine profiles can be connected onto the standard pallet racking frames using specially designed connectors. Pallet racking combined with mezzanine is often applied for picking floors or to support in- and outfeed conveyors for the automated racking systems.

### DESIGN CHARACTERISTICS

#### COLUMN



The columns are made of square tubes. Depending on the load per column and height of platform the size of tube is determined. The main beams are connected onto the supports, welded at the top of the column. For multi-tier installations more connectors in height can be welded.

#### RIGID CONNECTION



A rigid L-connector makes the joint between the main beam and the secondary beam. The loads from the secondary beam are transferred to the main beam without any deformation of the connector.

#### MAIN BEAM



The main beam is a cold-formed C-profile. Variety of profiles from 250mm to 450mm height and 2,5mm to 4mm thickness allows the best space optimization and a special design for particular warehouse needs.

#### SECONDARY BEAM



The secondary beam is a sigma profile, designed to ensure that it is hardly sensitive to torsion under load. A full range of sigma profiles with height of 250 up to 400 mm of high quality micro-alloy steel are available. The type of wooden decking or grating, its size and the load capacity determine the span between and the type of secondary beams.

#### BRACING



Stability and stiffness is ensured by bracing system. On ground level square tubes connect columns and ground. In multi-tier applications second level bracing is made of flat profiles connected with flat buckle. Horizontal bracing is needed under floors with grating as decking.



## SAFETY GATES

Where access through the guard is required, a self-closing gate is used. A gate has the hand-rail and knee rail positioned at the same level as the guard rail that it extends to. The dimensions of the safety gates should correspond with the basic dimensions of the pallets.

## SUPPLEMENTS

### HANDRAILS

Our handrail has been developed in accordance with the highest possible design criteria for industrial applications. The standard metal handrails have a minimum height of 1100mm and hand-, knee- and footprotection. A series of standard parts & easy connections are available to adjust the railing to any angle of a specific platform design.

### STAIRS

Stairs can be integrated in the racking, in the added flooring structure or outside the mezzanine. Depending on the country different types of stairs are possible, in particular the size of the steps and the slope of the stairs are determined by local regulations (between 32° and 45°). Our standard stairs have mesh treads and metal handrails.



## CUSTOMIZED CONSTRUCTIONS

### GRATING FLOORS

In some cases grating is used for the decking of the mezzanine floor. The grating is available in various dimensions, according the uniformly load capacity required, the point load and the span of the secondary beams.



### FREE PASSAGE IN ALL DIRECTIONS

In some cases free passage in all directions should be provided. This specially designed bracing comprises pallet racking frames installed just below the main and secondary beams.



### BEAMS WITH PERFORATIONS

Mezzanine beams can have sprinkler holes (on demand).







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## OUR SERVICE GUARANTEE

-  Own team of trained experts
-  International coverage
-  Large spare part stock
-  Distinct service packages



## MORE INFO

Want to know more about our Mezza-stow® or do you have a specific request?

### CONTACT US!

[info@stow-group.com](mailto:info@stow-group.com)  
[+32 56 96 09 90](tel:+3256960990)  
[www.stow-group.com](http://www.stow-group.com)



## we rack the world

[www.stow-group.com](http://www.stow-group.com)

Headquarters: stow Group • Industriepark 6B, 8587 Spiere-Helkijn, Belgium • [info@stow-group.com](mailto:info@stow-group.com)

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April 2021