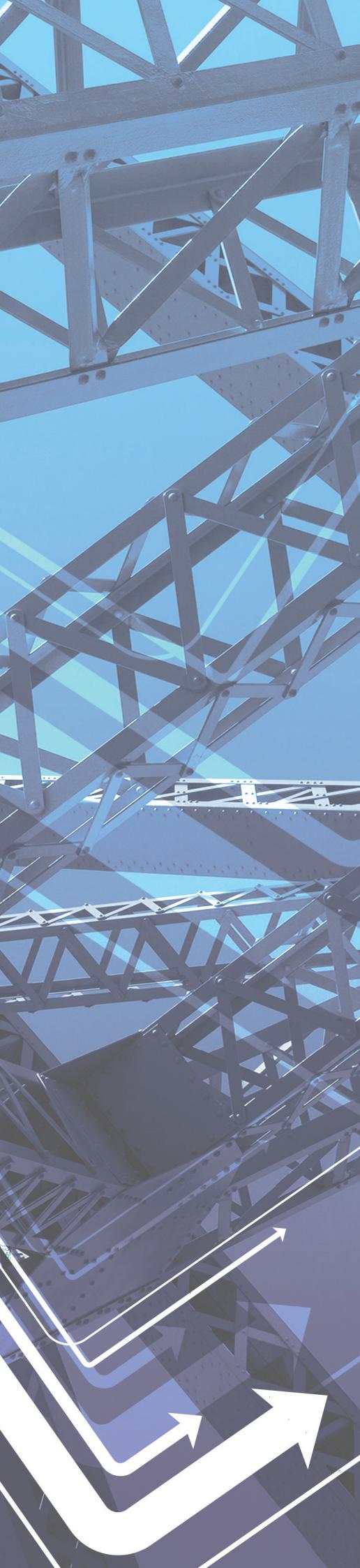




european materials handling federation

The European Materials Handling Industry



Materials Handling : an “enabling” industry...

“movement, storage, control and protection of materials”

The materials handling industry engineers and produces all mechanical equipment that relates to the movement, storage, control and protection of materials, goods and products throughout the process of manufacturing, distribution, consumption and disposal.

“fosters the efficiency of the various steps throughout the lifecycle of materials and products.”

Materials handling can be designated as an ‘enabling’ industry insofar as it fosters the efficiency of the various steps throughout the lifecycle of materials and products. For the client industries, the choice of material handling technology is the key to improved customer services, revenue growth and profitability. Materials handling equipment also guarantees the highest level of safety for workers in the production, movement and storage of goods.

“present throughout the entire supply and logistic chain”

Material handling equipment is becoming more automated and integrated into complete systems. In addition to mechatronic products, special attention is given to system controls, information processing and telecommunication. The materials handling industry is thus characterised by a high level of technology and innovation in order to provide tailor-made solutions for complex production, storage and logistic requirements.

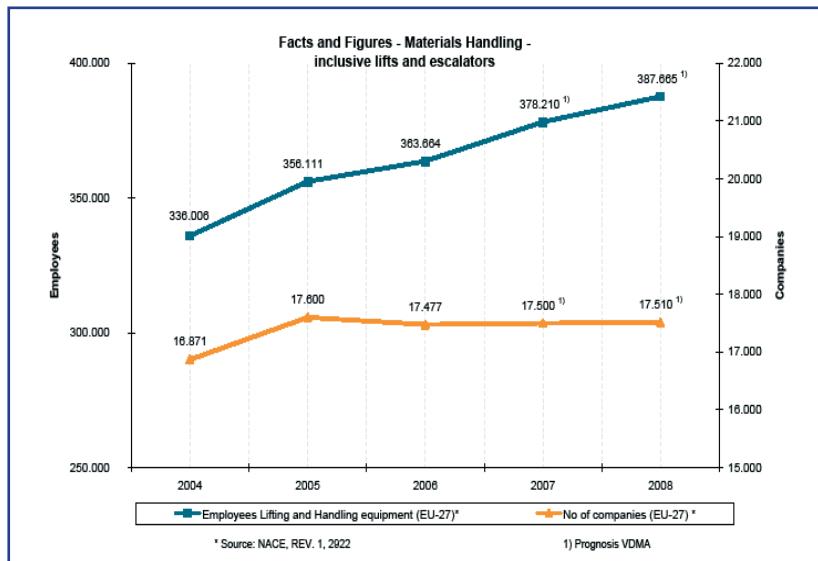
Materials handling products and systems are found in almost every manufacturing and distribution company and for an endless number of goods. They are also present throughout the entire supply and logistic chain and, more generally, during the entire lifecycle of a product, from manufacturing to distribution, consumption and disposal.



Materials handling equipment covers a wide range of products and systems, which FEM has classified in 7 categories:

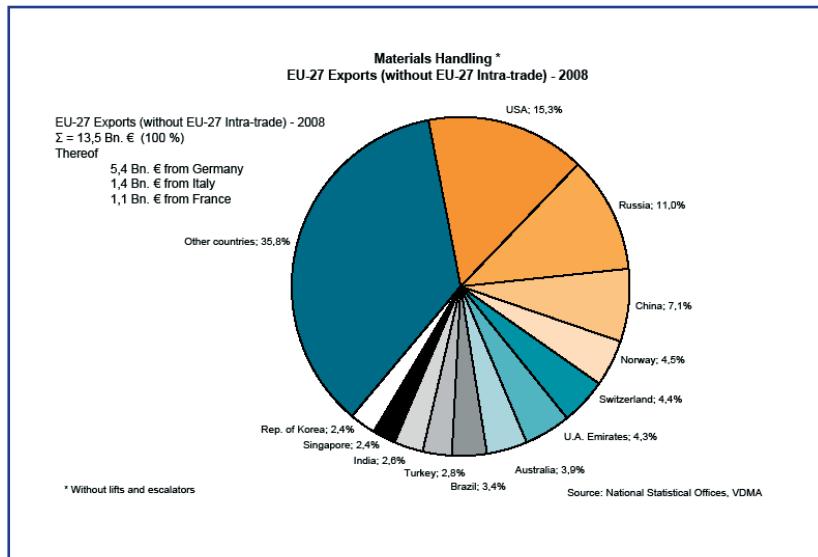
- **Conveyors for bulk handling:** conveyors moving bulk materials along a predetermined path by means of a machine
- **Cranes and lifting equipment:** lifting and hoisting equipment, tower and harbour cranes, mobile cranes
- **Elevating equipment:** lift tables, dock levellers and tail lifts for vehicles
- **Industrial trucks:** self-propelled industrial trucks, pedestrian-propelled manual and semi-manual trucks, driverless industrial trucks, industrial wheels and castors
- **Intralogistic systems:** automation, control and information technologies, and integration of several types of materials handling equipment into one system
- **Mobile elevating work platforms:** scissor lifts, self-propelled booms lifts, vehicle-mounted platforms, trailer push-around, vertical personnel platforms, insulated aerial devices...
- **Racking & shelving:** adjustable pallet racking, drive-in racking, gravity live storage racking, plastic storage containers...

The European Materials Handling Industry Facts & Figures



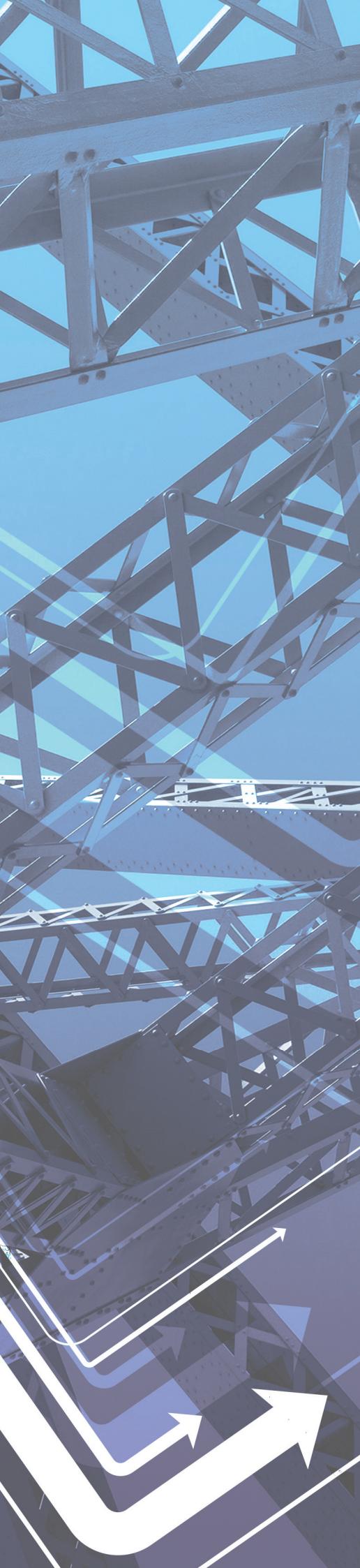
350,000 people directly & indirectly employed

17,000 companies (direct & related)



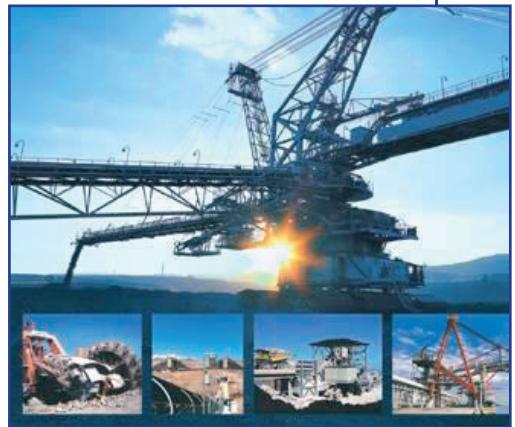
€ 65.5 bn production value (EU 27, 2008)

€ 13.5 bn exports value (EU 27 extra, 2008)

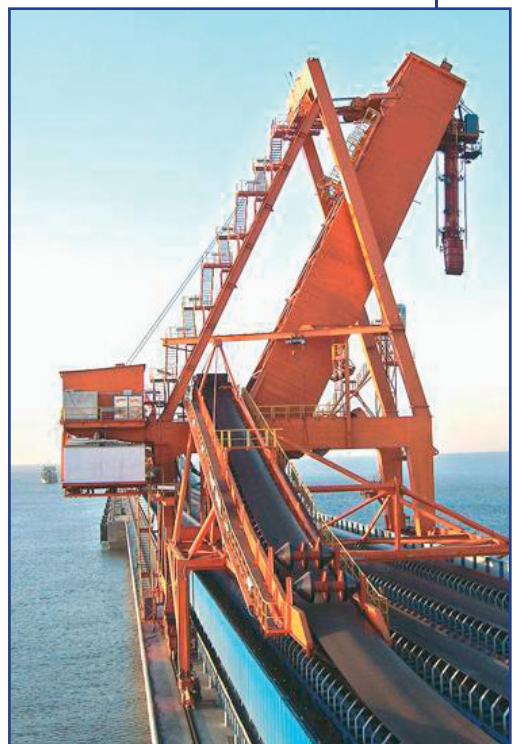


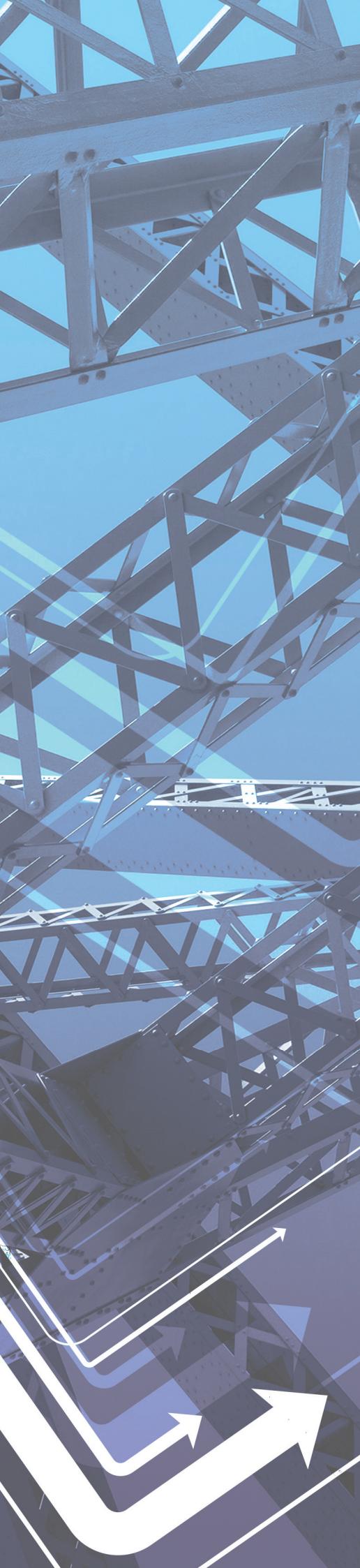
Conveyors for Bulk Handling

Open-cast mining was brought to a very high level of productivity by engineering and creation of these gigantic machines and plants. The prices for consumer goods could be kept reasonably low thanks to highly efficient raw material production



Flourishing international sea trade can be attributed to the high standard of perfection in port handling methods. All around the world, sea-going and coastal ships are constantly being loaded with coal, ores, bauxite, alumina, fertilizers, phosphates, sulphur and many other bulk materials.





Cranes & Lifting Equipment

Mobile cranes

With a lifting capacity of up to 3,200t, **crawler cranes** can move onsite and carry load.

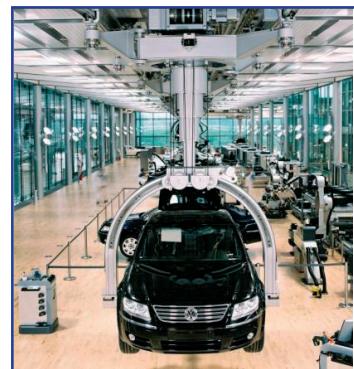


Truck-mounted cranes (all terrain or rough terrain) are designed to be able to travel on roads. When working on site, outriggers are extended horizontally from the chassis then down vertically to level and stabilise the crane while stationary and hoisting.



Lifting & hoisting

Whether for loading/unloading purposes or on production lines, lifting & hoisting equipment is present in nearly every factory as an essential part of the manufacturing process and transport process to lift/lower loads.



Tower and harbour cranes

Harbour cranes play a crucial role for the loading/unloading of freight in ports whereas tower cranes give the best combination of height and lifting capacity, essential in the construction industry.



Elevating Equipment

Electro-hydraulic dock levellers bridge the gap between the loading dock and the trailer during the loading / unloading process thereby allowing for the smooth, safe transition of goods into and out of the vehicle.



Moved and guided by an electro-hydraulic scissor mechanism, **lifting tables** are load carrying platforms which transport goods vertically to overcome height differences.



Tail Lifts are vehicle-mounted lifting platforms, designed to load and unload the vehicles to which they are attached. The equipment may be attached to the rear or side of the vehicle. Lifts may be for handling goods or for lifting disabled people into transport vehicles.



Intralogistic Systems



At check-in counters in airports the baggage is usually placed on short belt conveyors equipped with weighing systems. It is then transferred to very **complex baggage transport systems** that enable the baggage to be brought automatically by means of high-tech identification systems to the collecting point of the dedicated plane in very short time.



Coordinated by logic controllers and computers running logistics automation software, **automated storage systems in warehouses** enable optimised management of the storage capacity and an efficient use of vertical space.



Automated dispatching systems enable fast and precise management of mail in processing and distribution centres in order to dispatch incoming and outgoing mail to and from a designated service area.





Industrial Trucks

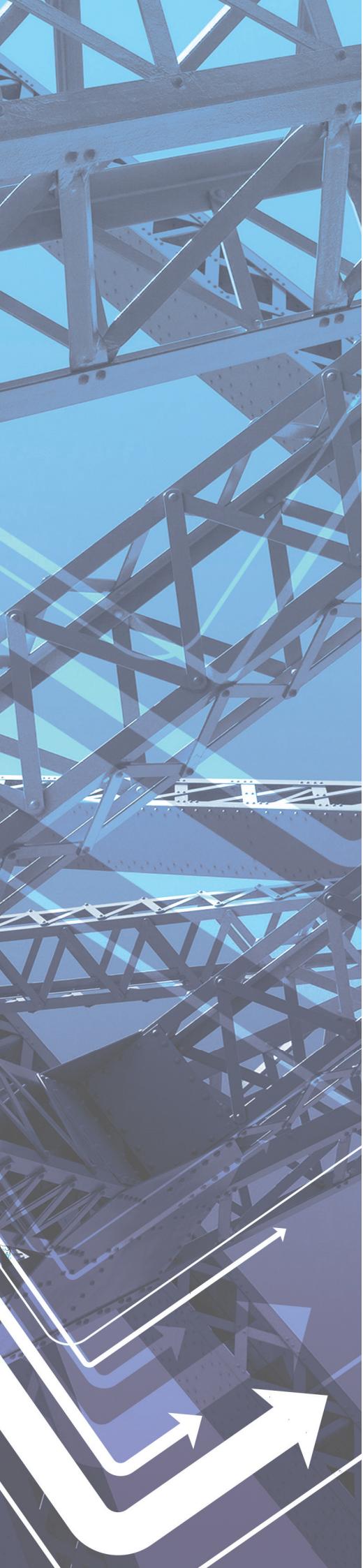


Industrial trucks are used in nearly every production process on several levels. From the unloading of raw materials from truck trailers, to placing them into, and removing them from stock, and providing components for the production line, industrial trucks are irreplaceable tools. Who would like to load/unload a truck trailer delivering paper rolls by hand?

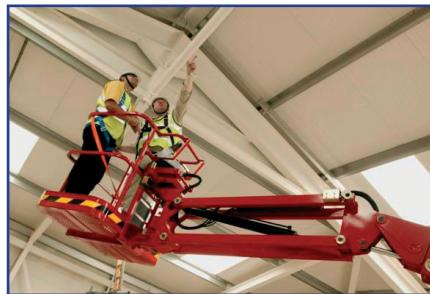


Industrial trucks are not limited to counter-balanced forklift trucks. All warehouse rider and pedestrian trucks are also covered. Who would like to carry the goods through the supermarket or DIY store to fill the shelves? Using a warehouse truck makes this task easier and more safe...





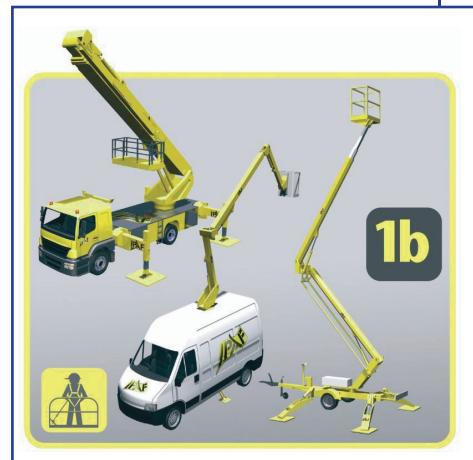
Mobile Elevating Work Platforms



Employers have a duty of care to ensure that work at height is properly planned, appropriately supervised and carried out in a safe manner. Choosing the right powered access equipment will provide a much more flexible, faster, cost-effective and, above all, safer alternative to traditional methods of working at height, such as ladders or scaffolding equipment.



Mobile elevating work platforms (MEWPs) have been instrumental in saving lives and reducing falls from height across different sectors. MEWPs are designed to enable people to work safely, productively and comfortably at height. They can be used in a comprehensive range of applications, both inside and outside buildings and structures. MEWPs are used in a wide range of industries to provide safe and secure working positions for operators. These include construction, arboriculture work, installations, mechanical and electrical work, supermarkets, etc.



Racking & Shelving

Pallet racking is a system designed to store materials on pallets in horizontal rows with multiple levels. It is an essential element in warehouses, manufacturing facilities and distribution/logistic centres.

Adjustable pallet racking is the most common example in use today and includes racking uprights with racking beams clipped into them.



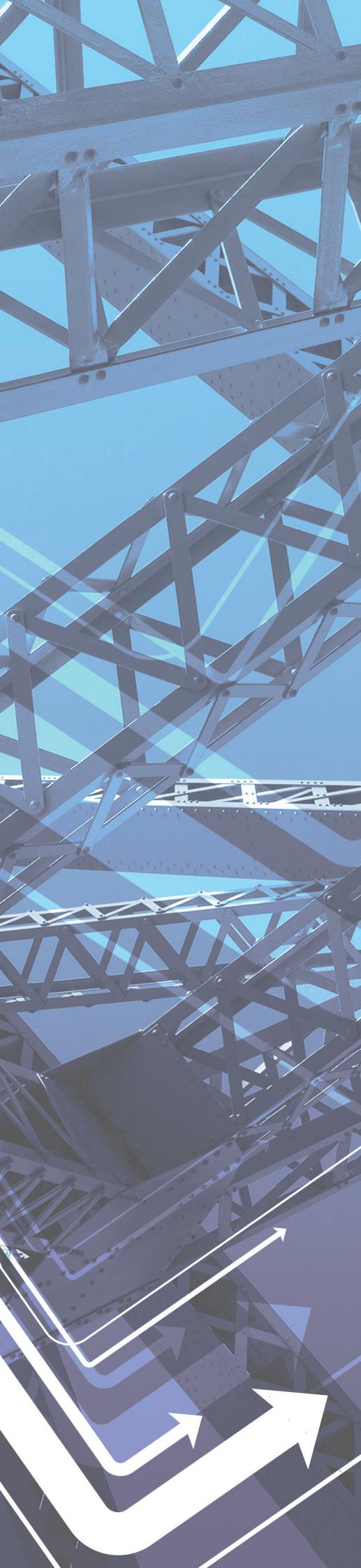
Pallet live storage is a system where pallets are put on at one end and then a system of rollers allow the pallets to roll down to the front. This eliminates the need for access aisles in front of each pallet.



Mobile pallet racking (right) is a variation of adjustable pallet racking where the racking is built onto electronically powered bases. It allows the racking to be moved side to side, meaning only one aisle is needed in an area.

Drive-in racking (down) is designed so that forklift trucks can drive directly into the lanes of stacked rows.





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Products on the move...

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