# Hubtex: safe and efficient flat glass handling

ne of the important sectors of Hubtex is the glass industry. The German company has sold over 600 glass transport systems to flat glass manufacturers and flat glass processors worldwide. Hubtex glass transport systems are well-known for their robust technical execution, long life expectancy, high quality, high truck reliability which, in turn, leads to low lifetime cost.

Hubtex is able to provide strong after sales organization worldwide with over 60 service partners and 10 subsidiaries.

#### **CUSTOMIZED SOLUTIONS**

Flat glass manufacturers in different countries face different intra logistic challenges.

Customers' main targets are to make logistic operations inside the factory safer, more efficient, increase warehouse capacity, follow market needs and optimize operation costs. Hubtex is, together with clients, able to develop handling solutions that meets all expectations.

For a flat glass manufacturer in Brazil, Hubtex developed a Electric Multidirectional Sideloader with special pick-up device for the handling of glass packs in Colares (steel brackets that enable to crane glass packs). The Hubtex equipment offered the customer important reasons to justify the higher investment costs for a better solution.

The customer saved the investment cost for overhead cranes in the whole warehouse area. The elimination of crane tracks enbled to construct a much lighter building shell, also leading to significant cost savings. Hubtex Sideloaders are able to stack glass packs two levels high, which doubles warehouse storage capacity, and are also able to handle up to six With more than 20 years' experience in the design and construction of glass transport systems, and active in the glass sector since 1993, Hubtex has set standards with a number of developments and product improvements in response to the numerous and highly diversified client needs and demands regarding the transport of this strong but – at the same time – delicate material: glass.

glass packs with a total weight of 13,2 tons at a time. This high capacity reduces the number of working cycles, making workflow more efficient. In the past, handling was carried out pack by pack with conventional forklifts, which made the workflow very slow. The use of two Hubtex vehicles replaced 12 forklifts.

Another advantage is that Hubtex Sideloaders are operated by a single person with perfect visibility, and in complete safety in the case of glass breakage. Electric Multidirectional Sideloader with special load pick-up device

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For another flat glass manufacturer in Germany, Hubtex supplied a glass frame transporter (GTR type) able to handle 9.3-metre A- and L-racks loaded with glass pack of up to 9 metres in length.

Hubtex sideloaders with glass pack rotating device were used to solve the problem of a customer regarding the fact that LES size demand was higher than Jumbo demand. Capacity on the LES stackers had already reached the maximum limit and the aim was to use the Jumbo stackers to stack LES sizes (double stacking). In the past, the client produced Jumbo sizes and transferred them to a separate cutting line, causing inefficient double handling and high handling costs.

The problem was that he could only stack the LES packs on the Jumbo stacker in portrait sense, but had no equipment to rotate the glass packs into the landscape sense for shipment. In this case, the Hubtex sideloader with glass pack rotating device avoids double handling and helps flat glass customers follow market requirements.

#### ELECTRIC MULTIDIRECTIONAL SIDELOADERS - M SERIES

#### Capacities from 3 to 20 tonnes

For the handling of packed and unpacked LES glass packs (L 3210 x H 2550) and/or Jumbo glass packs (L 7000 x H 3210). The M-series requires only one operator, who stands on a platform above the load. The advantages of this equipment are: very good visibility, multidirectional steering system which enables exact maneuvering and smooth working hydraulics. All these features are necessary to move hundreds of glass packs safely and efficiently each day.

The basic version of the M-Series is equipped with a number of standard safety features such as anti-glass breakage sensors installed on the forks.

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Right: Electric Multidirectional Sideloader, Model M 150

> Left: Electric Multidirectional Sideloader, Model M 75 running at Sangalli Vetro Porto Nogaro S.p.a., Italian float producer

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The main job within a flat glass factory is to store glass packs on floor bearers to increase warehouse density and storage capacity. On the other hand, commissioning of glass packs and their preparation on A- or L-racks for shipment is carried out according to customers' orders. As an option, the Sideloaders can be equipped with vacuum attachments for the handling of single glass sheets.

#### GLASS FRAME TRANSPORTERS -GTR SERIES

#### Capacities from 15 to 42 tonnes

Hubtex Glass Frame Transporters are utilized in the flat glass industry for the handling of A- and L-stillages with lateral lifting rails. The main jobs are the loading and unloading of stacker tables at the cold end, but also of stacker tables at glass processing lines (mirror, coating, laminating, automotive off-line cutting etc.). They are also used to move the A- and L-racks between the cold end, warehouse and dispatch. They are available electrically, diesel- or gas powered and can be equipped with Vulkollan (PU) tyres for indoor use and /or with solid rubber tyres for combined indoor and outdoor applications.

Glass stillages are picked up from floor level by synchronous vertical lifting of the chassis with carrying rails. The special vertical lifting movement guarantees the safe and precise lifting of glass stillages without displacement. Four hydraulic clamps hold the glass sheets in place during transport. The GTR 330 E/D/G is available with driver's stand or closed, sit-down cabin.

On request, an easily removable plastic cover to protect from rain can be supplied with wing or roller doors to be opened and closed electrically from the driver cabin. The closed driver cabin for combined in- and outdoor use, with rotatable driver's seat, heating, air condition and more, is also available. The driver's stand can also be equipped with a bilaterally adjustable operator panel for enhanced visibility during truck manoeuvring with the glass frame loaded.

The transporters are also equipped with horizontal standard glass clamps for minimum glass heights of 2400 millimetres and/or optional vertical glass clamps with increased retention force for thin glass and minimum glass heights of 1600 millimetres.



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Each clamp is equipped with ultrasonic sensors to prevent exertion of pressure on the glass pile. A hydraulic safety system and a vertical synchronous lifting system guarantee optimal truck stability.

#### PLATFORM TRANSPORTERS -GTT SERIES

### Capacities from 5 to 50 tonnes

As a third solution for indoor transport of A- and/or L stillages with feet, Hubtex offers the GTT series. This truck is equipped with a liftable platform that drives undemeath the A- or L-stillages.

Once the platform

is well-positioned the operator can, with the platform, lift the A- or L-stillage from the ground and move it around the factory. The truck has a very compact design, high manoeuvrability with an extremely small turning radius. The GTT platform transporter can also be equipped with a hydraulically rotatable glass securing system to stabilize glass packs on the right or left side of the stillage. The glass securing system is adjustable as per the height and thickness of the glass packs that need to be secured. The truck can be equipped with an operator stand in combination with a shiftable dashboard for enhanced visibility during the pick-up and deposit of glass stillages. For long drive distances, the truck can be equipped with a cross-seat cabin. On request, a colour camera system is available for better views underneath the stillage, or special stillage securing systems to stabilize unsymmetrically loaded stillages.

#### **PROVEN LIFE EXPECTANCY**

Hubtex has supplied over 600 glass transport systems to customers all over the world since 1993.



Hubtex glass transport systems are used nonstop in very hard three-shift applications 365 days per year, for a total of over 10,000,000 working hours of experience in glass handling.

Working hours increase continuously, because even the first machines delivered in 1993 are still working and doing their job every day. Hubtex glass transport systems have definitely proven their high life expectancy and, sometimes, different truck generations come together.

