

Motorized X-Y movement (Direct Drive)

Rigid Mast

350° rotation

Vacuumlifter manipulator TA & RA

Glas & Plate lifting (400Kg).

Tilt & Turn around Max. 270 kg/ 595 lb.



Air Balancer systems



Glass & Plate (vacuum)
Tilt - turn - rotate

Box in Box
clamp or vacuum

Kegs
clamp & rotate

Sacks vacuum - grab - clamp

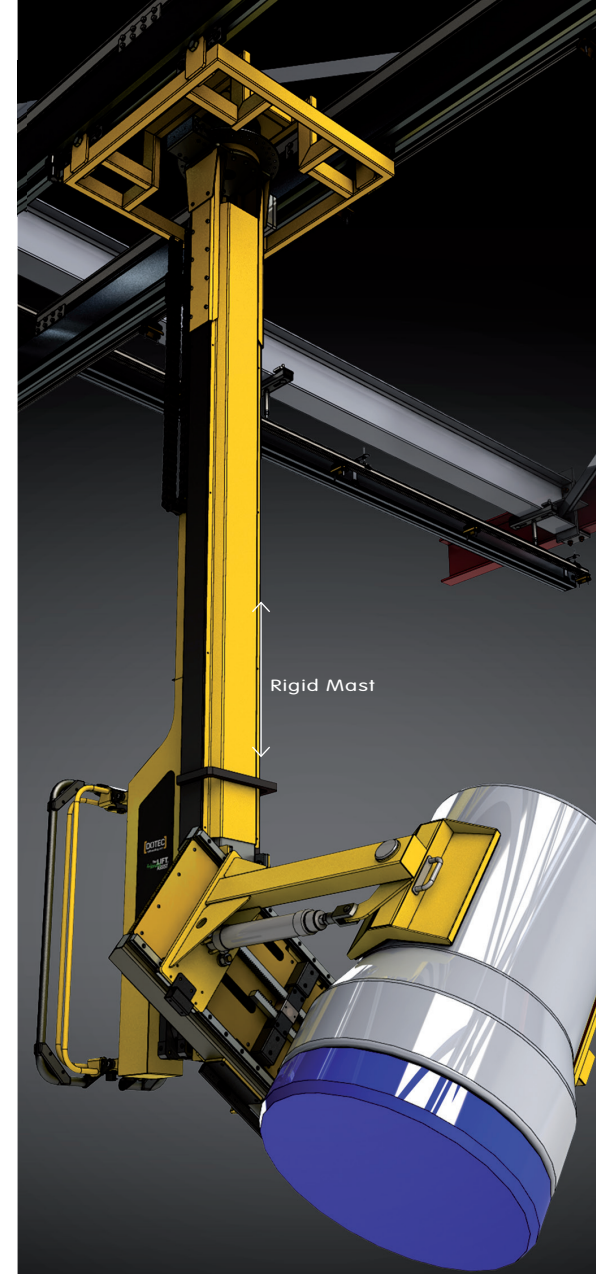
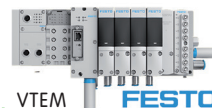
Rigid Mast

LiftAssists (Handling Solutions) for various applications:

Where many liftAssists are complex to use and do not work proportionally, our "Friendly LiftAssists" do things completely differently. Dotec LiftAssists speed up the lifting process and make it safer. All movements, up & down, tilting or turning are digitally proportional* (*option) controlled. Not with a fixed speed, but faster if necessary and relaxed if allowed, ideal in the logistics process with varying volumes throughout the day and week.

All Dotec Lift Assists are operated in exactly the same way (intuitively). That learns quickly and feels "comfortable". Often there are several systems in use in different departments. Everyone can be deployed immediately to operate a Dotec liftassist at any location or department, Ideal for job rotation.

Dotec is digital, 4.0 ready (Remote Control, Web Based connected) Dotec has integrated a pneumatic motion control system. This combination of a PLC and piezo controlled valves features flow-controlled proportional pressure regulators and is powered by 24VDC. These valves allow for pressure and flow control. The operation is smooth, features and options are endless, safety is secured, down time is minimised to the maximum through remote support. The implemented industry 4.0 technology is reliable and ready for any machine to machine or other automated system.

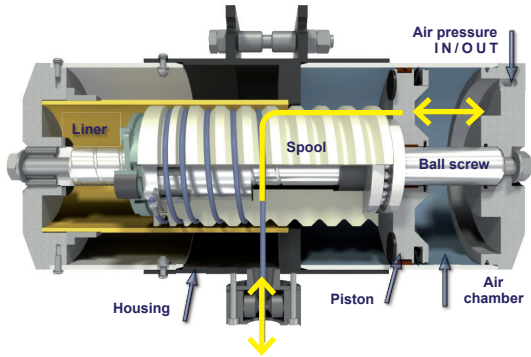


Drum manipulator TA & RA

Lift -Tilt - Rotate & Empty (dosed)

Max. 200 kg/ 440 lb.

Air-balancer



Dotec LiftAssists

have very specific characteristics that are based on ease of operation, speed of work and ergonomics in posture. The learning curve is very short, and work becomes a pleasure.

It's called **The Friendly LiftAssist®**.

The Air-balancer

The Air-balancer is the muscle of the system and makes the elastic vertical movement possible. Compressed air that is going in or is vented moves the piston (linear movement). The piston rod is connected to a ball-screw spindle that translate the linear motion into rotating, making the cable spool to turn. As a result it winds up and unwinds the balancer cable. When the movement is stopped the load is permanently supported by an air cushion and the load is in balance.

The elastic effect is the result of the compressibility of air. This principle explains the important difference between an Air-balancer and a hoist.

Smart technology

Digital simplicity with maximum flexibility. For the first time, the functions of a valve can be controlled and adjusted by software without having to change the hardware. The completely new intelligent technology of pneumatics, electronics and software control enables many functions, from a simple control valve to complex movement tasks.

Digitized pneumatics

100% pneumatic has so far been a conscious and consistent choice in our design. It gives the LiftAssist flexibility, literally resilience/ elasticity and proportional speed. These are the typical features with which we bring recognizable and tangible speed in the process of, for example, lifting, tilting and putting down again.

Remote support

A Dotec system requires an internet connection for updates, settings adjustments, troubleshooting, or remote support. This connection can now be established quickly using the included 4G SIM card, which offers standard connectivity.

Connected to Wi-Fi, Ethernet or 4G:

The VPN router must be connected to the internet.

This can be achieved through:

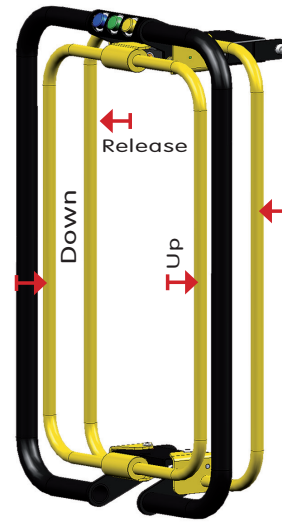
- 4G connection using the pre-installed SIM card (standard).
- Connecting to your local (guest) Wi-Fi network.
- Ethernet cable through an outbound access point (bypass firewall).



The motion terminal VTEM

A valve island with programmable Piezo valves. Piezo technique has proven itself in very critical applications. It brings high switching speed, reliability, accuracy and economy (air consumption). The motion terminal easily replaces the function of more than 50 individual components.

Ease of operation



Dotec Ergohandle

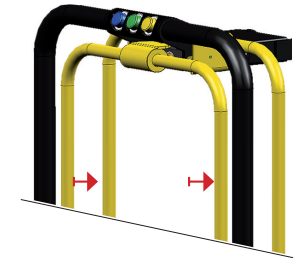
The central feature of the LiftAssist is the ergonomic handle, which is used to operate the lift assist. The handle can move freely up and down sliding through the hands, allowing the user to keep the eye's on the load, while a mere finger touch determines both direction and speed. There is no need for bending and stretching when lifting to high or low places.

Additional functions e.g.

tilt or rotate are activated by finger-tip touch of the levers at the sides. This is done without distraction or requiring special attention, similar to the steering wheel of a car. In a very short time operating happens intuitively. In other words the learning curve is short.

Proportional speed

Activated by the Ergohandle, the basic control allows the compressed air to enter into the balancer for the up/down-movement. The Piezo valves react Proportional, which means that pressing the operating lever harder results in a quicker up or down movement. This makes operating the LiftAssist quick and dynamic, or gentle and accurate, whatever way the process requires.



Center of gravity

An important feature in every system is the automated center of gravity adjustment. This unit secures the horizontal and vertical alignment under any condition. This means that an empty or loaded handler will always adjust itself into the correct position. Once adjusted for the application, it will align automatically.





Stacks nestable Crates



Glass



Beer Kegs & Crates

- **Stacks** of (return) crates, (KLT containers, Freshbox CBL) easily from pallet to belt.
- **Glass** up to 250 Kg, lift-tilt-turn.
- **Beer Kegs**, Pick up and turn, beer crates up to 6 at a time
- **Sheet** material, perforated sheet, with vacuum or clamping, pick up, tilt and turn!

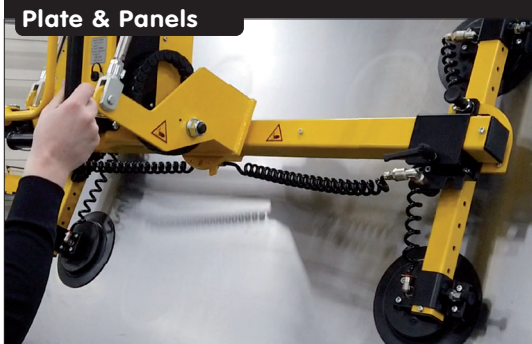


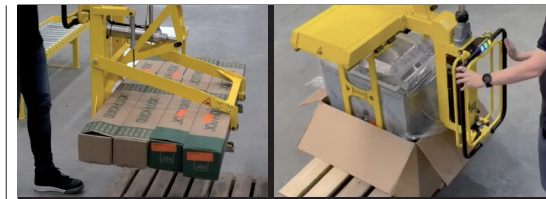
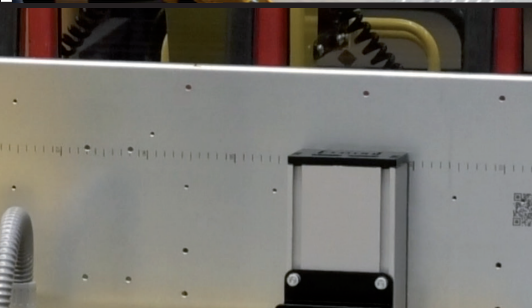
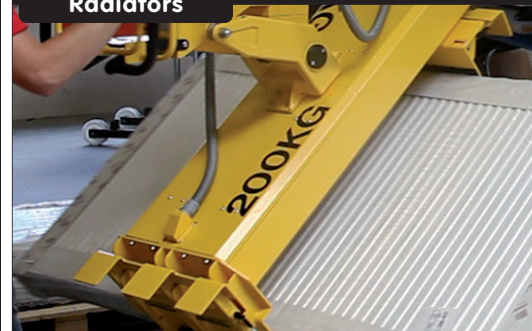
Plate & Panels



Drums Lift & Rotate

- **Drums** lift, tilt, rotate and empty (dosed). (Atex certified)
- **Radiators** lift, tilt, turn and rotate, vacuum, clamp, or (permenent!) magneten, also in packaging,

Radiators



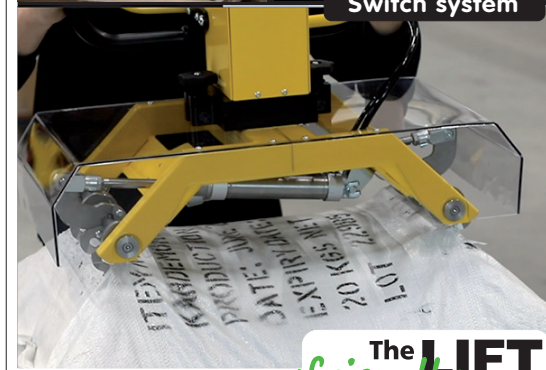
Boxes, Box in Box

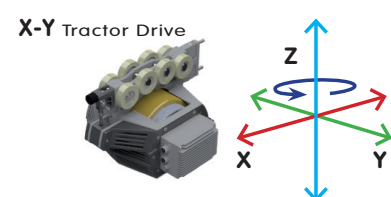
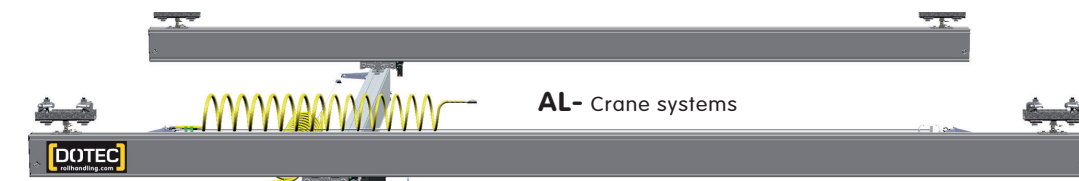
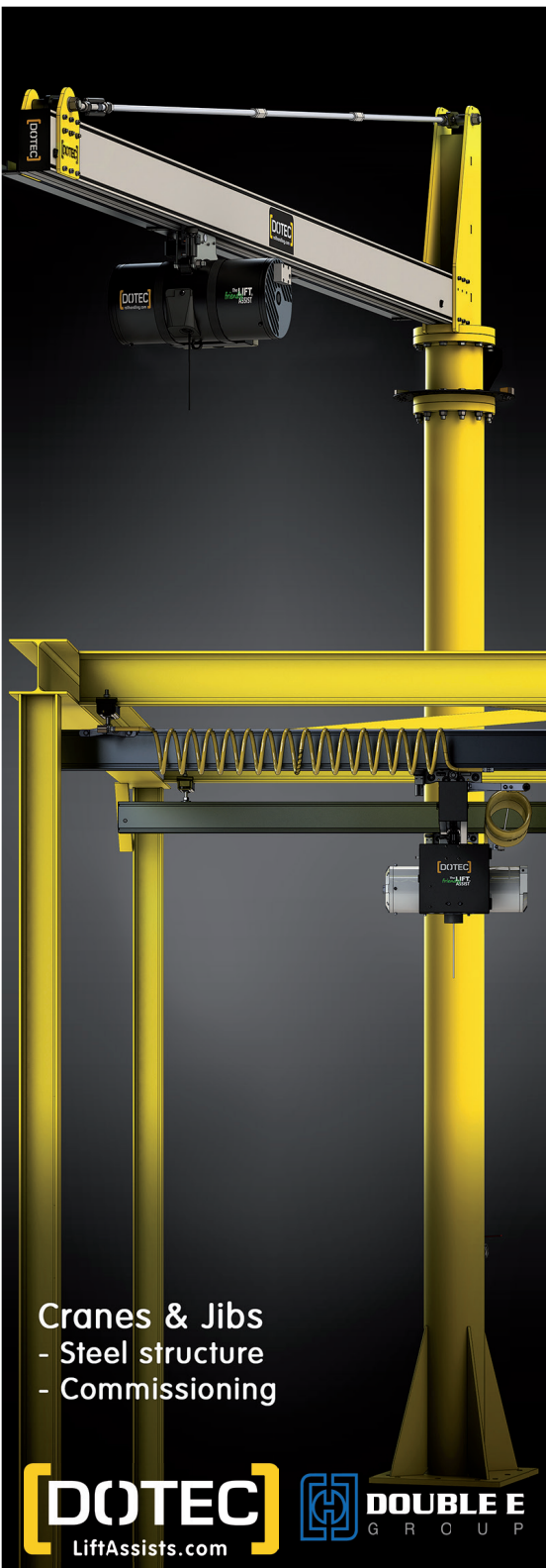
- **Boxes**, more at once or "Box in Box", clamping, vacuum.
- **Sacks** with vacuum, gripping or clamping.
- **Quick** change system, Swap suction cup for gripper system

Vacuum bags & gripping



Switch system





Motorized X-Y movement (Direct Drive) Tractor for heavy applications $\geq 300\text{Kg}/650\text{Lb}$

Dotec Cranes & Jibs:
The infrastructure is the backbone of the total system. In the design of the LiftAssist, we strive for maximum weight savings to accomplish minimum effort while moving the load from A to B. It is therefore most essential that infrastructure components, such as Rail, Trolley's and Cranes match these design rules. It is designed for a 24/7 production environment at high frequencies.

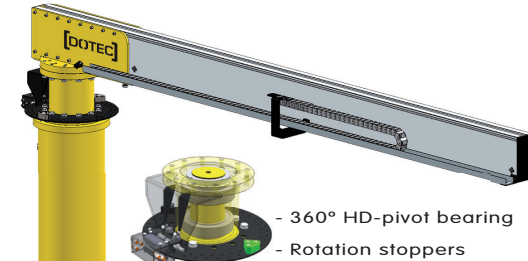
Jib cranes for short transfer applications. Aluminium-rail for the boom provide a comfortable ergonomic (lightweight) movement 24/7.

Accurate and heavy-duty pivot bearings allows smooth and free 360° rotation. End-stops & shock absorbers, can limit the radius. Parking brake (Option) secures a safe way of parking the Handler, when not in use.

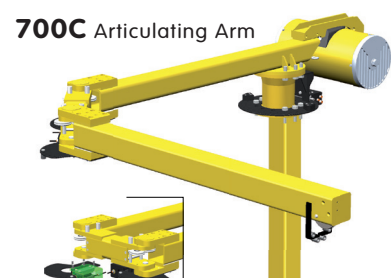
One Stop Shop:
We take care for Steel support structure and (FAT & SAT) Turn Key Commissioning.



J-Type Jib Crane



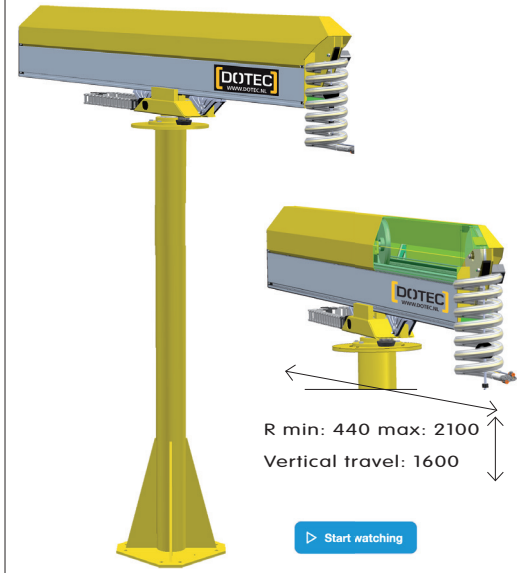
LH- Low Headroom Crane



700C Articulating Arm



Parking Brake on hinge



Air Balance Lifter®

The ABL combines Balance Lift and horizontal travel in one unit.
- Integrated Air Balancer.
- Plug & Play installation.
- 360° rotation
(For 70/150 Kg/Lb applications)

R min: 440 max: 2100
Vertical travel: 1600

[Start watching](#)

Dotec LiftAssists® are designed and build under strict CE legislation and therefore provide high and durable quality connected with safe working conditions for the operator. Certified Manuals are provided. **Safety First! Made in Holland**

CE Applied Standards:
Machine Directive 2006/42/EG
EMC Directive 2014/30/EU
Low Voltage Directive 2014/35/E
NEN-EN 14238:2004+A1 2010
NEN-EN 14238:2004+A1 2010



NEN-EN-ISO 4414:
NEN-EN-ISO 12100:2010, NEN-EN-ISO 13849-1:2016, NEN-EN-ISO 13849-2:2012, NEN-EN-ISO 13854:2019, NEN-EN-ISO 13857:2019, NEN-EN-ISO 4414:2010, NEN-EN-ICE 60204:2018



3800 m² / 40.000 ft² Facility

Cranes & Jibs
- Steel structure
- Commissioning



The **LIFT ASSIST** friendly