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### Lehr stacker

# 4-Axis Servo Stacker LS 800 FAST 25Z

The lehr stacker is designed to transfer glass ware in rows from the cross conveyor across the transfer plates onto the lehr mesh belt.

This completely new lehr stacker (robotic generation) has been designed for the operation with highest capacity IS machine production lines of speeds up to 800 BPM, as well as for extremely critical, unstable ware. The four individual drives allow various stacking characteristics and motions to meet the production demands. The repeatability of the motion and minimal service on the stacker are some of the highlights and make the difference towards standard stackers. The stacker is a perfect solution for narrow belt width lehrs at high production rates. However, the stacker also suits small ware at low speeds due to its high flexibility.

The reduced foot print (approx. 850mm x 850mm) also allows the installation of this stacker at tight space availabilities in front of the lehr. Additional safety fencing with limit switches along the stacker is part of the supply.

The stacker consists of a solid base frame and four individual servo operated drives, which communicate by use of special interfaces. The maintenance free drive/gear units are each designed as one unit, but may be replaced individually.

The four individually controlled servo drives are the basis for the absolutely smooth and precise motion. The actual stacking motion (contact to the glass) is



executed by the combination of the three, forward sideways and compensation movements. All three movements are executed by separate servo drives.

During the return stroke the fourth servo drive is responsible for lifting the stacker arm and the stacker bar respectively, to pass the finishes of the following row. In order to safe time, it is set to the minimum height requirement. This optimises time for the critical forward stroke.

The start impulse may be connected as a potential free contact, generated from the ware transfer or coming from the forming machine. The start impulse may be shifted by use of an electrical differential gear (advance and retard).

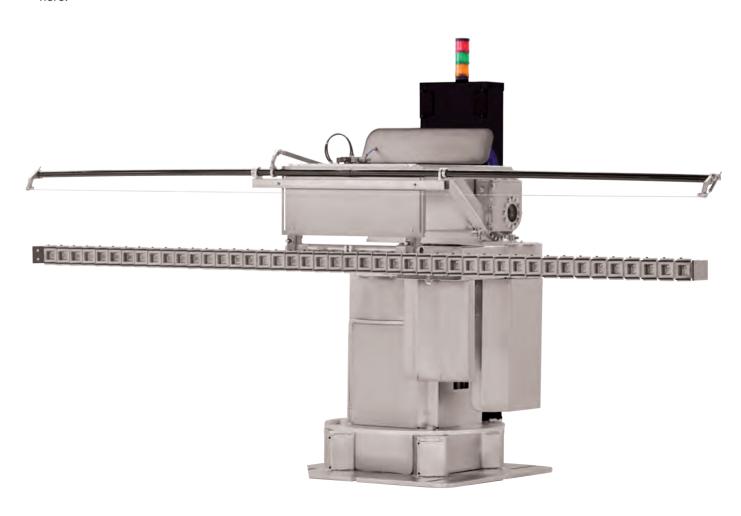
The entire stacker is monitored and controlled by a PLC which is installed in a free standing control panel. The operator panel is installed on the main column of the stacker itself. All settings and special software such as "stop in front", "offset stacking", "slow motion when transferring to the lehr belt" and others are to be set at the operator screen on the main control panel. In addition, all status and error codes will be displayed here.

In addition, the stacker is equipped with the function "pre-calculation of settings". This function is an important assistance in order to calculate the settings for a new production run.

For any maintenance no removal of the stacker from the lehr front is required. Due to the motion of the individual axes the stacker bar may be rotated away from the heat towards the back of the unit.

The stacker is furthermore prepared for the installation of the ware steady bar system that allows the support/stabilizing at the bottle finish during its forward stroke onto the lehr belt.

However, even this stacker is equipped with the unique Pennekamp stacker bar cooling system. Therefore it has a pressure controller installed at the back end in order to fine tune the stacker bar straightness during the production (on the run).

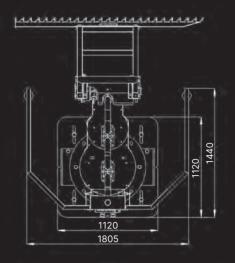


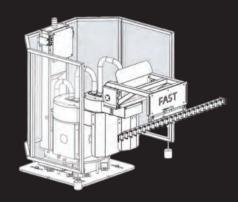
#### **Features**

- Solid electrical servo drive system by inverter (four axis)
- Most modern PLC control system with human operator interface display
- Automatic calculation of settings
- Up to 25 cycles/min
- Adjustable stacking speeds and characteristics selectable on touch screen
- Electrical timing differential to advance / retard the start signal
- Online alignment of the stacker bar towards the cross conveyor
- Simplified replacement of the stacker bar or service of the insulation pad by rotation of this stacker head towards the operator
- Stacker bar air cooling system
- Offset stacking
- Stop in front

#### **Options:**

- Air cooled flat bar
- Air cooled stacker bar with fingers
- Steady bar system





#### 4-Axis Servo Stacker LS 800 FAST 25Z

Length/Depth	1.120mm
Width	1.120mm
Height	1.450mm
Working height	850 - 1.070mm
Voltage	400V 50HZ*
Prefusing	32A
Compressed Air Pressure	2 - 6 bar 28 - 84 PSI
*others on request	

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