

Overview

Q-Line with BHS180



04/2023

Technical specifications

Q-Line with BHS180

| Cutter | | Board Handling System – BHS180 | |
|---------------------------------|---|--------------------------------|--|
| Available sizes | Q 18-32 D Q 22-32 D Q 32-32 D | Max. board size | 18-32 1790 x 3200 mm 22-32 2260 x 3200 mm 32-32 3200 x 3200 mm |
| Beam configuration | Dual beam | Min. board size | 700 x 1000 mm |
| Floor load | 500 kg/m ² , point load 800 kg | Board thickness | Min. 0.9 mm / max. 65 mm |
| Max. speed | 2 m/s (X/Y axis) 2.8 m/s (diagonal) | Max. material weight | 25 kg/m ² |
| Position accuracy ¹⁾ | ± 0.1 mm/m | Repeatability ²⁾ | ± 0.02 mm |
| Repeatability ²⁾ | ± 0.02 mm | Beam clearance | 65 mm (to process material thickness 50 mm + 10%) |
| Creasing force | 50 kg (with CRETO on AUTOMO L) | Max. material weight | 30 kg/m ² |
| Beam clearance | 65 mm (to process material thickness 50 mm + 10%) | Stack height | Max. 1800 mm (incl. pallet) Min. 80 mm (pallet height, reach) |

¹⁾ X/Y drive system, static, at constant operating temperature (may vary depending on cutting technology being used)

²⁾ X/Y drive system, static, at constant operating temperature (without processing)

Technical data subject to change without notice.

Benefits and functions – overview

Q-Line with BHS180



Performance

The brand-new machine concept behind the Q-Line with BHS180 is redefining performance. New machine components, such as the solid substructure, the new linear drive system, or the carbon fiber-reinforced plastic used for the beams, all combine to provide unprecedented speeds of up to 2.8 m/s.

This extraordinary performance also manifests itself in the impressive acceleration of up to 2.1g, which enables extremely high processing speeds and significantly shorter cycle times per job. The use of innovative new technologies translate into the new tool modules being capable of exerting a creasing pressure of up to 50 kg.

The INCAM can read register marks using the camera's Live View mode.

Carbon fiber-reinforced plastic beams

The beams are made from carbon fiber-reinforced plastic, which makes them very lightweight and exceedingly strong. This means even demanding materials can be processed at top speeds and the highest quality levels.

Ergonomic, smart workstation

The new workstation comes with a touchscreen for even more intuitive cutter control. The latest version of Zünd Cut Center (ZCC version 4.0), a handheld scanner for smart tool management, and a joystick to manually move the module carrier and operate the INCAM for edge recognition, ensure operation is as user-friendly as possible.

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Automated, digital tool management

Each beam has a tool magazine with seven slots. This allows the user to plan for tooling in advance in order to maximize machine utilization and significantly extend unattended production time. Any manual interventions are reduced to a minimum. The integrated DMC scanner automatically detects the type and location of tools. Consequently, there is no manual assignment of tools to a given job, and improper tool allocation is a thing of the past. The Integrated Tool Initialization (ITI) automatically adjusts the processing depth of knives and crease wheels and eliminates the need for any manual intervention.

Tool detail – bit.ly/q-line

UNDERCAM – taking efficiency to a new level

The UNDERCAM on the BHS180, integrated into the board feeder, captures the location of graphics printed on the board. It reliably identifies any distortions and ensures the cut is perfectly matched to the print every time. With every scan, the software adjusts the cut paths to the printed image in real time, thereby significantly reducing the cycle time for each job.

Identifying board position

Sensors on the board feeder identify the material edges to properly align each board. If the board is not within tolerance, the board feeder grabs it once more and realigns it so that it can be fed onto the cutter without delay. This allows even imperfectly stacked materials to be processed, which further streamlines the production workflow.



Perfect stacking

The new design of the off-load unit allows bridge-free cut boards to be stacked easily and reliably, making it easier to handle completed jobs in the stack. Different jobs are stacked slightly offset, which facilitates the subsequent job separation by the operator. Any faulty boards are also set aside with an offset and are therefore easy to spot as the pallet is removed. The stack height of 180 cm enables even longer periods of unattended production and fully automated digital cutting of packaging and display materials.