

“Where has all the swarf gone” New Compact Horizontal Machining Centre

fast and price optimised: The HBZ ® CompactCell from Handtmann



Up to now, machine manufacturer Handtmann A-Punkt Automation is mainly known for the construction of machining centres for large work pieces. With its new and innovative development – the HBZ CompactCell – Handtmann now expands its product portfolio for work pieces in smaller segment up to 2 x 1 meters. And this with amazing cost-effectiveness to get first class price-performance ratio.

To be successful in the global market, parts with high precision and lower per unit costs are very important. Thereby a horizontal machining centre is an optimal solution, when high material removal rates and high outputs are required. Advantage: The chips and the coolant fall down immediately and are removed efficiently out of the machining area by powerful chip conveyors. Handtmann has already implemented this idea since years in its Horizontal Machining Centre HBZ AeroCell for work piece sizes starting from 4 x 2 meters.

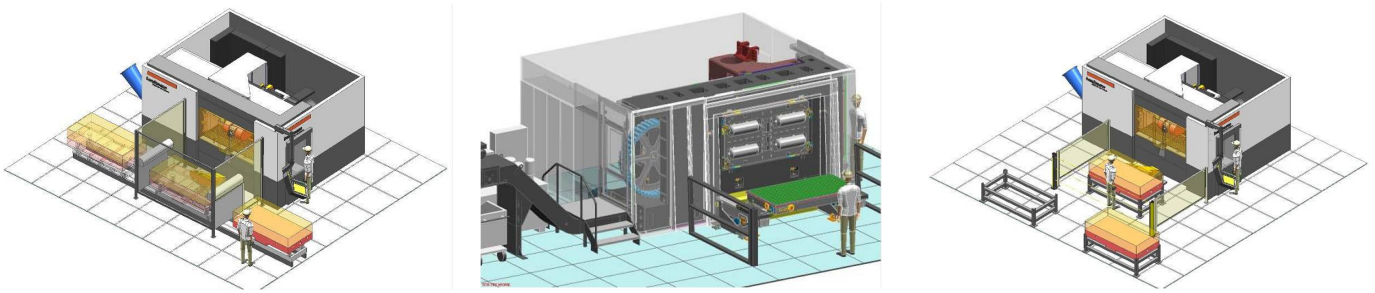
To be able to serve the market for smaller parts in the future, Handtmann now offers the innovative 5-axis Horizontal Machining Centre **HBZ CompactCell**. The machine is optimally adapted for work pieces up to 2 x 1 meters (option 3 x 1 and 4 x 1 meter), that justifies a horizontal machining centre due to the high material removal rates. The use of powerful high-frequency spindles with powers up to 75 kW and speeds up to 30.000 rpm as well as high travel speeds and high accelerations ensure the required high metal removal rates. Regarding power and dynamics, the HBZ CompactCell is comparable to the HBZ AeroCell in its class.

Key factor of the HBZ CompactCell is the compact machine design and hence less floor space requirement. The machine offers optimal access to the operator, from all sides, and is designed ergonomically. Easy loading and unloading of pallets/workpiece when the pallet carrier is in horizontal position directly in front of the machine is an additional main feature. Despite of the compact design, the operator needn't sacrifice on of a big and well-arranged working zone in the machine. A big glass door next to the control panel, allows a safe view to the machining process and gives a trouble-free entrance directly into the machining room.

Possible automated solutions

Minimizing expensive down times is a very important aspect for an economic machining. To meet this requirement, the HBZ CompactCell offers optimal and numerous possibilities to do the set-up parallel to the machining process by automating the loading and unloading process. Handtmann for example equips the machine with a pallet changing system according to the customer's needs. Options are loading via crane, via rail system or via pallet storage system, operating with a handling portal. The whole system can be adopted to a stand-alone machine, or to a number of machines, to form an interlinked solution.

As a standard version, the HBZ CompactCell is equipped with one pallet being positioned directly in front of the machine, for easy loading and unloading in horizontal position by crane. Beyond this, the system can be extended anytime flexibly. It is customer's decision, to buy the extended solution initially, or later as an upgrade.



Applications

The HBZ CompactCell is very versatile, thus a real all-rounder. Due to its outstanding features, the compact design combined with an optimal price performance ratio, Handtmann covers a wide range of applications with this new machine. Work pieces up to 2 x 1 meter (3 x 1, 4 x 1), that require high chip removal rates and high power, are perfectly suited for the HBZ CompactCell. Materials from plastics to aluminium up to steel are machinable, regardless whether it is a 3-axis or a 5-axis application. With the new Horizontal Machining Centre, Handtmann targets the general metal machining market, the automotive industry, the aerospace industry, the mould and die making and the solar industry as well.



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