

EuroBLECH 2022 Hanover: Hall 12 / Booth F85

High Speed Beam Drilling and Milling Machine HDX

Energy efficiency and unequaled service life for the new HDX

Since its market launch, the HDX has been known for the highest machining performance of the profile drilling lines available on the market in combination with excellent energy efficiency. Against the background of the current sharp rise in electricity prices, this aspect is increasingly coming into focus. In the current model of the HDX portal drilling machine, Vernet Behringer uses powerful, 6-pole Siemens servo motors. These are connected to a gearbox, which enables a ratio of 1:2 between the motor and the drilling spindle, resulting in a high torque being applied to the drilling spindle. This provides increased drilling performance with up to 50 percent lower drive power in relation to other systems.

In addition, the latest HDX generation is equipped with a frequency-controlled hydraulic unit. Thanks to active control, the maximum hydraulic power is only called up when it is actually needed - for example, for clamping beams. In stand-by situations, it switches off completely. Compared to the previous model, the entire hydraulic system uses 80 liters less hydraulic oil and offers much quieter operation.

The new "Smart Motion Management" technology additionally enables significant energy savings by interrupting the power supply to unused axes and motors (e.g. drilling axis during the sawing process). The axes are then held securely in position by a mechanical brake. In addition, an "Eco" mode reduces axis movements and machining speeds on request in situations where maximum machining power is not required. This additionally reduces energy consumption and also tool wear.

Sustainable due to long machine service life

Vernet Behringer machines are built to last. That's why more than 80 percent of the machines that are more than 30 years old are still in operation. However, technology is evolving rapidly, leading to accelerated aging of the machines' electrical and automated parts. Vernet Behringer therefore offers factory retrofits to extend the life of the machines and ensure optimal maintenance. This is achieved by replacing obsolete components with the latest technology.

Kirchardt, October 2022

Vernet Behringer relies on short distances for the production of its systems: The HDX drilling and milling machines are built at the Dijon site with a sustainable procurement concept. 90 percent of the purchased machine components come from suppliers in France or neighboring countries in the EU, 45 percent of which come from local companies. The control and drive technology comes from Germany.

New machine name and new features



Introduced in 2011, the HD-X has become the reference machine in its field. At market launch, its three independent drilling units with additional 500 mm X-axes revolutionized the machining of profiles. The simultaneous machining of flange and web increased the system throughput enormously. In addition to drilling and marking, milling work could also be carried out in a single setup. Thanks to various automation variants, completely unmanned operation of such a line is also possible.

Over the years, the machine series has been expanded with the HD-X_{EVO} and later the HD-X_{EVO2} in terms of machining possibilities and further improved in terms of performance. With the latest addition to the series, Vernet Behringer is returning to the roots of the series in the name. Machine upgrades and additional machining options will continue to flow into the series in the future - but the new name HDX will remain.

This is accompanied by a reworked visual identity and new features:

- New notching cycles through milling with or without optimized attachments with 16 mm diameter high performance VBmill carbide mills, generating a drop in machining times of up to 70%.
- Frequency-controlled hydraulic unit with intelligent control reduces energy consumption
- New ergonomic control panel with 24 inch touch screen, allowing a more user-friendly operation of the machine

Image captions:

	
<p>The high speed beam drilling and milling machine HDX by Vernet Behringer provides extensive features for an energy efficient production.</p>	<p>Individual sub-axis provide the fastest drilling, milling and marking operation on the market.</p>

Background:

The BEHRINGER Group, based in Kirchardt, Germany, is a full-range supplier on the market for sawing technology as well as sheet metal and profile machining centers. VERNET BEHRINGER is a brand of Behringer and specializes in the development and production of machining systems for profile and sheet metal processing. By combining sawing systems with machining centers for drilling, milling, marking, punching or flame cutting of sheet metal and profiles, fully automated lines for steel construction industry and steel trade are generated.