3 technologies – 1 machine – 100% satisfied customer

The Belgian C-Metal AG / SA produces high-quality wear parts for e.g. concrete mixers. In order to guarantee a long service life, C-Metal uses mainly highly wear-resistant materials like HARDOX®.

To meet the increasing demand of its customers and to further extend the product portfolio, C-Metal decided in 2018 to invest in a new cutting machine. Important requirement: Besides a high reliability and accuracy, all needed production processes should be performed precisely and fast on one single machine.

"Like every manufacturing company, we aim to produce our products as efficiently as possible with as little time and cost expenditure as possible", explains C-Metal's chairman Fernando Leyens. "In order to achieve that, we often need to combine different production technologies for the production of one part."

The ZINSER 4125 with CNC 5010 controller offered the ideal solution for the needed requirements of the Eastern Belgian company. The robust portal machine, which has proven its exceptional quality and long service life already various times under different circumstances, offers a high number of options and different components. Thus the machine could be optimally tailored to C-Metal's requirements.

C-Metal's ZINSER 4125, which has now been successfully in use for over half a year, is equipped with an oxy-fuel torch for propane gas with motor-driven height adjustment and capacitive height control. A laser diode, mounted on the drive carriage, supports the operator with the set up and positioning of the torch thanks to its clearly visible green light cross.

The machine is furthermore equipped with ZINSER's automatically swiveling plasma bevel head. It allows the cutting of bevels even of inner contours without loops. It is fully programmable, thus enabling the cutting of parts with bevels as well as vertical cutting edges. The unit is driven by high-quality AC servomotors in three dimensions (inclination, rotation and height) and allows cuts from 0° to +/- 50°. As plasma power source C-Metal chose Hypertherm's new XPR 300.

The highlight and at the same time third technology of the ZINSER 4125 cutting system is ZINSER's powerful, leading CNC drilling unit. With a maximum feed force of 14000N, the drilling units allows holes with a diameter of up to 40 mm through plates with a thickness of up to 300 mm. "ZINSER managed to drill the required holes through HARDOX® 500 at the first attempt. Other competitors failed completely", explained Fernando Leyens one of the decisive factors for investing in a ZINSER.

ZINSER is also very pleased about this successful project with the Belgian company. "ZINSER is known worldwide for its high-quality and technically superior machine concepts"; adds ZINSER CEO and owner Ulrich Bock. "That's why we love facing the challenges that our competitors fail at."

The work piece in the picture and video shows one example of C-Metal's products. In the first step, the CNC

drilling unit drilled two starting holes for two slotted holes. Afterwards the oxy-fuel torch cut two slotted holes (18 x 40 mm). Finally, the outer contour was cut with the plasma bevel head in combination with the newly developed 5-axis post processor. The bevel runs from 0° to 20° and back to 0°.

See video: : https://youtu.be/wvzqdEEj95Q

CUTTING
WELDING

SINCE 1898

ZINSER

ZINSER GmbH
Daimlerstr. 4
73095 Albershausen
Germany

Phone: +49 7161 5050-0
Fax: +49 7161 5050-100
info@zinser.de

zinser.de

S19002 · ENG · 2019-05