

PRESS RELEASE

Press contact
battenfeld-cincinnati

Angela Kohlmeier

Telephone: +49 (5731) 242-738

E-Mail:
kohlmeier.a@battenfeld-cincinnati.com

01. July 2019

Debating at K: Innovative cutting machine from battenfeld-cincinnati

Swarfless pipe cutting without hydraulics

The DTA 160 direct cutting machine from battenfeld-cincinnati is one of the highlights at this year's K trade fair. With the new cutting unit, both polyolefin and PVC pipes can be cut to customers' exact length specifications quickly, precisely, and cleanly. A particular highlight of the new swarfless unit is that it works entirely without hydraulics. The development of this new pipe cutting machine is once again testament to battenfeld-cincinnati's innovative capabilities as a specialist in integrated extrusion system concepts.

Among the main benefits of the new unit is the minimal weight of the saw carriage, amounting to just 40 % of that of a conventional system. The saw carriage must follow the pipe in line with the process requirements so as not to interfere with or interrupt the continuous production flow. The reduced weight improves the dynamics and enables short pipe lengths to be cut at greater extrusion speeds. The time required for acceleration and deceleration is significantly reduced. "The greater mobility of the cutting unit is advantageous for short lengths of 50 cm or less in particular," explains Dr. Henning Stieglitz, CTO of BC Extrusion Holding GmbH in Bad Oeynhausen. The cutting tools are powered by linear actuators. The particular advantages of an electrically powered tool feed over a hydraulically powered tool feed include the significantly reduced number of components and the resulting reduction in maintenance, as well as the increase in precision and flexibility. The operational behavior of the new concept is also independent of the hydraulic. The oil temperature, which can change at different stages of the extrusion process. The cutting tools rotate around the pipe during the cutting process. Because of this, the tool only needs to be long enough to cut through the wall thickness of the pipe, regardless of the pipe diameter – which contributes to the unit's compact design. Quick-action fasteners and centering aids enable the cutting blades to be exchanged easily. A huge variety of blade shapes can be used, including triangular and rounded blades to

optimize cut performance to specific customer needs. It is possible to incorporate a chamfer mill, as is often required for PVC pipes.

The clamping device is yet another advantage of the new cutting unit. Multiple evenly distributed pneumatic clamping jaws grip the pipe simultaneously, ensuring a clean cut thanks to their extremely stable guidance. The small distance between the cutting position and the clamp also prevents the pipe from being deformed, further enhancing the quality of the cutting surface. This makes it significantly easier when the pipe is installed, for example, with sleeves, and enables extremely precise pipe-to-pipe connections. Special bearing materials used to synchronize the clamping jaws help improve the service life of the individual components. The overall design of the innovative cutting unit means that it is easily accessible for any maintenance or conversion work that may be required.

The prototype of the new cutting unit has already won over one big name in the pipe manufacturing industry, having been incorporated into their day-to-day production activities.

The DTA 160 will be launched at this year's K trade fair and has already been added to battenfeld-cincinnati's broad product portfolio. It can be installed as an individual component or as part of a new overall system, and can also be retrofitted in existing pipe extrusion systems.

About battenfeld-cincinnati:

battenfeld-cincinnati has production facilities in Bad Oeynhausen and Kempen (Germany), Vienna (Austria), Shunde (China) and McPherson, KS (USA) and is a leading manufacturer of energy-efficient, high-performance extruders and complete extrusion lines according to customers' specifications. Our customers' end products can be found in infrastructure and construction (pipe, profile, sheet), packaging (thermoforming sheet), pelletizing, as well as calendering and lamination equipment. battenfeld-cincinnati's customers benefit from an extensive global sales and service network.

www.battenfeld-cincinnati.com



DTA 160 direct cutting machine from battenfeld-cincinnati
PR 201907_DTA.jpg