

System integrator Novotic counts on presses from TOX PRESSOTECHNIK

## Six perfect machines

The Italian manufacturer and system integrator Novotic compiled an assembly system for gearbox assemblies for its customer Bonfiglioli. With regard to press-in and joining stations, the Italian company relied on presses and drives from TOX PRESSOTECHNIK.

Novotic S.r.l. has been trading for more than 20 years, and has built an excellent reputation during this time as system integrator and manufacturer of production systems. Renowned mechanical engineers from all over Europe are among its clients. For one of these clients, the Italian gearbox manufacturer Bonfiglioli, Novotic compiled an assembly system for the series production of gearbox assemblies. “The client's demands on the components used were high”, says Manuel Todesco, CTO of Novotic. “The system is a key element for production at Bonfiglioli, therefore not only the quality of the presses and drives, but also the offer of service and delivery reliability had to be just right.” When searching for the correct partner, the Italian company came across the products from TOX PRESSOTECHNIK GmbH & Co. KG. The specialists in joining technology based in Weingarten, Germany, analyzed the task and suggested solutions. “We visited TOX PRESSOTECHNIK and closely examined the proposals. The feedback from our engineers was positive throughout”, says Manuel Todesco. In addition to the tried and tested drives and presses from the TOX modular system, the delivery and service capacity of the company from Upper Swabia impressed them. “This assured us to have found the right partner”, says the CTO.

### Adapted to the tasks

To be able to perform the different required press-in and joining operations on the gearbox assemblies, six press stations are positioned along a workpiece carrier transport system. “Five presses are integrated fully or partially automated into the production line, the sixth is designed as manual workplace”, says Joachim Kreh, Product Manager at TOX PRESSOTECHNIK. “Every press and drive combination is perfectly tailored to the requirements of the respective machining station.” The Italian subsidiary TOX PRESSOTECHNIK S.r.l, in Milan supplied the systems fully pre-installed, so that Novotic could easily integrate them. The shipping note listed five different press types, four different types of servo drives of the TOX-ElectricDrive series, the complete control STE E-Drive Control as well as the TOXsoftWare.

## Perfectly matched components

The first press-in station includes a TOX-Press of type MBG 015, which is designed as compact 2-column/2-panel construction with ball screw-guided ram plate. An electromechanical servo drive of type EQ-K 100 provides the necessary press force. “The drive provides press forces of up to 100 kilonewton”, says Mr. Kreh. “However, the press can also take a significantly higher load.” The second press-in station requires significantly less power: With a nominal force of 10 kilonewton, the efficient drive TOX-ElectricDrive EQ-K 010 is perfectly dimensioned for the smaller TOX-2-Column-Press of type MBG 001.

The basis for the press-in stations 3 and 4 are C-Frame bench presses of type CMB 004. They can receive press forces of up to 52 kilonewton. Press-in station 5 uses another TOX-2-Column Press, in this case of type MBG 008. Its drive of type ElectricDrive EQ-K 055 has a capacity of 55 kilonewton. “The sixth station is something rather special”, the Product Manager states. “Here, comparatively low press forces are requested. For this reason, we have installed a manual workplace.” Press forces of up to 8 kilonewton are available here in the form of a small press of type KSFU from the TOX-FinePress series.

## Complete package from one source

The five automated press-in stations are each equipped with their own power supply and control units of type STE E-Drive Control, adapted to the capacity of the respective servo drive. “Thanks to this decentralized architecture, the other stations remain in use, even if one of them should face a disturbance”, says Mr. Kreh. The presses are operated by means of the TOXsoftWare. It includes all required programs for fast and simple configuration, parameterization, visualization and diagnosis of the stations.

“The simple and intuitive operation of the systems is great”, says Mr. Todesco. This also applies to cooperation with TOX PRESSOTECHNIK. “We are more than pleased about the performance of the systems, the service, the easy handling on schedule as well as the resourcefulness of TOX PRESSOTECHNIK. Thanks to the tailored solution from one source, we were able to supply the perfect system to our customer.”

**Meta title:** System integrator Novotic counts on presses from TOX PRESSOTECHNIK

**Meta description:** TOX PRESSOTECHNIK supplied six press stations to system integrator Novotic for an assembly system for gearbox assemblies from Bonfiglioli.

**Keywords:** TOX PRESSOTECHNIK; Novotic; Bonfiglioli; press-in station; TOX-2-Column Press MBG; C-Frame bench presses CMB; small press TOX-FinePress KSFU; servo drive, TOX-ElectricDrive EQ-K; STE E-Drive Control; TOXsoftWare

Captions:



**Image 1:** TOX PRESSOTECHNIK supplied press stations to system integrator Novotic for an assembly system for gearbox assemblies from Bonfiglioli.



**Image 2:** The small press from the TOX-FinePress series provides ideal flexibility at the manual workplace.



**Image 3:** Three of the TOX-Press-In Stations in the flexible assembly for Bonfiglioli gearboxes



**Image 4:** Three of the automated press-in stations have TOX-2-Column Presses MBG, driven by a servo drive from the TOX-ElectricDrive series.



**Image 5:** The TOX-C-Frame bench presses can be perfectly integrated into the automated stations.

**Images:** TOX PRESSOTECHNIK GmbH & Co. KG

## About the company:

TOX® PRESSOTECHNIK is a supplier of presses, systems as well as components for sheet metal joining and assembly technology. Since its foundation in 1978, the family owned company has become a global player with more than 1400 employees worldwide, 550 of which at the headquarters in Weingarten, Germany. The success story started with one pneumohydraulic drive – the TOX®-Powerpackage. The “Components” division now includes pneumohydraulic and electromechanical drives as well as controls, sensors and software for process monitoring and quality assurance. In addition to a large range of presses, the system range comprises manual, machine and robot tongs. Another mainstay are modern sheet metal joining procedures, also incorporating the TOX®-Clinching Technology, which makes the company today’s market leader.

Drives, technologies, applications and systems from TOX® PRESSOTECHNIK can be found at automotive manufacturers and their suppliers as well as at industrial businesses for household appliances, electronic components, furniture and much more. Special versions of the TOX®-Drives are also approved for the food industry.

TOX® PRESSOTECHNIK is represented worldwide: 18 subsidiaries, amongst others in the USA and South America, Europe and South Africa, India, China and the entire Pacific Region. 20 representatives in many other markets support and advise local customers.

## Contact partner for queries:

TOX® PRESSOTECHNIK GmbH & Co. KG

Wolfgang Laux

Riedstraße 4

88250 Weingarten, Germany

Tel.: +49 751 5007- 340

[WLaux@tox-de.com](mailto:WLaux@tox-de.com)

[www.tox-pressotechnik.com](http://www.tox-pressotechnik.com)

## In case of publication, please send a specimen copy to our agency:

a1kommunikation Schweizer GmbH

Christian Beckenbach-Sülzle

Oberdorfstraße 31 A

70794 Filderstadt, Germany

Tel.: +49 711 9454161 - 40

[cbs@a1kommunikation.de](mailto:cbs@a1kommunikation.de)

[www.a1kommunikation.de](http://www.a1kommunikation.de)