## INNOVATION

# Next generation of Dual Motor Shears: a HEYE bestseller

tanding out in HEYE International's portfolio among the company's topselling products, the Dual Motor Shears have established an exceptional reputation in the container glass market over decades. Renowned for their precision and reliability, the shears have set a benchmark in the container glass industry. Indeed their advanced design and engineering excellence not only enhance cutting efficiency, they also ensure consistent gob loading - making Heye's shears a preferred choice among glassmakers worldwide.

#### TIME-TESTED RELIABILITY

The secret to the success of Heye's Dual Motor Shears lies in their design, which ensures highspeed and consistent cutting performance. The shear blades, which move on a circular arc, allow for practically wear - and backlashfree suspension of the shear arms, which is achieved through the use of tapered roller bearings. An outA real showstopper in Dusseldorf last year, HEYE's top-selling product, the Dual Motor Shears, displayed its latest enhancements at glasstec. With a solid reputation built over decades, the shears are designed to boost performance and efficiency – having become a coveted tool for glass manufacturers.

standing characteristic of the shears is their nearly parallel cut: the centres of rotation of both shear arms are aligned on a common axis, ensuring that the motion of the



shear blades is perpendicular to the centre line at the moment of the cut. The Dual Motor Shears also excel at achieving a minimum orifice distance, capable of cutting very close -within just 1/2"- to the orifice ring. Each shear arm is independently driven by a separate three-phase servo motor, with both motors completing one full revolution per cut. This eliminates the need for reverse rotation of the motor at the cutting point. A common control system ensures phase-locked synchronization of both shear arm movements. Additionally, the actuating joints of the moving parts are equipped with tapered roller bearings, which significantly reduce



wear and backlash, contributing to the accuracy, overall durability, and reliability of the shears. The solution is designed for a wide range of feeder types, spout casings of different sizes and various orifice centre distances and suitable for single to triple gob production.

#### **A GLASSTEC SHOWSTOPPER**

At glasstec 2024, Heve showcased their Dual Motor Shears and unveiled exciting new design enhancements on their booth. The exhibit proved to be a real showstopper with visitors and loyal customers, already impressed by the product's established reputation. Since the event, Heye has experienced a surge of enquiries for the enhanced version of this product. The key enhancement lies in the redesigned shear arms featuring an innovative gob guide. The shear arm, which accommodates the gob guide arms, has been revised with optimised rigidity. Additionally, the geometry of the gob guide arms has been improved. These enhancements minimise harmful vibrations and significantly improve gob fall. Along with the optimised gob fall, this also leads to considerably improved durability of both the bearings and the gob guide arms. This new design with improved rigidity ensures enhanced precision, durability and lower material wear. Retrofits, too, are possible: the approximately 800 Heye Dual Motor Shears currently in operation worldwide can also benefit from these new enhancements. By replacing the entire right shear arm along with the gob guides, the shears can easily be updated to the new version - thereby enhancing their precision and durability even further.

### **USER-CENTRIC DESIGN**

The Dual Motor Shears are also designed with ease of maintenance in mind. Their modular design allows for quick and easy replacement of the shear blades, facilitating routine maintenance and reducing downtime. The shears offer various mechanical adjustment possibilities to achieve clean and accurate gob cutting: Whether it is necessary to adjust the blade overlap, blade tension, or the height of the shears (and consequently their distance from the orifice ring), all these adjustments can be made using easily accessible handles and spindles. The next adjustment possibility relates to the gob guides. The handles for adjusting the gob guides are conveniently located on the right shear arm. The new design provides significantly improved accessibility to these handles. While this enhancement benefits the double gob version, it has an even greater impact on the triple gob version, where the middle handle was previously the most difficult to reach. It is crucial to be able to carry out manual adjustments or perform necessary maintenance on the shears quickly and easily - especially in the tough operating environment where the Dual Motor Shears are installed. The new enhanced design took account of all areas - which help Heve customers to improve efficiency, focusing on ease of use for the personnel while also prioritizing the reduction of downtime. Heye's Dual Motor Shears are not just a testament to engineering excellence; they are a forwardthinking solution, which addresses the evolving needs of the container glass industry. With their innovative features and a design focused on efficiency, these shears continue to set the standard for glass gob cutting, reinforcing Heye's position as market leader.

