Increased Efficiency of Automated Centration of Lens Systems

Robotic Loading of the Centration Measurement System OptiCentric® 100 and the Alignment Turning Station ATS 100 for Serial Production
Automated Solutions for Increased Efficiency in the Serial Production of Lens Systems

For many years now, TRIOPTICS has focused on the development of automated solutions in order to make the production of lens systems more efficient. Today, all operations – measurement, alignment and machining of lens systems – are already automated after the placement of the lens on the device. Now, the high-precision measurement and alignment processes of the well-established OptiCentric® 100 and ATS 100 systems can be expanded to include automated loading and unloading by means of robots. This allows the production fabrication of complete batches independent of the operator and, in particular, increases the efficiency of the machine as well as the process reliability. Thus, the process costs are reduced.

The robots are integrated directly into the processes so that the specific production process for OptiCentric® 100 and ATS 100 starts seamlessly after the lens has been inserted. When the production process is complete, the lens is also removed automatically. The direct and space saving integration of the robots guarantees robust operation. In addition, the user interaction is reduced to the preparation of the blank sets by batch as well as the one-time setup of the process. The automated process considerably increases utilization and thus throughput. It also enables the user to operate several systems in parallel or work on other tasks at the same time. The modular design permits the robot’s integration to other devices and the transfer of additional pre- and post-processing steps to the robot.

Key Features

- Automated loading and unloading reduces user interaction
- Expansion of the automated process to include the full handling of the manufacturing process for complete batches
- Increased system utilization