



KOYO INSIDE - March 2022

Special bearings for automated Covid19 test laboratories.

Koyo Bearings, a division of JTEKT Corporation, specialized in the design and engineering of a wide range of rolling bearings for numerous applications, ranging from automotive and windmill applications to aerospace and tunnel drilling equipment, has now developed a new series of dedicated bearings for automated Covid 19 PCR test laboratories.

Background of the development

Massive increase in global Covid 19 testing requires automation in laboratories to process the huge amounts of PCR tests coming into specialized laboratories every day. For reference: the Covid 19 PCR tests processing capacity in the UK reached ~1 million tests per day, in January 2022 (source: DW/ECDC 01/22). With such huge numbers of tests being offered to laboratories every day, human/manual processing is not sufficient anymore. To be able to process such volumes of test kits and to assure the quality/reliability of test evaluations, strongly automated laboratory processes are needed. This requires automated transportation means and robots to handle and process the test kits accurately, as well as for the safe disposal of the remaining materials. The current state of the art automated laboratory work stations can process up to 10.000 kits per day.



Features of the new product



Koyo supplies the NRBs to support laboratory equipment for automatic handling of PCR test tubes and the transfer to the PCR plate where the final synthesis, amplification and detection of the virus takes place under very strict hygiene conditions. Our bearings are supporting the rotational movements needed for the smooth linear transfer and robotic manipulation of the PCR test material. The features of the applied drawn cup caged NRBs



include: maximum radial load capacity in combination with a very thin outer ring (cup) requiring minimal space and allowing easy press-fit mounting.

Availability of this product.

This product is available in our production and can be supplied in small batches and/or for serial deliveries, for a large number of applications, also outside the automatic laboratory field.

General notification

Please note that **Koyo Bearings** will be rebranding to **JTEKT Bearings** as of April 1, 2022. This edition will be the last Koyo Newsletter that you will receive but we will be happy to send you the new JTEKT Newsletter soon again.



Please do not hesitate to contact us, in case you would like to have more information about our company, products and services.

Get to know our bearings at www.koyo.eu

