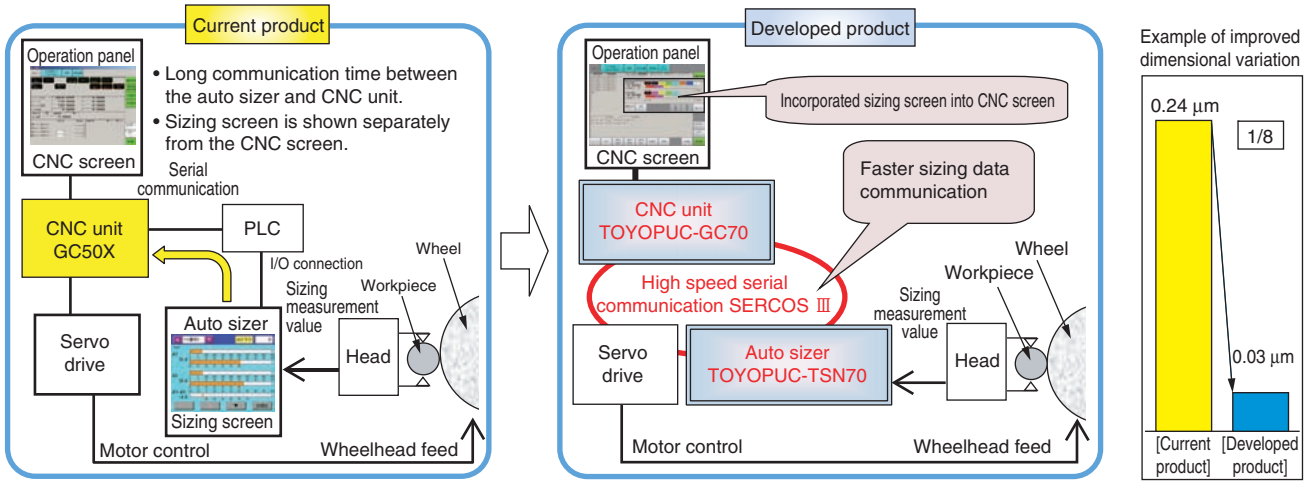
CNC Built-in Auto Sizer TOYOPUC-TSN70

The auto sizer is a device on grinders which measures workpiece dimensions, such as diameter, during grinding. The CNC unit controls grinding based on the measured results from the auto sizer, achieving high grinding accuracy. The auto sizers and CNC units developed by JTEKT have high measuring accuracy and excellent operability, and have received high evaluations.

This report introduces the sizing function incorporated in the grinder CNC unit TOYOPUC-GC70 and the control cabinet built-in auto sizer TOYOPUC-TSN70, both developed by JTEKT.

1. Features of the new built-in auto sizer model

- High speed SERCOS Ⅲ communication is used between the auto sizer and CNC unit. Faster communication of sizing data suppresses dimensional variation during sizing grinding, achieving higher accuracy.
- By integrating the sizing function into the TOYOPUC-GC70 CNC unit, faster processing speed and reduced communication time were achieved along with higher accuracy and shorter cycle time.



2. Main product specifications

Item		Specification
Built-in auto sizer TOYOPUC-TSN70	No. of head connections	Max. 2 units
	Connectable wide-range sizing head	Sizing head FX-1300, pin grind sizing head FX-1400, spline sizing head FX-1310, lateral locating head FX-1230
	Accuracy (During wide-range sizing measuring)	Repeatability (25 times) : Within 1 μm Thermal drift: Within 0.3 μm/℃
	Connection with CNC unit	SERCOS Ⅲ
CNC unit TOYOPUC-GC70	Measuring function	No. of measurement items: Max. 6 items
	No. of signal points	No. of signal points: Max. 8 points, No. of areas: Max 5 areas No. of taper decisions: Max. 5 areas, No. of taper controls: Max. 5 points
	Data control	Workpiece data: 64 types, No. of processes: 1 920 processes, Max. processes for each workpiece: 30 processes
	Additional measuring functions	Simple roundness, run out, foreign material interference detection, cylindrical grinding shape

*1 TOYOPUC is a registered trademark of JTEKT CORPORATION.

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