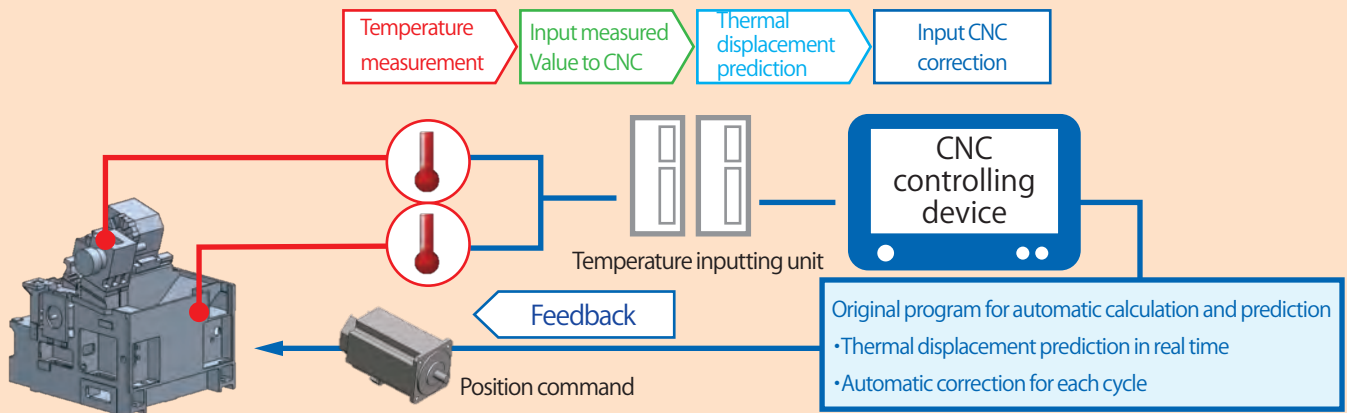


Thermal displacement compensation system



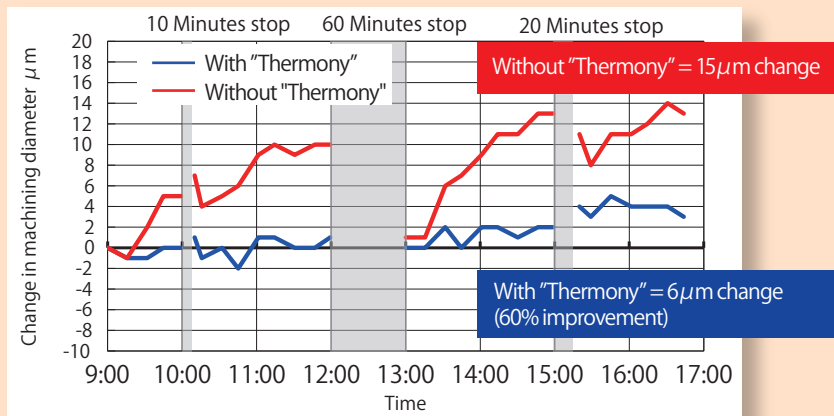
T-support system was made through the technical development in order to support the customers production. We would introduce one of the feature "Thermony(thermal displacement correction system)". Machining dimensions are adjusted according to machine temperature which is dependent on the working conditions (Machining conditions) as well as the environmental conditions (e.g. factory temperature etc.). In order to correct the fluctuation of the machining dimensions, the thermal displacement of different parts of the machine is forecasted based on corresponding the variations of temperature and the correctional values are provided to the control unit of the CNC. Since this system does not require any calculation equipment other than the NC unit, it is possible to include the integration of the new system in suitable machines when you place your order. We can also integrate the new system to your current machines within approximately 2 days. (Depends on the model and specification)

< Chart of Thermony (Thermal displacement compensation system) >



< Comparison results of XC-100 with /without "Thermony" >

Environmental temperature : Temperature rise of 5° C in 3 hours from 9:00am
 : Rapid temperature change of 3° C in a short period



This is the comparison result of our XC-100 with and without Thermony. Test was done in the following conditions that 5° C of temperature rise have occurred within 3 hours from the start of processing, and 3° C of temperature change have occurred within a short period of time. As a result, the diameter change in 8 hours with "Thermony" was 6 μm, while the diameter change without "Thermony" was 15 μm which showed an improvement of 60%.

(Note) It is more effective when there is a large change in the installation environment (environmental temperature), which affects the processing diameter. The effect may vary depending on the installation environment and processing conditions.

< Applicable machine >

Also available with XC-100, X T-6M, XW-60, XW-130M, XW-200 and XTT-500. We plan to increase the number of supported models as needed. Please contact us for details.

XT-6



XW-130

