



Water Temperature Control Unit

# DTU152/1531/1540

**High precision water temperature control for stabilizing equipment precision and product quality**

The DTU152, 1531 and 1540 are water supply units for dicing saws and grinders that provide a stable supply of spindle cooling water or dicing water at a constant temperature and a suitable pressure.

### Stable high precision processing

Due to optimizations in the unit design, changes in temperature when changing the flow rate of dicing water can be kept under 1°C. Changes in dicing saws, grinder spindles, chuck tables, and workpiece areas around the process point due to changes in temperature can be minimized to help improve processing precision.

### Guarantee water supply pressure

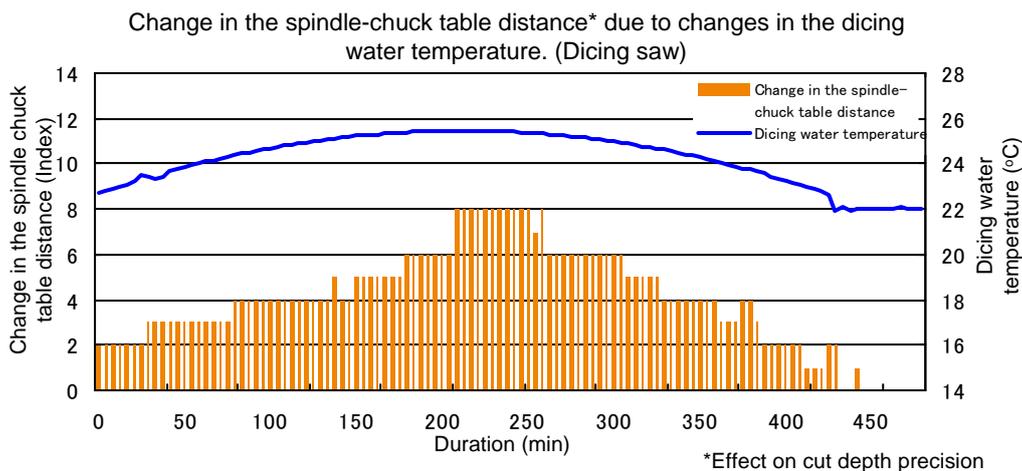
Even if the pressure of the water supply from the facility infrastructure is low, the unit will increase the water pressure to the necessary levels for dicing saws and grinders.



DTU1540

### Importance of water temperature management

Management of the thermal changes in the areas of the workpiece near the processing point with water at a stable temperature is critical for high precision processing.



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## DTU152

### Basic Model

Supports many different equipment types



## DTU1531

### Cooling water centric model

Supports high output grinders and spindles



## DTU1540

### Energy conservation model

Uses a highly efficient temperature unit for energy conservation

## Specifications

Specification	Unit	DTU152		DTU1531		DTU1540
		Cooling water line	Cutting water line	Spindle coolant	Grinding water	
Range required to guarantee accuracy	Deg C	20 ~ 25	20 ~ 27 and within 2°C of the spindle coolant setting	20 - 25	20 - 27 and within 2°C of the spindle coolant setting	20-25
Temperature accuracy	Deg C	1	1	Within 1	Less than 1	±1
Cooling efficiency	kW	1.16	6.3	1.5	6.3	9.4
Heating efficiency	kW	-	12.5	-	12.5	10
Flow rate	L/min	6	25	15	25	45
Circulation method	-	Recirculation type	Drainage type	Recirculation	Drain	Cutting water system: Flushing method Cooling water system: Circulating method Note: Both systems are branched from
Machine dimensions (WxDxH)	mm	450 × 1,296 × 1,235		330 × 1,550 × 875		500 × 780 × 1,650
Machine weight	kg	Approx.310 when full		Approx. 280 when full		270 (when it is dry)

### ■ Environmental conditions

- Keep room temperature fluctuations within  $\pm 1^{\circ}$  C of the set value. (Set value should be between 20 - 25 °C).
- The machines should be used in an environment, free from external vibration. Do not install machine near a ventilation opening, heat generation equipment or oil mist generating parts.
- This machine uses water.  
In case of water leakage, please install the machine on the floor with sufficient waterproofing and drainage treatments.
- \* All the pressures are described using gauge pressures.
- \* The above specifications may change due to technical modifications. Please confirm when placing your order.
- \* For further information please contact your local sales representatives