



ICEVICE® Freeze clamp technology

When to use this technology

This is ideal technology for clamping smalll or intricate workpieces without any tension yet accurately.

For machining mechanically or to separate small parts from a large unit of raw material.

Favoured by the following industries;

- Electronics / Semi-conductors
- Ceramics
- Optics, Glass / Quarz treatment
- Metals, clocks and watches
- Medical tools and laboratory equipment
- For universities and research.

Advantages

- Very precise up to ± 3µm
- No tension builds up within the workpiece
- Short clamping time +/- 90 seconds.

Handling

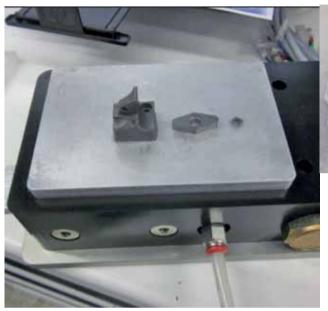
- Easy and quick
- With the use of workpiece specific adapter plates a high degree of repeatability in positioning and clamping is achieved

Function

- Freezing generated by compressed air
- Chuck surface in aluminium with very good warmth drawing properties
- Housing in special polymer with insulation



Clamping by freezing on a thin water film





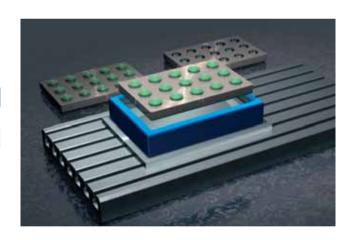
When clamping with the Ice-Vice system parts are frozen to chuck surface on a capillary film of water for machining. Even relatively uneven parts can be clamped as any gaps are filled with water. The vertical and horizontal clamping forces created are enough to hold small parts for milling, grinding, drilling or polishing.

Ice Vice Clamping System

Nr.	Dim	Clamping surf.	
282364	300x140x75	150 x 100	4,3
283209	300x200x100	250 x 150	9

Supply includes:

- 0,5m hose inside Dia 9 with connection fittings
- Plastic case with inlay



To improve production time ICEVICE® can also be palletized where a quick exchange of Freeze plates is possible. These plates have a vacuum connection to ensure secure fixation to the Icevice base.