

Removable Y-Axis on Nanoform® X  
(Accessory also available for Nanoform® 700, Nanoform® 1000, DRLs)

The Precitech removable vertical axis provides users of Nanoform systems with the ability to field-convert their systems from a two linear axis machine to a three linear axis machine. Featuring an oil hydrostatic bearing and linear motor drive the removable vertical axis adds a fully capable contouring axis to your Precitech system. Available as an accessory on all new machines or as a field retrofit.

Since 1962, Precitech has delivered complete ultra precision solutions and maintains an installed base of over 1,500 systems worldwide. We continue to define the state-of-the-art, enhancing accuracy, productivity, and ease of use. **Precitech is ultra precision machining solutions.**

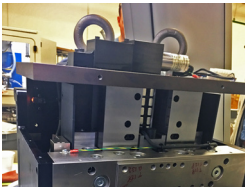
- ▶ **Expand your product portfolio with the addition of an economical removable Y-Axis to your ultra precision 2-Axis lathe**
- ▶ **Assure your part quality with guaranteed turning and raster flycutting specifications on our standard test parts**
- ▶ **Maximize production time with easy installation and removal**

**Key Features**

**Pneumatic counter balance system maximizes load capacity and thermal stability**

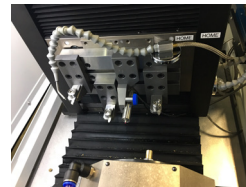


**Single linear motor and symmetric box slide design further improves thermal behavior**

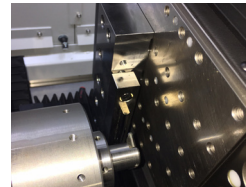


**Example Applications**

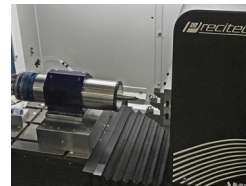
**Multi-level tooling plate accommodates diamond tools and probes for application flexibility**



**Part holding stage on vertical axis for raster flycutting and milling**



**Levicron high-speed spindle replaces HS-150 for more efficient milling**



**Other Key Features:**

- Robust braking system for safety
- Removable cover for internal component access
- Balanced lifting points for easy installation

**Key Specifications**

Turning performance (in XZ and YZ)	Surface roughness < 1.0 nm Sa Form accuracy < 0.15 µm P-V
XYZ raster milling performance	Surface roughness < 10 nm Sa (Under 3 nm is achievable with optimal material and cutting conditions) Form accuracy < 0.2 µm P-V
Y-Axis travel	100 mm
Load capacity	18.2 kg (40 lbs)
Position feedback resolution	8 µm
Programming resolution	0.01 nm

Linear Hydrostatic Slideway	Description
Type	Hydrostatic bearing slideways with symmetrical linear motor placement
Travel	Y: 100 mm (4.0 in.)
Maximum feedrate	1,500 mm/min. (59 in./min.)
Drive system	Linear motor
Position feedback resolution	8 $\mu$ m (0.008 nm)
Y-axis straightness	Horizontal, Vertical: 0.2 $\mu$ m (8.0 $\mu$ in.) full travel
Hydrostatic oil supply system	Smart Servo Control, low pulsation pump, optional thermal control