



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.

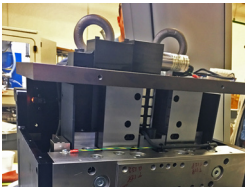
Since 1962, Precitech has delivered complete ultra precision solutions and maintains an installed base of over 1,500 systems worldwide. We continue to define the state-of-the-art, enhancing accuracy, productivity, and ease of use. **Precitech is ultra precision machining solutions.**

Key Features

Dual pneumatic counter balance system maximizes load capacity and thermal stability



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

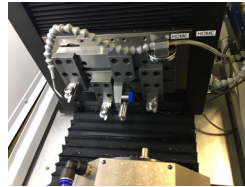


Other Key Features:

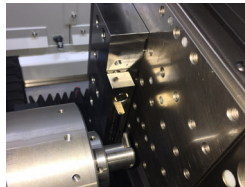
- Robust braking system for safety
- Removable cover for internal component access
- Balanced lifting points for easy installation

Example Applications

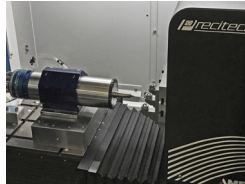
Multi-level tooling plate accommodates diamond tools and probes for application flexibility



Part holding stage on vertical axis for raster flycutting and milling



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



- ▶ **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 Specifications

Turning performance	Surface roughness < 1.5 nm Sa
	Form accuracy < 0.15 µm P-V
XYZ raster milling	Surface roughness < 10 nm Sa (Under 3 nm is achievable with optimal material and cutting conditions)
Performance	Form accuracy < 0.2 µm P-V
Y-Axis travel	100 mm
Load capacity	18.2 kg (40 lbs)
Scale feedback resolution	17 µm
Programming resolution	0.01 mm

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	17 pm (0.017 nm)
Y-axis straightness	Horizontal, Vertical: 0.2 μm (8.0 $\mu\text{in.}$) full travel
Hydrostatic oil supply system	Smart Servo Control, low pulsation pump, optional thermal control