

Features

- 3 tonne load capacity (larger load capacities available) .
- Kinematic mount interface to breadboard or diffractometer base.
- Vertical translation ranges available from $\pm 25\text{mm}$ up to $\pm 75\text{mm}$.
- Settable high accuracy ($\pm 1\mu\text{m}$) limit switches can be used as hard limits and/or home switch on each motion.
- Optical linear encoder to $\pm 0.1\mu\text{m}$ precision.
- Optional over roll/tilt switches can be fitted.
- Single Jacks 1 - 2.5 tonne load capacity, 0 - 25, 50, 75, 100mm travel available.

Custom Experimental Tables

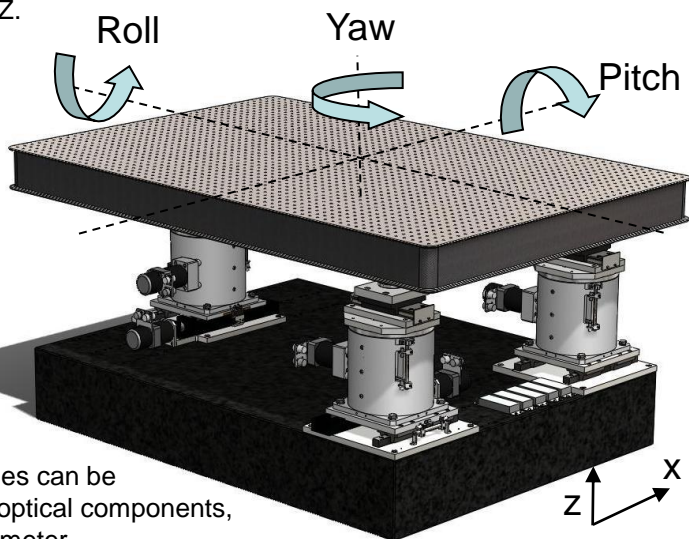
Multi Degree Of Freedom - Multi Purpose.

IDT have produced a comprehensive range of experimental table configurations to meet almost every possibility.

As standard, IDT can offer several types of experimental tables or bases from which to work off:

- **Large Experimental Table** - up to $2.5 \times 3.0\text{m}$. IDT have installed more than 20 custom tables at SLS, CLS, DLS.
- **Small Sample / Experimental Table** - motorised vertical stage, manual horizontal, installed on beamline I22 at DLS.
- **Instrument Motorised Platform** with pitch, roll, yaw & 2 translations (5 DOF), installed at ESRF-SNBL, CLS, PETRA III & DLS
- **Natural Granite Plinth** a low CTE, high stability, vibration damping platform with manual roll, yaw, pitch and motorised X & Z.

Motion	Resolution	Repeatability
Z	$0.32\mu\text{m}$	$\pm 1\mu\text{m}$
X	$1.86\mu\text{m}$	$\pm 1\mu\text{m}$
Pitch	$0.38\mu\text{rad}$	$\pm 2.5\mu\text{rad}$
Roll	$0.36\mu\text{rad}$	$\pm 2.5\mu\text{rad}$
Yaw	$4.5\mu\text{rad}$	$\pm 2\mu\text{rad}$



5 DOF Optical Table (right)

This versatile product from IDT's comprehensive range of optical tables can be used to provide a stable support to optical components, experimental equipment or diffractometer.

Fully motorised with pitch, roll, yaw and up to 2 translational degrees of freedom.



Above: Sample table used on I22 NCD end station @ DLS

A plot showing the difference between actual position and an ideal straight line over 1mm. Repeated over 3 cycles

