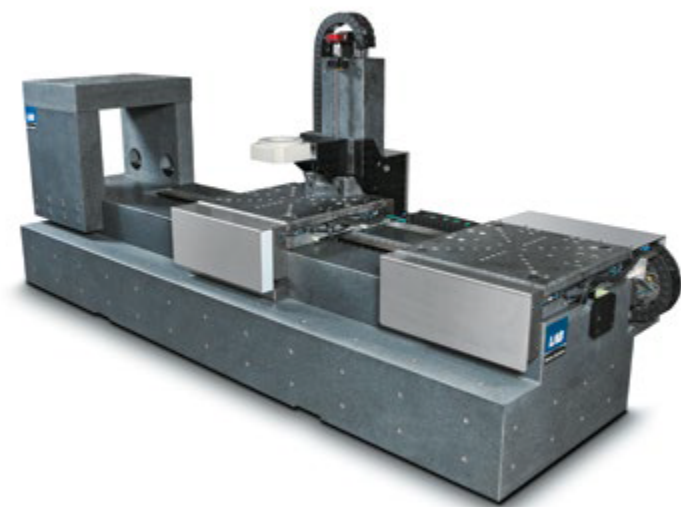


4 Axis Motion System

A combination of standard products, customized products and a custom developed air bearing vertical stage.

This custom developed XXZθ-motion system is 2,4 meters long and contains two horizontal air bearing stages with a travel of 1 meter each. They run on the same granite base, guaranteeing a perfect alignment. On one horizontal air bearing stage, a vertical air bearing stage is built that holds a standard LAB RT150S air bearing rotary stage. All axes can be driven and synchronized with LAB's motion controllers or with commercially available controllers.



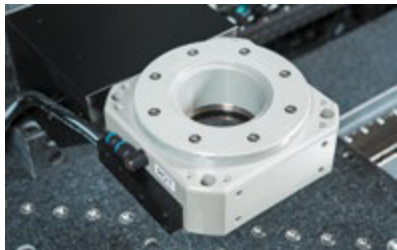
X-stage

TRAVEL	mm	1000
MINIMAL INCREMENTAL MOTION	µm	0,1
HORIZONTAL STRAIGHTNESS *	µm	± 0,4
VERTICAL STRAIGHTNESS *	µm	± 0,4
PITCH *	µrad	± 2
ROLL *	µrad	± 3
YAW *	µrad	± 3

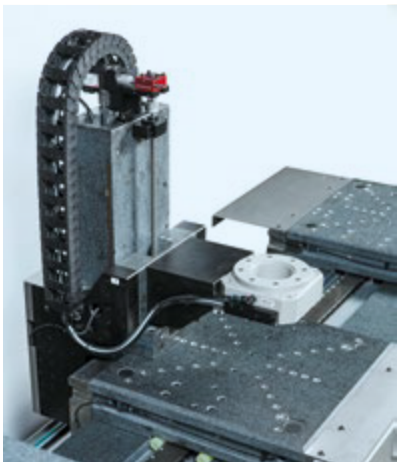
* over full travel

Z-stage

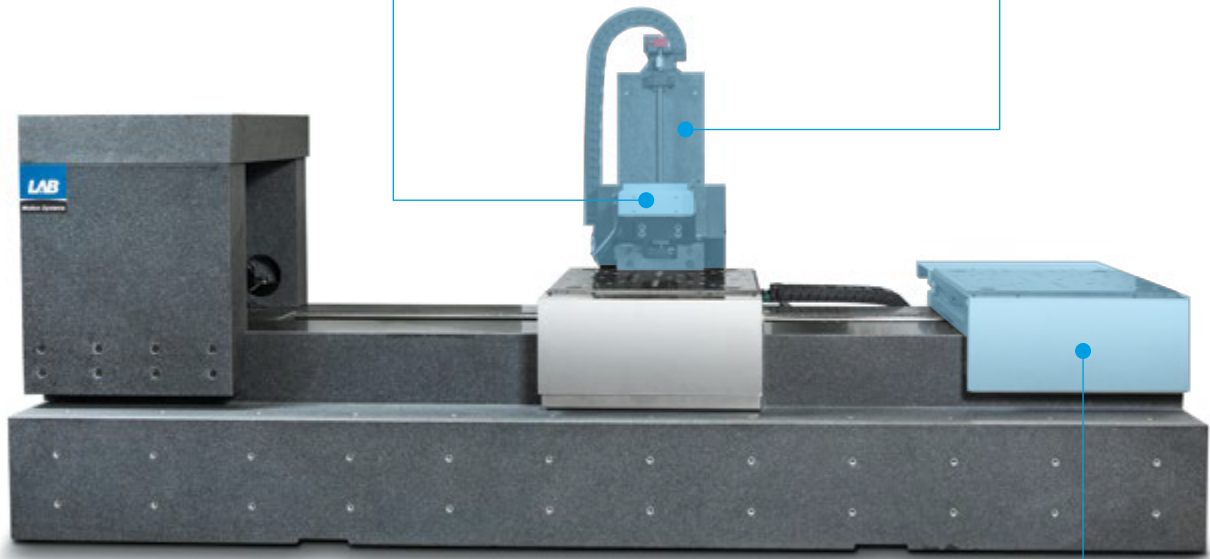
TRAVEL	mm	300
MINIMAL INCREMENTAL MOTION	µm	0,1
HORIZONTAL STRAIGHTNESS *	µm	± 0,2
VERTICAL STRAIGHTNESS *	µm	± 1,0
PITCH *	µrad	± 7
ROLL *	µrad	± 2



Standard RT150S air bearing stage



Custom developed air bearing Z-stage



Customized X-stage

