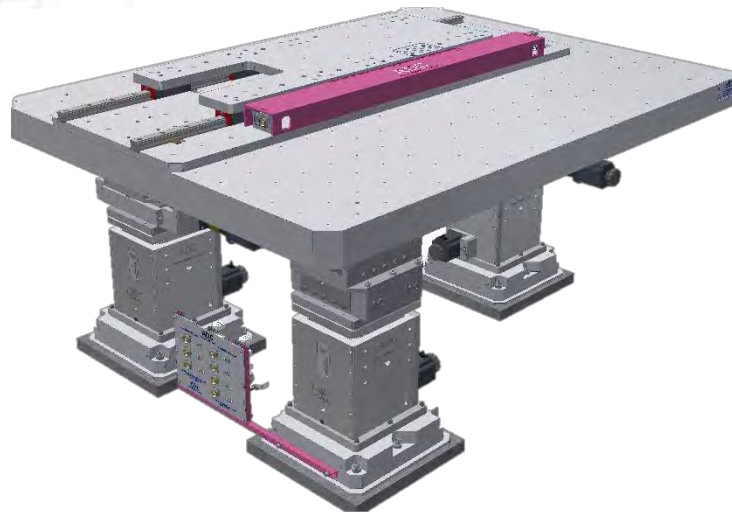


Paul Scherrer Institut (PSI) High-Capacity, 6 Axis Optical Table



Customer:
PAUL SCHERRER INSTITUT
Warenannahme Ost
CH-5232 Villigen PSI; Schweiz



A pair of identical optical tables was designed for Paul Scherrer Institut (PSI), to be installed in the Swiss Free Electron Laser (FEL) as large-scale manipulators for optical equipment. One of the two tables was topped with an additional horizontal axis to provide additional travel for the 2000 kg PRIME instrument and its surrounding vacuum chamber. From the crane capacity limitations in the hutch and the customer's desire for grouted foundations, it was decided to forgo the traditional base plate with casters and instead build the table in place, carting in each actuation stack separately and then placing the table atop the three stacks. All motions were driven by stepper motors through ball screws, and feedback was provided by absolute encoders.

