



Ramp Load/Unload Options for Olympus HDI Testers

All Load/Unload options below for can accommodate either CETR or any customer ramps.

During the tests, dynamics of load/unload is measured with friction, gram-load and AE sensors, the resultant surface degradation is measured in-situ with TAA and TA-Mapping capabilities.

Standard load/unload for production testing

The standard load/unload provides for adjustable positioning of the ramp. The ramp is placed in the circular slot along the edge of the disk and then fixed using a screw and an Allen key. The construction of the ramp holder allows rotation of the ramp around its pivot point. Positioning and set up of the angle can be done using a caliper (ruler) and Allen keys. Height adjustment is also possible over a small (0.04") range with two set-screws on the ramp holder. The height adjustment is done by loosening the fixing screw and adjusting the two set screws with Allen keys. This also changes the tilt angle of the ramp. The height of the ramp can be then checked with a caliper (ruler).

This option requires an experienced technician for ramp positioning.



Advanced load/unload for production testing

This load/unload ramp has all the position adjustments similar to the standard option. In addition, it uses a 0.001" resolution micrometer to adjust the ramp height.

The height adjustment is independent from the position adjustment. The micrometer has 0.25" vertical travel and a locking screw.

The advanced option reduces the possibility of human error in setting Z-height.



4 degree-of-freedom load/unload for R&D studies

The 4 degree-of-freedom load/unload allows ramp positioning and adjustment independently in 3 directions and around 1 vertical rotation axis (4 degrees of freedom). Linear slides with micrometers are used for positioning along three linear axes. Each slide has a screw for locking in any position. The position of the ramp is determined from the micrometer's reading. The resolution of all the micrometers is .001", their travel is .25". A rotary stage with worm gear and a 0.5° resolution scale is used for angular adjustment. Due to self-locking of the worm gear, there is no locking screw on the rotary stage.

This option allows for fine, fast and consistent ramp positioning. After positioning, all the slides are secured with thumb screws.

