

Pin-On-Disk Tribometer (ASTM G 99, DIN 50324)

This continuous rotating Pin/Flat/Ball-On-Disk (Fig 1) tribometer is one of the most common tribometers to measure the friction coefficient of the tribo-pair in-situ during sliding. The test samples can be immersed in a lubricant/fluid container and tests carried out under defined conditions. Wear evaluation of sliding pairs after sliding can be performed by optically scanning of the worn surface or using gravimetric methods. The nature of the tribo-couple contact can be point, line or surface to surface using different sample holders. The set-up parameters of this tribometer are:

Rotation speed: 0.03 to 500 rpm.

Load: 1 to 60 N.

Standard sample: $\varnothing = 60$ mm, $h = 15$ mm

Standard loads: 1, 2, 5, 10 N

Typical Standard Method:

ASTM G 99, DIN 50324: Standard test method for wear testing with a pin-on-disk apparatus. Materials are tested in pairs under nominally non-abrasive (dry sliding) conditions.

