

Tribometer Test Rig

CAPABILITY SHEET · FRICTION AND WEAR TOGETHER · CONDITIONS HELD AND RECORDED · ENGINEERED TO ORDER

THE ONE IDEA

PRINCIPLE	Friction belongs to the pair.
WHY IT MATTERS	A friction number or a wear loss is the response of both bodies, the contact, the medium and the conditions, so the rig records the conditions with every result.

THE RIG

FRAME & DRIVE	A heavy stiff frame and a drive that turns a disc or ring, or reciprocates a specimen, at a measured speed.
LOADING	Dead weights, a lever or a servo actuator set the contact load, with a load cell in the load path checked against a reference.
MEASUREMENT	A force or torque sensor reads the friction continuously, and the wear is measured by mass, by track profile or by displacement.
ENVIRONMENT	A heated stage, a humidity-controlled enclosure, a lubricant bath or a sealed chamber holds the medium, with a probe at the contact.

THE METHOD

ORDER	Specify, mount, set, run, measure and prove. Checking the conditions against references, and measuring the wear by a stated method, are what a quick order skips.
LIMITS	Loads, speeds and distances come from the method the customer names and from the pair, and are not printed here.

CONFIGURATIONS

PIN-ON-DISC & RECIPROCATING	Pin or ball loaded on a rotating disc, or reciprocated on a flat, for the friction and sliding wear of coatings, materials and lubricants.
TWIN-DISC RIG	Two loaded discs turned at different speeds, so that the contact rolls and slides together.
EROSION RIG	A particle-laden air jet on a target at a set angle, or a vibratory horn in a liquid.

STANDARDS & SCOPE

STANDARDS	Public references: ASTM G99, ASTM G133, ASTM G77, ASTM G76 and ASTM G32 for pin-on-disk, reciprocating, block-on-ring, gas-jet erosion and cavitation erosion tests.
SCOPE BOUNDARY	It is the tribometer test rig: not an impact testing machine, not a bearing rig, not a dust chamber, and not a hardness tester.
STATUS	Neometrix has quoted against successive tribometer and wear test rig requirements, and no delivered tribometer is claimed.

DEFENCE PROGRAMMES DESK

sales@neometrixgroup.com · +91 7777 876 876 · neometrixgroup.com
 Neometrix Defence Limited · E-148, Sector 63, Noida, Uttar Pradesh, India