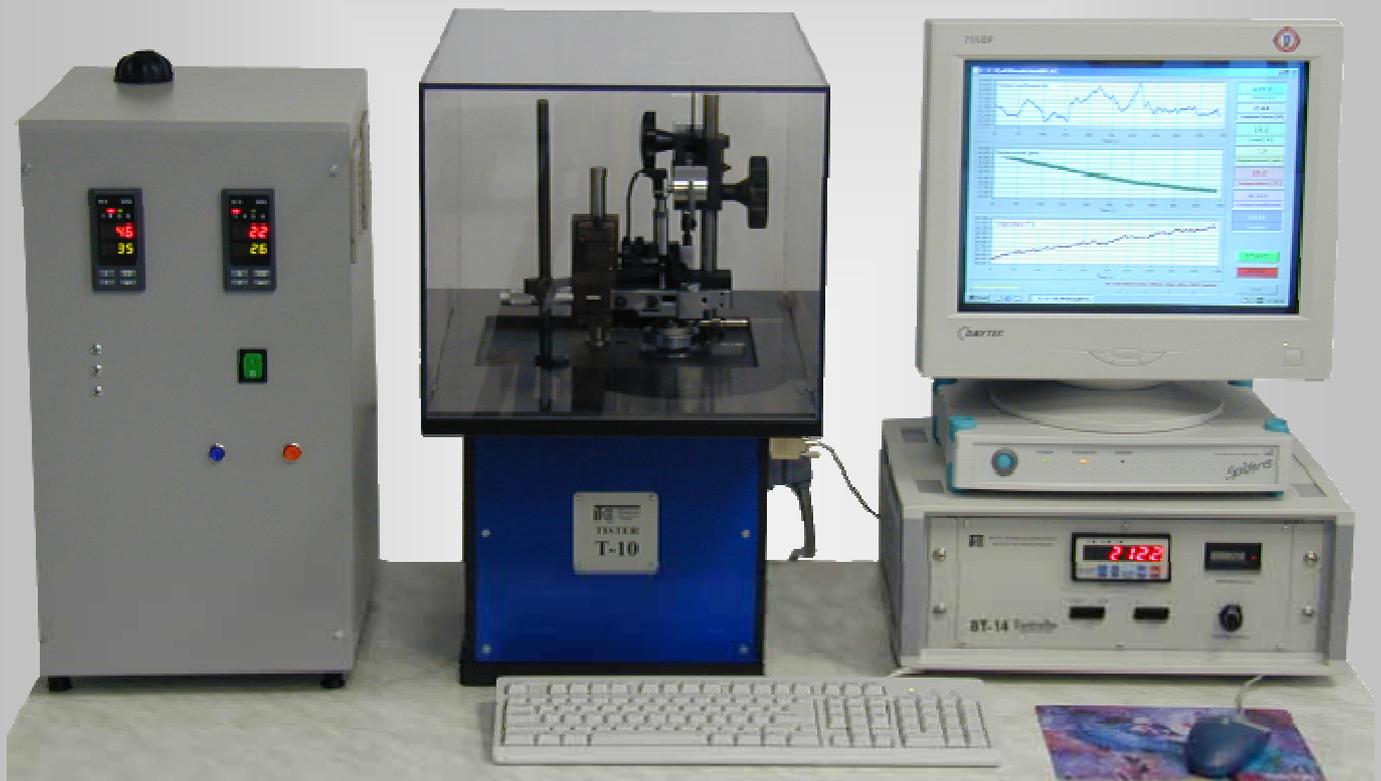


KS-10 AIR CONDITIONING CHAMBER FOR T-10 BALL-ON-DISK TESTING MACHINE



INSTITUTE FOR SUSTAINABLE TECHNOLOGIES
NATIONAL RESEARCH INSTITUTE RADOM

ul. K. Pułaskiego 6/10, 26-600 Radom, POLAND

fax: (+48-48) 3644765 www.itee.radom.pl www.tribologia.org trib-dep@itee.radom.pl

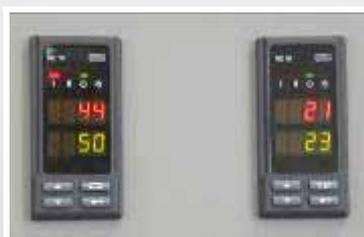
CHARACTERISTIC OF KS-10 AIR CONDITIONING CHAMBER

KS-10 Air Conditioning Chamber is intended for the use with T-10 Ball-on-Disk Testing Machine. The aim of the chamber is to stabilize the relative humidity (RH) and temperature in the surroundings of the ball-on-disk contact zone of T-10 Machine. Such an invention has great advantages compared to an air conditioning system of the entire laboratory room. They are: bigger precision of air conditioning, wider range of desired RH and temperature to be controlled, shorter time to stabilize these conditions, as well as lower cost.

Keeping the constant values of RH and air temperature is necessary to obtain repeatable wear under conditions of dry friction. This is particularly important when testing various engineering materials. So, during realization of the round-robin ball-on-disk tests on steel, ceramics and PVD coatings within the scope of the VAMAS international programme it was required that RH and air temperature should be constant - respectively 50% and 23°C.



KS-10 chamber, made of a transparent material, is easily and quickly mounted onto T-10 Testing Machine and is equipped with a special air conditioner. The desired values of RH and temperature are set using the keys located on the front end of the air conditioner. The LED displays show the preset values as well as current values of RH and temperature inside the chamber.



Although KS-10 Chamber is intended for the use with T-10 Ball-on-Disk Testing Machine, it can be adopted to other tribotesters manufactured by the Institute for Sustainable Technologies in Radom.

TECHNICAL SPECIFICATIONS

– range of RH to be controlled	25 ÷ 75%
– range of temperature to be controlled	20 ÷ 50°C
– nominal values of RH and temperature	50% and 23°C
– chamber dimensions (W x H x D)	360 x 320 x 560 mm
– air conditioner dimensions (W x H x D)	310 x 600 x 410 mm
– chamber weight	5 kg
– air conditioner weight	32 kg
– power supply	230 V / 50 Hz (optionally 110 V / 60 Hz)
– max. power consumption	2.5 kW

