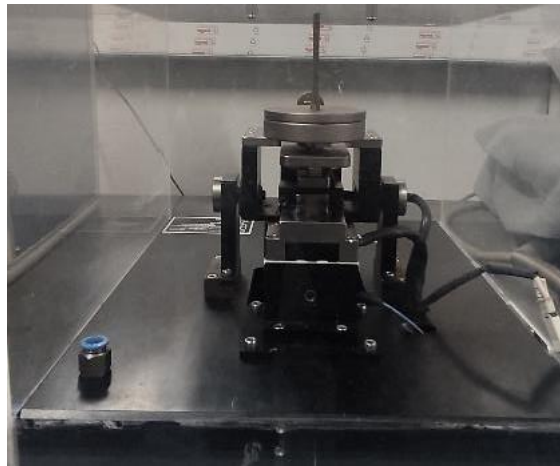


HIGH FREQUENCY RECIPROCATING RIG

Photo of Instrument:



Instrument Name	High Frequency Reciprocating Rig
Instrument Model & Serial No.	TR-282 734
Instrument Make	DUCOM
Category of Instrument	Characterization and Testing
Description of Instrument	It is an equipment used to find the Coefficient of Friction of lubricants. Here the spherical ball clamped in a holder which is reciprocating to & for along a cylindrical disc which is fixed at the bottom holder filled with lubricant.
Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)	Top Specimen Ball: $\phi 6\text{mm}$ Bottom Specimen Plate: $\phi 10 \times 3\text{mm}$ Stroke Range: $1 \pm 0.02\text{mm}$ Frequency Range: 10-60Hz Load: 1 to 10N
Application of Instrument (Limited to Major 4 or 5)	For Finding the lubricity of various fluids as well as its coefficient of friction.
Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions	Lubricants (30mL) Ball: $\phi 6\text{mm}$ (AISI E-52100 steel having HRC 58-66) Plate: $\phi 10 \times 3\text{mm}$ (AISI E-52100 steel, Annealed, Vickers Hardness HV 30, turned, lapped and polished to a surface finish of <0.02 micron Ra)

Department of Mechanical Engineering, NIT Calicut

Types of Analysis / Testing	Determining the Coefficient of Friction
Faculty In-Charge Name / Email / Contact	Dr. Amit Kumar Singh amitsingh@nitc.ac.in 8949362395
Technical Staff Name / Email / Contact	Mr. Eldho P Varghese epv76@nitc.ac.in 9447278215
Location of Instrument	TRIBOLOGY LAB
Other Details	

User Charges (per sample):

S.NO.	Type of Analysis / Testing	Internal - within Department of NITC	Internal - Other Departments NITC	External Academic Educational Institutes	National R&D Labs	Industry
1	Determining the Coefficient of Friction	Nil	100	500 + GST (18%)	500 + GST (18%)	1000 + GST (18%)

Note: Consumables and any other expenditure charges will be as per requirement, if any.

Slot Booking and Payment Work Flow: