

Swami Keshvanand Instituteof Technology,

Management & Gramothan

Approved by AICTE, Ministry of HRD, Government of India Recognized by UGC under Section 2(f) of the UGC Act, 1956 Affiliated to Rajasthan Technical University, Kota

Point 4.1.1 Research Facilities in Mechanical Engineering Department

Research Facilities

S. No.	Name of Equipment	Laboratory	DSR Page No.	Date of purchase & cost	Bill no. & Date				
	Research Facility in Renewable Energy/Thermal Engineering								
1	Single Cylinder, four stroke Diesel Engine Test Rig	I C Engine lab	1/11	15-01-2005 1,68,000/-	DR/0467/2005 15-01-2005				
2	Reciprocating Air Compressor Test Rig	Thermal lab	2/11	15-01-2005 1,03,800/-	DR/0467/2005 15-01-2005				
3	2-Stroke 1-Cylinder Petrol Engine Test Rig 2.5HP/3000RPM	I C Engine lab	40/11	13-07-2005 1,10,750/-	009 13-07-2005				
4	4-Stroke 4-Cylinder Water Cooled Petrol Engine Test Rig 10HP/1500RPM	I C Engine lab	41/11	13-07-2005 1,50,000/-	009 13-07-2005				
5	Closed circuit Pelton wheel turbine test rig 5HP	Fluid Machine lab	2/19	20-02-2006 1,70,775/-	032 20-02-2006				
6	Closed circuit Francis turbine test rig 5HP	Fluid Machine lab	3/19	20-02-2006 1,97,505/-	032 20-02-2006				
7	Closed circuit Kaplan turbine test rig	Fluid Machine lab	4/19	20-02-2006 3,30,000/-	032 20-02-2006				
8	Air Conditioning Test Rig(one ton)	Refrigeration & Air Conditioning lab	2/16	12-09-2006 1,84,851/-	025 12-09-2006				
9	Exhaust gas Analyzer (i3sys)	Thermal lab	63/11	26-07-2009 2,24,230/-	28/1 26-07-2009				
10	Variable compression ratio variable fuel injection computerized CI Engine test rig	I C Engine lab	65/11	04-07-2012 11,25,139/-	27 04-07-2012				
11	Axial Flow 3- Stage Compressor	Fluid Machine lab	7/19	28-08-2013 6,70,550/-	T/28 28-08-2013				
12	AVL Smoke Meter	I C Engine lab	68/11	10-9-2014 2,59,011/-	00005 09-04-2014				
	Computerized VCR petrol engine test rig	I C Engine lab	70/11	10-09-2014 10,16,785/-	011 21-06-2014				
13	EGR for diesel engine	I C Engine lab	73/11	10-09-2014 2,00,303/-	010 21-06-2014				

14	4-stroke,4-cyclinder variable speed diese engine test rig		74/11	10-09-2014 4,00,859/-	003 21-06-2014			
15	Pyranometer	Renewable Energy Lab	78/11	09-05-2015 3,38,405/-	04 09-05-2015			
16	AVL Gas Analyser DiGas444	Thermal lab	63/11	294700/-	2115160242 08-07-2015			
17	Solar Collector	Renewable Energy Lab	79/11	52550/-	003 09.05.2015			
	Research Facility in Production Engineering							
1	C N C Lathe with Accessories	CAM Lab	2/13	27-07-2006 4,92,581/-	6 27-07-2006			
2	C N C Mill with Accessories	CAM Lab	3/17	27-07-2006 6,94,069/-	6 27-07-2006			
3	Pneumatic Trainer with air compressor	Mechatronics Lab	8/12	08-09-2006 1,15,157/- +25,847/- =1,41,004/-	10169/05-09-06 &977/8-9-06			
4	5-Axis Robotic Arm	CAM Lab	5/17	06-03-2013 3,79,828/-	16 06-03-2013			
5	Optical Profile Projector	Metrology Lab	24/22	27-11-2015 1,05,000/-	H.E.T.T/R.O.K/SKIT/020			
6.	CNC Ultrasonic Drilling Machine	Manufacturing Lab	154/1	19-08-2018 3,35,000/-	Invoice No. 55 19-08-2018			
7.	Milling Machine Dynamometer	Production Engineering	148/1	19-09-2015 38,000/-	H.E.T.T/R.O.K/SKIT/020			
8.	Cut Viewer TURN/MILL CAM software	CAM Lab	11/21	06-03-2018 2,00,000	HA/0062			
9.	3-D Printing Machine	CAM Lab	8/17	3,12,700	3242 08-09-2020			



Equipment Name: Two stroke Motoring Test

Make and Model: Technical Teaching Eqipments, Banglore (Bajaj)

Cost: Rs.110750/-



Equipment Name: 4-Cylinder, 4-stroke Petrol Engine

Make and Model: Technical Teaching Equipments, Banglore (Isuzu Automotive)

Cost: Rs.1,50,000/-



Equipment Name: 4 Stroke 4 Cylinder Variable speed Diesel Engine coupled with

hydraulic Dynamometer

Make and Model: Balaji Education Equipments (HM STRIDE)

Cost: Rs.4,00,859/-



Equipment Name: Smoke Density Meter for Diesel engine

Make and Model: AVL 437 C

Cost: Rs.2,59,011/-



Equipment Name: Computerised Variable Compression Ratio Diesel Engine

coupled with Eddy current dynamometer

Make and Model: Technical Teaching Equipments, Bangalore (Kirloskar TV1)

Cost: Rs.11,25,139/-



Equipment Name: Computerised Variable Compression Ratio Petrol Engine coupled with Eddy current dynamometer

Make and Model: Technical Teaching Eqipments, Banglore (Greaves MK 25 HSP)

Cost: Rs.1016785/-



Equipment Name: Exhaust Gas Analyser

Make and Model: i3SYS (Indus Scientific PVT LTD, Bangalore)

Cost: Rs.2,00,303/-



Equipment Name: CLEAVELAND Flash & Fire Point Apparatus

Make and Model: Technical Teaching Eqipments, Banglore

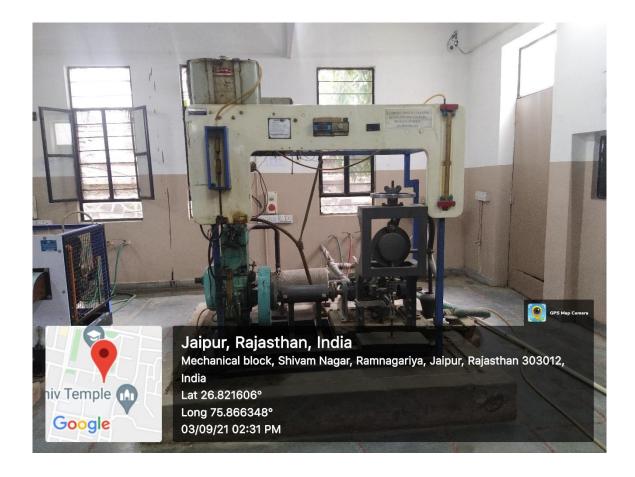
Cost: Rs.18,274/-



Equipment Name: Saybolt Viscometer

Make and Model: Technical Teaching Eqipments, Banglore

Cost: Rs.9898/-

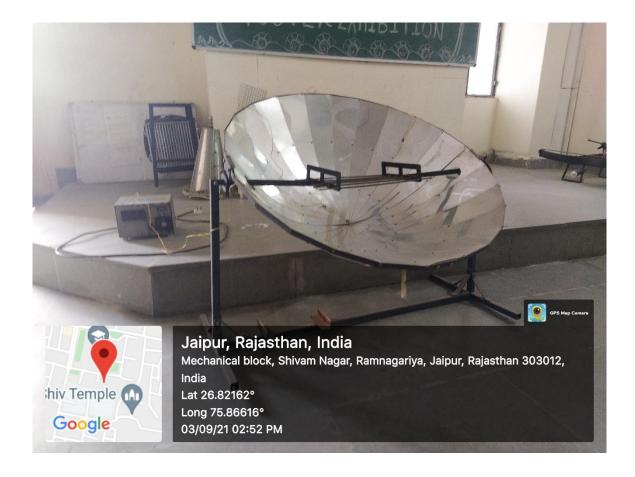


Equipment Name: Single Cylinder 4 stroke Diesel Engine Coupled with Hydraulic

dynamometer

Make and Model: Datacone (Kirloskar TV1)

Cost: Rs.168000/-



Equipment Name: Single Cylinder 4 stroke Diesel Engine Coupled with Hydraulic

dynamometer

Make and Model: Technical Teaching Equipments

Cost: Rs.52550/-



Equipment Name: CNC Lathe Machine with Accessories

Make and Model: Hytech Automation, Pune

Cost: Rs.4,92,581/-



Equipment Name: CNC Mill Machine with Accessories

Make and Model: Hytech Automation, Pune

Cost: Rs.6,94,069/-



Equipment Name: 5-Axis Robotic Arm

Make and Model: Hytech Automation, Pune

Cost: Rs.3,79,828/-



Equipment Name: CNC Ultrasonic Drilling Machine

Make and Model: K&K Engineers, Delhi

Cost: Rs.3,35,000/-



Equipment Name: 3D Printing Machine

Make and Model: Raj Infotech 3D Printer Max Due

Cost: Rs.3, 12,700/-