Updated on 09.01.2026

[CSIR-CMERI, Durgapur]

Procurement Plan

[Financial Year 2026-27]

[A] Equipment:

Table 1: Equipment for procurement during the FY 2026-27 and subsequent 3 – 5 years:

Sl. No.	Name of Equipment / Item	Quantity
1	Infrared camera for thermal mapping	1 No
2	Customized Robotic Hybrid DED-Machining System	1 No
3	Selective laser melting based powder bed fusion machine	1 No
4	Portable Optical Emission Spectrometer	1 No
5	Metal wire drawing machine	1 No
6	Investment casting unit for aerospace component development	1 No
7	Vacuum Induction Melting (VIM) furnace with 10 kg melt capacity	1 No
8	Clean Room Class 10000 (ISO-7) Facility for 200 to 250 square feet area	1 No
9	Laser Interferometer measurement System	1 No
10	Gauge Block Comparator with Calibration certificate from NMI or NABL accredited LAB	1 No
11	Thermal Calibration and Testing Equipment	1 No
12	3-D Optical Profilometer	1 No
13	FieId Emission Scanning Electron Microscope (FESEM) with attached Energy Dispersive Spectroscopy (EDS) and Electron Back Scattered Diffraction (EBSD)	1 No
14	High-Performance Thermo-Mechanical Testing Systems for Metal, Ceramic, Polymers etc.	1 No
15	Drop shape analysis system	1 No
16	80 kW Robotic Thermal Spray System consists of Atmospheric Plasma & HVOF	1 No
17	X-ray Photoelectron Spectroscopy (XPS)	1 No
18	Cut-off Machine	1 No
19	Chemical Vapour Deposition (CVD) System	1 No
20	Electrometer	1 No
21	Air/Nitrogen Gas Booster Unit with SS Type-I hydrogen Storage Tank	1 No
22	Hydraulic Burst Pressure Test Unit	1 No
23	Universal Hydraulic Test Rigs for Valves and Pumps	1 Lot
24	Combined Vibration and Shock Chamber with Climate Control	1 Lot
25	High Flow Screw Compressor with Variable Speed Drive	1 Lot

26	Vehicle Chassis with Engine for UAV Launcher	2 Lots
27	High Speed Precision conventional Lathe	1 No
28	Universal Milling Machine - conventional	1 No
29	CNC Wire CUT EDM machine	1 No
30	CNC Turning centre	1 No
31	CNC High Precision Waterjet Cutting Machine	1 No
32	Multitasking Mill-turn machine with integrated grinding technology	1 No
33	Multitasking Turn-Mill machine with integrated grinding technology	1 No
34	GPU-based computational Server for CFD/FEA along with Entry-level Client Workstations (15-20 nos.)	1 Lot
35	General Purpose Entry Level Workstations	1 Lot
36	General Purpose Desktop Machines	1 Lot
37	License servers (4 nos.) and PME File Storage cum Software Server (1 no.)	1 Lot
38	Mid-level Workstations for CAD & CAE	1 Lot
39	Various high-speed Network Switches compatible with existing Network	1 Lot
40	Hyper Converged Infrastructure (HCI) Hardware, Software and Backup Solution	1 Lot
41	Comsol Multiphysics Software	1 Lot
42	Integrated UPS Power, Cooling and Monitoring Solution at 9 different locations	1 No
43	GPU based High Performance Computation Server	2 Nos
44	GPU-based computational Server for Design and FEA simulations and 10~15 nos Client Workstations	1 Lot
45	Matlab Software package for Simulation and Visualization of Complex Underwater Robotic Systems	1 No
46	High End Workstations	4 Nos
47	Server /NAS	1 No
48	HPC Servers/cluster	1 No
49	AC Absorption type dynamometer	1 No
50	Ultrasonic thickness gauge cum oxide scale measurement equipment	1 No
51	Handheld XRF Analyzer	1 No
52	Industrial Video Scope with Measurement	1 No
53	Ground Penetrating Radar(GPR)	1 No
54	EO-IR/Thermal Camera	1 No
55	High Speed Precision Conventional Lathe	1 No
56	Universal Milling Machine with Vertical Head	1 No
57	CNC Lathe Machine with FANUC Controller	1 No
58	Hydrogen Internal Combustion Engine Test Facility	1 No
59	Psychrometric test lab facility	1 No
60	Computer Workstation Cum Server	1 No
61	Coil Designer Software	1 No
62	VapCyc Software	1 No

63	Aspen Plus	1 No
64	Automatic Proximate Analyser	1 No
65	CHNS Analyser	1 No
66	Thermal conductivity meter for liquids	1 No
67	Coriolis Mass Flow Meter with Controller and Test Control Panel	1 No
68	Multi-fuel Variable Compression Ratio Engine Test Set-Up with AC Dynamometer	1 No
69	Laser Cutting machine with air compressor	1 No
70	Hydraulic based Bending Machine	1 No
71	Hydraulic based Shearing Machine	1 No
72	Powder Coating/Painting facility	1 No
73	Electrical performance Test Benches	2 Nos
74	Condenser and Evaporator coiling machines	2 Nos
75	Overhead crane	1 No
76	Product Wrapping and Packaging Machine	1 No
77	Gantry type CNC filament winding machine	1 No
78	Video Extensometer	1 No
79	Electrochemical Workstation	1 No
80	Single Station Bi-Axial Rotational Moulding Machine	1 No
81	Low Velocity Impact Testing Machine	1 No
82	Autoclave for composite curing	1 No
83	High current battery cycler/analyser	1 Set
84	PLECS Real-Time (RT) simulator box (HIL/SIL)	1 No
85	High power high voltage bidirectional programmable power supply	2 Nos
86	Fuel cell system/engine	1 Lot
87	Power quality analyser	1 No
88	High definition oscilloscopes with probes	1 Lot
89	Multi axis Ultrasonic testing Machine for inspection of materials	1 No
90	Customized curing oven	1 No
91	Hydrostatic pressure test setup	1 Set
92	Electrochemical test prototype rig with RDE/RRDE	1 Set
93	Vibration Analyzer sensor and DAQ	1 No
94	Engine test bed	1 No
95	Human arm vibration Measurement Sensor	1 No
96	C.G measurement setup with hydraulic ramp	1 No
97	Chassis Dynamometer	1 No
98	VBoX with mini Input module	1 No
99	Electrodynamic Shaker Table	1 No
100	Online COD BOD TSS pH and conductivity analyser	1 No
101	FTIR Spectrophotometer (Liquid and solid)	1 No
102	Helmet Testing Apparatus kit	1 No
103	HPLC	1 No

104	TOC Analyser	1 No
105	Microscopes	1 No
106	BOD analyser, incubator	1 No
107	Gas Analyser	1 No
108	CH,N,S & O analyser	1 No
109	Ladder testing setup	1 No
110	Glove testing apparatus kit	1 No
111	Thermal imagining Camera and its DAQ	1 No
112	Prototype manufacturing equipment	1 No
113	Data Logger	1 No
114	Steering sensor	1 No
115	EOT Cranes	1 No
116	Fork Lift	1 No
117	Electric Vehicle for Material Handling	1 No
118	Gamboot testing apparatus kit	1 No
119	Training Room Apparatus/ conferencing system	1 No
120	Universal testing machine	1 No
121	3d Scanner	1 No
122	Industrial DLP 3D Printer for medical application	1 No
123	Data Acquisition System	1 No
124	Software's for Controller design/programming/DAQ	1 No
125	Micro/Nano Volume Spectrophotometer	1 No
126	Potentiostat / Galvanostat (Biosensor applications)	1 No
127	Haptic feedback device/ master manipulator	1 No
128	Rugged portable computational systems/ laptops for field work/ field data collection	2 Nos
129	Motion capture system (IMU or Camera based) with Software and Licence	1 Set
130	Centrifuge (29000 RPM, 1 Lakh x g) 50 ml with cooling	1 No
131	High Speed Camera (high FPS) system (with system computer and software)	1 No
132	Optical Absorption Analyzer System (with system computer and software)	1 No
133	Metabolic cost analyser	1 No
134	Low force UTM/ DMA	1 No
135	Data Glove	1 No
136	EMG acquisition system with sensors/ Vibromyography/ Mechanomyography	1 Set
137	Instrumented Data/ Haptic Glove system	1 Set
138	IAD prototype: Manufacture, Assembly and Integration	1 No
139	Customized actuation prototype of robotic endoscope/colonoscope	1 No
140	Supply of Control Console Container for testing of underwater robotic systems	1 No

141	Next generation industrial composite 3D printer (min 600mmx500mmx300mm)	1 No
142	Precision Towing Carriage on Rails at Shallow Basin	1 No
143	Customised Hydraulic Actuators with Power Pack for actuation in underwater environment	2 Nos
144	Rate table for rotary and linear motion	1 No
145	Underwater Laser based Imaging	1 No
146	3-D Imaging SONAR	1 No
147	Underwater Eddy-current based /Ultrasonic Thickness Gauge	1 No
148	2D-Imaging SONAR	1 No
149	Optical Modem for Underwater Communication	1 No
150	Underwater Thruster (15-25 kgf Forward thrust)	1 No
151	GPS Receiver with Custom designed Underwater Antenna for L1 and L2 Bands	1 No
152	Underwater Tracking Camera / Underwater IP camera with Custom Design Software	1 No
153	Underwater Rotary Actuators	5 Nos
154	Doppler Velocity Log with accessories	2 Nos
155	Flangibolt Actuator for emergency drop weight handling	2 Nos
156	Multiphysics Software for Simulation and Visualization of Complex Underwater Robotic Systems	1 No
157	Underwater Linear Actuator	1 No
158	Custom Design Power Cum Data Line 200 meter Long Cable Handling Winch with Slip Ring	1 No
159	Customised BLDC motor including test bed for underwater application	6 Nos

Note:

1. Equipment costing less than INR 10 lakh is not included in the list.
2. The names of the equipment and the approximate costs are tentative and subject to change as per the recommendations of TSC/PC.

Updated on 09.01.2026

[CSIR-CMERI, Durgapur]

Procurement Plan

[Financial Year 2026-27]

[B] Consumables:

The following categories of consumables are likely to be procured during the FY 2026-27.

Table 3: Consumables likely to be procured during **Financial Year 2026-27** (Annual):

Sl. No.	Category	Expected Procurement Value (Rs. In Lakhs)
1	Chemicals	300.00
2	Other Consumables (materials, workshop tools, fixtures, die & punch, spares, kits & consumables for running machines etc.)	500.00
3	Glass wares	80.00
4	Plastic wares	50.00
5	Cartridges, Batteries, etc.	40.00
6	Gases	40.00
7	Maintenance/AMC/repairing of existing equipment	200.00
8	Stationary items (toners, cartridges, papers, clips, etc.)	20.00
9	IT / software-related Items	150.00
10	Furniture	30.00
11	Electric Items	20.00
12	Mechanical Fabrication	100.00

Note:

- The above procurement plan is dynamic and could be revised as often as may be necessary with the approval of competent authority.
- The procurement of the chemicals & consumables would be based on the need and time to time requirement of the R&D activities.
- The procurement is subject to the funds availability/release of sufficient grant from CSIR / or funding agency.
- The indicated procurement value is an estimate only.

This is issued with the approval of the competent authority.