

Central Fabrication Facility - CFC

Preamble:

It was recommended during the ‘**All India Seminar – cum- Workshop of Low Cost Sports Equipment Manufacturing and Marketing**’ to create and provide fabrication facility in the form of workshop where training imparted of manufacturing and marketing of low-cost sports equipment to schools, sports clubs and colleges of physical education.

The event was organized and hosted by this College in January 2010.

Soon after the Seminar the College authority approached HVPM's College of Engineering & Technology (COET) for its cooperation and collaboration in utilizing ‘Workshop’ services for manufacturing, fabricating sports equipment like, dumbbells, Indian clubs, lezim, wands, batons, and such other simple equipment. The COET and its Management gladly agreed to provide such services. The workshop of COET since then was used as ‘**Central Fabrication Centre**’ from the year 2013 onwards.

Multiple utility of the Centre:

Apart from manufacturing sports goods, the Centre has been successful in proving its utility in the fabrication of window grills, desks-benches, classroom podium, steel cots and other furniture as per demand and order of various institutions, schools, colleges run under the management of HVPM. The workshop also carries out repairs of different furniture and sports equipment.

The centre is well equipped with following shops / Laboratories:

- 1. Carpentry Shop: -**
 - a. Wood turning Lathe of 4.5 Ft. bed length
 - b. Carpentry Work benches with vices
 - c. Hammers, saws, measuring instruments, etc.
- 2. Welding Shop: -**
 - a. Electric Arc welding Machines
 - b. Spot Welding Machine, Thyristrised control, 10 KVA Paddle
 - c. Oxy Acetylene - GAS Welding Machine
 - d. Inverter MIG welding Machine CO2 gas based
- 3. Machine Shop: -**
 - a. Grinding Machine
 - b. Pipe Cutter Machine
 - c. Vertical Drilling Machine for drilling Max. 30mm Dia.
 - d. Dilip, Rajkot Make 4.5 Ft. Bed length Lathe Machines
 - e. Sunrise, Rajkot Make, 0A – Type, Milling Machine
- 4. Smithy Shop: -**
 - a. Black Smithy Hearth

- b. Anvil, Swage Block, Holding Equipment, etc.
- 5. **Fitting shop:** - Work Benches with Bench vices, Measuring instruments, Hammers, etc.
- 6. **Automation Lab:** -
 - a. Sinewave, Pune Make CNC Lathe of 2 ½ feet bed length with controller, 2HP Spindle Drive, Self Centering 3 Jaw chuck, Variable speed drive 2HP, P.C. & Color Monitor, 8 Station Automatic Index able Turret
- 7. **Computer Aided Designing and Drafting CADD Lab:** -
 - a. Divide by Zero's Accucraft i250D, hybrid dual extruder 3D printer with a build volume of 200mm × 250mm × 200mm.
 - b. LAN Connected 20 PCs of HP of configuration Dule core 3.2 Ghz. Processor, 4 GB RAM, 500 GB HDD, Graphic card, and loaded with 3D Modeling and analysis Software.
 - c. Laser Printer, A4 Size Scanner

Activities Performed at CFC – Central Fabrication Facility: -

1. Fabrication and Repair work of fencing of Grounds
2. Fabrication and Repair work of Wholly Ball, Loan Tennis, Badminton Poles
3. Fabrication and Repair work of Hockey, Foot Ball, Hand Ball, Water Polo Goal Posts
4. Fabrication and Repair work of Basket Ball, Soft ball Brackets
5. Fabrication, manufacturing and Repair work of Gymnastic Equipments like Single Bar, Double Bar, Roman Rings, etc.
6. Fabrication, manufacturing and Repair work of Indigenous Activities like Malkhamb, Kho Kho, Lathi Kathi, Lezim, etc.
7. Fabrication, Repair and Maintenance work of Beds, Tables, Grills, Windows, etc. of Hostels, Class rooms and institute premises.

Data requirement:

Name: Central Fabrication Centre

Year of Establishment: 2013

Video/ Pictures depicting work in progress.

Adviser: Prof. Y.P.Padole / S.H.Deshpande

Convener: Akshay Gohad.

















