



Ministry of Micro, Small and Medium Enterprises,
Government of India



TOOL ROOM & TRAINING CENTRE, GUWAHATI

Ministry of Micro, Small and Medium Enterprises, Govt. of India

PRODUCTION

INFORMATION BROCHURE

Amingaon Industrial Area, North Guwahati Road, Guwahati-781031.

E mail: trtcproduction@hotmail.com / tcguwahati@dcmsme.gov.in / trtcghy@hotmail.com

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INTRODUCTION

Tool Room & Training Centre, Guwahati has been established by Government of India to cater tooling and training need of Industries of North Eastern Region. The State Government of Assam has provided the land as well as initial building to the Tool Room. TRTC has been registered as Government of India Society on 24th February 2000. It is situated at Amingaon Industrial Area, North Guwahati Road with Administrative Block, Training Block, Modern Workshop, Knowledge Centre, Staff Quarters and Hostel, canteen etc.

The management of the affairs of the Centre rests with the Governing Council constituted by Government of India. Additional Secretary and Development Commissioner (MSME), Government of India, is the President of the Society and the Chairman of the Governing Council.

The training department provides quality training in the field of Design with CAD/CAM/CNC Machining with latest high- tech softwares , Machine Tool Operation, Precision Machining, Welding Technology, IT, PLC, Robotics etc. The production wing manufactures press tools, moulds, jigs & fixtures, gauges and other precision components as per the needs of the industries. In pursuit of excellence, Tool Room & Training Centre, Guwahati has been awarded with an IS/ISO 9001:2015 and IS/ISO 14001:2015 certifications.



OUR CENTRES:

TOOL ROOM & TRAINING CENTRE, CITY CENTRE, BAMUNIM AidAM, GUWAHATI-781021

TOOL ROOM & TRAINING CENTRE, TINSUKIA INDUSTRIAL ESTATE, NEAR GM DI&CC, BORGURI, TINSUKIA 786126

TOOL ROOM & TRAINING CENTRE, JORHAT EXTENSION CENTRE RAJABARI, JORHAT-785014

TOOL ROOM & TRAINING CENTRE, AGARTALA BAMBOO PARK, R. K. NAGAR, AGARTALA- 799008

AIMS & OBJECTIVES

- **To provide qualitative service in the area of Development & Manufacturing of Precision Tools & Components, Design, Project Consultancy.**
- **To develop production facilities of moulds, jigs, fixtures, gauges & other sophisticated tools preferable for Industries.**
- **To provide consultancy facilities primarily for MSMEs units in the field of tool engineering aimed at improvement in productivity.**
- **The aim of the Centre is to promote growth and development of Micro, Small & Medium Enterprises through Technological and Skilled Manpower Support.**

SERVICES OFFERED

- **Manufacturing of different parts of Plastic Moulds, Press Tools, Jigs & Fixtures, Gauges, Extrusion Dies, Blow Moulds.**
- **Manufacturing of high precision Jobs and Machine Components.**
- **Production with latest technologies like CNC and CAM**
- **Repairing, Re-sharpening and Maintenance of Dies and Tools**
- **Reverse Engineering, 3D Scanning & 3D Printing**
- **Precision inspection and measurement using advanced instruments.**

PRODUCTION MACHINES

CNC TURN MILL MACHINE

The CNC Turn Mill machine integrates turning and milling functions in one setup, enabling complex part production. It increases efficiency, reduces setup time, and improves accuracy in manufacturing

SPECIFICATIONS

MAKE	BFW
MODEL	PL600R-Y/1000
REPEATABILITY	0.005 or better C-axis positioning
QUANTITY	01 no
AXIS	X= 500, Y=70 mm, Z=950 mm



APPLICATIONS

- Enables machining of complex components involving both turning and milling operations in a single setup, ensuring high accuracy and consistent quality.
- Eliminates the need for multiple setups, thereby significantly reducing manufacturing time and improving productivity.
- Ideal for components with combined turning and milling features, such as flanges, shafts, and housings.
- Enhances efficiency in batch and mass production, making it well suited for high-volume manufacturing.



CNC TURNING MACHINE

CNC Turning is a high-precision machining process used to create cylindrical components by rotating the workpiece against a cutting tool. At TRTC, our advanced CNC Turning machines are capable of producing complex geometries with superior surface finish and dimensional accuracy — ideal for both training and industrial applications.

SPECIFICATIONS

MAKE	2 BFW Orbiter & 1 AEC Designer
MODEL	Orbitur
REPEATABILITY	0.005 mm
QUANTITY	03 Nos.
AXIS	X=150mm, Z=250 mm



APPLICATIONS

- Precision turning of cylindrical components, ideal for shafts, pins, bushes, and rollers
- Taper, contour, and profile machining for complex geometries with tight tolerances
- Thread cutting and grooving, enabling accurate internal and external threads with fine control
- Fast and repeatable production, making it highly suitable for batch manufacturing of industrial parts



CNC MILLING MACHINE

The CNC Milling Machine is a computer-controlled machining system capable of producing highly accurate and complex components. Designed for precision, speed, and repeatability, it plays a critical role in modern manufacturing, supporting both prototyping and high-volume production.

SPECIFICATIONS

MAKE

BFW

MODEL

3 Chandra+
& 1 Gaurav

REPEATABILITY

0.010mm

QUANTITY

04 Nos.

AXIS

X= 800, Y=350 mm, Z=350mm



APPLICATIONS

- Used for machining complex 2D and 3D components with high dimensional accuracy.
- Ideal for aerospace, automotive, mold-making, and precision engineering industries.
- Supports production of parts with intricate geometries that are difficult through manual operations



3D CMM MACHINE

Mitutoyo APEX 7106 is a high-precision Coordinate Measuring Machine designed for 3D measurement and scanning of complex components. With its granite structure and advanced probing system, it ensures excellent stability, repeatability, and accuracy in demanding inspection environments.

SPECIFICATIONS

MAKE

Mitutoyo

REPEATABILITY

Crysta-Apex S
7106

ACCURACY

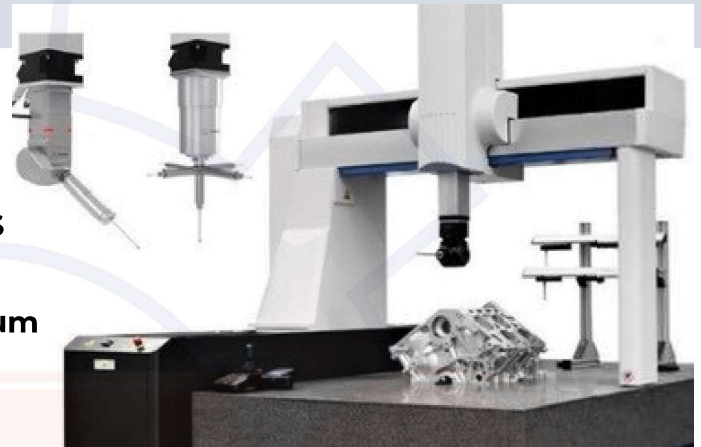
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QUANTITY

01 No.

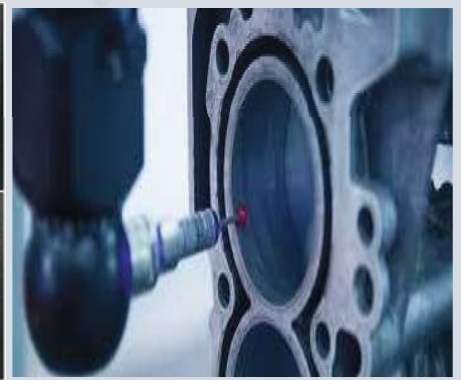
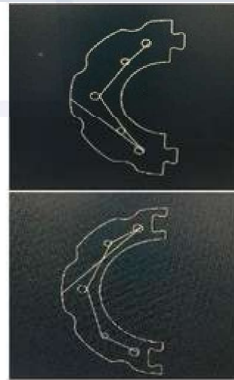
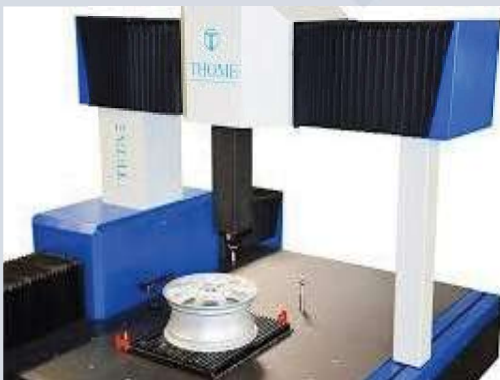
MEASURING LENGTH

600mm X 800mm X 500mm



APPLICATIONS

- Used for high-accuracy 3D measurement and surface scanning of mechanical components.
- Ideal for first article inspection, reverse engineering, and quality control.
- Supports CAD model comparison, GD&T evaluation, and automated inspection cycles.



CNC WIRE CUT MACHINE

The CNC Wire Cut machine is a high-precision electrical discharge machining (EDM) system that uses a continuously moving wire to cut intricate shapes through electrically conductive materials. It is essential for producing complex components with extreme accuracy and smooth surface finishes.

SPECIFICATIONS

MAKE	ELECTRONICA INDIA LIMITED
MODEL	eNOVA25
SURFACE FINISH	0.4 μ Ra
QUANTITY	01 no
AXIS	X= 600, Y=400 mm



APPLICATIONS

- Used for high-precision cutting of hard and conductive materials such as tool steel, carbide, and titanium.
- Capable of producing intricate internal profiles, fine contours, sharp corners, and tight-tolerance geometries that are difficult or difficult with conventional machining methods.
- Widely applied in tool and die manufacturing, including punches, dies, molds, and complex aerospace components.
- Commonly used in industries that demand high dimensional accuracy and surface finish, such as medical devices, aerospace, and electronics.



ROBOTIC WELDING MACHINE

The Robotic Welding Machine is an advanced automation system designed to perform high-speed, high-precision welding with exceptional repeatability, integrated with programmable robotic arms and intelligent welding controls, it increases productivity, reduces human error, and ensures consistent weld quality across large-scale production.

SPECIFICATIONS

MAKE	CLOOS
MODEL	QINEO Star T-406 Premium
AREA	Dia 2950mm
QUANTITY	01 No.
NO. OF CONTROLLED AXIS	06 Nos.



APPLICATIONS

- Used for **precision cutting of hard metals**, such as tool steel, carbide, and titanium. Capable of producing **complex internal profiles, fine contours, & tight-tolerance**.
- **Used in tool and die manufacturing**, punches, molds and **aerospace parts**, Automotive Industries, Ship Building, Heavy Fabrication, construction, punches. molds etc. Geometries that are difficult with conventional cutting methods.
- Commonly used in industries requiring **high dimensional accuracy**, such as medical, aerospace, and electronics.



3D SCANNER MACHINE

The Artec SpaceSpider2 is a high-resolution handheld 3D scanner designed for capturing intricate details with metrology-grade accuracy. Built for industrial use, it excels at scanning small parts with complex geometries and sharp edges

SPECIFICATIONS

MAKE → **Altem technologies**

MODEL → **Space spider 2**

ACCURACY → **0.005 mm**

QUANTITY → **01 No.**



APPLICATIONS

- High-detail scanning of industrial components, tools, molds, and small mechanical parts.
- Used for reverse engineering, quality control, and product development.
- Enables 3D scanning of the human body for applications in medical technology, prosthetics, orthotics, and custom-fit equipment.
- Scanned models can be exported to CAD software for design modifications, 3D printing, and metal casting workflows
- Used in Reverse Engineering, Quality control & inspection, product design & Development, Medical Health-care, cultural heritage & archaeology, Education & Research and Aerospace & Auto-motives



FDM 3D PRINTER

The Fused Deposition Modelling (FDM) 3D Printer is a versatile, user-friendly additive manufacturing system designed to build durable parts layer by layer using thermoplastic filaments. It is ideal for rapid prototyping, design validation, and low-volume functional part production.

SPECIFICATIONS

MAKE	CREALITY Ender-3
MODEL	V3 KE 220 X 220 X
AREA	240mm
QUANTITY	06 Nos.



APPLICATIONS

- Ideal for **rapid prototyping**, **functional testing**, and **design validation** in early product development stages.
- Used to create **custom jigs**, **fixtures**, **tooling aids**, and **low-volume end-use parts**.
- Supports creation of **visual models**, **concept mock-ups**, and **casting patterns** for further production processes.

Also applicable in educational, architectural, and medical model-making.



SLA 3D PRINTER

The Stereolithography (SLA) 3D Printer is a high-resolution additive manufacturing machine that uses **UV laser or LCD light** to cure liquid resin layer by layer. Known for producing parts with **exceptional surface finish and intricate detail**, it is ideal for applications where precision and aesthetics are critical.

SPECIFICATIONS

MODEL

STEREOLITHOGRAPHY

RESOLUTION

30 μ

QUANTITY

01 no

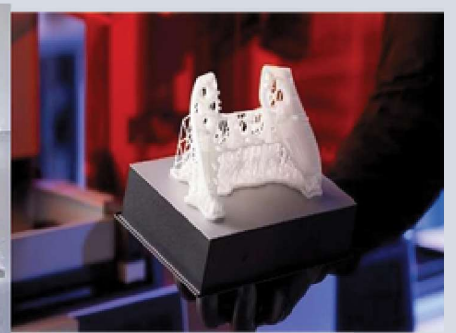
VOLUME

300mm X 180mm X 250 mm



APPLICATIONS

- Ideal for producing **high-detail prototypes**, functional model, **miniatures**.
- Enables **fine-detail mold pattern & models for casting**, and **functional prototypes** with excellent dimensional stability.
- Supports **biomedical aerospace**, and **creative design** industries with accuracy and aesthetic quality not achievable with FDM.
- Used in Prototyping & Product design, dental & medical Application, Jewellery & Fashion, Engineering & Industrial Application, Education & research etc



CONVENTIONAL MACHINE FACILITIES

Vertical Milling Machine

Make: BFW
Model: VF 3.5E
Quantity: 01 No.
X=1000mm, Y=450mm,
Z=450mm



Surface Grinding Machine

Make: Parmar Pinnacle
Model: FASGM 10050
Quantity: 01 No.
1000x500mm,
Permissible weight: 750 kg
Accuracy: 0.001 mm
(vertical)



Vertical Milling Machine

Make: Batliboi
Model: BFCV15
Quantity: 01 No.
X=1350mm, Y=315mm,
Z=500



**Centre Lathe
Machine**

**Make: Leader Machine
Tools
Model: 1568211
Quantity: 01 No.
D 1000 mm x L 3500
mm
Permissible weight: 3
Ton
Accuracy: 0.1 mm**



**Radial Drilling
Machine**

**Make: Batliboi
Model: BR615
Quantity: 01 No.
Drilling Capacity upto
75mm**



**Vertical Milling Machines
Horizontal Milling Machines
Universal Milling Machines
Lathe Machines**



PROFILE PROJECTOR



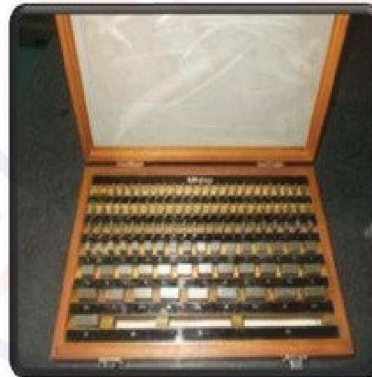
MAKE: RADICAL
MODEL: RPP-3000
QUANTITY: 01 No.
RESOLUTION = 0.001 mm
TABLE SIZE = AL 300x220 mm
EFFECTIVE TABLE AREA = 275x180 mm
XY RANGE = 200x110 mm
Max. HEIGHT = 115 mm

TOOL MAKER'S MICROSCOPE



MAKE: Mahr
MODEL: Mar Vision 200mm
QUANTITY: 01 No.
RESOLUTION = 0.0001 mm
TABLE SIZE = 150x150 mm
TABLE LOAD = 15 KG
XY = 50/50
OBJECT HEIGHT = 190 mm

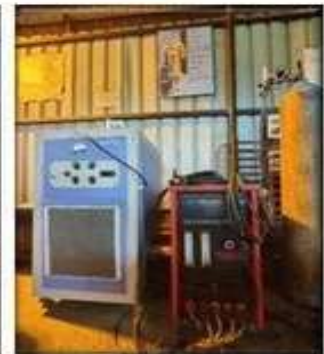
PRECISION MEASURING TOOLS & EQUIPMENTS



WELDING & FABRICATION FACILITY

Tool Room & Training Centre, Guwahati is having one of the best metal joining facilities at Amingaon & Jorhat Centres.

Different types of weldings like ARC, Gas, TIG, MIG, Submerge ARC, Plasma weldings are carried out in its centres for catering the need of MSEs in the field of fabrication.



HYDRAULIC POWER PRESS

**Make: HIND HYDRAULICS & ENGINEERS
Model: C TYPE HYDRAULIC POWER PRESS
Capacity: 100 Ton**



TRYOUT PRODUCTION FACILITY

INJECTION MOLDING MACHINE

**Make: SHIBAURU
MACHINE INDIA Pvt. Ltd.
Model: TS 250 LNC6
Quantity: 01 No.
Clamping force: 250 T**



LIST OF MACHINES AND INSTRUMENTS

No.	Name of the Machine	Quantity	Manufacturer & Model Number	Working Capacity / Max Table Size
01	CNC Wire Electro Discharge Machine	01 No.	M/S Electronica Machine Tools Ltd. Ultra Cut FI	400mm x 350mm x 250mm / Or 10 mm
02	CNC Vertical Milling Machine	01 No.	BFW Model No.: Gaurav BMV 35TC20	400mm x 450mm x 500mm
03	CNC Lathe Machine	01 No.	M/S ACE Designers Ltd. Model No.: LT16XL	D270mm x 1,400mm
04	CNC Wire Electro Discharge Machine	01 No.	Electronica Hitech Tool Master	600mm x 400mm x 350mm, UV-120mm, Taper ±300, Surface Finish 0.4 Ra
05	CNC Vertical Milling Machine	02 Nos.	Model No.: CHANDRA	X=800mm, Y=350mm, Z=350mm, Accuracy 0.012mm
06	CNC Lathe Machine	02 Nos.	BFW Model No.: ORBITUR	Dia=270mm, Length=250mm, Accuracy 0.007mm
07	Injection Moulding Machine	01 No.	Shibaura Machine India Pvt. Ltd. TS250 LNC6	Screw Dia:50mm, Shot: Min gms – Max 402 gms, Mould Stroke:500–575mm, Distance Between Tie Bars:580x580mm Max Mould Height:575–650mm
08	Hydraulic Press Machine	01 No.	M/s Vickson Model No.: HP-OI	1 Ton
09	Hydraulic Press Machine	01 No.	Hind Hydraulic & Engineers Pvt. Ltd. 12717	Press Capacity:100 Ton, Table:600x400mm, Ram Stroke:420mm
10	Horizontal Milling Machine	01 No.	M/s Batliboi Ltd. BF	X=1350mm, Y=320mm, Z=500
11	Vertical Milling Machine	01 No.	M/S Batliboi Ltd. BFCVIS	X=1350mm, Y=315mm, Z=500
12	Vertical Milling Machine	02 Nos.	M/s BFW VFI	X=750mm, Y=450mm, Z=400mm
13	Vertical Milling Machine	01 No.	M/s BFW VF2	X=1000mm, Y=450mm, Z=400mm
14	Vertical Milling Machine	01 No.	M/s BFW VF2E	X=1000mm, Y=450mm, Z=400mm
15	Vertical Milling Machine	01 No.	IWW VF3.SE	X=1200mm, Y=355mm, Z=400mm
16	Lathe Machine	02 Nos.	M/s HMT Ltd. NH26	D260mm x L1000mm
17	Lathe Machine	03 Nos.	M/s I-LMT N1122	D220mm x 1100mm
18	Surface Grinding Machine	01 No.	AVRO REETA24	X=600mm, Y=300mm, Z=275mm
19	Surface Grinding Machine	01 No.	PRAGA	X=600mm, Y=200mm, Z=175mm
20	Universal Cylinder Grinding	01 No.	M/s HMT K130U	30mm x 100mm
21	Cylindrical Grinding	01 No.	M/S Modern KG	D150mm x L1000mm
22	Universal Cylindrical Grinding	01 No.	Ltd. ANUVHAB 130U	D130mm x L800mm

LIST OF MACHINES AND INSTRUMENTS

23	Universal Tool & Cutter Grinder	01 No.	HMT PRAGA	D130mm x L760mm
24	Surface Grinding Machine	01 No.	M/S Parmer Pinnacle FASGM10050	100mm x 500mm
25	Conventional Radial Drilling Machine	01 No.	M/S Batliboi BR615	Drilling Capacity=75mm
26	Pillar Drilling Machine	03 Nos.	M/S Premier PRL-40	Drilling Capacity=30mm, Tapping=M16
27	Pedestal Grinding	03 Nos.	M/S Sieco SPG 350	350mm x 50mm x 50.8mm
28	Shaping Machine	02 Nos.	M/s MMM Loyal LSI	400mm x 350mm x 250mm
29	Power Hacksaw	01 No.	RK Foundry & Engine Works	200mm x 200mm
30	Power Shearing Machine	01 No.	Krishna Machine Tools	750mm to 1200mm
31	TIG 315 AC/DC	01 No.	Ador Fontech Ltd. 1104270	TIG: 20A/11V – 315A/22.6V
32	GMAW Welding Machine	01 No.	Model No.: IK-GMAW-400	50A/16.5V – 400A/34V
33	GMAW Welding Machine	01 No.	Model No.: IK-GMAW-400	50A/16.5V – 400A/34V
34	IGBT Inverter ARC	05 No.	Model No.: CMMARC400	30A/21.2V – 400A/36V
35	ARC Welding Rectifiers – 300	05 No.	Model No.: ARC300	20A/10.8V – 400A/26V
36	Inverter ARC – 200T	08 No.	Model No.: ARC200	30A/21V – 200A/28V
37	Polymovent Fume Extractors	04 No.	Model No.: Draftmax Basic	2200W, 400V, 50Hz
38	Spot Welding Machine	01 No.	M/S Soham Impex SI-SP-7.5	415V, 3 Phase, 50Hz
39	Plasma Welding Machine	01 No.	Model No.: BW 04501	230V, 12A, 1Phase, 50Hz
40	Submerge ARC Welding	01 No.	M/S Adore Tornado SAW-1250	03 Phase, 415V
41	Plasma Cutting Machine	01 No.	Powermax85	25A/90V – 85A/114V
42	Pipe Bending Machine	01 No.	Inder Hydraulic 213B	2"
43	Pipe Cutting Machine	01 No.	M/S Stanley	355mm, 3800 Rpm, 240V
44	Welding Machine	01 No.	Ador Fontech Ltd.	50V/22V – 400A/36V
45	Surface Tester	01 No.	Mitutoyo	-
46	Tool Maker Microscope	01 No.	Mar Vision	-
47	Profile Projector	01 No.	Radical Scientific Equip. Pvt. Ltd.	Magnification: 10x, 20x, 50x, 100x

LIST OF MACHINES AND INSTRUMENTS

No.	Name of the Machine	Quantity	Manufacturer & Model Number	Working Capacity / Max Table Size
48	Temp Controller of Heat Chamber	01 No.	MAKTHERM	0 to 1200°C
49	Outside Micrometer	04 Nos.	Mitutoyo	0 to 25mm
50	Outside Micrometer	03 Nos.	Mitutoyo	0 to 50mm
51	Outside Micrometer	01 No.	Mitutoyo	50 to 75mm
52	Outside Micrometer	01 No.	Mitutoyo	0 to 100mm
53	Outside Micrometer	01 No.	Mitutoyo	0 to 125mm
54	Outside Micrometer	01 No.	Mitutoyo	0 to 150mm
55	Outside Micrometer	01 No.	Mitutoyo	0 to 175mm
56	Outside Micrometer	01 No.	Mitutoyo	0 to 200mm
57	Outside Micrometer	01 No.	Mitutoyo	0 to 225mm
58	Outside Micrometer	01 No.	Mitutoyo	0 to 250mm
59	Outside Micrometer	01 No.	Mitutoyo	0 to 275mm



PRODUCTION ACTIVITIES



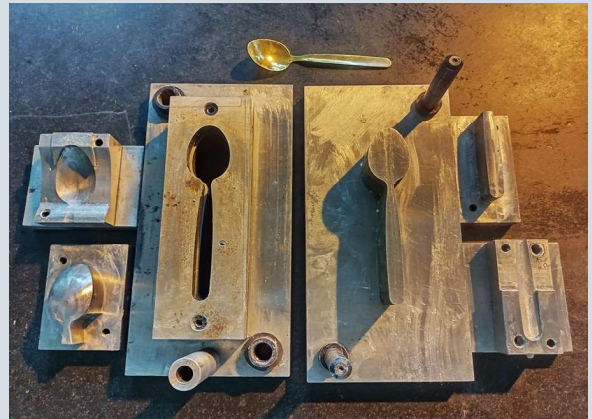
Blanking & Forming Tool for Wood Apple leaf



Gravity Casting Tool for Diya (Lamp)



Blanking & Forming Tool for Lotus

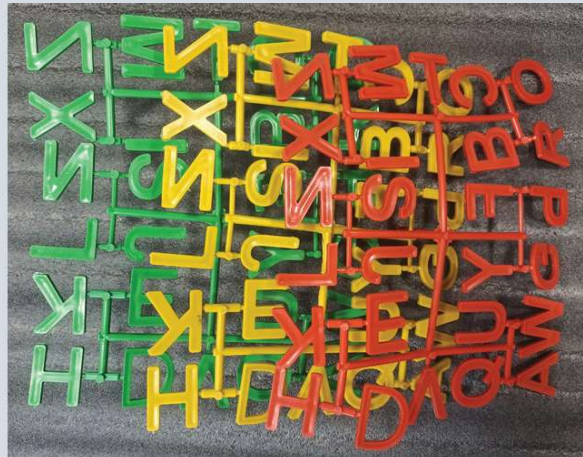
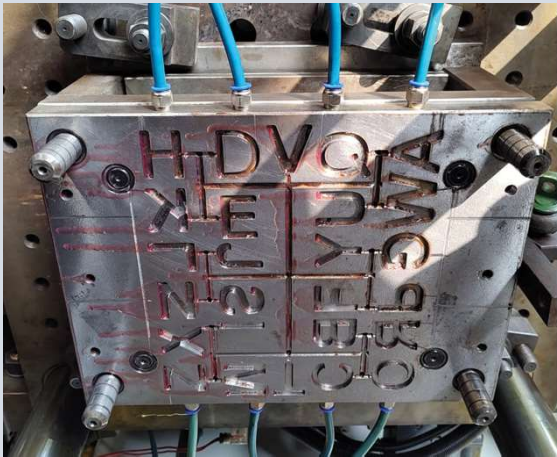


Blanking & Forming Tool for spoon



Compression Mould for Eco-friendly Areca nut leaf plate

PRODUCTION ACTIVITIES



26 Cavity Fully Automatic Family Injection Mould for English Alphabet



Manufactured Powder Delivery nozzle for metal 3D printer



High Precision Components

PRODUCTION ACTIVITIES

Initiative taken under Atmanirbhar Bharat Abhiyan – Manufacturing of various products as Imports Substitutes.



Star Wheel Assembly



Clamp Jaw set



Teflon digestion vessel



Cap Gripper



Aircraft Hydraulic Jack Test Rig

OUR ESTEEMED CLIENTS





TOOL ROOM & TRAINING CENTRE, GUWAHATI

Ministry of Micro, Small & Medium Enterprises, Govt. of India

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E mail: trtcproduction@hotmail.com / tcguwahati@dcmsme.gov.in / trtcghy@hotmail.com

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