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| https://lh7-rt.googleusercontent.com/docsz/AD_4nXeH1FcN-dfwvkyqb5DrkBfpBToumxzLSm9nofJpsuo4VFAzT6wLHQ5PvAGXjm_Dyl8o8bR7PhfvNcOYqPu5a3TSsHoqalybJkExrwuImxtl4ItZGGNoxWarlK0qBR_Mw9IaUQ6ZDtJtSYXminRBPgAkLuFEooJUMk1zNLW0aSbMkRpzzjmPxQ?key=0xxaWLJ99kSZ7khgN95IgUYB |  **CNC VERTICAL MACHINING CENTER****Name of the equipment:** CNC VERTICAL MACHINING CENTER**Make & Model:**Agni BMV45 TC24 4-axis vertical machining centre**I-Stem Registration ID-** **3224889****Category of Instrument**Advanced Manufacturing**Types of Analysis / Testing**Machining**Application:*** Prototyping & Product Development
* Precision Component Manufacturing

**Description of Instrument** CNC machining of complex geometries using codes written explicitly or generated by using Master cam software. |

**Booking Details**

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| **Book through I-STEM:** <https://www.istem.gov.in/>**Slot Booking Link**[I-STEM Slot Booking link for External User](https://www.istem.gov.in/equipment-info/24889/CNC-Vertical-Machining-Centre) | **Booking available for**Internal and External Both**Requisition form for** [Internals](https://randc.nitc.ac.in/pdf/instruments/med/20.%20Internal.pdf)[Externals](https://randc.nitc.ac.in/pdf/instruments/med/20.%20External.pdf) |

**Contact Details**

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| **Faculty In-charge:** Dr. Basil Kuriachen**Email ID:**bk@nitc.ac.in**Phone number:** +91-9947187133 | **Technical Staff:**  Mr. Unni Krishnan(TA )kishan@nitc.ac.in  | **Department**MED**Office Email ID**medoffice@nitc.ac.in**Location**FIST LAB, CAD/CAM CENTRE, Department of Mechanical Engineering**Lab Phone No**0495 228 6476 |

**Features, Working Principle and Specifications**

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| **Features of the equipment*** Vertical Spindle Orientation
* Automatic Tool Changer (ATC) – Allows for quick tool swaps (typically 16 to 30+ tools).
* Rotary Table (4th Axis Option) – Enables indexing for complex geometries.
 | **Unique features/Measurement capabilities, if any*** Multi-Axis Capabilities (Beyond 3-Axis)
* High-Speed Machining (HSM) Capabilities
* Enhanced Chip & Coolant Management
 |
| **Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)*** Three axes XYZ travel (X – 600mm, Y – 450mm, Z – 500mm)
* Clamping area 450 x 900 mm2
* Position accuracy +/- 0.005mm
* Max. Tool diameter 75 mm
* Max. Tool length 250 mm
 | **Measurement/Sample specifications:**  Metallic/composite/alloys etc |

**Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions**

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| --- |
| * Quantity:
* Sample Type: Metallic/composite/alloys etc
* Pre-preparation:
* Maximum No. of Samples Accepted at a Time- 2
* Minimum No of Days Required for Analysis – 1
 |

**User Charges Rs. (GST Extra)**

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| **Internal** | **External Academic Institutes** | **National R&D Lab** | **Industry** |
| 250/hour | 250 + 18%GSTRs. 295 | 250 + 18%GSTRs. 295 | 250 + 18%GSTRs. 295 |