cmti

Annexure-1

**Ref: Procurement of CAD/CAM software NX latest version with Total machining, Machine tool kits with postprocessors.**

**Compliance Statement (to be filled by supplier)**

| **Module** | Compliance Yes/No as applicable | Remarks / Feature description |
|---|---|---|
| **NX CAD / CAM Total Machining - *No. of Licenses –1*** | | |
| **NX Advanced CAD module** | | |
| Generic motion control | | |
| Wizard builder | | |
| Shop Documentation | | |
| Work Instruction Authoring | | |
| Solid Modelling and Drafting | | |
| Synchronous modelling | | |
| Drafting | | |
| Visual Reporting | | |
| Surface and edge extraction | | |
| Surface extensions and patches | | |
| Feature Modelling | | |
| Advanced Freeform | | |
| User Defined Features | | |
| Sheet Metal design | | |
| Quick Check, Web Express, and Xpress Review | | |
| Geometric tolerancing | | |
| Studio visualization | | |
| Check-Mate Runtime | | |
| Product manufacturing information | | |
| Assembly modelling | | |
| Standard model editing functions | | |
| Associative geometry | | |
| 3D wireframe construction for boundaries | | |
| Probing cycle support | | |
| **NX Advanced CAM module** | | |
| **2DTurning** | | |
| Turn Roughing | | |
| Turn Finishing | | |
| Groove turning | | |
| Thread cutting | | |
| Centering | | |
| Simple Drilling | | |
| Drilling with chip break | | |
| Drilling with pecking | | |
| Reaming | | |

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|---|---|---|
| Tapping | | |
| Thread Milling | | |
| Boring | | |
| **Drilling cycles** | | |
| Helical Drilling | | |
| Boss thread milling | | |
| Radial Groove milling | | |
| Hole milling | | |
| Centre drilling | | |
| Drilling (with chip breaks) | | |
| Deep hole drilling | | |
| Thread drilling | | |
| Sequential Drilling | | |
| Hole chamfer milling | | |
| Boss milling | | |
| Back Countersinking | | |
| **3D Milling** | | |
| Generalized roughing | | |
| High speed machining (HSM) | | |
| Contour Milling | | |
| Planar milling | | |
| Cavity Milling | | |
| Adaptive Milling | | |
| Plunge Milling | | |
| Z-Level Milling | | |
| Face Milling | | |
| Floor and wall milling | | |
| Groove Milling operation | | |
| Sequential Milling | | |
| Surface Contouring | | |
| 3 Axis surface machining | | |
| Interpolated patterns | | |
| Adaptive Milling with a Bottom-Up Addition | | |
| Pillar Cutting | | |
| Guiding Curves strategies | | |
| Raster and offset patterns | | |
| Tool path editor | | |
| NURBS Output | | |
| G-code drive machine simulation | | |
| Multi-channel program synchronization | | |
| Feature Based Machining Author | | |
| Online post processor library for free post | | |
| Tool path replay and material verification | | |
| ***Mill Turn Cycles*** | | |
| **5 Axis Milling** | | |
| Tube Milling | | |
| Automatic valley rest milling | | |
| 5 axis surface machining | | |

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|---|---|---|
| 5 axis manual machining (sequential milling) | | |
| 5-axis surface milling with lead/lag | | |
| 5-axis swarfing | | |
| 5-axis cutting with user control over drive, part and Check geometries. | | |
| G-code driven machine simulation | | |
| Feed rate optimization | | |
| Automatic 3-axis tilt for prevention of collision in deep cavities | | |
| Shop documentation | | |
| Post Builder | | |
| Post Configurator | | |
| NC machine tool builder | | |
| **New features** | | |
| Automated deburring operation | | |
| Rotary roughing | | |
| 5 axis guiding curves | | |
| Prime turning | | |
| Automatic Holder creation | | |
| Multistep IPW | | |
| Z Level undercut | | |
| AI Powered NC Programming | | |
| Flow milling | | |
| Planar deburring | | |
| Thread turning operations | | |
| U-Axis turning support | | |
| 3 Axis guiding curves | | |
| Turning Reversal spindle direction | | |
| Tool creation and turning tool usage | | |
| Any other Recent New features | | |
| **Postprocessor and ISV for all the machines listed below** | | |
| • *HARDINGE – Hard Turning machine* | | |
| • **Kinematic model of the machine for simulation is under the scope of vendor** | | |
| • **The prove out of the post processors and ISV are to be done by machining of components as per the CAD Model /drawings of CMTI. The necessary CAD model and sample program pertaining to the particular machine will be provided by CMTI.** | | |
| **CAD Translators** | | |
| CAD interfaces for smooth data exchange processes | | |
| Import standard | | |
| IGES | | |
| STEP | | |
| STL | | |

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|---|---|---|
| DXF/DWG | | |
| Parasolid | | |
| HyperCAD | | |
| Pointcloud | | |
| **Import Direct** | | |
| SOLIDWORKS | | |
| Autodesk inventor | | |
| **Export** | | |
| IGES | | |
| STEP | | |
| STL | | |
| DXF/DWG | | |
| Direct solid modeling and A Class surface creation | | |

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| **Training:** | | |
| **Minimum 15 days 3 phase training (5 days X 3 phases)** for CMTI personnel, covering all features. Training licences to facilitate training of 5 CMTI personnel during the training session to be arranged. Additional training as and when required by CMTI on mutually agreeable dates to be provided. | | |
| **Other conditions:** | | |
| Software installation to be done at CMTI site prior to training. | | |
| The supplied licence is perpetual | | |
| The supplied licence to be a floating licence | | |
| **Vendor** to issue training licences to CMTI during training programs conducted at CMTI. These additional licences should be valid for the complete training period at CMTI. | | |
| **Vendor** should extend support to CMTI in new product developments/metal cutting projects for program generation and prove out if needed. | | |
| **Vendor** to offer One-year AMC to CMTI from the date of installation at CMTI free of cost. | | |
| Post processors prove out to be done at CMTI site. | | |