

**TENDER NO.65.12.8020**  
**TECHNICAL SPECIFICATION**

<b>Major parameter</b>	<ol style="list-style-type: none"> <li>1. Set of Torquing tool for Cylinder Head nut of WDM2 Engine as well as Crab nut of EMD Loco Engine consisting of metric tool drive size ¾” Torque range 135 to 950Nm, speed 30 RPM, Weight 5.4 KG &amp; Dimension 336 x 210 x 64 (<b>Length x height x gearbox diameter</b>) with accessories Sp. Reaction arm for Alco cylinder head nut and socket ¾” x 46 mm And metric tool model E RAD 5400 with Drive size 1.1/2”, Torque range 1080 to 5400 Nm, speed 5.2 RPM, Weight 14 Kg, Dimension 450 x 222 x 89 (<b>Length x height x gearbox diameter</b>) with accessories Sp. Reaction arm for Alco for EMD Crab nut and Socket 1.1/2” x 70mm.</li> <li>2. Advanced pistol grip torque wrench designed for high torque assembly applications. High degree accuracy of +/- 3 %, and repeatability of +/- 2 %, controlled by precision gear box and an advanced AC servo motor.</li> <li>3. Capable of data collocation in prescribed format which will include operator name, time, type of Job start and finish of the operation with the record of final Torque/angle measurement to take printout for record.</li> <li>4. LED indicator lights, indicating status of torque (pass/ fail)</li> <li>5. Separate controller module with each tool for setting of Torque, with digital readout.</li> <li>6. Eight channels for application torque/angle presets.</li> <li>7. Extremely low noise – 75 db</li> <li>8. Fast and convenient error free digital single increment torque setting.</li> <li>9. Password protected Fast and convenient error free digital single torque setting.</li> <li>10. Easily selectable pre set application and torque/angle values.</li> <li>11. On tool data log viewing &amp; real time clock for data logging.</li> <li>12. 15 feet long heavy duty electric cable from controller to tool</li> <li>13. Optional Reaction Arm with dummy socket to avoid pinch points.</li> </ol>
<b>Concomitant accessories</b>	Portable Swivel Crane with Spring Balancer to hold the tool, for operator friendly torque operation.
<b>Optional Accessories</b>	Two copies of printed original operation & maintenance Manuals.
<b>Spares</b>	Cost of consumables required for two years as quoted by firm will be advised separately to consignee
<b>Warrantee requirement</b>	18 months from the date of commissioning
<b>Special requirement</b>	<ol style="list-style-type: none"> <li>1. Commissioning at the consignee site by firm free of cost. Payment will be made 80% after commissioning &amp; 20 % successfully working after two months.</li> <li>2. Firm practical demonstration and the suitability inline with above technical specification of the M&amp;P must be conducted at diesel shed Itarsi before supplying the final equipment to the shed at on free of cost basis.</li> </ol>

**For Controller of Stores**