**FEATURES:**

- Built for high cycle use with ball bearing joints & rigid support column
- The TR-1 features high torque capacity (40 Nm) with tool adaptors for most tool brands
- Optional encoders provide positional information for sequential fastening & changing tool strategies
- A spring loaded cable support is also included together with an output cable for the two (2) encoders
- Encoders may be used on an existing PLC controller at the station. (Optional controller available)
- The swivel handpiece & remote start trigger provide a comfortable and ergonomic workstation
- A combination spring & air cylinder support system handles tools up to 5 lbs. (2.3kg) with controlled “down assist” for self-tapping & similar applications
- The TR series may be supplied with screw sensors & blow feed system for a complete “smart” workstation

For more information & additional data, please email: info@assemblyauto.com
“TR” Series Torque Arms

**Basic TR-1**

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**Features and Benefits:**

- Rigid construction.
- Sealed bearings at each joint for smooth action and minimum deflection.
- Air cylinder/spring suspension for a zero gravity feel.
- Adjustments in each plane to ensure perpendicularity to the work surface.
- Optional swivel hand piece to keep the operator’s wrist straight.
- Optional remote start trigger for lever operated tools to keep the operator’s hand close to the process.
- Optional down-assist feature. Great for thread forming fasteners and maintaining positive bit engagement.
- Optional encoders provide X-Y positioning for “Smart Workstations”.

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<table>
<thead>
<tr>
<th>Model</th>
<th>Max Tool Weight</th>
<th>Max Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-1</td>
<td>5 lbs. (2.3 Kg)</td>
<td>354 In-lb (40 NM)</td>
</tr>
<tr>
<td>TR-1HD</td>
<td>5 lbs. (2.3 Kg)</td>
<td>620 In-lb (70 NM)</td>
</tr>
<tr>
<td>TR-2</td>
<td>10 lbs. (4.5 Kg)</td>
<td>1328 In-lb (150 NM)</td>
</tr>
</tbody>
</table>