Sunnen's HTC Series of CNC tube honing machines are ideal for small diameter tubes such as hydraulic cylinders and precision tubing.

The HTC provides bore finishing solutions for diameters from 4.1 to 50 mm (.161 to 1.96 in.) with a bore length up to 2760 mm (108.6 in.).

The HTC features a unique tool expansion and feed system that is capable of maintaining close size and finish specifications. A special feature of the feed system provides for maximum protection against overloading the tool.

Sunnen offers multiple tooling solutions for this challenging process including one of the latest developments in tooling technology – the Sunnen MMT multi-stone mandrel.

Sunnen's MMT mandrels are available with single or multiple superabrasive stones and provide fast stock removal.

All Sunnen systems, tooling and abrasives are backed by world class customer service and technical support. For more information, contact your Sunnen Sales and Application Engineer.

WWW.SUNNEN.COM
**HTC Series Tube Hones**

**Key Features:**
- Ideal for small diameter tube applications.
- Tool expansion and feed system maintains close size and finish specifications.
- Unique reverse feed system provides for maximum protection against overloading the tool.
- Uses a variety of tools including Sunnen’s MMT multi-stone mandrels and General Hone tooling and abrasives.
- For optimum control of bore geometry, a computer is used to control all functions including stroke position, motion, stone feed and cutting pressure.
- A touch screen allows for easy programming and recommends the proper tool and calculates the spindle speed.
- Bore geometry errors are corrected automatically.
- Tool slide allows spindle carriage to be moved away from bore for easy inspection.
- Equipped with traveling driveshaft for maximum tool stability.

**Specifications:**

**Standard Capacity:**
- 4,1 to 25 mm (161 to 1.0 in.)
- 400 mm (15.75 in.) maximum workpiece O.D.

**Spindle:**
- 1,1 kW (1.5 Hp)
- 150 - 1500 RPM, manually adjusted

**Stroke Movement:**
- 1,1 kW (1.5 HP) Spindle motor
- 3,2 kW (4.3 HP) Servo Drive
- 1 to 40 meters (1 to 131 ft) per minute stroke rate adjustable in 0,1 m/min (3.5 ft/min) increments
- Dwell and oscillation feature

**Feed System:**
- 0,2 kW (.25 HP) Servo Drive
- Industrial PC control
- Zero Shutoff
- Automatic geometry correction and

**Coolant System:**
- 38 liters/min (10 gal./min) flow rate
- Magnetic separator (cleaning rate 70 percent)
- Auto/manual start of coolant

**Electrical System:**
- 230/460 Volt, 60 Hz, 3-phase (via transformer)
- or 400 Volt, 50 Hz, 3-phase
- Automatic stone wear compensations

<table>
<thead>
<tr>
<th>Specifications</th>
<th>HTC-1120</th>
<th>HTC-2120</th>
<th>HTC-3120</th>
<th>HTC-3120*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Stroke Length:</td>
<td>760 mm (29.9 in.)</td>
<td>1760 mm (69 in.)</td>
<td>2760 mm (108.6 in.)</td>
<td>2500 mm (98.4 in.)</td>
</tr>
<tr>
<td>Coolant Capacity:</td>
<td>300 liters (79.4 gal.)</td>
<td>300 liters (79.4 gal.)</td>
<td>300 liters (79.4 gal.)</td>
<td>300 liters (79.4 gal.)</td>
</tr>
<tr>
<td>Machine Length:</td>
<td>4200 mm (165 in.)</td>
<td>6200 mm (244 in.)</td>
<td>8200 mm (323 in.)</td>
<td>8200 mm (323 in.)</td>
</tr>
<tr>
<td>Machine Width:</td>
<td>1200 mm (47 in.)</td>
<td>1200 mm (47 in.)</td>
<td>1200 mm (47 in.)</td>
<td>1200 mm (47 in.)</td>
</tr>
<tr>
<td>Machine Height:</td>
<td>1500 mm (59 in.)</td>
<td>1500 mm (59 in.)</td>
<td>1500 mm (59 in.)</td>
<td>1500 mm (59 in.)</td>
</tr>
<tr>
<td>Machine Weight:</td>
<td>2000 kg (4409 lb.)</td>
<td>2200 kg (4850 lb.)</td>
<td>2400 kg (5291 lb.)</td>
<td>2400 kg (5291 lb.)</td>
</tr>
</tbody>
</table>

Traveling driveshaft support standard on all machines

*Can be equipped with two traveling driveshaft supports

SUNNEN WORLDWIDE

Sunnen Products Company
World Headquarters
St. Louis, MO – USA
Phone 1.314.781.2100
Fax 1.314.781.2258
Toll Free 1.800.325.3670
Email sunnen@sunnen.com
www.sunnen.com

Switzerland – Sunnen AG
Phone +41 71 649 33 33
Fax +41 71 649 33 34
Email info@sunnen.ch
www.sunnen.ch

Italy – Sunnen Italia S.r.l.
Phone +39 02 383 417 1
Fax +39 02 383 417 50
Email sunnen@sunnenitalia.com
www.sunnenitalia.com

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