Hand Installation Pincers (HIP)
HIP 7000 | MCR, HIP 11000 | MCR, HIP 16000 | MCR

Recommended for the installation of Oetiker Stainless Steel Multi Crimp Rings

Benefits
- High quality design
- Easy to use
- Durable, reliable swaging

Minimal swaging time: fast and easy installation
Compound action: superior mechanical advantage
Custom jaws: to suit customer application
Hand Installation Pincers for Multi Crimp Rings

TECHNICAL DATA OVERVIEW

Ratchet Swaging Tool

<table>
<thead>
<tr>
<th>Model No.</th>
<th>HIP 7000</th>
<th>MCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item No.</td>
<td>Size specific</td>
<td></td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>290.0 mm</td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>77.0 mm</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>23.4 mm</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>680 g</td>
<td></td>
</tr>
<tr>
<td>MCR range *</td>
<td>5.0 – 405R to 11.0 – 506R</td>
<td></td>
</tr>
<tr>
<td>Reference jaw force</td>
<td>7,000 N</td>
<td></td>
</tr>
</tbody>
</table>

Heavy Duty Swaging Tool

<table>
<thead>
<tr>
<th>Model No.</th>
<th>HIP 16000</th>
<th>MCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item No.</td>
<td>Size specific</td>
<td></td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>380.0 mm</td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>120.0 mm</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>29.0 mm</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>2000 g</td>
<td></td>
</tr>
<tr>
<td>MCR range *</td>
<td>5.0 – 405R to 17.0 – 908R</td>
<td></td>
</tr>
<tr>
<td>Reference jaw force</td>
<td>16,000 N</td>
<td></td>
</tr>
</tbody>
</table>

*Note:
MCR rings are defined by the as supplied ID before swaging
HIP jaw Ø is the MCR target OD after swaging
HIP jaw Ø is marked on tool

APPLICABLE CLAMPS

<table>
<thead>
<tr>
<th>Product Group</th>
<th>MCR Size (mm)</th>
<th>Band width (mm)</th>
<th>Material Thickness (T)</th>
<th>Assembly tools: Ratchet Swaging Tool HIP 7000</th>
<th>MCR</th>
<th>Heavy Duty Swaging Pincer HIP 11000</th>
<th>MCR</th>
<th>Heavy Duty Swaging Pincer HIP 16000</th>
<th>MCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>5.0–11.0</td>
<td>4.0–6.5</td>
<td>0.5</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>5.0–17.0</td>
<td>4.0–9.0</td>
<td>0.5–0.8</td>
<td>-</td>
<td></td>
<td>-</td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

DESCRIPTION

Oetiker Hand Installation Pincers are designed for installing spiral welded stainless steel Multi Crimp Rings. They are not suitable for puzzle lock Multi Crimp Rings.

All HIP series MCR tools are engineered to suit the diameter reduction of the application, and are selected based on the required swaging force to achieve desired roundness. Maximum diameter reduction of two jaw swaging tools is limited to approximately two wall thicknesses (2T) of the ring.

Hand swaging is ideally suited for low volume assembly, field work as well as prototype and development work.

The low investment is ideal for low volume and cost sensitive applications where a high performance multi crimp ring connection is desired.

Ratchet Pincer models are light, and the center handle allows for single handed pincer use. The ratchet mechanism releases when full closure is achieved. Process reliability is supported by preventing incomplete handle stroke.

Heavy Duty Pincer models can achieve exceptionally high jaw forces to swage wider band and thicker wall rings onto applications which provide more compression resistance. Heavy Duty pincers have a preload and positive handle stop which indicate full jaw closure to assure roundness of the swaged ring.

Oetiker will be pleased to help you find the correct choice for your specific application. For detailed information, including application specific Item No., please contact your local Oetiker sales office.
CLOSING FORCE COMPARISON CHART

The mechanical advantage increases as the jaws are closed, thus providing for high clamping forces when needed most.

INSTRUCTION GUIDE
RATCHET PINCER HIP 7000 | MCR

1. Begin swaging with one hand
2. Squeeze handles, ring compresses
3. If swaging requires more force, use two hands
4. Process is complete when handles stop and release

Notice: Hand pincer closing force consistency cannot be guaranteed, given the inherent variability of applied force. Reference jaw forces are guidelines only, actual pincer force varies on basis of applied hand force, local worker safety limits and specific application properties. Max closing force of clamp may be exceeded. It is the responsibility of the end-user to assure worker safety and final connection integrity.