**Pneumatic Wedge Grips 10, 20, 50, 100 and 300 kN**

- Self-aligning centric jaw movement
- Self-intensifying clamping system to hold a sample securely in place
- Ideal for complicated samples with low coefficient of friction such as hard steel foils, Plastic or rubber with fibers etc.
- Can be supplied with pull rods of different length for use in temperature chambers*

<table>
<thead>
<tr>
<th>Item no.:</th>
<th>TH175-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load:</td>
<td>10 kN</td>
</tr>
<tr>
<td>Clamping force:</td>
<td>20 kN at 7 bar and 10 kN load</td>
</tr>
<tr>
<td>Jaw clamping surface:</td>
<td>30x40 mm (height x width)</td>
</tr>
<tr>
<td>Standard temperature range:</td>
<td>-70° ... 280°C</td>
</tr>
<tr>
<td>Standard coupling:</td>
<td>Af159 or Af20 Further couplings on request</td>
</tr>
<tr>
<td>Body:</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Jaws:</td>
<td>Hardened steel 58HRC</td>
</tr>
<tr>
<td>Weight per grip without jaws:</td>
<td>Ca. 2.8 kg</td>
</tr>
<tr>
<td>Scope of delivery:</td>
<td>1 pair of grips without jaws</td>
</tr>
</tbody>
</table>

*Pull rods of different length are available on request (not included in price). Item no.: THS521.

**Jaws for TH175-10**

<table>
<thead>
<tr>
<th>Item-No.</th>
<th>Surface</th>
<th>Opening</th>
<th>Clamping surface (hxw)</th>
<th>Weight per pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH175-10-BP6</td>
<td>Pyramid (serrated)</td>
<td>0-6 mm</td>
<td>30x40 mm</td>
<td>0.3 kg</td>
</tr>
<tr>
<td>TH175-10-BP12</td>
<td>Pyramid (serrated)</td>
<td>6-12 mm</td>
<td>30x40 mm</td>
<td>0.2 kg</td>
</tr>
<tr>
<td>TH175-10-BP16</td>
<td>Pyramid (serrated)</td>
<td>10-16 mm</td>
<td>30x40 mm</td>
<td>0.2 kg</td>
</tr>
</tbody>
</table>

Scope of delivery: 1 set = 4 jaws.
Jaws with other surface coatings and openings are possible on request

**Examples for customized solutions**: 

- Extra wide pyramid jaws
- Diamond jaws – covered with synthetic diamonds
- V-jaws for round samples

**Further customized solutions on request**

All specifications subject to change without prior notice
Item no.: TH175-20

Load: 20 kN
Clamping force: 43 kN at 7 bar and 20 kN load
Jaw clamping surface: 50x60 mm (height x width)
Standard temperature range: 0° ... +70°C
Further ranges on request
Standard coupling: Af159 or Af20
Further couplings on request
Body: Steel
Jaws: Hardened steel 58HRC
Weight per grip without jaws: Ca. 8.9 kg
Scope of delivery: 1 pair of grips without jaws

Scope of delivery: 1 set = 4 jaws
Jaws with other surface coatings and openings are possible on request
Item no.: TH175-50

- Load: 50 kN
- Clamping force: 103 kN at 7 bar and 50 kN load
- Jaw clamping surface: 67x60 mm (height x width)
- Standard temperature range: 0° ... +70°C
- Standard coupling: AF318
- Body: Steel
- Jaw: Hardened steel 58HRC
- Weight per grip without jaws: Ca. 20.5 kg
- Scope of delivery: 1 pair of grips without jaws

Scope of delivery: 1 set = 4 jaws

<table>
<thead>
<tr>
<th>Item-No.</th>
<th>Surface</th>
<th>Clamping surface (hxw)</th>
<th>Opening</th>
<th>Weight per pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH175-50-BP12</td>
<td>Pyramid (serrated)</td>
<td>67x60 mm</td>
<td>0-12 mm</td>
<td>2.2 kg</td>
</tr>
<tr>
<td>TH175-50-BP22</td>
<td>Pyramid (serrated)</td>
<td>67x60 mm</td>
<td>10-22 mm</td>
<td>1.9 kg</td>
</tr>
<tr>
<td>TH175-50-BP32</td>
<td>Pyramid (serrated)</td>
<td>67x60 mm</td>
<td>20-32 mm</td>
<td>1.5 kg</td>
</tr>
<tr>
<td>TH175-50-BP42+SG+RN48*</td>
<td>Pyramid (serrated)</td>
<td>67x60 mm</td>
<td>30-42 mm</td>
<td>1.4 kg</td>
</tr>
<tr>
<td>TH175-50-BV12</td>
<td>V-jaws for round samples</td>
<td>67x60 mm</td>
<td>5-12 mm</td>
<td>2.2 kg</td>
</tr>
<tr>
<td>TH175-50-BV22</td>
<td>V-jaws for round samples</td>
<td>67x60 mm</td>
<td>12-22 mm</td>
<td>1.9 kg</td>
</tr>
<tr>
<td>TH175-50-BV32</td>
<td>V-jaws for round samples</td>
<td>67x60 mm</td>
<td>22-32 mm</td>
<td>1.5 kg</td>
</tr>
<tr>
<td>TH175-50-BV42+SG+RN48*</td>
<td>V-jaws for round samples</td>
<td>67x60 mm</td>
<td>32-42 mm</td>
<td>1.4 kg</td>
</tr>
</tbody>
</table>

*supplied with special guides and retracting nose (included in the price)

Jaws with other surface coatings and openings are possible on request

All specifications subject to change without prior notice
Item no.: **TH175-100**

Load: 100 kN  
Clamping force: 210 kN at 7 bar and 100 kN load  
Jaw clamping surface: 67x100 mm (height x width)  
Standard temperature range: 0° ... +70°C  
Further ranges on request  
Standard coupling: AF40  
Further couplings on request  
Body: Steel  
Jaws: Hardened steel 58HRC  
Weight per grip without jaws: Ca. 42 kg  
Scope of delivery: 1 pair of grips without jaws

<table>
<thead>
<tr>
<th>Item-No.</th>
<th>Surface</th>
<th>Clamping surface (h%xw)</th>
<th>Opening</th>
<th>Weight per pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH175-100-BP12</td>
<td>Pyramid (serrated)</td>
<td>67x100 mm</td>
<td>0-12 mm</td>
<td>3.8 kg</td>
</tr>
<tr>
<td>TH175-100-BP22</td>
<td>Pyramid (serrated)</td>
<td>67x100 mm</td>
<td>10-22 mm</td>
<td>3.3 kg</td>
</tr>
<tr>
<td>TH175-100-BP32</td>
<td>Pyramid (serrated)</td>
<td>67x100 mm</td>
<td>20-32 mm</td>
<td>2.7 kg</td>
</tr>
</tbody>
</table>

TH175-100-BV12 V-jaws for round samples  
TH175-100-BV22 V-jaws for round samples  
TH175-100-BV32 V-jaws for round samples

Scope of delivery: 1 set = 4 jaws  
Jaws with other surface coatings and openings are possible on request

**Examples for customized solutions***:

TH175-100-AF50-Ni-T250°C  
Temperature range up to 250°C

TH175-100-D260-S46  
Extra wide jaw opening 46 mm

*Further customized solutions on request
**TH175**

**Item no.:** TH175-300

<table>
<thead>
<tr>
<th>Load:</th>
<th>300 kN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping force:</td>
<td>517 kN at 7 bar and 300 kN load</td>
</tr>
<tr>
<td>Jaw clamping surface:</td>
<td>84x120 mm (height x width)</td>
</tr>
<tr>
<td>Standard temperature range:</td>
<td>0° ... +70°C</td>
</tr>
<tr>
<td>Body:</td>
<td>Nickel-plated steel 1.2711</td>
</tr>
<tr>
<td>Jaws:</td>
<td>Hardened steel 58HRC</td>
</tr>
<tr>
<td>Weight per grip without jaws:</td>
<td>Ca. 100 kg</td>
</tr>
<tr>
<td>Scope of delivery:</td>
<td>1 pair of grips without jaws</td>
</tr>
</tbody>
</table>

**Scope of delivery:** 1 set = 4 jaws

**Jaws for TH175-300**

<table>
<thead>
<tr>
<th>Item-No.</th>
<th>Surface</th>
<th>Clamping surface (h×w)</th>
<th>Opening</th>
<th>Weight per pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH175-300-B25</td>
<td>Blank jaws</td>
<td>84x120 mm</td>
<td>10-25 mm</td>
<td>Ca. 3.9 kg</td>
</tr>
<tr>
<td>TH175-300-BP25</td>
<td>Pyramid (serrated) jaws</td>
<td>84x120 mm</td>
<td>10-25 mm</td>
<td>Ca. 3.9 kg</td>
</tr>
<tr>
<td>TH175-300-BW25</td>
<td>Wave jaws</td>
<td>84x120 mm</td>
<td>10-25 mm</td>
<td>Ca. 3.8 kg</td>
</tr>
<tr>
<td>TH175-300-BD25</td>
<td>Diamond jaws</td>
<td>84x120 mm</td>
<td>10-25 mm</td>
<td>Ca. 3.9 kg</td>
</tr>
<tr>
<td>TH175-300-BV15</td>
<td>V-jaws for round samples</td>
<td>84x120 mm</td>
<td>5-15 mm</td>
<td>Ca. 4.4 kg</td>
</tr>
</tbody>
</table>

**Jaw surfaces:**

- Blank jaws
- Pyramids 1x45°
- Wave jaws
- Diamond jaws
- V-jaws

All specifications subject to change without prior notice
Accessories:

**TH205-1 Foot pedals**
None-locking: The grip jaws open by pressing the foot pedal and close after removing the foot from the pedal.
Scope of delivery: 1 pair of foot switches including tubes and fittings

**TH205-2 Foot pedals**
With locking function: The grip jaws open by pressing the foot pedal and remain opened after removing the foot from the pedal. The jaws close by pressing the pedal one more time.
Scope of delivery: 1 pair of foot switches including tubes and fittings

**TH205-PR16 Pressure regulator**
Optional for TH205-1 or TH205-2
To adjust air pressure: 1-16 bar

**TH205-3 Hand switches**
With locking function: The jaws of the grip close by pulling the handle and remain closed. The jaws open by pushing the handle back.
Scope of delivery: 1 unit of hand switches including tubes and fittings

**TH216 Silent compressor for laboratories, oil-lubricated, with pressure reducer**
Max pressure 16 bar; 230 V/50 Hz; noise level: 38 dB(A)
Motor: 0.13 kW; displacement: 17 l/min; tank size 3.5 l
Dimensions: 340x290x340 mm (L x W x H); weight 18 kg

See also our homepage:
www.grip.de/G12/TH175/
www.grip.de/G12 - further pneumatic grips