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 very high clamping load
- 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
- **Jaws:** Hardened steel 58HRC
- **Weight per grip without jaws:** Ca. 20.5 kg
- **Scope of delivery:** 1 pair of grips without jaws

### Jaws for TH175-50

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

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

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

Jaws with other surface coatings and openings are possible on request
Item no.: TH175-100

Load: 100 kN

Clamping force:
- 210 kN (7 bar 100 kN)
- 274 kN (15 bar 100 kN)

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: 42 kg

Scope of delivery: 1 pair of grips without jaws

**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

Scope of delivery: 1 set = 4 jaws
Jaws with other surface coatings and openings are possible on request
Item no.: TH175-300

Load: 300 kN

Clamping force: 517 kN at 7 bar and 300 kN load

Jaw clamping surface: 84x120 mm (height x width)

Standard temperature range: 0° ... +70°C

Body: Nickel-plated steel 1.2711

Jaws: Hardened steel 58HRC

Weight per grip without jaws: Ca. 100 kg

Scope of delivery: 1 pair of grips without jaws

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**Jaws for TH175-300**

<table>
<thead>
<tr>
<th>Item-No.</th>
<th>Surface</th>
<th>Clamping surface (hwx)</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>

Scope of delivery: 1 set = 4 jaws

Jaws with other surface coatings and openings are possible on request

**Jaw surfaces:**

- Blank jaws
- Pyramids 1x45°
- Wave jaws
- Diamond jaws
- V-jaws
**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/](http://www.grip.de/G12/TH175/)
[www.grip.de/G12](http://www.grip.de/G12) - further pneumatic grips