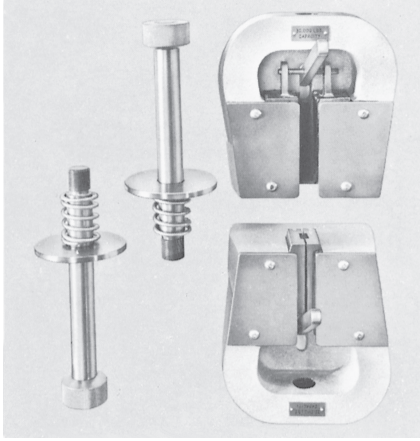


# GRIPS

## Suspended Wedge Tensile Grips



### OPEN FRONT LEVER OPERATED 'K' GRIPS

#### Description:

These open front lever operated grips, known as 'K' grips, have a positive, self-aligning gripping action and allow rapid sample insertion and removal. The grips are supplied as standard with flat file inserts, but solid or insert type vee wedges can be supplied for round specimens. At some capacities, Tinius Olsen offers a choice of wedge angle – one with an 8½° angle for maximum gripping

pressure (recommended for hard, smooth faced materials) or one with a 15° angle for a wide range of sample types.

#### Used on:

ST and SL Series materials testing machines.

#### Applications:

Metals and other high strength materials.

#### Specifications – 30kN/6,000lb

- Wedge angle:  
8½°
- Maximum diameter  
(with vees):  
12.7mm/0.5in
- Minimum diameter  
(with vees):  
6.35mm/0.25in
- Maximum thickness  
(with flats):  
8mm/0.3125in
- Maximum width  
(with flats):  
25mm/1in
- Gripping length:  
70mm/2.75in
- Weight each:  
5.9kg/13lb

#### Specifications – 60kN/12,000lbf

- Wedge angle:  
8½°
- Maximum diameter  
(with vees):  
12mm/0.5in
- Minimum diameter  
(with vees):  
8mm/0.3125in
- Maximum thickness  
(with flats):  
9.5mm/0.375in
- Maximum width  
(with flats):  
44mm/1.75in
- Gripping length:  
70mm/2.75in
- Length each:  
184mm/7.25in
- Weight each:  
9kg/20lb

#### Specifications – 60kN/12,000lbf

- Wedge angle:  
15°
- Maximum diameter  
(with vees):  
22mm/0.875in
- Minimum diameter  
(with vees):  
6.35mm/0.25in
- Maximum thickness  
(with flats):  
15mm/0.625in
- Maximum width  
(with flats):  
44mm/1.75in
- Gripping length:  
70mm/2.75in
- Length each:  
168mm/6.61in
- Weight each:  
9kg/20lb

#### Specifications – 150kN/30,000lb

- Wedge angle:  
15°
- Maximum diameter  
(with vees):  
28mm/1.125in
- Minimum diameter  
(with vees):  
8mm/0.3125in
- Maximum thickness  
(with flats):  
22mm/0.875in
- Maximum width  
(with flats):  
50mm/2in
- Gripping length:  
70mm/2.75in
- Length each:  
190mm/7.48in
- Weight each:  
16.3kg/36lb

# GRIPS

## Suspended Wedge Tensile Grips



### Specifications – 60kN/12,000lbf

- Wedge angle: 15°
- Maximum thickness (with flats): 15mm/0.625in
- Maximum width (with flats): 44mm/1.75in
- Maximum diameter (with vees): 19mm/0.75in
- Minimum diameter (with vees): 8mm/0.3125in
- Gripping length: 70mm/2.75in
- Length each: 193mm/7.6in
- Weight each: 6.7kg/14.8lb

## OPEN FRONT LEVER OR ROTARY

### Description:

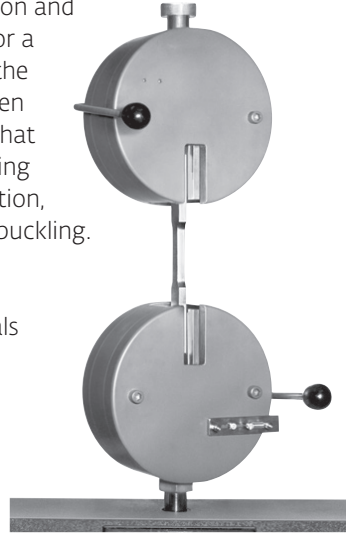
These grips use a unique balanced design that allows easy insertion of the specimen into these open front grips without bowing or bending the sample. Two types of actuation are available: a spring activated lever that allows faster insertion and removal of the sample, or a rotary type that moves the wedges horizontally when the handles are turned that maintains positive gripping without any vertical motion, eliminating any sample buckling.

### Used on:

ST and SL Series materials testing machines.

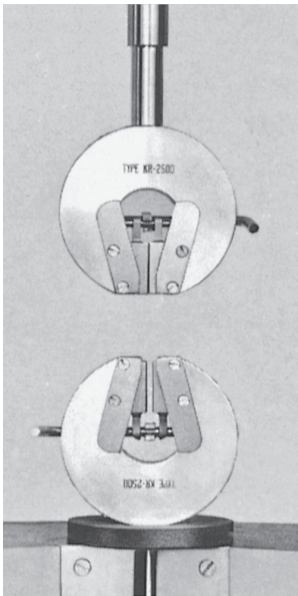
### Applications:

Metals and other high strength materials.



### Specifications – 150kN/30,000lbf

- Wedge angle: 15°
- Maximum thickness (with flats): 25mm/1in
- Maximum width (with flats): 50mm/2in
- Maximum diameter (with vees): 25mm/1in
- Minimum diameter (with vees): 6.35mm/0.25in
- Gripping length: 70mm/2.75in
- Length each: 210mm/8.27in
- Weight each: 15.7kg/34.7lb



## SPRING TENSION CLOSURE 'KR' GRIPS

### Description:

These grips use a spring tension closure to ensure a uniform gripping action – this is a particularly important feature for relatively fragile specimens. The type KR grips are normally supplied with flat wedges but wedges to accept round samples are available on special order.

### Used on:

ST and SL Series materials testing machines.

### Applications:

Metals and other high strength materials.

### Specifications – 500N/100lbf

- Wedge angle: 15°
- Maximum thickness (with flats): 6.35mm/0.25in
- Maximum width (with flats): 25mm/1in

### 11kN/2,500lbf

- Wedge angle: 15°
- Maximum thickness (with flats): 9.5mm/0.38in
- Maximum width (with flats): 31mm/1.25in

### 25kN/5,000lbf

- Wedge angle: 15°
- Maximum thickness (with flats): 9.5mm/0.38in
- Maximum width (with flats): 31mm/1.25in