

# Side Loading, Self-Tightening Manual Wedge Action Grips Series PWG-300 kN

The family of manual wedge action grips PWG-300 are general-purpose grips designed for easy specimen loading, alignment, and productive testing of metals, composites, plastics, polymers, elastomers, wood, cardboard and others including high strength materials.



These self-tightening 300 kN grips provide proportional gripping force increase that minimize specimen slippage without the need for pneumatic or hydraulic actuation. A low initial gripping force is applied perpendicular to the flat or round specimen via the handle. The open front design makes specimen loading and changing of the inserts quick and easy.

The body-over-wedge design, where the gripping force is applied via movement of the grip body relative to the wedge-shaped jaw face, minimize compressive force being applied which may cause specimen buckling and allows to pre-select the position at which the specimen will be held with consistent gauge length.

The PWG-300 grip design holds the inserts in fixed position without any recoil or loosening at specimen failure so that an extensometer can remain in place through specimen rupture.

The interface to the testing machine is via mounting stud with PIN connection that enables quick installation and removal and delivers good alignment.

## Features

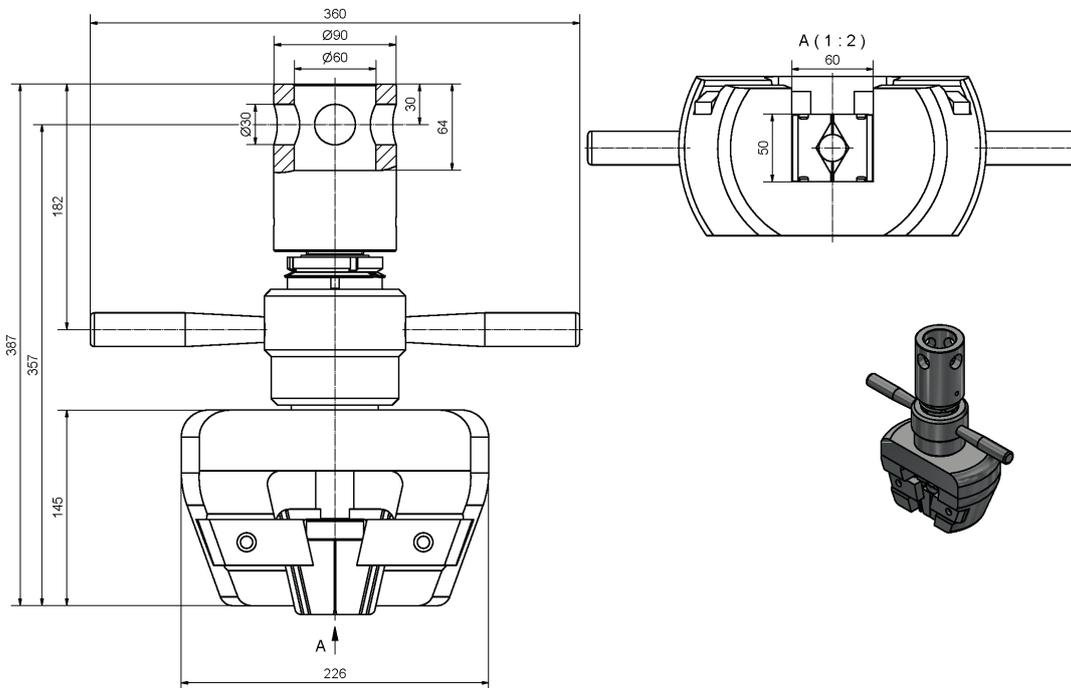
- Self-tightening during test minimizes slippage
- Easy specimen insertion for high productivity
- Rapid specimen clamping and removal
- Parallel closing allows for accurate positioning and clamping
- Easy and quick change of inserts
- Available of different materials for wide temperature range
- Easy installation and removal via standard PIN connection
- Grease nipple for easy spindle greasing

### Mechanical Interface to the Testing Machine via Mounting Stud with Clevis PIN

The mechanical interfaces used on our testing machines and grips & fixtures have remained since decades. For static electromechanical machines this generally confirm to a clevis pin style with different dimensions related to the nominal force. This connection provides easy and quick installation and removal of the grips and delivers good alignment. Other mounting systems as internal thread with wash, thread bold circle and other available on request

### Technical Data

Model	PWG-300
Article-No.	22-4371-000
Tensile Force	Up to 300 kN
Mechanical Interface: Female (internal) Ø Clevis Pin hole Ø	60 mm 30 mm
Grip Body	Chromium Plated
Temperature Range	0-100°C
Weight	43 kg



### Inserts (Jaws) for PWG-300 · 1 set = 4 jaws · Hardened 59-63 HRC

Item-No.	Surface Serration	Clamping surface (Heigh x Width), mm	Clamping Range Round, mm	Clamping Thickness Flat, mm
22-4377-000	Pyramid	55x50	–	1-11
22-4372-000	Pyramid	55x50	–	10-20
22-4373-000	Pyramid 5°	55x50	–	18-25
22-4374-000	Vee	55 (clamping length)	Ø 6-12	–
22-4375-000	Vee	55x50 (clamping length)	Ø 10-20	–
22-4376-000	Vee	55x50 (clamping length)	Ø 20-30	–



### Mounting of Accessories on the PWG-300 Grips

We are offering direct adapters that can be mounted into the grips instead of the jaws to attach a low force load cell, grips or fixtures, compression platen, bending devices or any other, tool or accessories.

This interface eliminated the need to remove the PWG grips from the testing machine and enables the precisely attaching of further accessories making changing from one task to another easy and productive.