



MTS Advantage™ Mechanical Wedge Grips

Versatile, general-purpose grips that accelerate test transitions

The MTS Advantage family of mechanical wedge grips are available in 10 kN (2,200 lbf), 30 kN (6,700 lbf), 50 kN (11,000 lbf), 100 kN (22,000 lbf), 150 kN (33,000 lbf) and 300 kN (67,000 lbf) capacities. These general-purpose grips are especially good for applications where screw or pneumatic grips do not provide sufficient clamping force, or where compressive or buckling forces are not desirable during specimen insertion and gripping.

The MTS Advantage grip is a productive grip: a unique design allows for faster specimen handling and grip operation so it is quicker to transition from test to test. It is quick to load and quick to change because it has greater range and requires fewer turns and less force to lock.

The MTS Advantage grip is engineered of material that allows for use in a wide temperature range, and it is plated to prevent corrosion. Both flat and vee wedges are available, as well as several

grip faces. The unit comes with mounting hardware, including the pin adapter (as shown) to mount in any mechanical or hydraulic test system using 30 mm, 45 mm, or 1.25 inch pin adapters. The grips also come with all the necessary tools to mount them in a test system and to change wedges. MTS Advantage wedge grips can be used to test advanced materials, metals, plastics, polymers, paper, cardboard, wood, and much more.

Features

VERSATILITY

- » Quick and easy interchangeable faces for round and flat specimens

FUNCTIONALITY

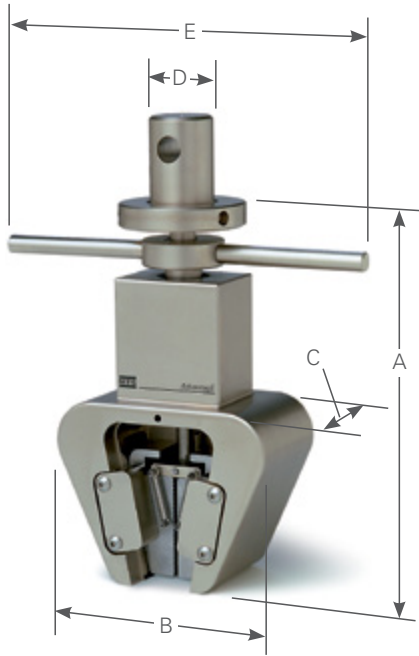
- » Self-tightening during test reduces slipping
- » Side loading design provides for easy specimen insertion
- » Standard pinned adapter for easy installation and removal
- » Suitable for use in environmental chambers

ADVANTAGES

- » Side insertion and stops provide for accurate positioning
- » Can bring significant savings due to increased specimen range per wedge set
- » The gripping force is applied perpendicular to the specimen for smooth application of the gripping force and minimal pulling. This is especially important for delicate and sensitive specimens.

- » Right-hand, left-hand thread design shortens the mechanism and reduces turns and force necessary to activate the grip
- » The grip is compact, lightweight, and easy to handle
- » It accommodates a wide range of specimens
- » Improved serration patterns allow for better specimen gripping

be certain.



Function

WEDGES

- » Spring and mechanical retraction
- » Easy access to wedges for quick changeover

PRELOAD

- » Uses right-hand/left-hand thread mechanism for reducing effort

GRIP INTERFACE

- » Standard 30 mm, 1 1/4 in, or 45 mm pinned clevis, adapter needed for threaded connections



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ISO 9001 Certified QMS

Specifications

Load Capacity	Upper Grip Weight	Temperature Rating	Part Number
2,200 lbf	10 lb	-200°F up to 600°F at 1,600 lbf	056-079-501
10 kN	4.5 kg	-130°C up to 315°C at 7.5 kN	056-079-502
6,700 lbf	12 lb	-200°F up to 600°F at 5,000 lbf	052-862-001
30 kN	5.5 kg	-130°C up to 315°C at 22 kN	052-862-002
11,000 lbf	15 lb	-200°F up to 600°F at 8,000 lbf	054-951-001
50 kN	7 kg	-130°C up to 315°C at 37 kN	054-951-002
22,000 lbf	33 lb	-200°F up to 600°F at 16,000 lbf	056-079-801
100 kN	15 kg	-130°C up to 315°C at 75 kN	056-079-802/03
33,000 lbf	43 lb	-200°F up to 600°F at 24,000 lbf	053-536-901
150 kN	19.6 kg	-130°C up to 315°C at 112 kN	053-536-902/03
67,020 lbf	120 lb	-200°F up to 600°F at 48,000 lbf	056-144-701
300 kN	54 kg	-130°C up to 315°C at 224 kN	056-144-702

Grip Dimensions

Load Capacity	A	B	C	D	E	Part Number
2,200 lbf	6.8 in	5.22 in	2.44 in	1-1/4 in	7.8 in	056-079-501
10 kN	173 mm	133 mm	62 mm	30 mm	197 mm	056-079-502
6,700 lbf	8.1 in	4.45 in	2.44 in	1-1/4 in	7.8 in	052-862-001
30 kN	206 mm	114 mm	62 mm	30 mm	197 mm	052-862-002
11,000 lbf	8.3 in	5.81 in	2.45 in	1-1/4 in	8.1 in	054-951-001
50 kN	210 mm	147 mm	63 mm	30 mm	207 mm	054-951-002
22,000 lbf	8.5 in	7.54 in	3.7 in	1-1/4 in	9.6 in	056-079-801
100 kN	215 mm	192 mm	93 mm	30 mm/45 mm	243 mm	056-079-802/03
33,000 lbf	10.2 in	7.61 in	4.0 in	1-1/4 in	10.2 in	053-536-901
150 kN	259 mm	193 mm	102 mm	30 mm/45 mm	259 mm	053-536-902/03
67,000 lbf	11.83 in	16.00 in	4.00 in	1-1/2 x 12 in	16.00 in	056-144-701
300 kN	300 mm	406 mm	102 mm	M36 x 2mm	406 mm	056-144-702

Wedge Offerings

Flat	Capacity	Part Number
0 to 7.9 mm (.312 in)	10 kN (2200 lbf), 30 kN (6700 lbf), 50 kN (11,000 lbf)	053-140-801
6 mm (.236 in) to 13.2 mm (.520 in)	10 kN (2200 lbf), 30 kN (6700 lbf), 50 kN (11,000 lbf)	053-140-802
0 to 9 mm (.355 in)	100 kN (22,000 lbf), 150 kN (33,000 lbf), 300 kN (67,000 lbf)	053-537-401
6.4 mm (.25 in) to 16 mm (.63 in)	100 kN (22,000 lbf), 150 kN (33,000 lbf), 300 kN (67,000 lbf)	053-537-402

Vee	Maximum Specimen Diameter (for side insertion)	Capacity	Part Number
3 mm (.118 in) to 7.9 mm (.312 in)	7.9 mm (.312 in)	10 kN (2200 lbf), 30 kN (6700 lbf), 50 kN (11,000 lbf)	053-140-803
7 mm (.276 in) to 12.7 mm (.5 in)	9.5 mm (.375 in)	10 kN (2200 lbf), 30 kN (6700 lbf), 50 kN (11,000 lbf)	053-140-804
11.5 mm (.453 in) to 16 mm (.630 in)	12.7 mm (.5 in)	100 kN (22,000 lbf), 150 kN (33,000 lbf), 300 kN (67,000 lbf)	053-537-403
12.2 mm (.482 in) to 19.5 mm (.768 in)	15.5 mm (.61 in)	100 kN (22,000 lbf), 150 kN (33,000 lbf), 300 kN (67,000 lbf)	053-537-404
3.2 mm (.125 in) to 7.6 mm (.300 in)	5.8 mm (.23 in)	100 kN (22,000 lbf), 150 kN (33,000 lbf), 300 kN (67,000 lbf)	053-537-405

Specifications subject to change without notice.

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100-470-315 AdvantageWedgeGrips Printed in U.S.A. 12/18