

Product Information

Sample holders for ZHN Nanoindenter

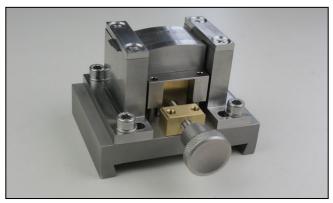
Steel specimen holder for 5 small specimen inserts, \emptyset 24 mm, insulated upper section



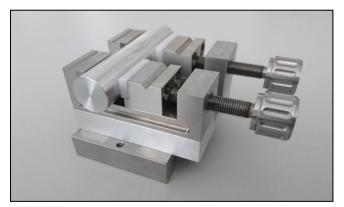
Steel specimen holder for 1 large specimen insert, Ø 50 mm



Set of specimen holder inserts, dia. 50 mm, for liquids



Specimen holder for films/foils



Screw grip for round specimen



Clamp-type specimen holder

Applications

The Universal Nanomechanical Tester ZHN is designed for the determination of hardness and elastic modulus of materials and coating systems. Further on it is used as a mmicro scratch tester, profilometer, fatigue tester and micro wear tester. To be able to test the various styles of samples, ZwickRoell is offering a wide range of sample holders, e.g. for foils, liquids and round specimens.

CTA: 101467 101513



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Technical data

The technical data of the different sample holders are described below. Furthermore, a sample heater (up to 400 $^{\circ}$ C) is available, see separate product information. Similarly, specific adjustments to specific samples are available upon request.

Description	Item number
Steel specimen holder for 1 large specimen insert, Ø 50 mm • Work surface 80 mm x 60 mm • With dovetail guide, quartz glass calibration material	1011433
Replacement specimen insert, Ø 50 mm, 1 piece • for steel specimen holders with dovetail guide	1016673
Set of specimen holder inserts for steel specimen holders with 50mm Ø specimen insert • Comprising: 1 x insert with 3 mm recess for liquids, 1 x insert with 6 mm recess for liquids, 1 x insert with 12 mm recess for liquids	1024800
 Steel specimen holder for 5 small specimen inserts, Ø 24 mm Insulated upper section with electrical connection for contact resistance measurement of tip to specimen Work surface 80 mm x 80 mm With dovetail guide 	1011432
Replacement specimen insert, Ø 24 mm, 1 piece • for steel specimen holders with dovetail guide	1016675
 Clamp-type holder for rapid securing of specimens without gluing Maximum specimen length: for specimens up to 7.5 mm, height: 39.5 mm for specimens between 7.5 mm and 16 mm, height: 33.5 mm Adjustable slot width between clamping plates; 6 mm to 12 mm Maximum specimen width: 10 mm to 16 mm (depending on slot width) 	1019419
Specimen holder for films/foils, thin metal sheets and wire • Minimum specimen length for fastening: 50 mm • Maximum specimen width: 18 mm • Maximum measurement area: 10 x 10 mm ²	1019420
Screw grip for ZHN Nanoindenter • Maximum size of specimen (width x length): for 2 specimens: 25 mm x 40 mm for 1 specimen: 25 mm x 80 mm	1063148

Hard wax/hotplate (optional accessory for specimen holders)

Different types of hot wax can be used to secure specimens to the specimen holder inserts. The wax is heated on a glass ceramic hotplate.

Description	Item number
Crystalbond hard wax, Type 555 (56 °C)	1016423
Crystalbond hard wax, Type 509 (85 to 110°C)	1016424
Glass ceramic hotplate For securing specimens to the specimen holder (hard wax melted) Heating temperature 50 to 500°C Exact temperature setting via digital display (LED) Footprint 100 x 100 mm Heating power 250 W incl. colophonium and 1 pack of lint-free dusters	1018033