

Calibration and Measurement Capability (CMC) DANAK 200 DTI Force Laboratory

| EA Scope | Equipment | Quantity | Range Low Limit | Range High Limit | U(CMC) Low Limit | U(CMC) High Limit | Working Standard | Method | Remark | In Situ |
|------------------|---------------------------|-------------------------|-----------------------|------------------------|------------------------|-------------------------|--|---|--|------------|
| Force and torque | Force transducers | Force (0,001 - 1,3 kN) | 1 N | 1300 N | 0,05 % | 0,05 % | Deadweight | DS/EN ISO 376:2011 | Calibration of Force Transducer Tension. Internal method D03. | |
| Force and torque | Force transducers | Force | 0,1 kN | 600 kN | 0,05 % | 0,07 % | Force Transducer | DS/EN ISO 376:2011 | Calibration of Force Transducer Tension. Internal method D03. | |
| Force and torque | Force transducers | Force (0,001 - 1,3 kN) | 1 N | 1300 N | 0,05 % | 0,05 % | Deadweight | DS/EN ISO 376:2011 | Calibration of Force Transducers Compression. Internal method D03. | |
| Force and torque | Force transducers | Force | 0,1 kN | 1000 kN | 0,05 % | 0,08 % | Force Transducers | DS/EN ISO 376:2011 | Calibration of Force Transducer Compression. Internal method D03. | |
| Force and torque | Force transducers | Force | 1000 kN | 2000 kN | 0,08 % | 0,08 % | Force Transducers | DS/EN ISO 376:2011 | Calibration of Force Transducer Compression. Internal method D03. | |
| Force and torque | Force transducers | Force | 2000 kN | 3000 kN | 0,08 % | 0,3 % | Force Transducers | DS/EN ISO 376:2011 | Calibration of Force Transducer Compression. Internal method D03. | |
| Force and torque | Force transducers | Force | 3000 kN | 5000 kN | 0,2 % | 0,3 % | Force Transducers | DS/EN ISO 376:2011 | Calibration of Force Transducer Compression. Internal method D03. | |
| Force and torque | Material testing machines | Force | 2,5 N | 500 kN | 0,4 % | 0,4 % | Deadweights and Force Transducers | DS/EN ISO 7500-1:2004 | Calibration of Force Equipment Tension based, including Hydraulic Jack's, Dynamometers ect. Internal method E04. | X |
| Force and torque | Material testing machines | Force | 2,5 N | 2000 kN | 0,4 % | 0,4 % | Deadweights and Force Transducers | DS/EN ISO 7500-1:2004; DS/EN ISO 12390-4:2000 | Calibration of compression testing machines, including hydraulic jack's, dynamometers ect. Internal method D01 & D04. | X |
| Force and torque | Material testing machines | Force | 2000 kN | 5000 kN | 0,6 % | 0,6 % | Force Transducers | DS/EN ISO 7500-1:2004 | Calibration of Force Equipment Compression, including Hydraulic Jack's, Dynamometers ect. Internal method D04. | X |
| Hardness | Hardness testers | Hardness (Brinell) | 3 HB | 650 HB | 1,5 % | 1,5 % | Force Transducers, Hardness blocks, Geometrical Scale | DS/EN ISO 6506 | Calibration of Hardness Testers, Except calibration of the endenter. For indentations > 0,2 mm. Internal method D05.1. | X |
| Hardness | Hardness testers | Hardness (Vickers) | 5 HV | 3000 HV | 2,5 % | 2,5 % | Force Transducers, Hardness blocks, Geometrical Scale | DS/EN ISO 6507 | Calibration of Hardness Testers, Except calibration of the endenter. For indentations > 0,2 mm. Internal method D05.2. | X |
| Hardness | Hardness testers | dBHardness (Rockwell) | 20 HR | 100 HR | 1 HR | 1 HR | Hardness Blocks, Force Transducers | DS/EN ISO 6508 | Calibration of Hardness Testers, Except calibration of the endenter. Internal method D05.3. | X |
| Other | Impact Testing Machines | Impact | 1,3 J | 750 J | 1 % | 1 % | Geometrical equipment, Force Transducer, Reference Impact material | DS/EN ISO 148-2:2009 | Calibration of Impact Testing Machines. Internal method D06. | X |