

TORSION ADD-ON 2.0

For Electromechanical Systems

Simple multi-axis testing is often necessary to test the performance of a variety of devices such as pharmaceutical and surgical products, electronic components, and packaging. Across all industries, the development of new products and materials demands stringent standard-based and functional testing with a need for increased breadth of capability in testing equipment. For example, some of these standards, such as ASTM F543 for testing bone screws, requires that the test is performed with both axial and torsion control. The Instron® Torsion Add-On 2.0 for Electromechanical Universal Testing Systems is designed for simple, simultaneous axial and torsional testing of devices and/or components, but has the flexibility to be used for purely uni-axial or torsional testing. The Torsion Add-On 2.0 easily mounts to any new Instron 5940 or 5960 system or can be retrofitted in the field on existing 5940 or 5960 systems. The torsion drive is mounted above the machine's crosshead and all required electronics are mounted to the side of the system, thus maintaining the system's footprint. The Torsion Add-On 2.0 utilizes Bluehill® Universal's dedicated tension torsion and/or compression torsion method types in a user-friendly and intuitive interface.

FEATURES AND BENEFITS

- Easily mounts to new and existing Instron frames
- Saves lab space by combining dedicated axial-only or torsion-only test frames
- Compatible with existing fixtures
- Meets requirements of ASTM F543, ISO 11040, ISO 80369, and others
- Supported by Instron local service
- Uses Bluehill® Universal software with TestProfiler
- Reduced operator training
- Compatible with Bluehill's large library of calculations
- IQ/OQ documentation available
- Compatible with ComplianceBuilder™ to meet 21 CFR Part 11 compliance
- Ability to perform unlimited rotations



APPLICATION RANGE



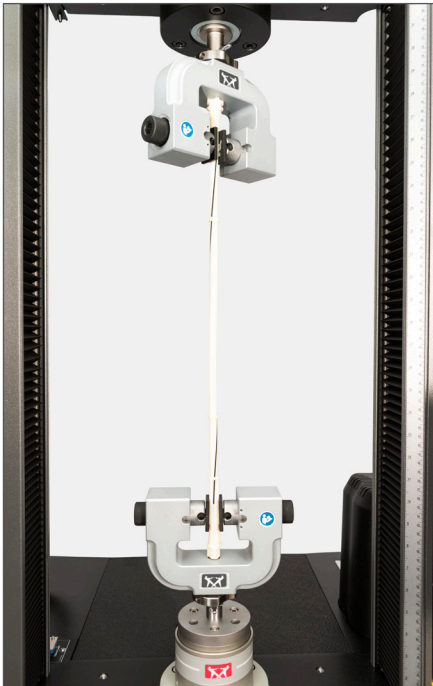
Bone Screw Testing to ASTM F543



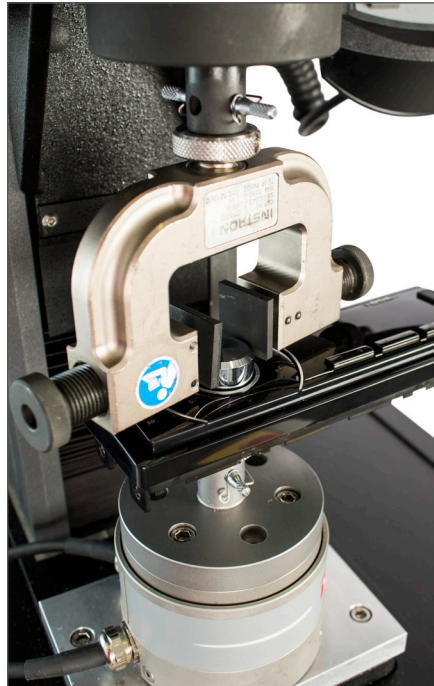
Low-Torque Testing of Luer Connections to ISO 80369



Testing Child-Proof Pharmaceutical Bottles to ASTM D7860



Torsional Testing of Medical Tubing



Functional Test of a Dual-Activated Button



Product Development of Consumer Packaging

SPECIFICATIONS

Catalog Number	Torque Capacity		Axial Load Capacity		Angular Resolution	Maximum Rotation Speed		Minimum Rotation Speed		Electrical Requirements	Operating Temperature	
	N-m	lbf-in	N	lbf		°/sec	rpm	°/min	rpm		°C	°F
5942 5943 5944	±20	±170	500 1,000 2,000	450 225 1125	0.001	360	60	1	0.002	Single Phase, 47/63 Hz, 120 or 220 VAC	10 to 38	50 to 100
5965 ¹	±20	±170	5,000	1,125	0.001	360	60	1	0.002	Single Phase, 47/63 Hz, 120 or 220 VAC	10 to 38	50 to 100
5966 ¹	±20	±170	10,000	2,250	0.001	360	60	1	0.002	Single Phase, 47/63 Hz, 120 or 220 VAC	10 to 38	50 to 100
5967 ¹	±20	±170	30,000	6,744	0.001	360	60	1	0.002	Single Phase, 47/63 Hz, 120 or 220 VAC	10 to 38	50 to 100
5969 ¹	±20	±170	50,000	11,240	0.001	360	60	1	0.002	Single Phase, 47/63 Hz, 120 or 220 VAC	10 to 38	50 to 100

Notes:

1. Dual column vertical daylight reduced by 10 in (254 mm). To achieve full travel custom top plate is required

SPECIFICATIONS

Catalog Number	Axial Capacity	Torque Capacity
2527-302	1 kN	25 Nm
2527-303 ¹	5 kN	25 Nm
2527-202 ¹	10 kN	100 Nm
2527-201 ¹	25 kN	100 Nm
CP122055	445 N	5 Nm

Notes:

1. Limited to 20 Nm by Torsion Drive



Biaxial Load Cell

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