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6800 SERIES SYSTEM RETROFITS

Legacy Table Model System Upgrades and Modernization

6800 Series system retrofits allow older legacy Instron electromechanical table model universal testing machines to be upgraded with the latest control electronics and testing software so you can enjoy the latest in testing technology. Instron's universal testing machines are built to provide decades of reliable and repeatable test results. The comprehensive retrofit upgrade is a cost-effective way to extend the life of your legacy machinery, prevent unexpected downtime, and enjoy the latest in testing software and features.

FEATURES AND BENEFITS

A retrofit upgrade breathes fresh life into a wide variety of legacy table model systems from 5 kN to 50 kN and provides them with the following benefits:

- **System Life Extension:** Rejuvenates your system and extend its life.
- **Downtime Prevention:** A comprehensive replacement of vulnerable and worn components and electronics prevents unplanned downtime.
- **Supportability:** Upgrades your system with fully-supported electronics and mechanical components, restoring your system to life cycle phase 1.
- **6800 Architecture:** Provides full access to latest Bluehill® Universal software and platform testing features.
- **Lab Uniformity:** Simplify operator training by upgrading all your machines to run on Bluehill Universal software and 6800 Series controls.
- **Accessory Compatibility:** Full compatibility with latest software and accessories. Backwards compatible with most extensometers, load cells, and accessories.

6800 UPGRADE FEATURES

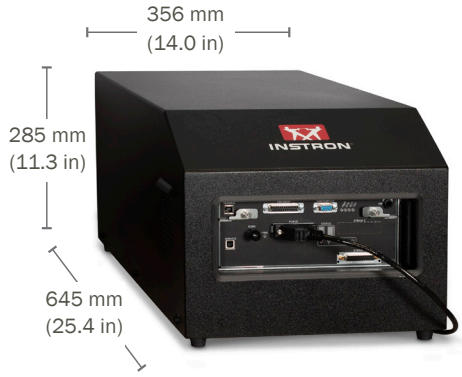
- **Auto Positioning:** Save the correct fixture separation location for each test method to ensure all operators run each test exactly the same way across all shifts every day.
- **Operator Protect:** Instron's patent-pending Operator Protect system architecture is an intelligent workflow that keeps equipment and operators safer by controlling system status from setup to test completion.
- **Safety Coaching:** 6800 Series systems provide clear visual feedback regarding system status at all times. Users will easily understand when the system is in a safe setup mode, and are clearly reminded to exit the test space once safety limits are removed.
- **Smart-Close Air Kit (optional):** Finger pinch hazards from pneumatic grips are reduced through lower grip closing pressure and restricted speed during the setup phase of your test.
- **Collision Mitigation:** Reduce damage to equipment and delicate specimens by stopping the crosshead if force is detected upon return or during a jog.
- **6800 Ergonomic Handset:** Mounted directly to the column of the frame, the handset comes with customizable soft keys, specimen protect, and a fine position adjustment wheel.

NEW & REPLACED COMPONENTS

- 6800 Series control electronics
- Robust sheet metal electronics enclosure
- Removable 6800 ergonomic handset
- Maintenance-free brushless AC servomotor
- Absolute encoder
- Absolute position battery
- Speed sensor
- Power amplifier
- Drive belt
- E-stop button
- Indicator panel
- System front cover
- Smart-close air kit (optional add-on)

The retrofit's control electronics can be flexibly relocated** to either side of the machine or to the floor to make more room on your workspace. Its robust sheet metal enclosure allows it to also serve as a monitor stand.

**Distance of retrofit controller box from the machine is limited by 1524 mm (60.0 in) cable length



UPGRADE PROCESS

- Site survey conducted to assess viability of system upgrade
- Installed on-site by Instron Field Service Engineer in 1-2 days
- System calibration and training
- Availability of replacement parts & service guaranteed for 10 years

FRAMES ELIGIBLE FOR 6800 SYSTEM RETROFIT

Model	Capacity (kN)	Support Phase	Manufacturing Period
4464	2	3*	1993 - 2002
4465	5	3*	1993 - 2002
4466	10	3*	1993 - 2002
4467	30	3*	1993 - 2002
4469	50	3*	1993 - 2002
5564	2	3*	1993 - 2008
5565	5	3*	1993 - 2008
5566	10	3*	1993 - 2008
5567	30	3*	1993 - 2008
5569	50	3*	1993 - 2008
5864**	2	3	2001 - 2009
5865**	5	3	2001 - 2009
5866**	10	3	2001 - 2009
5867**	30	3	2001 - 2009
5869**	50	3	2001 - 2009
5565A	5	3	2009 - 2010
5566A	10	3	2009 - 2010
5567A	30	3	2009 - 2010
5569A	50	3	2009 - 2010
5965	5	2	2008 - 2020
5966	10	2	2008 - 2020
5967	30	2	2008 - 2020
5969	50	2	2008 - 2020

Data Acquisition Rate at the PC:
Up to 5 kHz simultaneous on force, displacement, and strain channels.

Load Measurement Accuracy:
±0.5% of reading down to 1/1000th of load cell capacity with 2580 Series load cells (Advanced Performance Option).

±0.5% of reading down to 1/500th of load cell capacity with 2580 Series load cells.

±0.5% of reading to 1/250th.

±1.0% of reading to 1/500th of load cell capacity with 2525 or 2530 Series load cells.

Strain Measurement Accuracy:
Meets or exceeds ASTM E83, BS 3846, ISO 9513, and EN 10002-4 standards.

Displacement Measurement Accuracy:
±0.01 mm or 0.05% of displacement (whichever is greater).

Testing Speed Accuracy:
(Zero or constant load) ±0.1% of set speed.

Single Phase Voltage:
100, 120, 220, or 240 VAC ±10%, 47 to 63 Hz.

Operating Temperature:
+5 to +40 °C (+41 to +104 °F).

Storage Temperature:
-25 to +55 °C (-13 to +131 °F).

Ingress Protection (IP) Rating:
IP 2X. Protective measures may be required if excessive dust, corrosive fumes, electromagnetic fields, or hazardous conditions are encountered.

Humidity Range:
+10 to +90%, non-condensing at 20 °C.

* Model moving to phase 4 in 2023.
** Retrofited 586X frames are converted to static testers.

Additional Notes:

1. Unlisted models can be upgraded upon request. Please contact Instron for support.
2. System speed, compliance, and general operating specifications are limited by the system being upgraded and the strain and load equipment utilized.

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