



PC STRAND DEFLECTED TENSILE TESTING MACHINE

ISO 15630-3 Compliant | Precision Testing for Prestressing Steel Wire Strands

Torontech's ToronDTT-500 is a high-performance PC Strand Deflected Tensile Testing Machine specifically designed to perform deflected tensile tests on wire strands in full compliance with ISO 15630-3.

This method evaluates the reduction in tensile strength caused by a 20° deviation around a specified mandrel, offering crucial insights into the mechanical properties of prestressed concrete reinforcement wire strands.

APPLICATIONS

Test Method Overview - ISO 15630-3

ISO 15630-3 is the international standard for testing steel for the reinforcement and prestressing of concrete. The deflected tensile test assesses the reduction coefficient of the maximum force under uniaxial tension when the strand is deflected over a mandrel at a 20° angle. This test is critical for ensuring the durability and strength of PC (Prestressed Concrete) wire strands under realistic stress conditions.

Applications

1. Steel wire strand manufacturers
2. Construction material testing labs
3. Quality control for prestressed concrete products
4. Civil engineering R&D
5. Rebar and reinforcement testing facilities

Related categories

1. PC Strand Deflected Tensile Testing Machine
2. ISO 15630-3 Testing Equipment
3. Prestressing Steel Tensile Testing Machine
4. Wire Strand Deflection Test Equipment
5. PC Wire Strength Reduction Tester
6. Reinforcement Steel Strand Testing Machine
7. Hydraulic Tensile Tester for PC Strand
8. Concrete Reinforcement Testing Equipment

Torontech's ToronDTT-500 delivers the accuracy, efficiency, and standard compliance your lab or production line needs to validate prestressing steel performance with confidence.

FEATURES

- **Fully Compliant with ISO 15630-3**
Designed for the deflected tensile testing of prestressing steel strands with full adherence to international standards.
- **Servo-Hydraulic Power System**
Powered by a servo-controlled hydraulic system, the ToronDTT-500 ensures high-precision load, displacement, and strain control, with low noise operation.
- **Real-Time Curve Display**
Automatic generation of load vs. time and stress vs. time curves with real-time display and data acquisition through integrated software.
- **Triple Wedge Interchangeable Anchorage**
Accommodates wire strands of different diameters, ensuring secure and accurate specimen gripping.
- **Integrated Calibration System**
Innovative built-in load cell and system calibration setup allows for on-machine calibration without disassembling

componentsâ€”saving time and improving accuracy.

- **Hardened Steel Mandrels**

Includes interchangeable mandrels made from high-hardness tool steel to ensure long-term durability and test reliability.

- **Self-Aligning Grips**

Specimen anchorage features self-alignment functionality to enhance test precision and repeatability.

- **Safety & Visibility**

Equipped with a transparent protective window, ensuring operator safety while maintaining full visibility during testing.

- **Customizable Reports & Methods**

User-defined test parameters and fully customizable report templates for streamlined workflow and compliance documentation.

TECHNICAL SPECIFICATIONS

1. Max load capacity: 500 kN
2. Compatible with various strand diameters
3. Closed-loop servo control for precise load application
4. User-friendly interface with automatic result generation



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