



TORONTECH

AXIAL LOAD FATIGUE TESTING MACHINE



ToronALFT300 Axial Load Fatigue Testing Machine is specifically designed to perform axial load fatigue testing on rebar and prestressed concrete (PC) strands in accordance with ISO 15630-1 and ISO 15630-3 standards.

In this testing process, the strand undergoes cyclically varying axial tensile forces, following a constant-frequency sinusoidal waveform within the elastic range. The test continues until the strand fails or successfully withstands the number of load cycles specified in the relevant product standard.

APPLICATIONS

Axial Load Fatigue Testing Machine

This machine is powered by a servo-hydraulic power pack and operates via software that automatically generates testing curves and records results. The actuator, mounted on the upper crosshead, can be freely adjusted on four posts to accommodate various test-piece lengths and vertical spacing requirements.

- ISO 15630-1: Steel for the reinforcement and prestressing of concrete — Test methods — Part 1: Reinforcing bars, rods, and wire
- ISO 15630-3: Steel for the reinforcement and prestressing of concrete – Part 3: Axial load fatigue test

TECHNICAL SPECIFICATIONS

Model		ToronALFT300
Load Capacity	kN	Â±300
Load Accuracy	%	Â±0.5%

Amplitude	mm	Â±75
Amplitude Accuracy	%	1
Frequency	Hz	0.1-20
Vertical span	mm	1000
Horizontal Span	mm	500
Grip for rebar	mm	Ã~5- Ã~40
Grip for PC Strand	mm	Ã~12.4- Ã~ 15.7
Dimensions & Weight		
Load Frame	mm	W1200*D1200*H2500, 2000kg
Hydraulic Power Pack	mm	W1500*D1000*H1300, 400kg
Console	mm	W800*D600*H1600, 50kg

General Specifications

Power supply:

Three phase 380VAC, 50 Hz, Power must be free of spikes and surges exceeding 10% of the nominal voltage.

Humidity Range:

10% to 90% non-condensing,

Storage Temperature:

-40 to +66Â°C (-40 to +150Â°F)

Note:

Specifications are subject to change without notice.



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