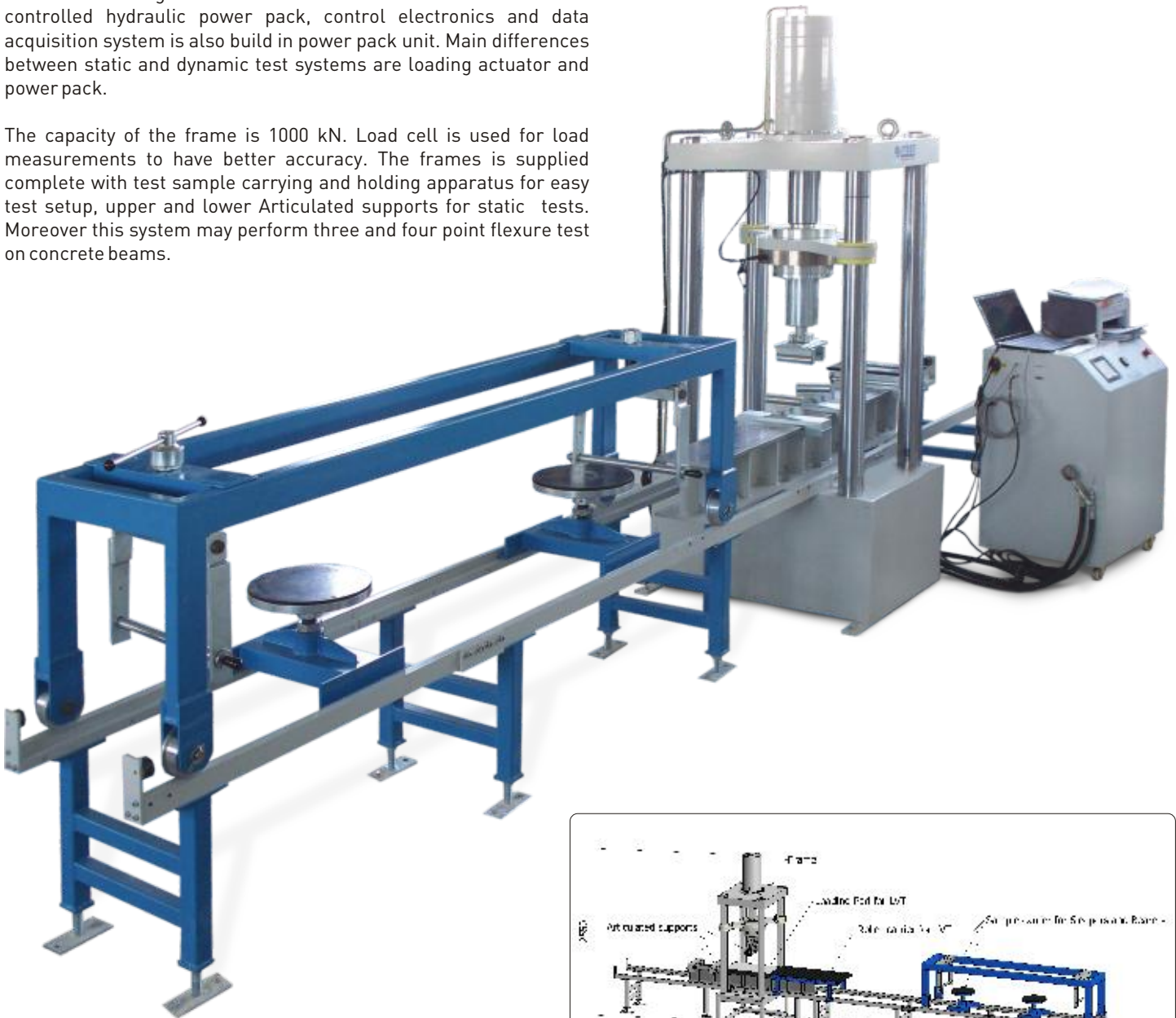


Product Code

UTSP-0100 Concrete Railway Sleepers and Bearers Static Testing Machine

UTSP-0100 Concrete Railway Sleepers and Bearers Static Testing Machine, has been designed basically to perform static tests according to EN 13230-2, EN 13230-3 and EN 13230-4 (Prestressed monoblock and twin-block reinforced sleepers and bearers tests) and also Low vibrating track system (LVT-System) tests. The machine is mainly consist of testing frame with accessories and Advanced servo controlled hydraulic power pack, control electronics and data acquisition system is also build in power pack unit. Main differences between static and dynamic test systems are loading actuator and power pack.

The capacity of the frame is 1000 kN. Load cell is used for load measurements to have better accuracy. The frames is supplied complete with test sample carrying and holding apparatus for easy test setup, upper and lower Articulated supports for static tests. Moreover this system may perform three and four point flexure test on concrete beams.



UTC 4850 and UTC 4860 Automatic Power Packs with Proportional Valve, are advanced power packs with P.I.D. closed loop control. They can perform tests under load and displacement controls. The frequency of the P.I.D controller and data acquisition is 1000 Hz. Power pack is designed to supply the required oil to the load frame for loading and unloading. All the operations of Data Acquisition and Controls System can be controlled from the touch screen front panel of a 240x320 LCD display or computer. There are total 4 analogue input channels. One is used for load cell and remaining three analogue channels can be used for other sensors such as LVDT's, strain gauges, built in the system. (For more detail please check UTC 4850 and UTC 4860 in catalog)

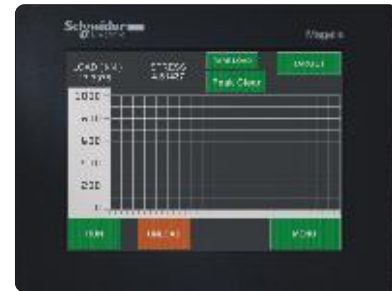
The maximum oil flow is 2 liters per minute, at 300 bar pressure. Accuracy of the system is 0.1 kN and minimum controllable load is around 10kN. Control unit can be connected to the computer through Ethernet for advanced test cycles, data acquisition and reporting. All the calibration values of the transducers and also all the test parameters for the last test is automatically stored on the control unit. Power pack incorporates a pressure safety valve and a cooling unit.



UTC-4850

FEATURES

- 4 analogue channels for load cell, LVDT's, strain gauges, built in the system. Instrumentation amplifiers for sensor excitation and amplification
- 1/65.000 resolution and 1.000 Hz control for each channel
- Ethernet port for connecting to computer
- 240x320 pixel LCD display
- Touchscreen operator panel
- Can control 2 frames (UTC-4850) or 4 frames (UTC-4860)
- Can execute load or displacement control tests
- Free of charge PC software for test control and advanced report printout
- Pace rate control from 0.01 kN/s to 100 kN/s (depend on the specimen stiffness)
- Factory install English and Turkish languages
- Real time clock/date



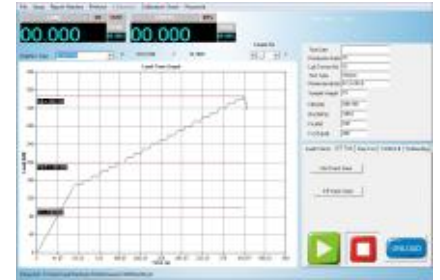
CONCRETE RAILWAY SLEEPERS & BEARERS STATIC TESTING MACHINE

Data Acquisition & PC Software

CONCRETE RAILWAY SLEEPERS & BEARERS STATIC TESTING MACHINE can be controlled by a computer with the software (given free of charge by UTEST). The advanced functions for data base management provide an easy navigation of all saved data. The test results certificate includes all descriptive information. Therefore, test parameters can be set and details about the test carried out such as client details, test type, specimen type, user info and other information required can be entered and printed out as well as test report and graph.

The software is developed for making test respect to EN 13230 standard. On the software there are submodules for making test on LVT samples, positive negative bending tests on sleepers. Loading rates, dwell times, delays and unloading are performed as in standard.

The software also includes an easy calibration check facility. The machine gives some constant load values and waits there for easy check mechanism. As standard requires the pace rate of 2kN/sec is suggested, but user can modify the test rate. For each type of different tests an easy report generation is available.



Technical Specifications

Capacity	1000 kN static (UTSP-0100),
Load Measurement Accuracy	+/- 1 % from 1 % of the full capacity.
Piston Stroke	400 mm
Dimensions	2500 kg (approx)
Weight (approx.)	990x7690x2550 mm (Installed)

Power Pack

Dimensions	900x550x1050 mm
Weight (approx.)	170 kg
Power	1500 W

Accessories for Low Vibrating Track System Test

