

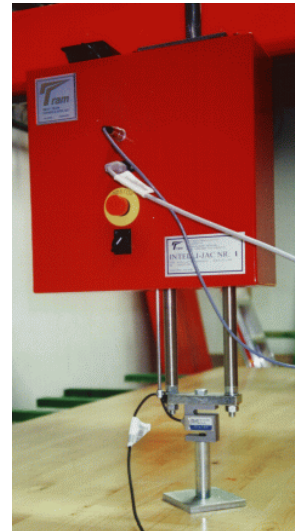
# “Intelli-Jac”

## Portable System for Loading Large Structures

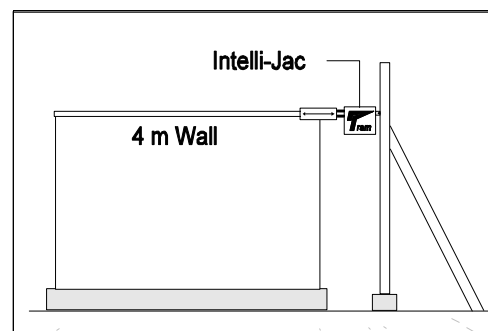
*Système Portable de Charge de Grande Structures*  
*Transportables System zur Belastung Grosser Elemente*

### T-JAC 12 000..50 000 N

## Wall and Floor Testing - and Much More!



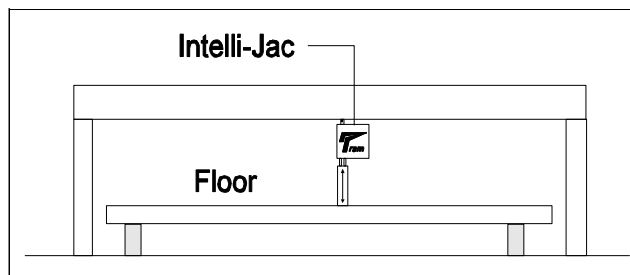
**Intelli-Jac** was originally designed for Racking Strength testing of a wall. However, it offers a unique solution for test loading of large structures where use of a standard test machine would not be possible. Contained in a small portable box it weighs from only 20 kg. Designed to be used with a purpose built reaction frame in conjunction with the test structure, **Intelli-Jac** needs only a standard AC supply and a connection to a Pentium PC. Testing is controlled by the PC using Windows based TRAM-QA software which allows very complex programmed test sequences. It is capable of applying a tensile or compressive load. Being a compact device with high stiffness, it can also provide accurate measurement of deformation at the point of load application without the use of any ancillary gauges. Additionally the system allows data inputs from external transducers to record information such as deformation at other positions on the test structure. It is capable of performing a wide range of complex testing procedures and can be set up for relevant international or national standards.



Racking strength testing

## Data Handling

During testing the load-deformation curve is simultaneously generated on the monitor and can be recorded in a database. The **Intelli-Jac** system with TRAM-QA software is thus a fast, effective way of generating and preserving a test report. It offers the user a data filing and retrieval system giving instant access to reports on any previous tests. Much more than just strength test results can be included in the report. The software gives the user a simple means of incorporating all relevant quality parameters in a system of tables that can be set up for almost any application.



Floor strength/deformation testing



## QUALITY ASSURANCE

# Specification

| MODEL                                 | T-JAC 12 000 N, T-JAC 25 000 N, T-JAC 50 000 N  |
|---------------------------------------|---|
| Max loading stroke length             | 100-200 mm as standard  |
| Max Loading-cell-force                | $\pm 12000$ N, $\pm 25000$ N, $\pm 50000$ N as standard   |
| Force measuring resolution            | 1 N as standard   |
| Loading speed control                 | Selectable load- or deformation speed. Programmable loading sequence for semiautomatic testing as well as cyclic loading with predefined conditions.  |
| Loading speed-range                   | 0- 150 mm/min, fast return 0- 500 mm/min, as standard   |
| Deformation measuring resolution      | 0.01 mm as standard   |
| User inputs for external transducers  | 15 inputs of $\pm 10$ V with software calibration of each transducer  |
| Supply voltage                        | 220/240 V or 110/120 V, 50-60 Hz  |
| Approx. weight (plus computer system) | from 20 kg  |
| Computer control system               | PC with additional hard-and software, and printer. The <b>TRAM QA</b> software makes the testing, filing and analysing of data extremely versatile - refer to the separate brochure for the software.   |
| Data generation                       | <ul style="list-style-type: none"> <li>• Real-time generation of load/deformation curve, and Instant calculation of Breaking Load, Ultimate Deformation, Modulus Of Rupture, Stress at Proportionality limit, Modulus of Elasticity, Strain at Ultimate Load, Fracture Energy etc. Options to connect external transducer signals (deformation, load etc.) so that results can be directly transferred to the system for further processing.</li> <li>• Up to 230 testings can be filed in each set, and additional data (example: weight/m<sup>2</sup>, sample-width, density etc. ) can be added to the set. A logbook is maintained on all data-sets, giving easy access to a specific set.</li> </ul> |
| Data Presentation                     | The test results can be shown on the computer monitor or printed out in a table for each set of samples, together with, e.g. average and standard deviation values. Additionally a load deformation curve with all the specifics of a single test can be printed out. Various statistical analyses can be performed automatically, and results can be presented on the monitor or printed out in a number of different layouts according to your specification. Data can be transferred for virtually any Spreadsheet for further processing.   |

Specifications are subject to change without notice.

Very stiff construction, a sealed ball screw loading system and accurate loading-head travel measurement are the basis of the Intelli-jac system. An IBM compatible PC with TRAM-QA software makes the machine a powerful "automatic" system for generating, filing and displaying data from structural tests, on walls and floors for example. Simple to use software enables the operator to grow familiar with the test machine very quickly, even if he has no experience at all in using a computer. The software is supplied in national languages as required.

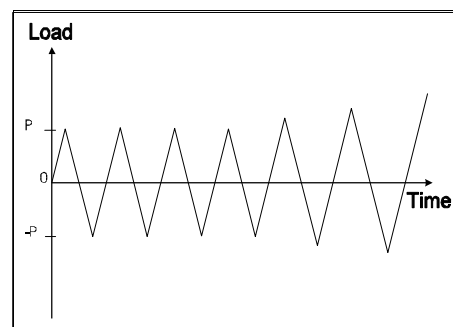
Comprehensive electronic protection prevents the machine being damaged by overloads or driving out of limits. A simple calibration procedure is included in the software. Operation is easy in spite of the advanced, automatic testing procedure.

For operation in dusty environments the system can be supplied with the computer and printer in a sealed tower arrangement.

The equipment offers great opportunities either to improve quality through instantaneous data generation in a production environment, or as a tool for structural engineering research and development.

The modular design and versatile software allow tailored systems to be offered at a moderate price.

Please contact TRAM or your local distributor for more information.



Example of a loading procedure



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