Model Datas

Models	max/min Speed [1] mm / sec	max Force kN	max/min Stroke [2] +/- mm	Installed Power kW	Test position continious arbitrary	max Diam of testpice mm
300/25	300 / 10	25	180 / 5	22	0 - 90 °	400
500/25	500 / 10	25	180 / 10	30	0 - 90 °	400
500/40	500 / 10	40	180 / 10	37	0 - 90 °	400
700/25	700 / 10	25	180 / 20	37	0 - 90 °	400

1 Lower speeds as option also aviable
2 Standard Strokes - other options aviable

Overview of the main components

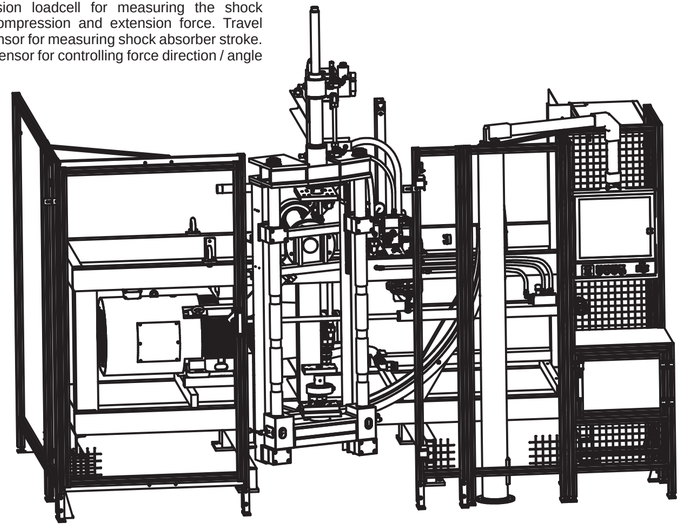
- **Steel construction**
  With high stability floor frame and C-profile load aperture. The loading aperture can be swung from a vertical position by 90°. Within this range, the actual testing position can be further adjusted by using a joystick.

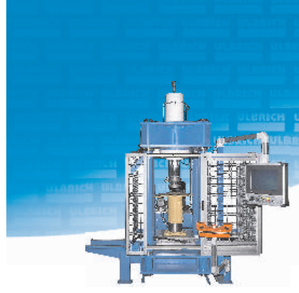
- **Actuator**
  The integration of servo valves and the synchronised hydraulic cylinders enables the operator to generate an opposing force from the shock absorber up to 45 kN over a stroke of 360 mm. Swivel cylinder allows the realignment of the loading frame aperture.

- **Power Drive**
  Variable flow pump with 22 kW up to 37 kW, oil tank 60 Ltr., air- oil heat exchanger, pressure accumulator, proportional-servo valves plus filter.

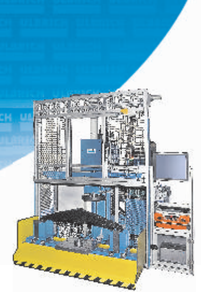
- **Sensors**
  High precision loadcell for measuring the shock absorber compression and extension force. Travel distance sensor for measuring shock absorber stroke. Protractor sensor for controlling force direction / angle of test run.

Control Interfacing / Software
System control with the “Ulbrich© shock absorber test programme“.
Interface connectivity via a Bernecker & Rainer PC based automation system.
The control system transmits the “cylinder motion signal“ via regulating valves which allow the setting of speed, also the pre-programming of sinus curve profiles or simple trapezoid movements can be simply achieved using the Ulbrich© test programme software.
The speed input is fully variable up to a max. of 0,7 m/sec over the complete stroke length.





Puffer Testing Machine



Spring Testing Machine

Shock Absorber Testing Machine

Machines for testing assembling & joining

ULBRICH
Competence in joining and testing machines, as well as in hydraulic solutions

We are a Privately owned Austrian Engineering company with Sister companies operating throughout Central and Eastern Europe.
Our main focus is based on the design, construction and the distribution of :

Hydraulic Press and Test Equipment

Hydraulic Components

Hydraulic Systems

Our goal is to provide customers with Test and Production equipment that enable our customers to sink their production costs and increase efficiency, quality and ultimately provide our customers with a significant competitive advantage.

In addition to our standard machinery we also work together with our customers to provide bespoke special hydraulic machines and system solutions based on their unique specifications.

Please visit us at our website

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Press fit and analysis units

Maschinen zum Prüfen Montieren & Fügen

ULBRICH
Kompetenz in Füge- und Prüfmaschinen sowie Hydraulik

Wir sind ein Familienbetrieb mit Stammsitz in Österreich und diversen Tochterbetrieben bzw. Niederlassungen in Zentral- und Osteuropa.

Wir beschäftigen uns – unter anderem – mit der Produktion und dem Vertrieb von:

Füge und Prüfmaschinen wie z.B. Feder-, Stoßdämpfer- und Pufferprüfmaschinen für die Bahnindustrie

Füge- und Prüfmaschinen für die Automobilindustrie

Ziel unserer Tätigkeit ist es, die Produktivität, Prozesssicherheit und Wettbewerbsfähigkeit unserer Kunden zu stärken.

Neben Serien Prüf- und Fügemaschinen erarbeiten wir gemeinsam mit unseren Kunden hydraulische Sondermaschinen und Hydraulikanlagen für deren spezifische Bedürfnisse.

Bitte besuchen Sie uns auf unserer Webseite

Spring and Shock Absorber Testing Machine

Chockblock Testing Machine

Central Coupler Testing Machine

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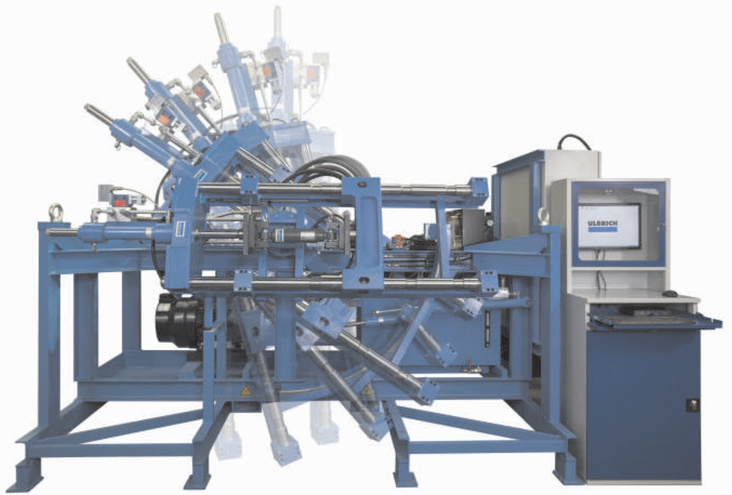
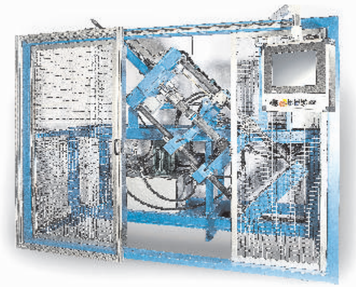
Railway Depot Equipment
Universal Shock Absorber Testing Machine





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Universal Shock Absorber Testing Machine

Shock absorbers need to be regularly tested in order to ensure that the energy absorption properties are in-line with the specification.

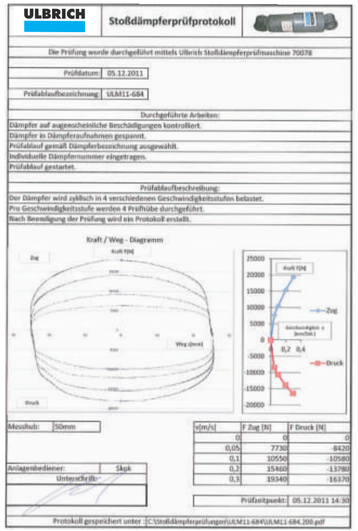
Such tests will be carried out in accordance to the manufacturers quality control procedures or railway regulations.

The main test criterion revolve around the measurement of impacts in relation to a selected speed linked to a number of specific strokes with specific stroke lengths (normally displayed with a sinusoidal curve).

Basic characteristics of the control and test software

- Display shows the required / achieved data for the distance and speed
- Speed profile over the stroke from the stroke starting position and the No. of strokes-fully programmable
- Envelope for press curve graphically available on the screen panel
- I.O. / N.I.O. result on the screen panel
- Saving of Operator details and contract No.
- Memory for XX programmes
- Programme call up in accordance to contract No. or type of shock absorber
- All relevant process data shown on a operator friendly display screen
- Test result, operator, date, time, test parameter, contract No. and or type will saved and archived on the computers hard drive
- Test curve in the form of stroke / force diagram also available on the screen
- Printing / coding of results in the form of a sticker – optional
- Statistical analysis option available
- Memo field available for extra remarks

The resulting forces are measured and recorded using the integrated load-cell.


ULBRICH

Stoßdämpferprüfprotokoll

Die Prüfung wurde durchgeführt mittels Ulbrich Stoßdämpferprüfmaschine 70078

Prüfdatum: 05.12.2011

Prüfablaufbezeichnung: ULM11-684

Durchgeführte Arbeiten:

Dämpfer auf augenscheinliche Beschädigungen kontrolliert.
Dämpfer in Dämpferaufnahmen gespannt.
Prüfablauf gemäß Dämpferbezeichnung ausgewählt.
Individuelle Dämpfernummer eingetragen.
Prüfablauf gestartet.

Prüfablaufbeschreibung:

Der Dämpfer wird zyklisch in 4 verschiedenen Geschwindigkeitsstufen belastet.
Pro Geschwindigkeitsstufe werden 4 Prüfhübe durchgeführt.
Nach Beendigung der Prüfung wird ein Protokoll erstellt.

Kraft / Weg - Diagramm

Messhub: 50mm

Anlagenbediener: Skpk

Unterschrift:

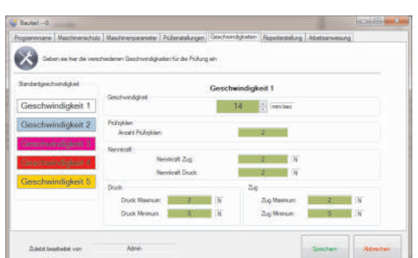
v[m/s]	F Zug [N]	F Druck [N]
0	0	0
0,05	7730	-8420
0,1	10550	-10580
0,2	15460	-13780
0,3	19340	-16370

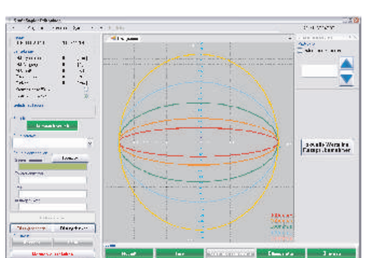
Prüfzeitpunkt: 05.12.2011 14:30

Protokoll gespeichert unter C:\Stoßdämpferprüfungen\ULM11-684\ULM11-684.200.pdf

The following information / data is shown on the print out result form =>

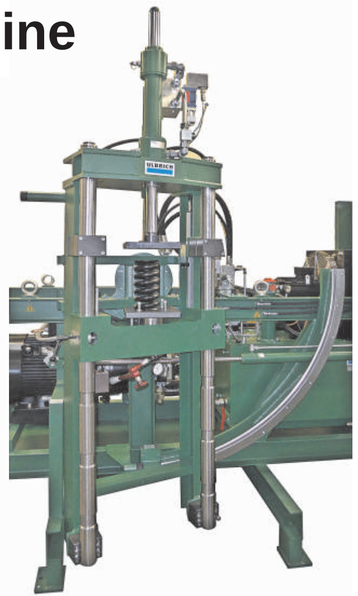
- actual curve achieved
- the test criterion to be evaluated
- the actual condition of the shock absorber in relation to required and actual physical performance
- I.O. or N.I.O. analysis





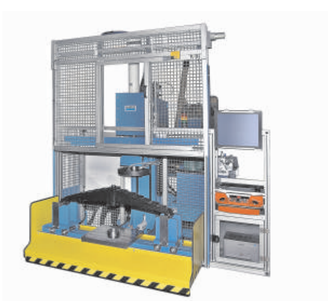
Model 500/40

Model 500/25

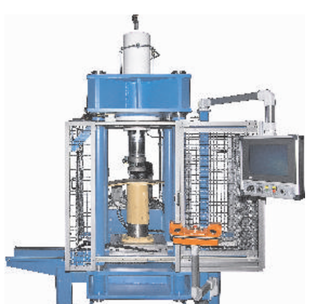


Model 500/40 and 700/25

Several pressplate heights enable measurement of shock absorbers with varying lengths	High resolution / fully integrated force/distance measurement	Working area fully enclosed with protective cage	Joystick for test objekt positioning	Test parameter settings, analysis, display of results and saving of data via “touchscreen” PC	All test positions programmable with help from the angle transmitter	Data transfer via USB flash drive and / or LAN	Robust high precision loadcell



Spring Testing Machine - front insertion



Buffer Testing Machine

Chockblock Testing Machine

Central Coupler Testing Machine