

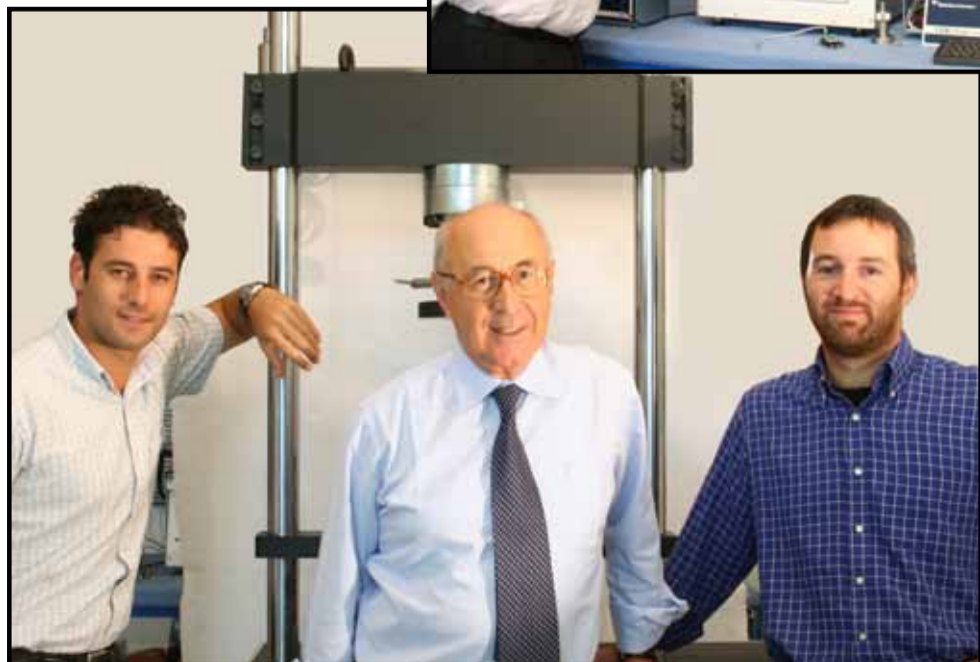
CONTROLS: new claim!



CONTROLS has recently adopted a new claim: **Your partners-Masters of Technology**. A demanding and ambitious statement expressed after much thought which, however, is based on **our mission**, since the beginning, **of being the best partner of our customers delivering unique expertise, outstanding service and specialized proficiency**. **Your Partners** because we are operating all over the world through various branches, in Europe and America, and more than 100 Distributors which are strictly connected with us with an exchange of information fundamental to satisfy our customers assuring, at the same time, the best technical-commercial assistance and first quality service. Furthermore our **R&D specialists** often collaborates actively with the academic world and the **CEN** European Standard Organization, providing a **contribution to innovation**. **Masters of Technology** because, first of all, we have been building, day after day, our experience since **1941** with **Wykeham Farrance** (part of our Group), and since **1968** as **CONTROLS**, producing some of the most **Advanced Automatic Testing Systems**, coming from the **Strongest Heritage on the Market**, investing considerable resources in Research and Development of new technologies.

A wealth of experience at your disposal

One of the most important ways in which Controls express its technological experience are the **Product Managers**. **A Unique team** of executive experts which cover the three basic **Business Units: Soil Mechanics, Concrete and Cement, Roads**. They are available to answer your enquiries representing also an ideal link between the world of standard, technological development and the laboratory. We are pleased to present this group.



Up, from left to right:
Fred Evans,
Pier Luigi Raviolo
and Elisa Granelli

To the left,
from left to right:
Alessandro D'Amico,
Pietro Ferrari
and Andrea Carlessi

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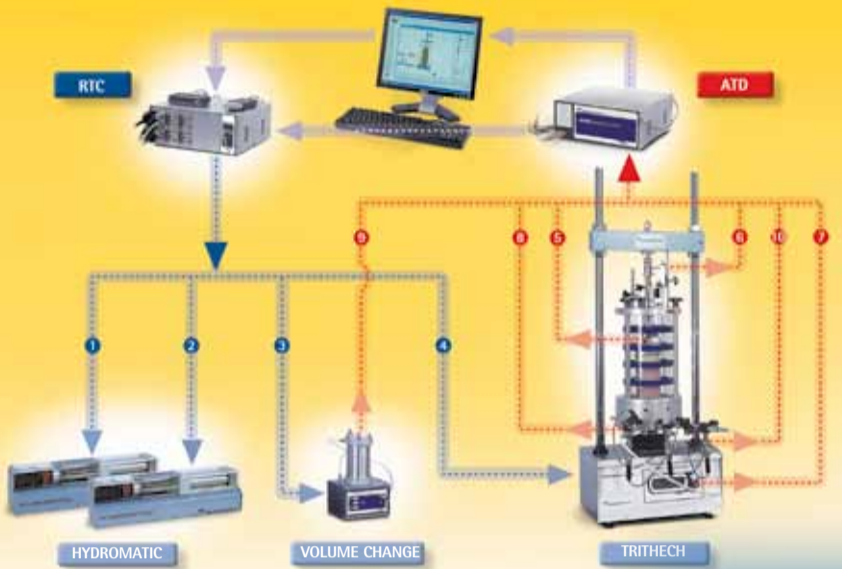
GYROCOMP

**The 3rd
innovative generation of
Gyratory Compactors**



The complete automation of the geotechnical laboratory: a dream that became reality

AUTOTRIAX



On display at GEOFLUID

Very often the technical term automatic is used in a improper way as it concerns just a single phase of the test or, simply, the data acquisition. The geotechnical laboratory normally includes the following tests: **Triaxial, Direct/Residual Shear and Consolidation**. All the three tests can now be automatically managed via software, not only with the data acquisition, but **setting the test parameters** and simply pushing

the start button and leaving the machines to complete **automatically** the job.

This **dream** is now reality with our **AUTOTRIAX, Automatic Triaxial System**, a modular apparatus featuring the ability to run and control up to three independent triaxial systems performing 24 hours 7 days a week tests without interruption, and the **SHEARMATIC, automatic direct/residual shear machine**

with programmable pneumatic loading

The complete laboratory will be shown at the **Geofluid exhibition** with the other important geotechnical testing apparatus such as the **DYNATRIAX**, the computer controlled servo-pneumatic system to perform **static and cyclic stages of a triaxial test**, and the **RESONANT COLUMN/TORSIONAL SHEAR SYSTEM**.



Shearmatic 27-WF2180

- ▶ Automatic pneumatic application of preset consolidation steps
- ▶ Automatic management of the test with the possibility to directly continue from consolidation to failure
- ▶ Easy and immediate set up of the test parameters via the large digital graphic display
- ▶ Each single step can be applied instantaneously or by means a linear ramp in a preset time of interval

DYNATRIAX

The dynamic triaxial system ideal for commercial and research laboratories

NEW

This new system has been developed using the latest technologies with decades of **WF** experience in dynamic soil testing. Designed to perform the static and dynamic stages of a triaxial test, it manages three closed loop axis: Vertical load/displacement, Cell pressure and Back pressure.

The base system includes:

- **Tritech 50 or Trittech 100 load machine**
- **Double acting pneumatic Actuator ±5 or ±14 kN capacity**
- **Data Acquisition, Process & control system**

The controller has sixteen transducer input channels using 16 bit ADC. Max. servovalve frequency: 70 Hz

The pneumatic actuator applies the vertical cyclic load/displacement according to the set wave shape.

Servovalve for the vertical load control.

The actuator locking system allows the user to easily skip from dynamic to static testing taking advantages of the load frame's maximum capacity.

Submersible load cell is used for accurate measurement, not affected by the friction of the ram and the cell pressure.

PC software controlled automatic volume change apparatus.

Dynatriax includes PC and software that provides the control of all test stages in automatic mode.

The air reservoir is provided with two servo valves for cell and back pressure control.



NOW you decide how to run dynamic triaxial test!

CDC – Compact Dynamic Controller with manual emergency shut-off switch. It is provided with 16 channels 16 bit ADC.

Tritech 50 load frame fitted with ±5 kN actuator and TRI-CELL Plus triaxial cell.

Dynatriax

FLEXIBILITY

- ▶ Three axis closed loop control
- ▶ Operating frequency up to 10 Hz
- ▶ Can perform Static (effective stress and stress path), Dynamic and Unsaturated triaxial tests
- ▶ Available upgrade for Bender Element testing, local strain and Mid Height pore pressure measurement

RELIABILITY

- ▶ Standard and user defined wave shapes
- ▶ Complete test automation of all test stages
- ▶ Automatic compensation of cell/back pressure during dynamic stage
- ▶ Transducers calibration and verification by software

MODULARITY

- ▶ Test set up by unique programmable multi-stage test procedure
- ▶ Designed to easily integrate existing static systems

RESONANT COLUMN

Resonant column/torsional shear testing system

The new entry to complete WF range of advanced testing systems

The apparatus is used for the determination of Resonant frequency, Initial Shear Modulus G_0 , Shear velocity (m/s), G modulus decay against the level of the shear deformation, the Rate of Damping factor D against the level of shear deformation, the Damping ratio-free vibration decay (%) and the Damping ratio-half power band width (%). The system includes the special Triaxial Cell, the internal Floating frame and electro servo motor Actuator, the Driving box with electro-pneumatic motor controller, PC and Software.

NEW



- ▶ A combined Resonant Column/Torsional shear device
- ▶ Automatic determination of resonant frequency and damping ratio from half power bandwidth and free vibration data
- ▶ Internal floating frame for large angular and axial specimen deformations measurement
- ▶ No oscilloscope or function generator required
- ▶ Conforming to ASTM D4015-2000

Products News

**On display
at ASPHALTICA
from 24 to 26 November**

The new GYROCOMP, Gyrotory compactor

The ICT series of gyrotory compactors, **hundreds sold all over the world** and much appreciated by all customers, has been recently redesigned and upgraded with the new electronic automatic control with touch-screen display and USB port to unload test data.

The basic structure is the same: strong thus small and easy to locate either in the laboratory or in mobile labs.

NEW

**THE ONLY
EUROPEAN COMPACTOR
APPROVED BY
FHWA-USA**

- ▶ Pneumatically operated
- ▶ EN and AASHTO versions
- ▶ Automatic control and touch-screen display
- ▶ USB port
- ▶ Strong thus small and easy to locate



Gyrocomp 76-B2522

The new MARSHALL COMPACTOR improved and modified to increase the working life

The automatic Marshall compactor is one of the most hard working machines in any laboratory. Indeed to prepare each sample between 100 and 150 blows are required. This means that, during road construction, hundreds and hundreds of specimens have to be prepared and the compactor have to work without interruption. We have been producing compactors for many decades modifying the machine conforming to the information and suggestions coming from our service department and from the field. This last improvement concerns essentially the sliding mass lifting and release system, more simple and rugged to further increase the working life of the appara-

NEW



- ▶ Improved sliding mass lifting and release system
- ▶ Tested for thousands of compacting blows
- ▶ Increased working life

"TWO IS BETTER THAN ONE"

DYNA-COMP, Roller compactor and DYNA-TRACK, Wheel tracking apparatus

A couple of important machines which increase the laboratory operativity

Since the launch of the above machines, the end of 2008, several dozen have been sold and are operating all over the world with the appreciation of the users. The machines are simple, easy to operate and assure great flexibility in the laboratory management. It is known that the asphalt has to be compacted at 150°C then removed from the machine and thermostatically conditioned to 45-60°C for the Wheel Tracking test. The use of two different machines give the important advantage of making possible the preparation of other samples in the compactor. Furthermore, our compaction method, is based on the "smooth steel roller compaction", acting directly on the asphalt specimen, simply and quickly, combining load and layer thickness control. Other methods that, as example, require the interposition of steel plates between the roller and the asphalt sample, cannot assure the same reliability.



77-B3502 Dyna-Track, wheel tracking apparatus

- ▶ Automatic test control by Data acquisition and processing system
- ▶ Adjustable load cycle frequency
- ▶ Auxiliary motor to lower and lift the wheel assembly to and from the specimen



77-B3602 Dyna-Comp, Roller compactor

- ▶ Pneumatically powered
- ▶ Best performance with the "smooth steel roller compaction"
- ▶ Combined load and layer thickness control
- ▶ Load per unit roll width equal to largest site roller
- ▶ Simple and easy to maintain

UNITESTER 70-U0107

The new multispeed compression frame ideal for CBR and Marshall tests

This machine has been specifically designed for the routine road laboratory to perform the above tests. Particular attention has been given to the final cost of the apparatus proposing either an economical field version or a more sophisticated digital version, thus assuring the best performances. The testing speed can be adjusted from 0.1 to 51 mm/min and can be used for many other tests.

NEW

**Ideal for
site road
laboratories**

- ▶ 50 kN capacity
- ▶ Fully variable testing speed from 0.1 to 51 mm/min
- ▶ Digital and analogical options
- ▶ Reliable and economical

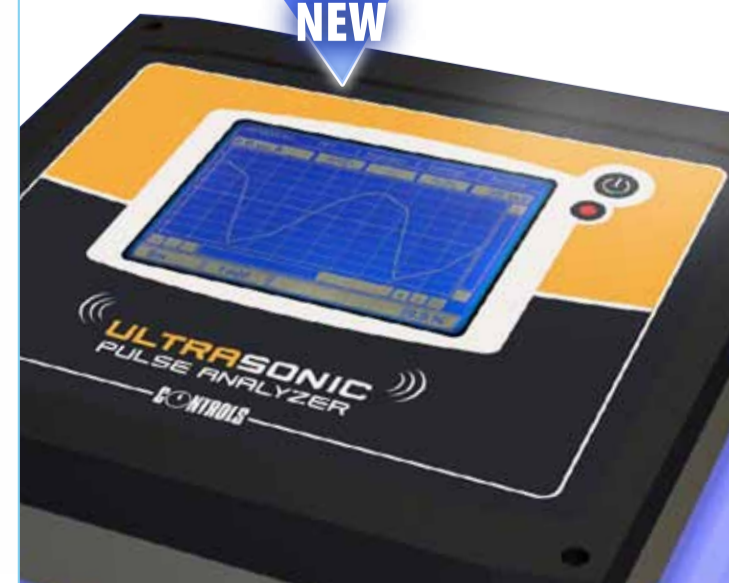


58-E4900

ULTRASONIC PULSE ANALYZER

It represents a new top level for the concrete ultrasonic testers. The new device features a high degree of ergonomics and speed. A large 5" touch screen display has been employed to create an even clearer graphics-based user interface with excellent user guidance. Numerous evaluation functions have been implemented: the 8 selectable low-pass filter for frequencies and the 8 selectable pre-amplifier gains, the innovative accurate arrival time determination, the Sonic-Rebound method and the Advanced signal processing using the Fast Fourier Transform (FFT).

NEW



Business

Great success of the PILOT 4 concrete compression tester



We were absolutely confident about the potentiality of this automatic machine summing a number of advantages such as the **Automatic test execution, High productivity and Energy saving etc.**, and a very competitive price. The result has gone over the expectations: more than **100** units sold in few months all over the world.

ADVANTEST 9 sold to CTG, Italcementi Group (Italy).



This above testing system will be soon installed in i.lab, the new Research and Innovation Centre of Italcementi Group, close to Bergamo (Italy). CTG joins the many others national and international Research Centers which have chosen ADVANTEST to perform, automatically, tests under control of **Load/Stress, Displacement and Strain Rate.**

AUTOTRIAX system "invasion"

Four systems installed in **China (Lanzhou and Tianjing Universities, North China University Zhengzhou, China Airport Construction Group Corporation).** Other systems installed in **Saudi Arabia (King Saud University), Denmark (Aarhus University), Brazil (In Situ Geotecnia)** etc.



Company life

News

Tiziano Ferrario new Marketing Executive of the Control Group



Dr. Tiziano Ferrario, 51 years old, degree in mechanical engineering at the Politecnico di Milano, has recently joined us for this important activity. He has matured an international experience in similar industrial sectors and will surely improve our commercial performances all over the world. Best wishes from all Controls staff and good luck.

Dave Rolfe new Branch Manager of Controls UK



Dave Rolfe, one of the founders in 1983 of Controls UK is now charged with the management of our English branch. With his deep knowledge of products and testing methods we have no doubt he will give a important contribution to expand the activity in the home and Irish markets. Congratulations

Marcin Golen, Sales Manager of Controls Polska, just married



Marcin, successful Sales Manager, has taken this important decision. Our best wishes to also become a "successful husband".

Alvaro Beleña, Master Graduated at IEDE Business School



At the workplace of the new appointment as Commercial Director of Central and South America, Alvaro has graduated in **Executive MBA at IEDE Business School – Universidad Europea de Madrid, Spain.** Congratulations.

Sales Meeting –Latin America 2010

Bogotá, 11 May 2010



The group participating to the Meeting in Bogotá

Bogotá, Colombian capital, was the location of the Controls Meeting of all our Central and South America distributors.

13 countries were represented: **Argentina, Bolivia, Chile, Costa Rica, Ecuador, Guatemala, Mexico, Panama, Perú, Rep. Dominicana, Uruguay, Venezuela and, our hosts, Colombia.**

The important meeting, attended also by our Director **Flavio Galli**, Product Manager **Alessandro**

D'Amico, and Sales Promotion Manager **Medeo Olivares**, and the outgoing Area Manager **Albano Pera**, mainly devoted to the presentation of the new important products of the three Business Unit-**Concrete, Soil Mechanics, Road Testing**- and related marketing information, has also been the occasion to:

-Present our new Marketing Executive of CONTROLS Group Tiziano Ferrario

-Alvaro Beleña, new Commercial Director of the area. -To thank Albano Pera for his long and profitable (since 1983) cooperation Albano will now devote himself completely to the development of his family business in Colombia, but he won't miss to give us information and suggestions as to continue his successful activity. A big thank you is due to our local distributor **Dirimpex**, in the person of **Mr. Oswaldo Guevara F. and Mr. Javier Eraso G.**, for the cooperation in the organization of the meeting. **Mr. Guevara (Dirimpex), Mr. Eduardo Madrid with Mr. Luis San Jorge (Celestron-Chile),** have been awarded for the results obtained in their countries in **25 years** of cooperation. Finally, our congratulations to **Mr. Javier Eraso** of Dirimpex-Colombia, winner of our quiz, and best wishes to **Alvaro Beleña** for the new demanding appointment. Once again Hasta Luego Amigos-See you soon.

Training @ CONTROLS

The activity of our Customer Care Department proceed intensely with all initiatives concerning Technical-commercial training of our commercial network and Service/installation training dedicated to technical-service engineers. We believe that transferring the knowledge of our expert to the field is a great value for our clients.



A group of technicians coming from Poland, India, Denmark, Portugal, UK and Spain with our staff during the meeting concerning the instructions for the installation and use of the Autoriax, Automatic Triaxial System.



A group of technicians coming from Turkey, Lebanon, India, UK, Bulgaria and Spain with our staff during the meeting concerning the instructions of the new Compression Testers and selected Asphalt Testing Systems.

Controls products in Brazil

SIGNALWORKS, leading brazilian company operating in testing equipment has recently entered the agreement for the exclusive

distribution of Controls products in Brazil . We welcome the new team in the Controls famsily



Priscilla Wu, Sales coordinator of Signalworks with other Salesman and Alvaro Beleña, Commercial director of Controls Central and South America.

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