

**NEW SMART-Line
control consoles**

offer **MORE...**

Discover the Advantages!

- **Flexibility** - The wide range covers many applications
- **Modularity** - Expandable up to 3 frames, controllable either by display or PC, several programmable test modules
- **Technology** - Efficient Energy Saving solutions, powerful double-stage hydraulic, advanced electronics
- **Reliability** - CONTROLS' compression machines have been in use around the world for over 40 years. We know how!
- **Precision** - Top quality of components ensures constant accuracy of results
- **Productivity** - Up to 40 tests per hour
- **Functionality** - Stylish design with particular attention to the ergonomic interaction with the operator
- **Safety** - Conformity to international regulations and Standards



SMART-Line



PILOT SMART-Line AUTOMAX SMART-Line

Ordering information

- **50-C10C02 PILOT** Smart-Line stand-alone control console.
230 V, 50-60 Hz, 1 ph.
- Note:** for 110 V, 60 Hz, select 50-C10C04
- **50-C10D02 AUTOMAX** Smart-Line stand-alone control console.
230 V, 50-60 Hz, 1 ph.
- Note:** for 110 V, 60 Hz, select 50-C10D04

Upgrading options

- **50-C10C/2F** Upgrading of **PILOT** with a second frame connection
 - **50-C10D/3F** Upgrading of **AUTOMAX** with a third frame connection
- Note:** upgrading options shall be factory installed

DIGIMAX SMART-Line

Ordering information

- **50-C10B02 DIGIMAX** Smart-Line stand-alone control console.
230 V, 50 Hz, 1 ph.
- Note:** for 110 V, 60 Hz, select 50-C10B04; for 220V, 60Hz, select 50-C10B03

Upgrading options

- **50-C10B/2F** Upgrading of **DIGIMAX** with a second frame connection
- Note:** upgrading options shall be factory installed

Upgrading options and accessories for all SMART-Line consoles

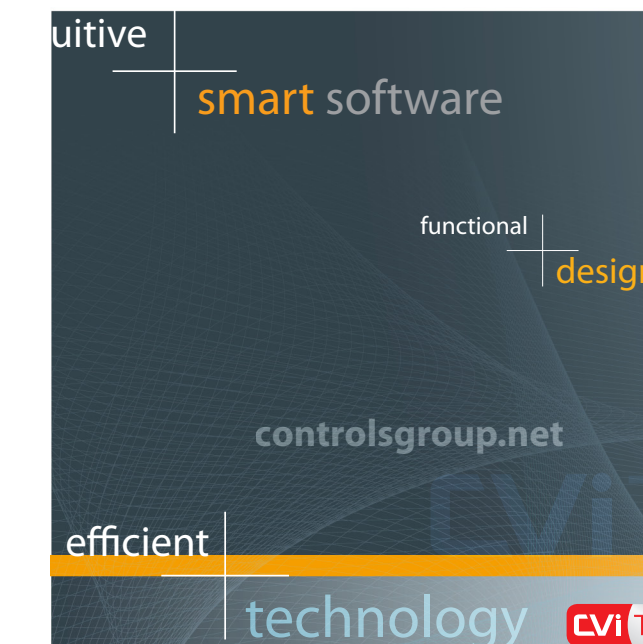
- **50-C10/PR** Upgrading of **PILOT**, **AUTOMAX** and **DIGIMAX** with a serial printer incorporated in the control panel
- **82-SW/DM** **DATA MANAGER PC software**, for remote control of the system (**AUTOMAX** only), real time data acquisition and management of test data (**AUTOMAX**, **PILOT** and **DIGIMAX**)



Test execution	AUTOMAX	PILOT	DIGIMAX
Automatic plus			
Automatic			
semi Automatic			

● INCLUDED ○ OPTIONAL

	AUTOMAX	PILOT	DIGIMAX
Dual stage pump with DC motor	●	●	—
Dual stage pump with AC motor	—	—	●
ES energy Saving Technology	●	●	—
Effective resolution	132,000 points	132,000 points	132,000 points
Touch screen graphic display	240 x 128 pixel	240 x 128 pixel	240 x 128 pixel
Sampling rate	50/sec	50/sec	50/sec
USB pen drive	●	●	●
Ethernet port	●	●	●
Control mode	By PC By control panel	By control panel	By manual proportional valve
Real time management software	○	○	○
Serial graphic printer	○	○	○
Two frames control	●	○	○
Three frames control	○	—	—
Overall dimensions (mm)	1292 x 350 x 450	1292 x 350 x 450	1292 x 350 x 450
Weight approx. (kg)	80	80	80



Intuitive

smart software

functional design

controlsgroup.net

efficient

technology

CVI Technology

NEW

AUTOMAX

PILOT

DIGIMAX

SMART-Line control
for Hydraulic testing



SMART-Line control consoles



modular expandability



CONTROLS Your Partner
Masters of Technology



CONTROLS Your Partner
Masters of Technology

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Spain
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Kingdom
testing.co.uk

CONT

In line with its continual program of product research and development, CONTROLS reserves the right to alter specifications to equipment at any time. SMART-LINE C 12R0/E/T2
CONTROLS S.R.L. is certified to ISO 9001:2008

NEW

AUTOMAX PILOT DIGIMAX

SMART-Line control consoles for Hydraulic testing frames

PILOT SMART-Line and AUTOMAX SMART-Line

New SMART-Line consoles for AUTOMATIC control of hydraulic compression and flexure testing frames from 15 to 5000 kN.

Main features:

- > Automatic compression and flexure test execution
- > Adopt the latest ES Energy Saving technologies for reduction of power and silent operation
- > Double stage hydraulic pump with rapid approach and precise oil flow control allowing high throughput of accurate tests (up to 40 samples per hour)

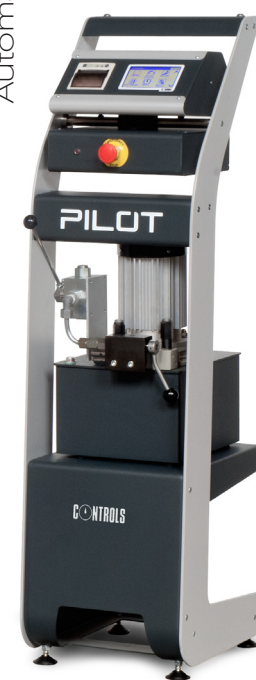
CVI TECH

**CUSTOMER'S VALUE
DRIVES THE INNOVATION**

Adopting the innovative CVI TECH concept which leads CONTROLS' development strategy, the new consoles feature:

- > **Efficient Technology**
- > **Intuitive and Smart Software**
- > **Functional and Industrial Design**
- > **Modular Expandability**

Automatic



PILOT + compression frame



PILOT + compression and flexure frames

- > Soft platen-to-specimen contact and smooth load rate control from the very beginning of the ramp
- > Equipped with advanced electronics ensuring superior precision, high stability and effective resolution
- > Optional control of a second frame
- > Optional internal graphic printer including Load-Time plot
- > Connect to laboratory network via LAN port
- > Compatible with the new intuitive and smart DATA MANAGER software, very easy to use, complete with many functions, totally flexible, open to network communications
- > Dual user interface display and PC
- > Allow remote verification of settings and performances for easy debugging of unexpected malfunctions

Automatic plus



AUTOMAX + compression and flexure frames (concrete) + compression frame (cement)



AUTOMAX + compression frame



AUTOMAX + compression and flexure frames

AUTOMAX SMART-Line Additional performances:

•PC control option

Double user interface based on display and PC. When connected to a PC, the system is fully computerized and controlled by the Data Manager software

•Fully automatic test cycle

The complete test cycle with closed loop digital feedback is automatically performed by simply pressing the start button. The load-time graph and the actual load rate are displayed in real time during the test. Correct test execution according to the selected Standard, is continuously and automatically controlled.

•Third frame control option

AUTOMAX can be upgraded for the non simultaneous control of a third frame as, for example, flexure testing frame and cement compression frame. Active frame selection is made via the display/software.

efficient

technology

semi Automatic



DIGIMAX + compression frame (ASTM)



DIGIMAX + compression frame



DIGIMAX + compression and flexural frames

DIGIMAX SMART-Line

New SMART-Line console for semi-automatic control of hydraulic compression and flexure frame from 15 to 5000 kN.

Main features:

- > Double stage hydraulic pump with rapid approach and precise oil flow control allowing high throughput of accurate tests (up to 40 samples per hour)
- > Soft platen-to-specimen contact and smooth load rate control
- > Equipped with advanced electronics ensuring superior precision, high stability and effective resolution
- > Optional control of a second frame
- > Optional internal graphic printer including Load-Time plot
- > Connect to laboratory network via LAN port
- > Compatible with the new intuitive and smart DATA MANAGER software

modular

expandability

intuitive

smart software

DATA MANAGER PC Software

The DATA MANAGER PC Software (cod.82-SW/DM) allows remote control of the AUTOMAX SMART-Line console and the real time acquisition and management of test data of AUTOMAX, PILOT and DIGIMAX SMART-Line.

Readings are displayed both as graphical and numerical format and stress vs. time diagram is plotted in real time. The conformity to Standards is easily proved and certified. Allows remote verification of unexpected malfunctions.

Standards:

UNI EN 196-1, UNI EN 1338,
UNI EN 1339, UNI EN 1340,
UNI EN 12390-3, UNI EN 12390-4,
UNI EN 12390-5, UNI EN 12390-6,

ASTM C39, ASTM C78,
ASTM C109, ASTM C239,
ASTM C348, ASTM C496

and many others for cement, mortar, concrete, masonry, blocks and similar construction materials.



Reliable PC
connection
via LAN port