

## Uni3 Test System

The use of Uni3 test system for harness tables, by harnesses manufacturers all over the world, is increasing during 2002.

As a matter of fact, after the presentation at the "Borderland 2001" in El Paso (USA), many different applications of Uni3 test system have been done so that we have been able to improve its performances.

Now the system can be considered settled both for reliability, which is an absolute requirement for SIXTAU tester, and for performances. In Uni3 tester have been included and completed the performances already existing in the previous type of tester systems (TCD) maintaining the compatibility line with UniX system.

Many of the Uni3 performances cannot be found in any test equipment of this range.



Test equipment for Harnesses  
Integrated solutions for your Quality goals

Some of the answers given to our customers are a practical explanation of the functional features of the system.

Uni3 tester does not have I/O integrated points. The same distributed I/O subsystem used by Uni4 tester equipped with a Personal Computer is used instead. [\(see description\)](#)



**How many I/O points are available in Uni3 tester?**

Uni3 tester can be connected from 64 points minimum (an I/O distributed card) up to 2048 points maximum (corresponding to 32 I/O cards).

This means that the upgrade of a table to a Uni4 system can take place without intervention on I/O and on harnessing into the same test table.

**Uni3 test programs and layout (pin table) can be used through Uni4?**



Since the supporting software tool is the same one, it is possible to use the same programs both for Uni3 and Uni4 systems.

An upgrade of test system can take place in a few minutes without problems.

Uni3 tester, thanks to a ¼ VGA graphic with backlight, of high readability and good visibility in any condition, offers a wide range of information either in case of open (missing wire) or short circuit (see figure 1).



**In case of error on the harnessing phase what kind of information are given to the operator?**

The following information are visualized on display:

- ↳ Connector on starting point,
  - start up pin,
  - state of controls associated to the specific connector,
  - position of connector on table (coordinates X, Y),
  - colour of starting cable,
  - additional information about cable (e.g. section, isolation,...).
- ↳ Connector on ending point,
  - start up pin,
  - status of controls associated to the specific connector,
  - position of connector on table (coordinates X, Y),
  - colour of starting cable,
  - additional information about cable (e.g. section, isolation,...).
- ↳ Indication of "Splice" presence between starting and ending.

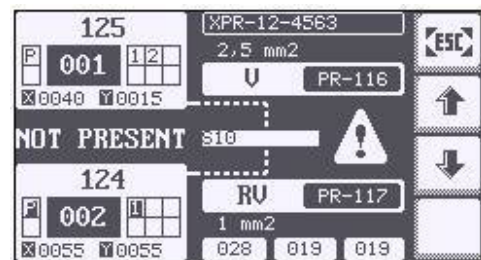


Figura 1

These information are acquired and updated in real time together with the error counters which are always present on display.

In case the adapters are equipped with LED, these will be blinking at the starting and ending point in order to help the operator to quickly find out the concerned connectors on the table.

## Are there special I/O points for LED and additional controls on connectors



All points of I/O subsystem can be used without distinction as points test for harnessing, LED controls, sensor condition controls or controls for external elements (e.g. 12V relé).

In particular, for the state test (e.g. Seal detection test, secondary-lock test and so on) only one I/O point is used. The scanning of errors, even when it is actuated at the same time of the harnessing, produces specific error signals which are easily detected by the operator.

Figure 2 shows the visualizing of correct harnessing but incomplete connectors.



Figura 2

In UN3 tester the same UN4 sealing check strategy has been implemented.

The strategy consists of an autonomous check cycle for each single adapter. The cycle develops simultaneously to the cable test cycle without limit and interference. The sequence is the following:

- ↳ check for sure connector insertion in its adapter during the test phase,
- ↳ wait for a programmable settling time,
- ↳ activation of test actuator (vacuum pump or pressure regulator),
- ↳ wait for programmable test time,
- ↳ check of vacuum or pressure sensor state and memorizing of good/rejection state.

If after having done the test cycle the connector is taken out from its adapter, the result will be set to zero and the cycle will start as soon as the connector is inserted again.



## Is it possible to handle sealing test cycles as with UN4 testers?

## Can UN3 tester be used on assembly and test tables?



UN3 tester is born from the high experience that SIXTAU technicians have acquired in this field through the previous TCD 2000 equipment. It is perfectly fitting to this specific use.

Besides, it has an additional feature which makes it particularly useful to guide the operator by giving him instructions about the table, through a LED and optical fibres, not only regarding the connector in use but also of each single housing in which the cable will be inserted. (Figure 3).

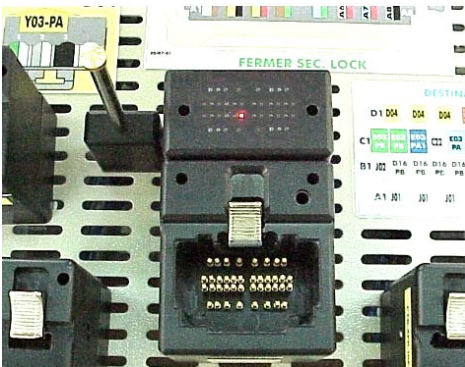


Figura 3

**Have we aroused your curiosity ?....We do hope so!**

**For any further information and/or any kind of questions do not hesitate to get in touch with us.**

**We are at your disposal at the following address:**

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