An award-winning Italian machine for the
delicate, yet high-speed, automatic packaging
of fresh fruit owes its precision to intelligent
drives from Control Techniques.

Tiber Pack, of San Sepolcro in Tuscany, won the prestigious
Award for Technological Innovation at the recent Agro Costa
Show, held in Spain, for its revolutionary fresh fruit processing
line - the Tiber Pack F/WR-p machine.

Each installation, which features Control Techniques’
technology to control a number of pick-and-place axes and
other movements throughout the machine, is custom-
designed to meet specific customer requirements. Care is
given to make it easy to use for operators who will be able to
carry out adjustments and/or maintenance with simple
keypad operation.

Leading fresh fruit producers in Spain and the world over
showed a great deal of interest in the new machine. A leading
global multi-national was the first to secure itself an order for
20 new F/WR-p Tiber Pack lines for use in its packaging plant
in Spain. The groundbreaking new feature in the Tiber Pack
machine is that a highly complex, delicate process, which,
traditionally, is always carried out manually, is now completely
automated and under the control of Control Techniques
precision drives.

The line can package fresh fruit baskets into
cardboard boxes created by the machine itself or
into plastic crates at an extremely high
production rate of approximately 120,000 baskets per hour.
The proprietary software designed by Tiber Automation (Tiber Pack's engineering division) combined with Control Techniques technology plays a key role in managing the process accurately and effectively.

Digitax ST PLUS servodrives provide synchronisation via CT-Sync and CT-Net of the various pick & place and shifter axes, whilst 0.75-1.1 kW Commander SK AC drives coordinate all steps to prepare and package fragile, easily bruised products that must be handled with the utmost care. All lines are connected in a network and have onboard video cameras to check product flow at each part of the machine, from entry through to the exit point. Processing can also be monitored online from any Internet point; live updates of the product being processed and lines in operation are available online, as well as process control and quality statistics. This system gives end customers full access to the entire production cycle.

The recently introduced Digitax ST range encompasses four models, each with industry-leading features and extremely compact in size - Base, Indexer, EZ Motion and Digitax ST Plus. Tiber Pack opted for the top of the range Digitax ST Plus that features a full functionality motion controller, optimised for high performance machines requiring synchronised motion. The on-board drive-to-drive networking links multiple axes and enables true distributed control. Configured using CTSoft, the drive's advanced motion features are configured in a flexible IEC61131-3 software development environment using PLC-open motion function blocks within Control Techniques' SyPT software.

Digitax ST combines reliability, high-performance to increase operating speed, repeatability and accuracy, whilst at the same time reducing panel sizes and costs. Tiber Automation is a young and highly dynamic company with the skill and know-how to build integrated systems, starting from the design of electrical circuitry and switchboard cabling, to onboard systems and software development across various platforms. Having completed the requisite training on Control Techniques products, Tiber Pack's software team found programming of the system straightforward and intuitive.

Tiber Pack S.r.l. has been working in the packaging sector for more than 40 years, designing and building automatic packaging machines with a staff of expert personnel who are especially attentive to the needs of each customer, creating customised installations equipped with the very latest technology in machine management, self-adjustment and self-diagnosis.