



CSIP's seven-function manipulator

Seven Function Manipulator

Niche manipulator manufacturer CSIP, part of ECA, has developed a compact seven-function manipulator. The manufacturers say that this will be eventually part of a specialised range.

The company has gone through a process of re-engineering its existing manipulators to give them more lift power and controllability. A keynote of the design is its modularity. This means that should a part break, onboard spares can be used to repair the arm or a specific modular section can be flown out and fitted on site rather than the arm having to be returned to a central repair base.

The seven function arm provides the traditional features of the six-function unit and adds the ability to pitch and yaw the jaw tip through a single axis by rotation of the forearm joint.

Position feedback version is complete with multiplexed control system, servo valve VP and master arm control unit.

'The arm has a reach of 1.7m and typically weighs 70kg in air. The jaw can open to 150mm, rotate continuously and has a closing force of 50kg. The wrist yaw is 90deg while the forearm can rotate 350deg. The elbow can rotate 105deg. In all it can lift a minimum of 80kg in any configuration.