



Products & technologies» Air conditioning & thermal control systems»

For over 40 years, **Microtecnica** has designed, developed and manufactured **Air conditioning and thermal control systems** for airborne applications. These systems have been designed around a number of Air Cycle Machines (turbofan, bootstrap, three wheel) capable to support different system architectures.

The three-wheel **ACM** integrates the advantages of the "bootstrap" configuration (boosted pressure in engine idle condition) with those of the "turbofan" approach (self induced air cooling through the heat exchanger).

In response to the growing market demand **Microtecnica** is currently producing Avionic Cooling Systems for airborne applications. During the past 20 years **Microtecnica** has also developed a wide range of in-line valves capable to operate up to 700°C (1300°F). This concept is providing a number of advantages i.e. :

- **Lighter : reduced number of parts**
- **More reliable: few moving parts**
- **Easier to install: the in-line approach allows a more compact design**
- **Easier to maintain: reduced inventory list**
- **Lower cost: simpler configuration**

The modularity of this approach allows the implementation into the same valve of different valve features, through the change of the servo components. The range includes:

- **Shut-off valve**
- **Pressure regulating / shut-off valve**
- **Single and double element**
- **Computer controlled flow / pressure modulation.**

MICROTECNICA has also designed and manufactured a wide range of butterfly valves up to 4.5 inches for a number of on-board applications including starter controls. Testing of individual components or of integrated full scale systems can be performed at our Luserna San Giovanni plant through the use of our large world-class pneumatic test facilities.



AW101 Air Cycle Air Conditioning Pack



A129 Air Cycle Air Conditioning Pack



Pneumatic valves for aerospace applications



S92 Air Conditioning Compressor Package

Microtecnica S.r.l. | Piazza Arturo Graf, 147 - 10126 - Torino - Italy

Microtecnica S.r.l. (socio unico) - Cap.Soc. 800.000 euro i.v. - Reg. Imprese di Torino n° 2042/89 - C.C.I.A.A. Torino 726252 - Comm. Estero TO-029230 - VAT n°/p.iva IT05635550014
C.F. 08846940156