

MACCON

MOTION UNDER CONTROL

Torque, Linear and Custom Motors

Stepper, Servo and Traction Motors

Drive Electronics and Controllers

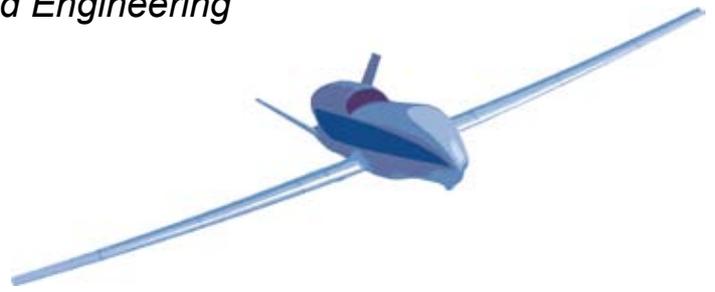
Actuators and Sensors

CAE Tools and Engineering

Motion Control Systems

AEROSPACE & DEFENCE TECHNOLOGY

MACCON – Technologies, Products and Engineering



MACCON

The Mechatronics Company

MOTION CONTROL SOLUTIONS for Aerospace & Defence

MACCON and A&D

Since 1982, we have been the motion control technology partner for defence contractors in the Aerospace and Defence industries.

Technology suppliers

On the last page of this brochure, we show the logos of our most important suppliers for the A&D industry. With their specialist products and our own technology and engineering expertise, we can design and build the best technical solution.



Our suppliers offer comprehensive catalogues and technical information. Let us know what you need!

A&D – Aerospace & Defence

MACCON and partners simulate, design, manufacture and integrate off-the-shelf and bespoke servo products for the particular motion-control needs of the A&D industry.

Motors

One of our core strengths is the development and manufacture of:

- Torque motors of all sizes
- Linear motors in different lengths
- Curvilinear motors (2D/3D)
- Voice coil motors
- Stepper motors

Sensors

We provide a range of sensors for servo systems:

- Tachometers
- Resolvers and ruggedised transducers
- Optical encoders
- Magnetic encoders
- Capacitive encoders
- Absolute linear/rotary encoders

Electromechanical actuators

Many applications require increased forces or torques. Linear and rotary positioning movements can be carried out by electromechanical actuators. Compared to pneumatics or hydraulics, this technology has the following advantages:

- More dynamic motion is possible
- Higher level of controllability
- More energy-efficient
- No oil leakage
- Maximum performance despite smaller geometries and weight. Forces up to 200,000N and torques up to 6,000 Nm are possible.

Electronics

We develop and supply sophisticated control electronics for applications such as:

- MIL and naval applications
- Space satellites, ground telescopes
- Automotive applications

Systems

We take on turn-key projects for:

- System design and simulation
- Hardware and software development
- Systems integration

Space motors

We manufacture specialised motors for space, such as:

- Zero cogging motors
- Quadriplex motors
- Switched reluctance motors



Maccon torque motor and drive electronics



APPLICATIONS for Aerospace & Defence



Sofia airborne infra-red telescope

Missile and Air Defence



Missiles and air defence

- Air-to-ground, air-to-air
- Sea-to-air

New generation guided missiles

- Rudder adjustment systems for guided missiles and UAV
- Positioning drives for launcher and firing tables



Ship defence system

Searam



Astronomy

- Position control of telescope antennas
- Choppers and covers

Aviation

- Fuel supply control systems
- 400 Hz positioning motors and generators
- Primary and secondary flight control
- Electrical seat adjustment

Naval technology

- Rudder and fuel valve control in torpedoes and submarines
- Periscope positioning drives
- Winches and "towed-array" drives
- Drive motors for remotely operated underwater vehicles (ROV)

Military vehicles

- Ammunition loading system
- Platform positioning drives
- Lifting drives

Space

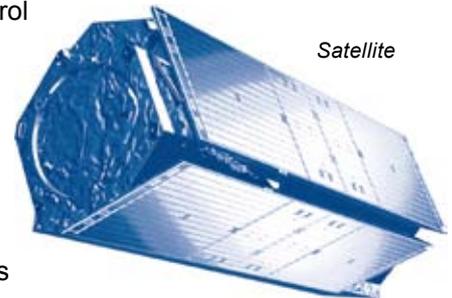
- Scanner motors and electronics
- Centrifuges and flywheel drives
- Robots and deployment systems

Application examples

This page shows just some of the many application examples where our motors and drives have been used.



Pilot and astronaut trainer



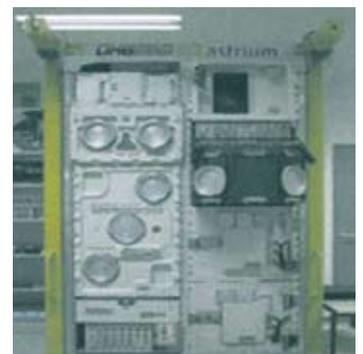
Satellite



Giant Metrewave Radio Telescope



LeFlySys + Asrad-R



Biolab (Columbus)

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|---|-----------------------------------|
| Torque, Linear and Custom Motors | MACCON GmbH |
| Stepper, Servo and Traction Motors | Aschauer Str. 21 • D-81549 Munich |
| Drive Electronics and Controllers | Tel. 089/65 12 20-0 |
| Actuators and Sensors | Fax 089/65 52 17 |
| CAE Tools and Engineering | sales@maccon.de |
| Motion Control Systems | www.maccon.de |

Company profile

MACCON was founded in 1982. We are active in the area of motors, drives and motion control. The company name is derived from the words: **MACHINE CONTROL**.

Aerospace and defence (A&D)

We simulate, develop, manufacture and integrate customer-specific servomotor and drive systems for the special requirements of the A&D industry.

Hi-Rel applications

We have domain expertise for the requirements of the A&D industry, such as:

- Encapsulated systems, IP65 or higher
- Pressure and vacuum proof
- Shock and vibration proof
- Good EMI/EMC characteristics
- High reliability
- Temperature hardening

Contact to MACCON

We are based in Munich, Germany.
Visit our website at: www.maccon.com



MACCON technology partners

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Because Motion Matters™

