ExoMars-CM

A Breadboard of the ExoMars Rover Chassis

- On 22-02-2006 our chassis model ExoMars-CM completed successfully its first drive on a sand hill near Schwetzingen in Germany.
- The ExoMars-CM is a rover chassis breadboard, built to match the requirements of ExoMars Phase A. This development took place under a contract issued by EADS Astrium UK.
- The ExoMars Rover for the ESA cornerstone mission Aurora will be a mobile laboratory carrying an exobiology and geochemistry payload (Pasteur) and a drill reaching a depth of up to 2 m.
- The ExoMars-CM shall be used for performance tests and software model verification as well as motion control and navigation software tests.







- Obstacle height up to 0.3 m.
- Locomotion speed: 100 m/h.
- Power: 60 W peak, Battery.
- Breadboard mass ~115 kg.
- Payload capacity ~185 kg.
- Size: 1600 x 1000 x 815 mm.
- Status: chassis studies and breadboard model
- Features 3 independent load balancing suspension units with near-optimum (vertical) wheel displacement.
- All six wheels are independently motor driven.
- The speed of each wheel is centrally controlled to optimize the traction capability.
- Individually steered corner wheels allow efficient curved trajectories and point turns.



von Hoerner & Sulger GmbH

Dr. C. Lee +49-6202-5756-20 secretary@vh-s.de http://www.vh-s.de







