

# Multi purpose tool for maintenance, parts replacement and recovery equipments and parts

EFDA Grant: EFDA: TW6-TVRWHMAN2 | 2008

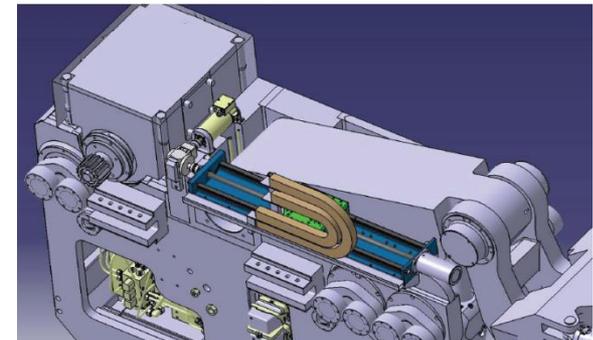
## Partners:

- Active Space Technologies
- Instituto Superior Técnico (IST), Portugal – Supervisor

## Grant Objectives

- Water Hydraulic Manipulator (WHMAN) Gripper
- WHMAN Gripper fingers
- Sliding Table
  - Sub-system design
  - Power and transmission
    - DC motor and 90° gearbox
    - Supports
    - Power and transmission
    - Couplings
    - WHMAN Mechanical Interface
  - “Reli-a-Flex” Precision coupling
  - Sensors

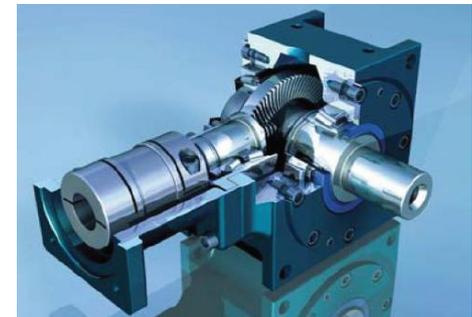
WHMAN Gripper  
- Sommer  
GH6460-B



Final Sliding  
Table layout



Sliding Table ESA 3SL DC servomotor



Marzahl WT 35 right-angle gearbox

# Multi purpose tool for maintenance, parts replacement and recovery equipments and parts

EFDA Grant: EFDA: TW6-TVRWHMAN2 | 2008

## Grant Objectives

- Integrated structural analysis
  - Static analysis
  - Modal analysis
- Sliding Table resolvers
- Main final design options

