

Chances for SME's in the Remote Handling world of ITER

the Remote Handling world of ITER

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Contact:

Dr.ir. C.J.M. (Cock) Heemskerk



1) Chances or challenges and risks?

- ITER has unique challenges in size, complexity, technology
- IO, F4E and other DA's are evolving organizations
- Procurement policies evolve as well

2) How do you get noticed?

- Fusion is still largely R&D driven => publish?

3) How to get a foot hold?

- Team up, start small, perform

4) How to make serious money?

- Forget it! ITER is NOT a big bag of money

5) How to team up?

- Add value to established partners

We...



...are a young and dynamic company

...are active in the international arena via R&D and partnerships

...support high-tech projects in critical development phases

...specialize in:

- Complex Robotic Systems
- Remote Handling

Activities & Partners



Our activities include:

- Concept Studies
- System Studies
- System Engineering
- Project Management
- Engineering Audits
- Peer Reviews

Network:



Past & Current Projects

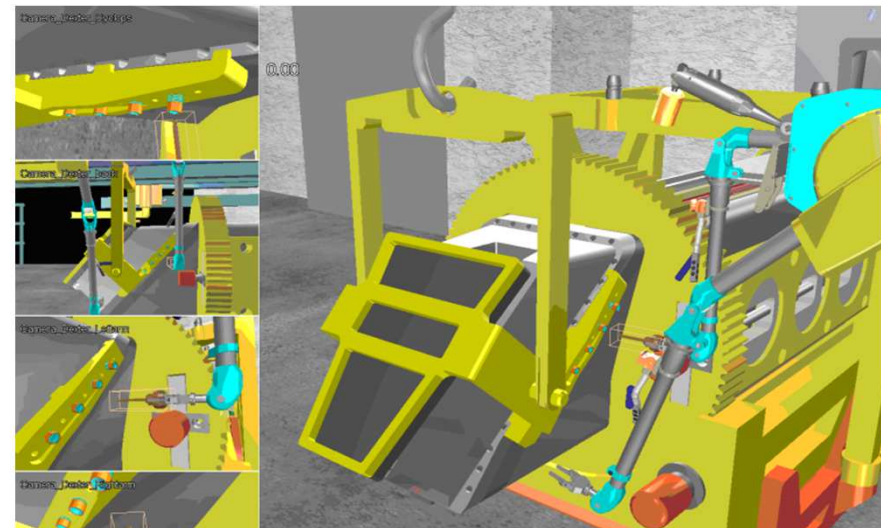


ITER Remote Handling Study Centre:

Developed with FOM institute DIFFER



Remote Handling Study Centre



Remote Handling Compatibility Analysis (RHCA) of the ITER Upper Port Launcher – VR Animations

“Effective RH maintenance scenarios for ITER”

Provide system level design support to ITER IO RH:

- Recommendations on procedures, tooling, standards
- RO's: Recommendations on procedures, tooling
- HCF: Recommendations on tooling, layout

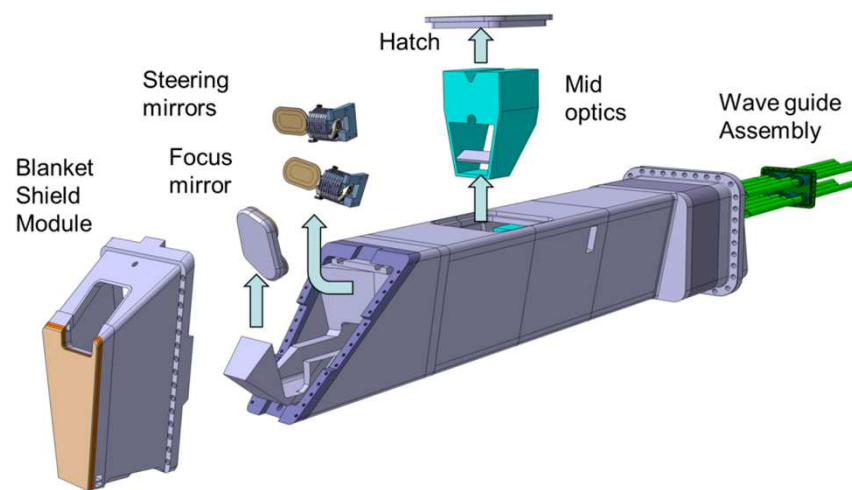
Provide design support to component developers

- Integrate RH into component design
- Perform RH Compatibility Analysis
- Prepare for successful design reviews (RH aspects)
- Advise on RH related system engineering aspects

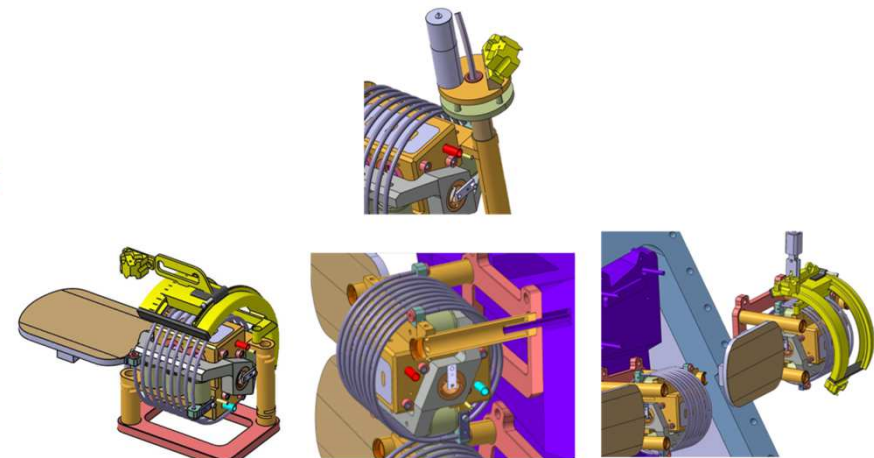
Past & Current Projects: ECH UL



ITER Remote Handling



RH Compatibility Analysis : ECH Upper Launcher



Remote Handling Tooling Analysis

Studying RH Compatibility



RH Compatibility Analysis

Example output - VR Animation:
Unbolting a steering mirror in the ECH Upper Launcher



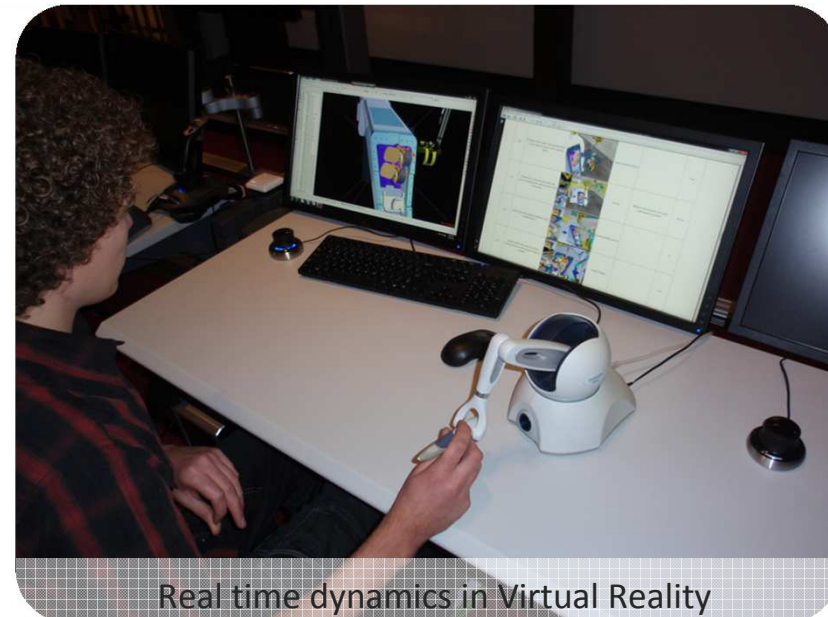
Past & Current Projects: R&D



Dexter: Mascot heritage



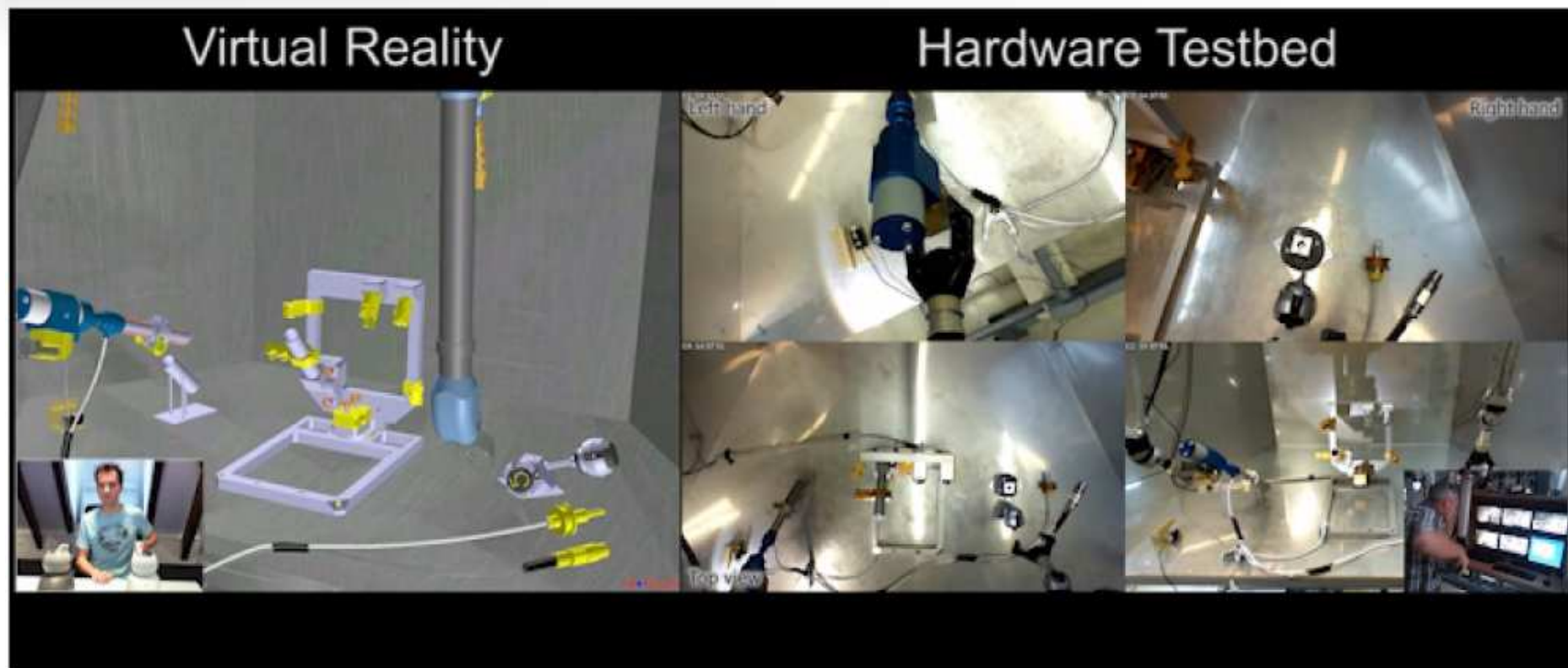
Virtual Slave Simulator



R&D on VR Calibration



Example Virtual Reality vs Hardware Testbed



Chances for SME's in ITER



- 1) Long term vision**
 - Invest
 - Establish relationships, create network
- 2) Team up with Institutes and R&D**
 - ITER has unique challenges in size and complexity
 - Fusion is still largely R&D driven
- 3) Team up with key industry players**
 - Need hands on experience with large scale projects
 - Need deep financial pockets to cover risks and overhead
- 4) Focus on unique products and exceptional performance**
 - ITER is a truly international playing field
 - ITER budget and rate limits put pressure on delivery to cost

Heemskerk Innovative Technology B.V.

Your partner in Robotics and Remote Handling for ITER



Contact:

Dr.ir. C.J.M. (Cock) Heemskerk

M: +31 (0) 651 340 966

E: c.heemskerk@heemskerk-innovative.nl

W: www.heemskerk-innovative.nl

