



Identification of the installation/facility: Construction facilities for mechanical precision products

Country: The Netherlands
Location (city): Flevopolder
Name of the facility: Construction facilities for mechanical precision products
Date of construction or of acquisition: start of realization: 1989
Owner: NLR
Contact point: Jan van Twisk - Dept. Engineering & Technical Services
Internet site: [facilities](#)

Technical characteristics:

1 - Type of infrastructure

Wind tunnel	
Propulsion bench	<input type="checkbox"/>
Structures facility	<input checked="" type="checkbox"/>
Material facility	<input checked="" type="checkbox"/>
Simulator (ex. Flight simulator, tower, ...)	<input type="checkbox"/>
Flight test bed (aircraft, embedded facilities, ...)	<input type="checkbox"/>
Supercomputers	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>

2 - Main technical characteristics

Design and manufacture of mechanical precision products like wind tunnel models, remote control mechanisms, moulds, structural test rigs.
CAD/CAM system based on CATIA V5.
CNC milling machines, 4x five-axis up to 3000x1200x800 mm.
Carbon Fibre composites milling facility.
CNC 3D-geometry measuring machine.
For a complete overview: see internet site.

3 - Research domains which can be addressed (refer to ACARE taxonomy <http://www.acare4europe.com/docs/ASD-Annex-final-211004-out-asd.pdf>)

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4 - Main (or specific) associated measurement techniques
Brown&Sharpe DEA Scirocco 3D-coordinate machine

5 - Operational status
- Fully operational



6 - Picture:



5-axes high speed milling machine: Huron KX50L

Financial elements:

Replacement cost (M€uros)

- | | |
|---------------|-------------------------------------|
| Less than 10 | <input type="checkbox"/> |
| 10 to 30 | <input checked="" type="checkbox"/> |
| 30 to 60 | <input type="checkbox"/> |
| 60 to 100 | <input type="checkbox"/> |
| More than 100 | <input type="checkbox"/> |

Practices concerning:

The facilities are available for support to the industry and research institutes; national, European, as well as worldwide.

Access to the facilities is on contract basis only.

Security procedures are normal practice to safeguard confidentiality of customer information.

Comments:

Specialty of the facilities is design and manufacture of “smart” wind tunnel models, e.g. models with high geometric accuracy, including complex instrumentation, balances, and remotely controlled mechanisms, both for testing at ambient and cryogenic conditions. Specific mechanisms are related to jet, propeller and (helicopter) rotor simulation.



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Origin of information ('signature'): author and date
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