## ICANS XIV 14<sup>th</sup> Meeting of the International Collaboration on Advanced Neutron Sources June 14-19, 1998

Starved Rock Lodge, Utica, IL

## Daimler-Benz Aerospace Dornier 88039 Friedrichshafen, Germany

Hugo Betzold

Tel +49-7545-82596 Fax +49-7545-82693 E-mail Hugo.Betzold@dss.domier.dasa.de

## EQUIPMENT AND SOFTWARE FOR RESEARCH WITH NEUTRONS

Incorporated in the Daimler-Benz Aerospace, Dornier is one of the leading high-tech companies in Germany.

In the field of advanced technologies Dornier developed neutron velocity selectors which reach the utmost limit of what is technically feasible today.

The unique feature of this SANS neutron velocity selector is the use of carbon fibre epoxy material for the very thin, helically twisted rotor lamellae which are coated with <sup>10</sup>B or Gd<sub>2</sub>0<sub>3</sub> as absorbing material.

This novel design allows rotor speeds of up to 28,300 rpm (= 430 m/s peripheral velocity).

Based on this technology Dornier is a partner for:

- neutron velocity selectors (monochromotors)
- ♦ higher-order neutron filters (harmonic filters)
- disk choppers
- FERMI choppers
- components for choppers (slats, multi-slit disks etc.)

as well as for software and peripheric instrumentation, e.g. as:

- control systems (PC based)
- monitoring systems for choppers and selectors
- interface to a host.

The successful use in many laboratories world-wide reflects the fact that Dornier's neutron research related instruments and components meet high experimental requirements and allows a broad versatility of applications.

## References:

BNL, Upton, NY; GKSS, Geesthacht; HMI, Berlin; IFE, Kjeller; ILL, Grenoble; ISSP, Tokyo; KAERI, Seoul; KFA, Jülich; LANL, Los Alamos, NM; MPI, Mainz; NIST, Gaithersburg, MD; NPMR, Chalk River, ON; PSI, Villigen; PTB, Braunschweig; RISO, Roskilde; SERC, Didcot; TUM, Munich