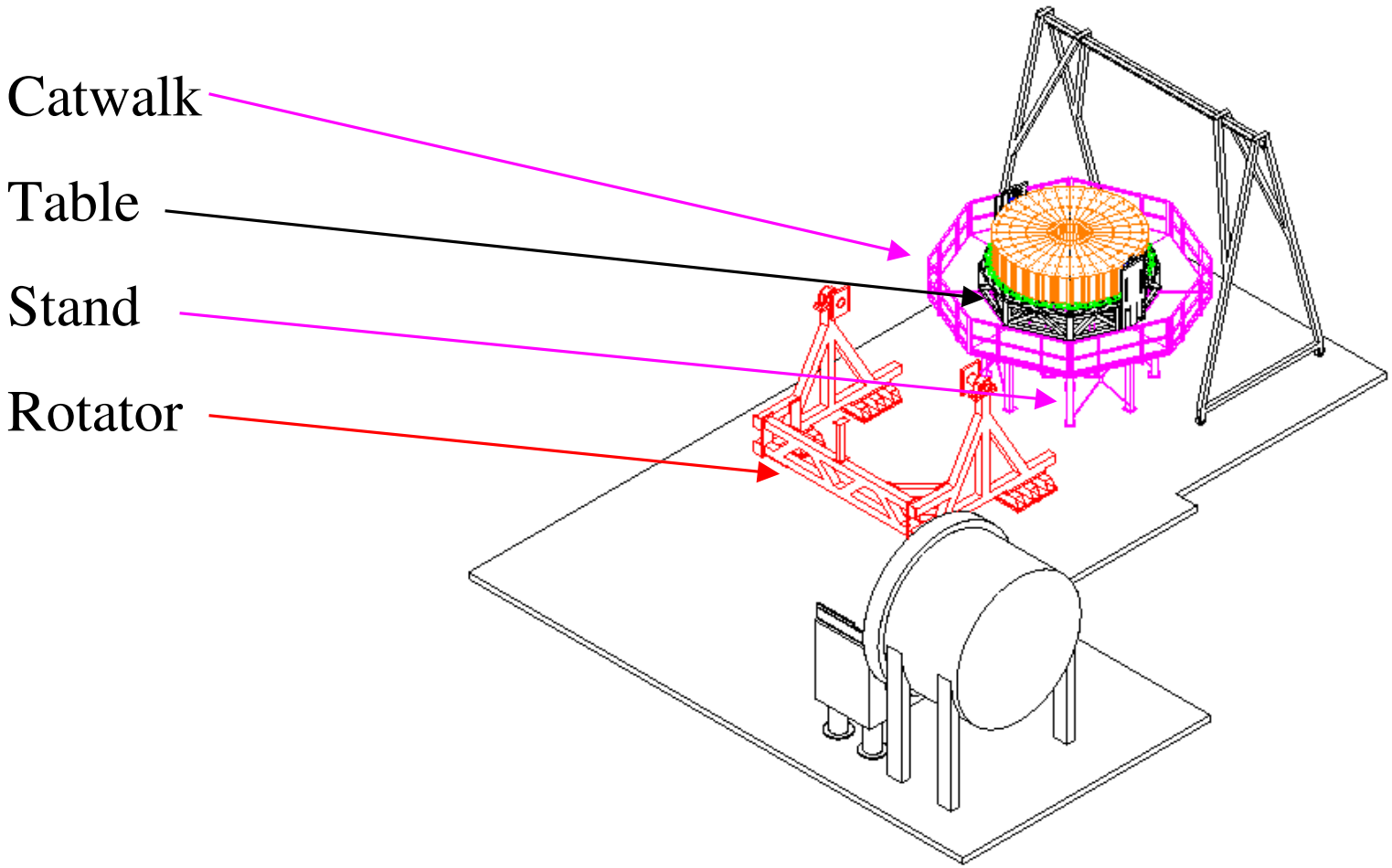
The HEC Wheel Assembly Equipment (Mechanical)

Chris Oram

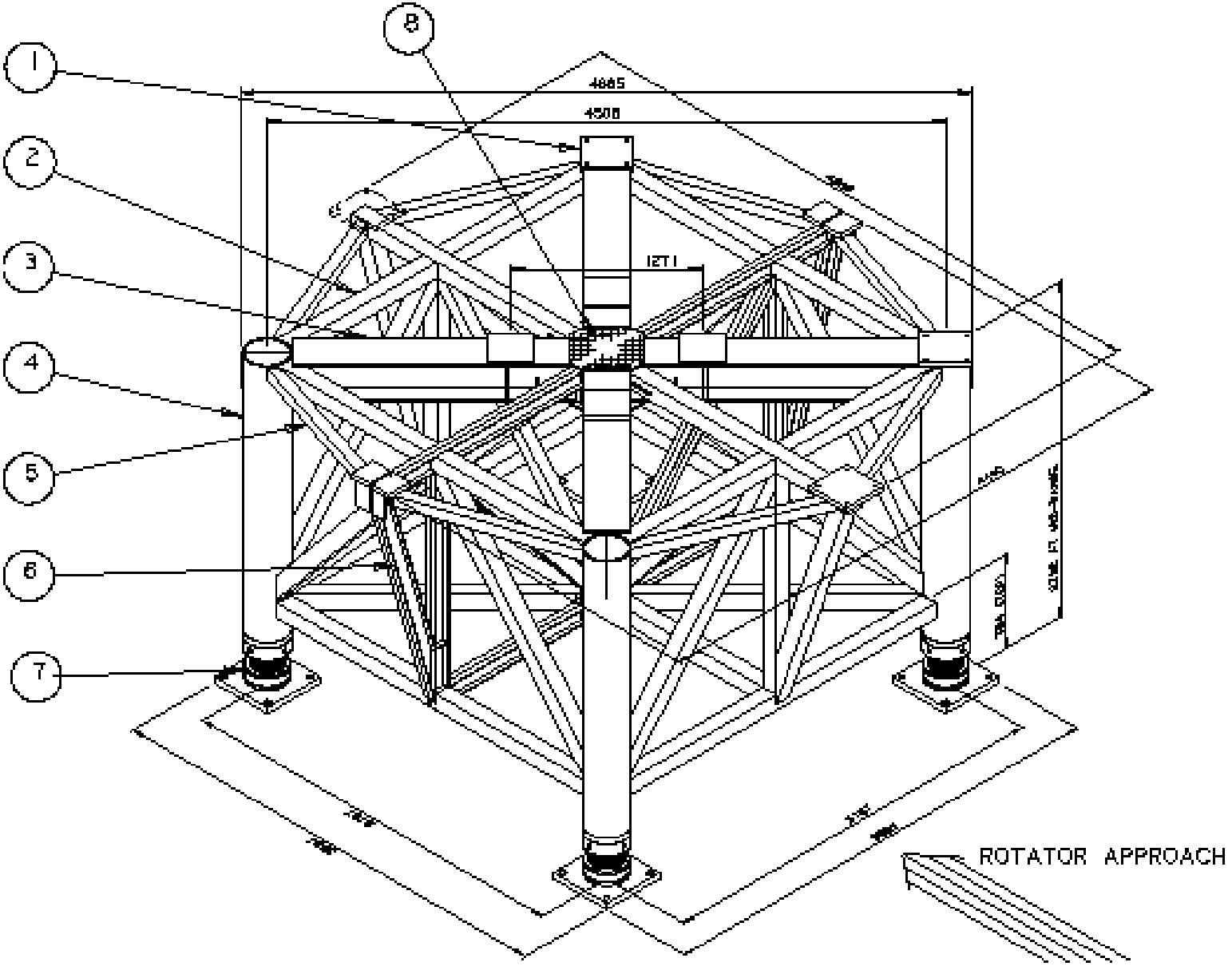
for

Jan Soukup & Roy Langstaff

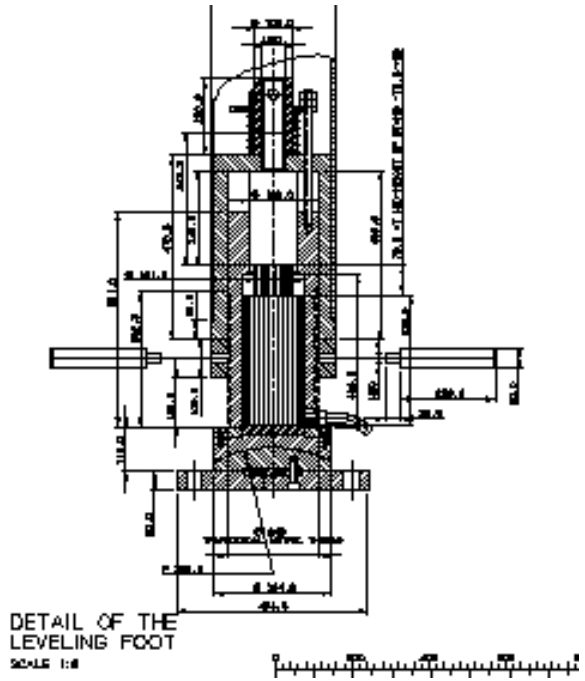
The Items



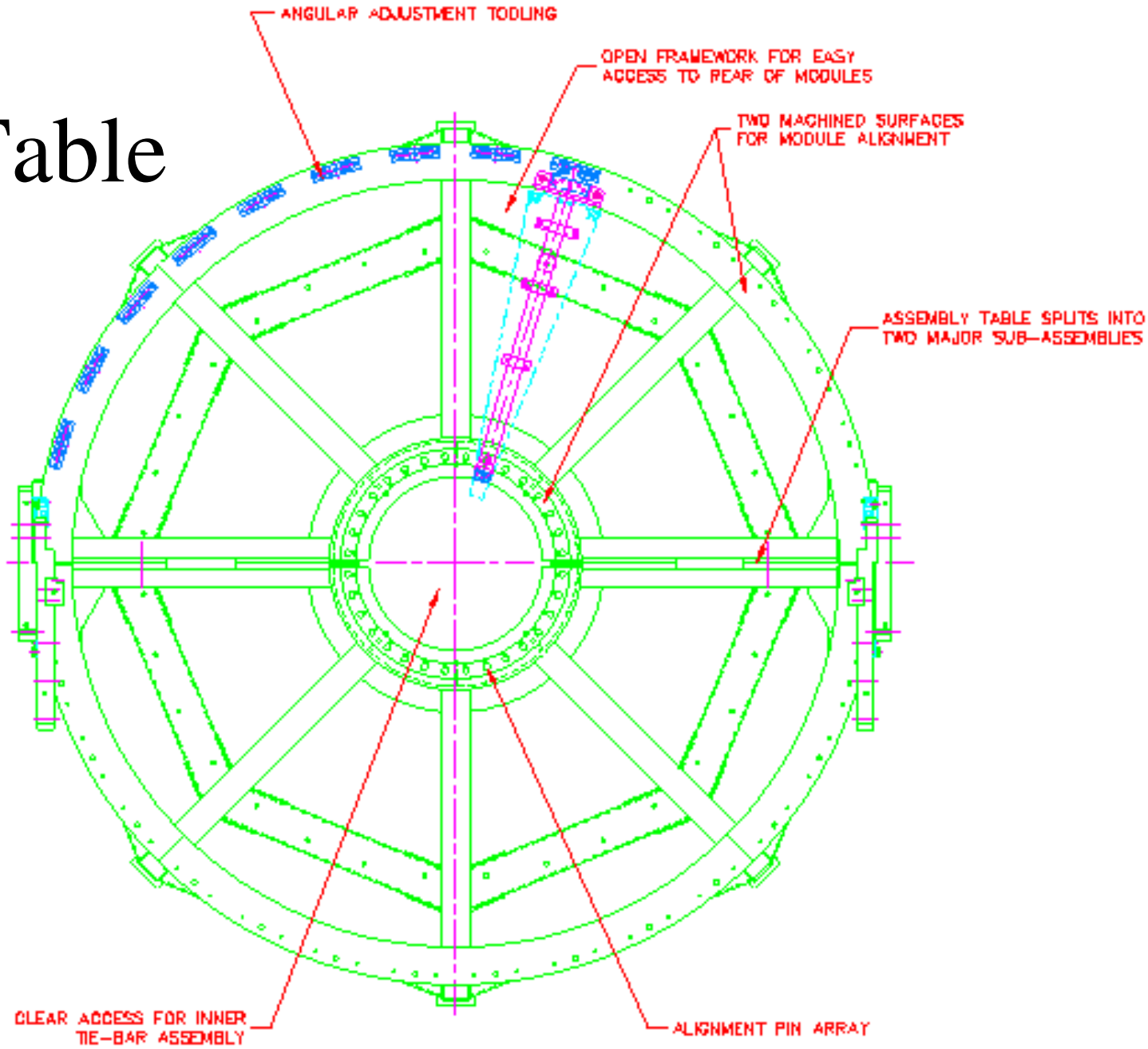
The Stand



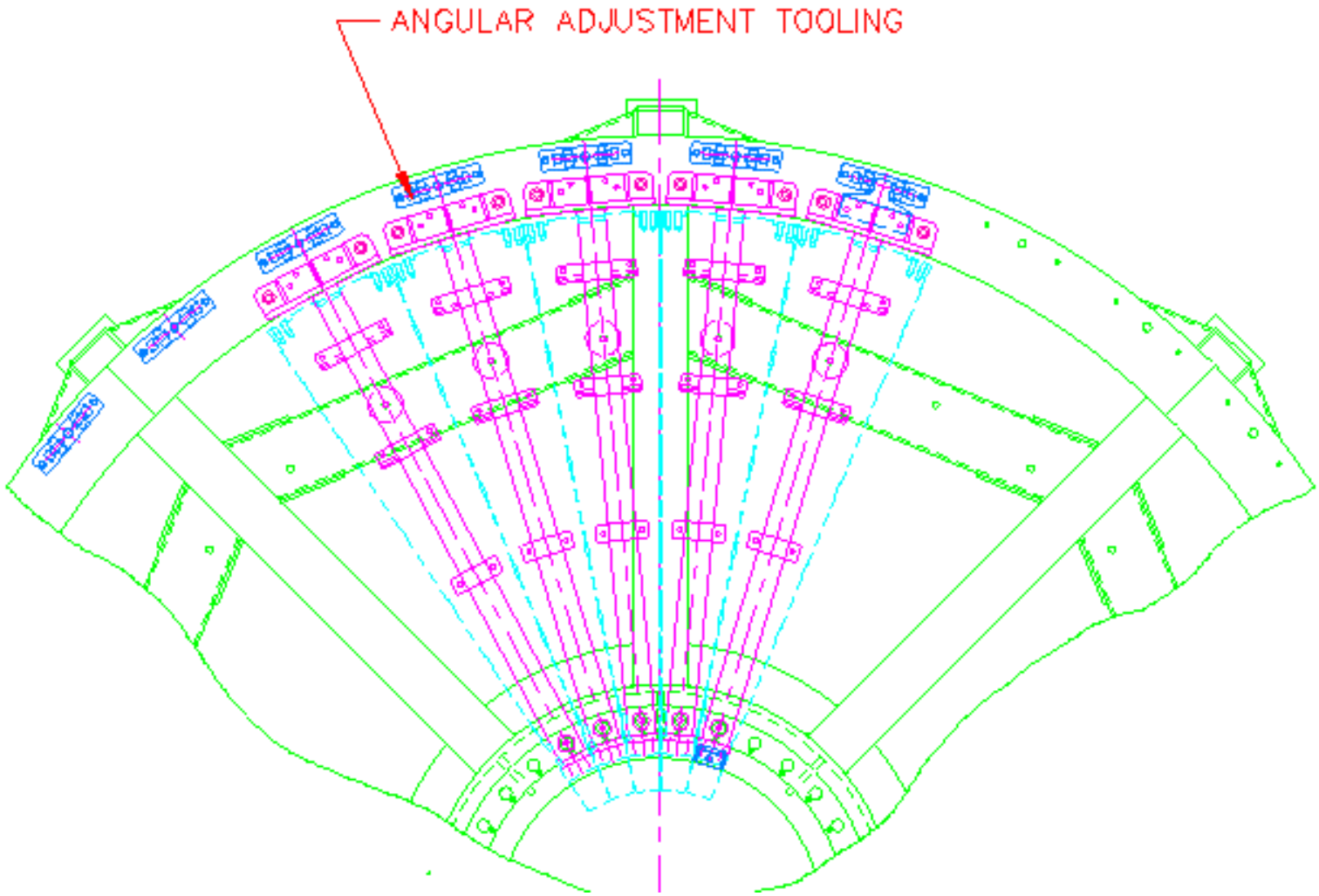
The Stands Adjustable Feet



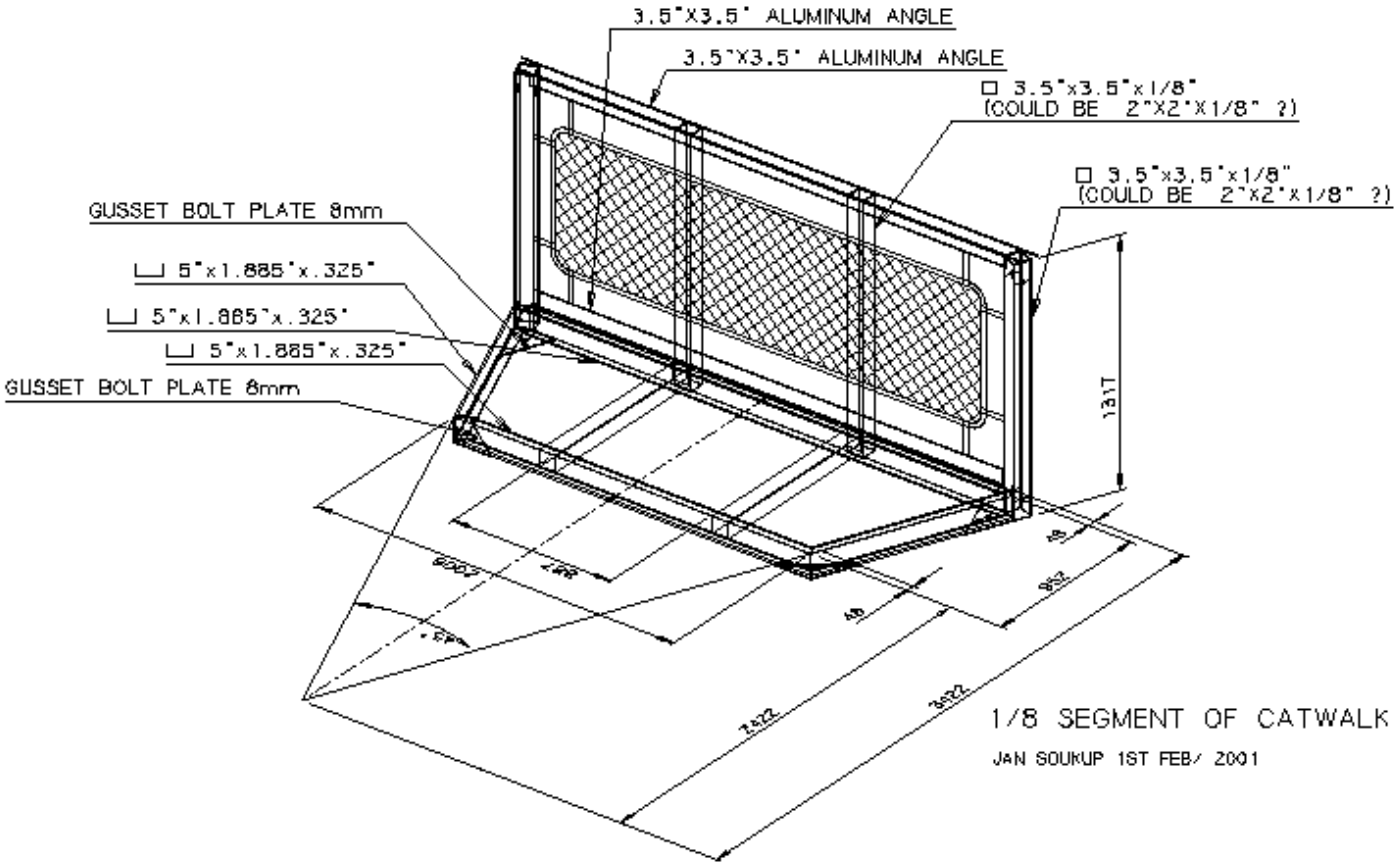
The Table


ANGULAR ADJUSTMENT TOOLING
OPEN FRAMEWORK FOR EASY ACCESS TO REAR OF MODULES
TWO MACHINED SURFACES FOR MODULE ALIGNMENT
ASSEMBLY TABLE SPLITS INTO TWO MAJOR SUB-ASSEMBLIES
CLEAR ACCESS FOR INNER TIE-BAR ASSEMBLY
ALIGNMENT PIN ARRAY

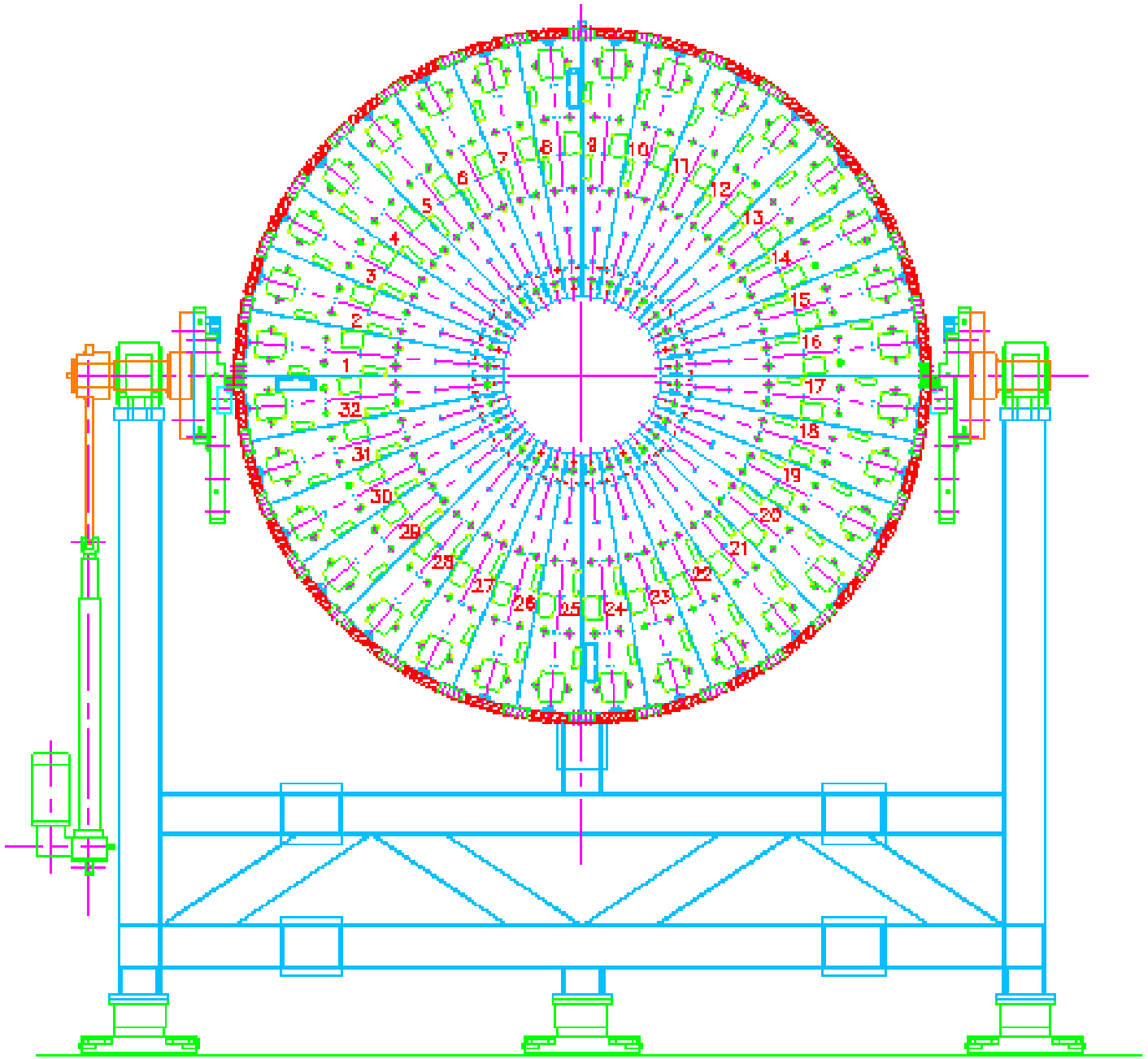
Angular Adjustment Tooling



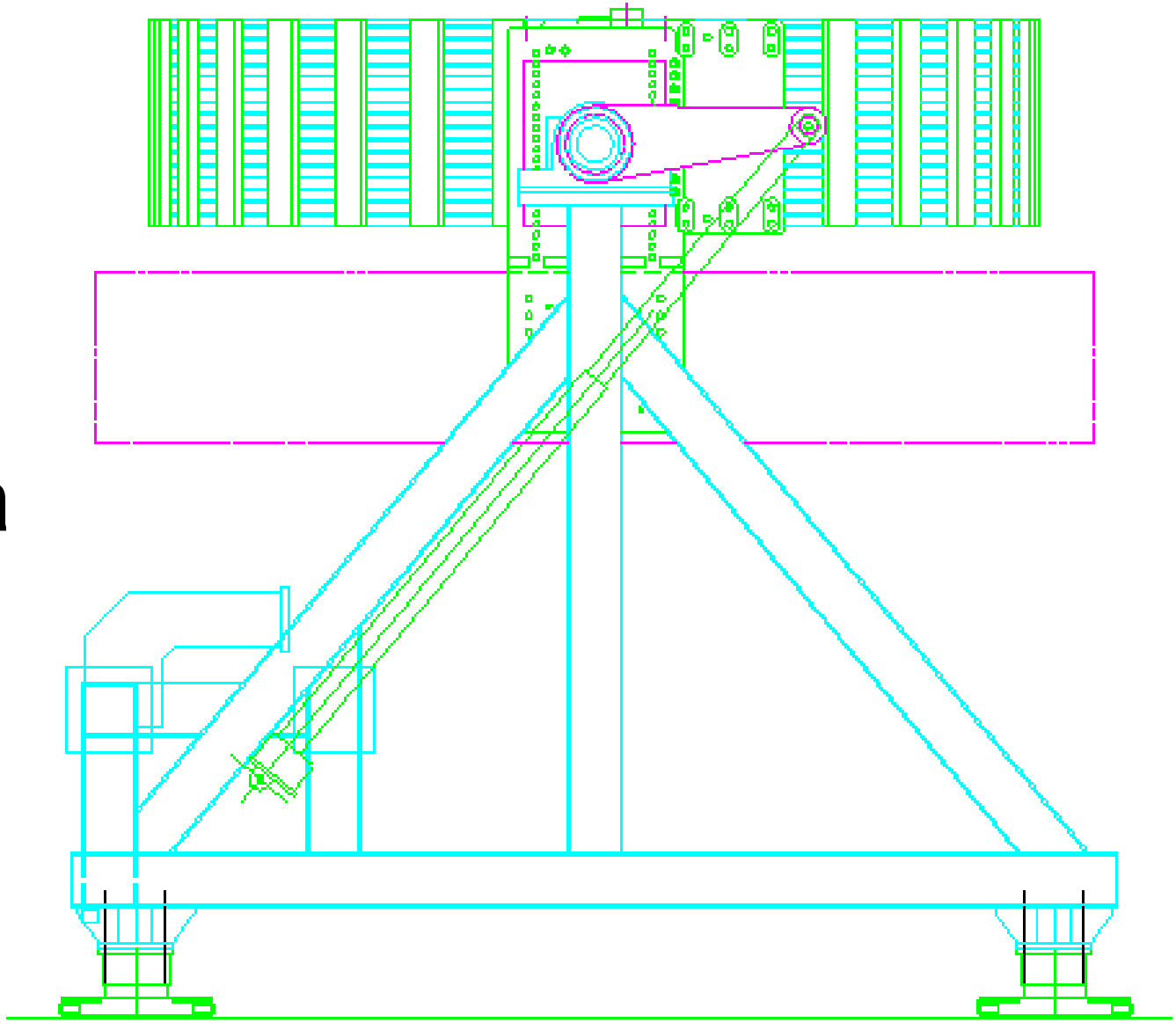
The Catwalk for Personnel



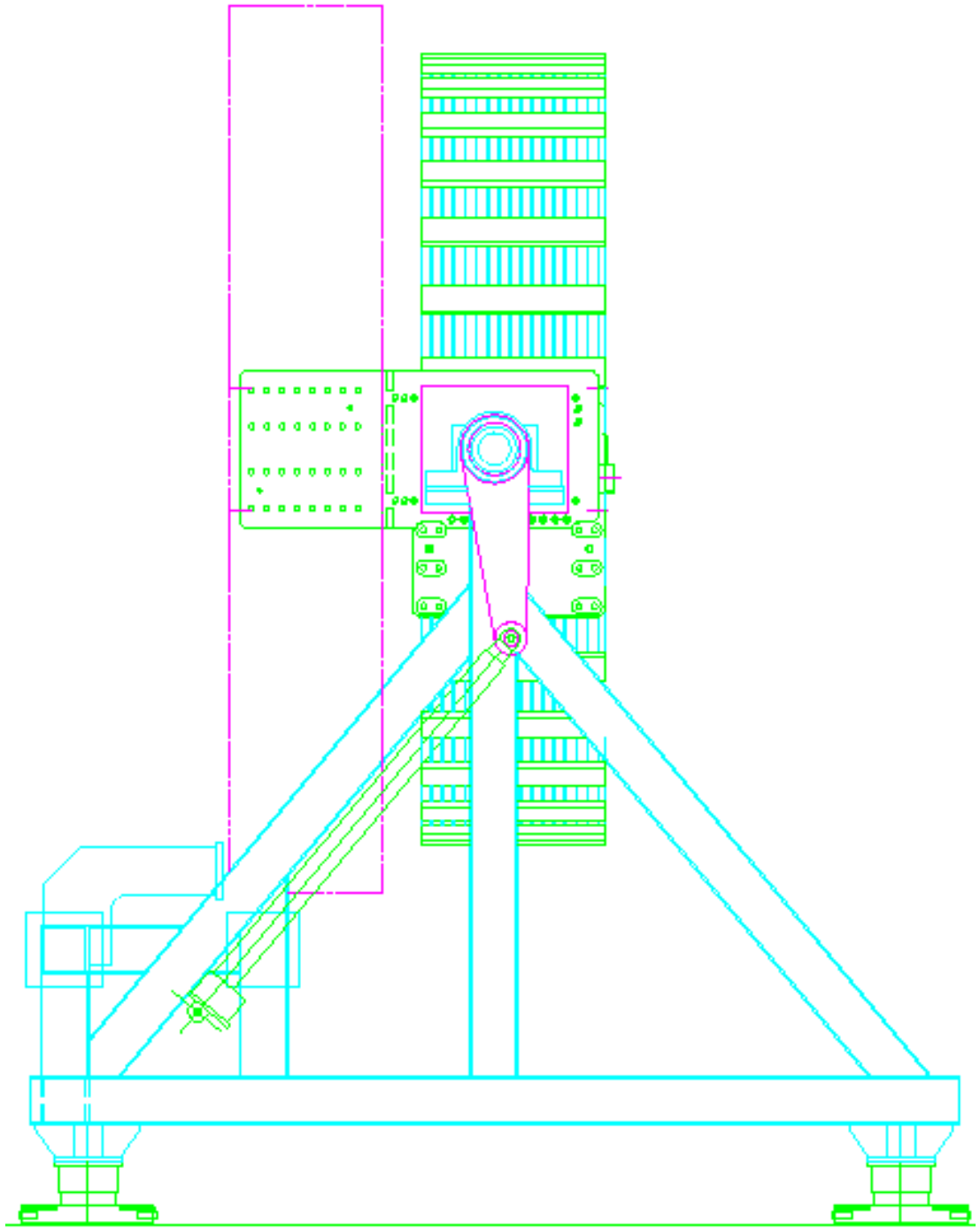
The Rotator With HEC Wheel



The Rotator Before Rotation



The Rotator After Rotation



Review of This System
Monday Morning 19th Feb 2001

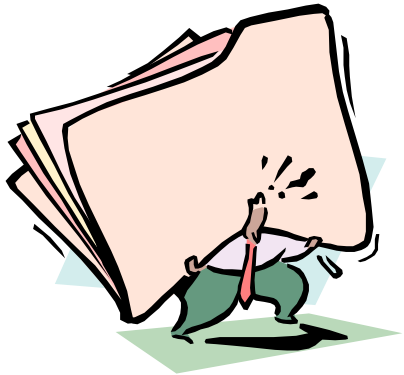
Purpose of the review.

The mayor objectives of this review are to confirm the feasibility and soundness of the design of the rotator to be used for the different calorimeter wheels for the insertion into the cryostat. The available drawings, draft technical specifications and QA plans will be discussed. In addition the feasibility and soundness of the HEC stacking table and support will be presented and reviewed.

Scope of the Review

A critical assessment of all engineering, but also organizational aspects of the project should be made. In general terms, the review should address the following points:

- Are all functional requirements completely and consistently defined and are they satisfactorily met by the proposed design.
- Are design risks adequately considered.
- Are the proposed solutions supported by calculations in terms of performance and safety.
- Are all components and materials are qualified.
- Are assembly and qualification test procedures defined and understood.
- Are procurement plans and schedules feasible, are manpower and space requirements clear.



The Review

Review Committee

- B. Szeless, CERN, Chair
- P. Fassnacht, CERN
- P. Schacht , MPI
- L. Shaver , Arizona

Ex officio

M. Price, CERN

H. Oberlack, MPI

For Information

- G. Benincasa, CERN
- H. Schmücker, MPI

Cryostat team:

A. Falou, LAL-Orsay

G. Mace, LAL-Orsay

P. Pailler, CERN

EMEC team:

P. Karst, Marseille

S. Tisserant, Marseille

M. Raymond, Marseille

HEC team:

C. Oram, TRIUMF

J. Pinfold, Alberta

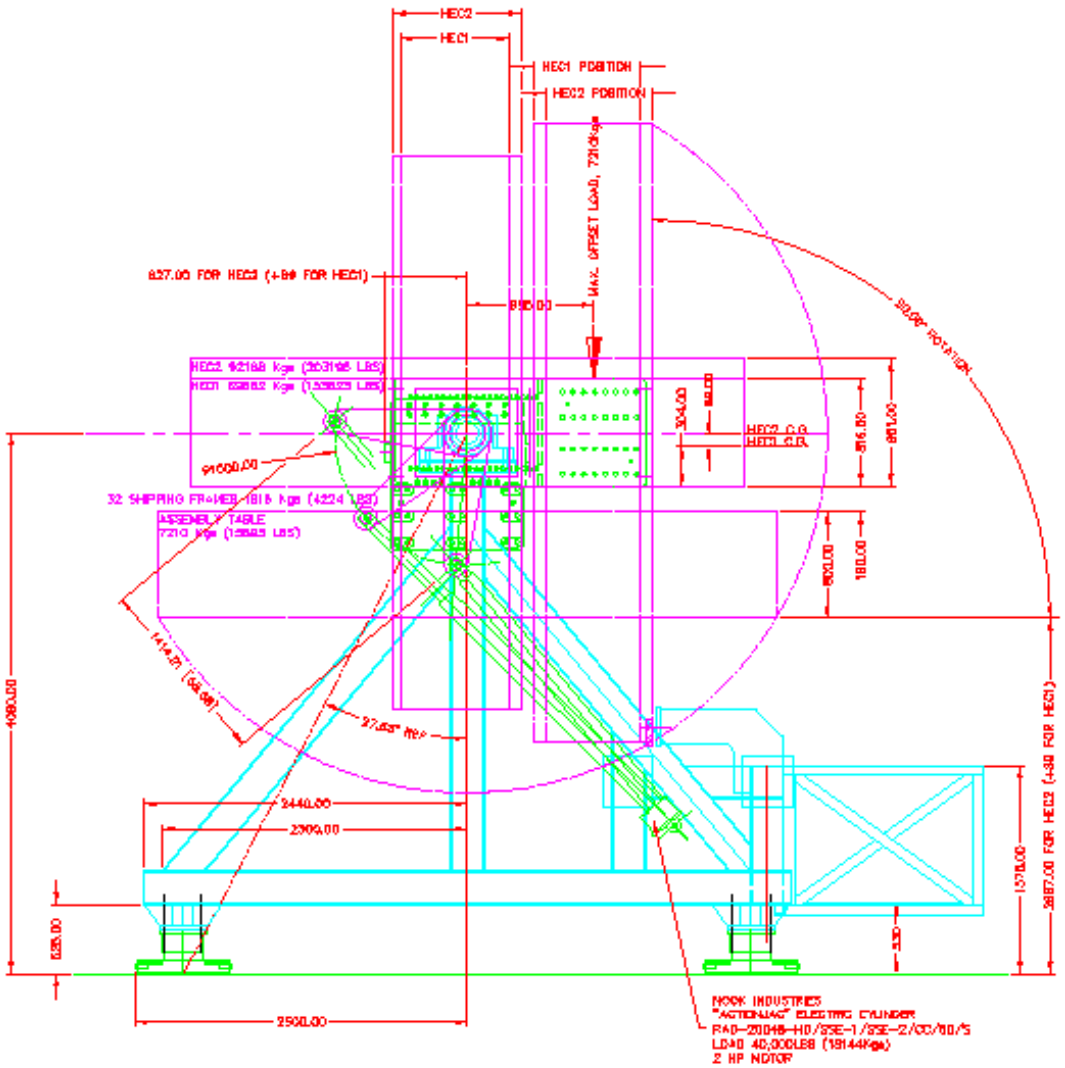
M. Kazarinov, Dubna

LARG team:

D. Fournier, LAL-Orsay

D. Steyaert, Paris VI-VII

Rotator Details, Especially the Rotation Arm



ROTATIONAL GEOMETRY
HEC1 AND HEC2 WHEELS

ROTATOR REVIEW – CERN – FEBRUARY 19 2001
ROY LANGSTAFF – TRIUMF – CANADA