1/4/1997ep

MODIFICATION OF TECHNICAL SPECIFICATION

EP - 13746 / PPE

SUPPLY OF A PROTOTYPE COMPOSITE CYLINDER FOR ATLAS

Note: Relevant paragraph replacement are made below. Otherwise, the original technical specification EP - 13746 / PPE dated 05/11/1996 remain valid.

2.1 DRAWINGS
Design of the cylinder (all fasteners to fix reference marks, detector modules, cooling pipes etc will be defined and added later, and are not part of this tender) is described in the drawings 1-TB-0035-242-00-C and 152227P3B.
Stiffness test set-up is described in the drawing 1-TB-0035-243-00-B
CERN reserves the right to make small changes to these drawings at the time the order is placed.

2.3.2 SANDWICH EDGES
The edges of the sandwich should be completely closed with appropriate close-outs, where the flanges will be glued. The sandwich-flange assembly may be reinforced by additional doublers. The technique proposed should be clearly explained in the tender.

2.3.4. MATERIAL SAMPLES FOR VALIDATION
No sample for validation are required.

2.3.5. MATERIAL SAMPLES
The following samples should be made - with the same batches of material and cured exactly as the cylinder and flanges - to allow for quality control tests of the sandwich and flanges mechanical properties.

Samples of skin material for sandwich:
- 4 flat skin pieces 230mm x 25mm x 0.2mm thickness (2 in 0° and 2 in 90° direction of the skin), for tensile tests to measure Youngs modulus of skins.

Samples of sandwich flat plates:
- 4 flat pieces 400mm x 50mm x 6mm thickness for 4 points bending tests.
- 4 flat pieces 50mm x 50mm x 6mm thickness for flatwise tensile strength tests.

Samples of sandwich edge including close-out.
- 2 flat samples with close out on one edge, exact definition to be agreed before order is placed.

Samples of flange material:
- 4 flat plates 230mm x 25mm x 3mm thickness for tensile test .

For all these sample, the manufacturer, based on his experience, can propose alternative dimensions. They should be clearly indicated in the tender.