

**TECHNICAL SPECIFICATIONS OF STORES AND DRAWINGS.**

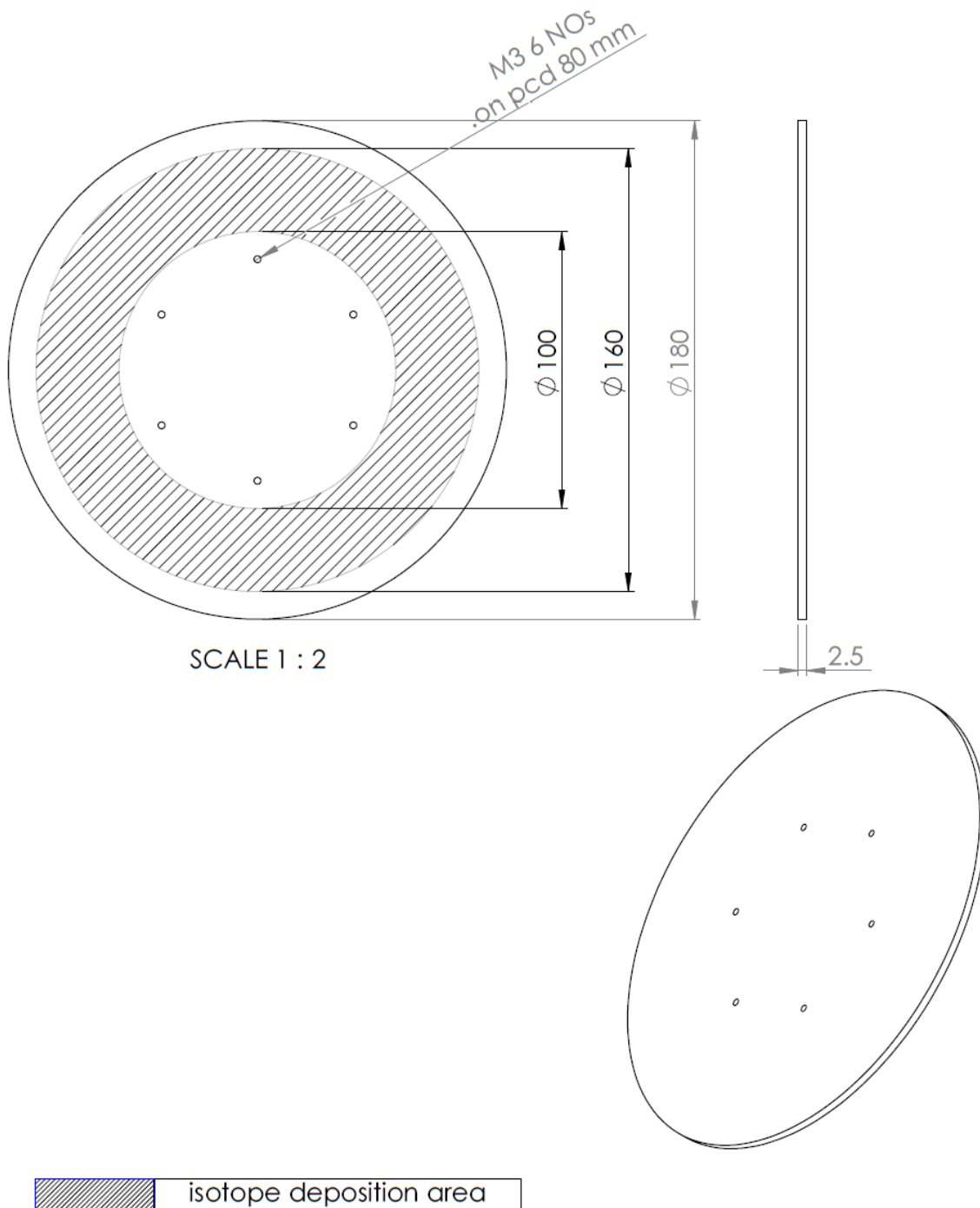
Technical Specifications of Hydrogen Isotope Target



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## **Technical specifications of Hydrogen Isotope Target**

- (1) Target Type: Disk Target
- (2) Disk Dimension :
  - Outer Diameter: 180 mm  $\pm$ 1mm
  - Thickness: 2.5 mm  $\pm$  0.5mm
- (3) Disk Material : Copper OFHC ( Oxygen free high conductive Copper)
- (4) Titanium Layer
  - Internal Diameter: 100 mm  $\pm$ 2 mm
  - Outer Diameter: 160 mm  $\pm$ 2mm
  - Active area:  $\approx$  122 cm<sup>2</sup>
  - Tritium deposition:  $\approx$ 1150  $\mu$ g/cm<sup>2</sup>  $\pm$ 10%
- (5) Tritium Loading Ratio: T/Ti  $\geq$  1.5
- (6) Tritium Content : 140 Ci  $\pm$  10%
- (7) Quantity: 2 Nos.
- (8) Each target should be delivered with an inspection report giving the individual characteristics.
- (9) Packing and Transport: Each target should be packed in an individual metallic vessel, under vacuum. The vessel should be easily openable. Tool for opening the vessel should be provided
- (10) Delivery: Within 1 Year from the date of contract/purchase order.
- (11) Factory Acceptance Test (FAT) criteria: Following factory acceptance test should be carried at vendor side and test report should be submit for IPR approval before shipment.
  1. Tritium activity measurement.
  2. Tritium/ Titanium ratio
  3. Tritium mass
- (12) Site Acceptance Test (SAT) criteria: Following site acceptance test should be carried at IPR side by IPR personnel only.
  1. Tritium activity measurement.
  2. Tritium/ Titanium ratio
  - 3 Tritium mass



## Hydrogen Isotope Target

## **-: COMPLIANCE STATEMENT :-**

<b>Compliance Table for Hydrogen Isotope Target</b>		Vendor Specification
IPR Specification		
Target Type	Disk Target	
Disk Dimension	Outer Diameter: 180 mm $\pm$ 1mm Thickness: 2.5 mm $\pm$ 0.5mm	
Disk Material	Copper OFHC ( Oxygen free high conductive Copper)	
Titanium Layer	Internal Diameter: 100 mm $\pm$ 2 mm Outer Diameter: 160 mm $\pm$ 2mm Active area: $\approx$ 122 cm <sup>2</sup> Tritium deposition: $\approx$ 1150 $\mu$ g/cm <sup>2</sup> $\pm$ 10%	
Tritium Loading Ratio: T/Ti	$\geq$ 1.5	
Tritium Content	140 Ci $\pm$ 10%	
Quantity	02	
Each target should be delivered with an inspection report giving the individual characteristics.		
Packing and Transport: Each target should be packed in an individual metallic vessel, under vacuum. The vessel should be easily openable. Tool for opening the vessel should be provided		
Delivery:- 1 Year from the date of contract/purchase order.		
Factory Acceptance Test (FAT) criteria: Following factory acceptance test should be carried at vendor side and test report should be submit for IPR approval before shipment. <ul style="list-style-type: none"><li>• Tritium activity measurement.</li><li>• Tritium/ Titanium ratio</li><li>• Tritium mass</li></ul>		
Site Acceptance Test (SAT) criteria: Following site acceptance test should be carried at IPR side by IPR personnel only. <ul style="list-style-type: none"><li>• Tritium activity measurement.</li><li>• Tritium/ Titanium ratio</li><li>• Tritium mass</li></ul>		

Please specify/mention exact technical values instead of mentioning OK, YES, ACCEPTABLE, CONFIRM, COMPLY, AGREED etc.

**AUTHORIZED SINGATORY**

**OFFICIAL SEAL**

**DATE :-**