

## Technical Appendix TCPH 3D MODELS

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### TECHNICAL SPECIFICATION FOR THE SUPPLY OF THE TORUS CRYOPUMP HOUSINGS TO THE ITER ORGANISATION

## INFORMATIVE APPENDIX APB3\_D

### TCPH 3D MODELS

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Ref. #	APB3_D
Filename	APB3_D_TCPH_3D_Models

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MODIFICATIONS			
PA Version Number	Date	Document Version Number	Modifications
1.0	30 Oct 2015	1.0	First Draft
1.0	28 Jan 2016	2.3	Version number changed
1.0	24 April 2017	2.5	DET of Model added
1.0	20 June 2017	2.6	Version number changed

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### 3D MODELS HAS BEEN SUPPLIED BY IO TO THE DA

The following 3D models are provided by IO to the DA and are contextual. This means:

- the data sent by ITER shall not be modified
- the data set shall only be used for the generation of 2D drawings for the call for tender procedure
- The modification of the 3D data sent by IO is not expected. Only new drawings attached to the relevant structure shall be reconciled
- Restructuring of the 3D data from multi-body to multi part structure is not needed for the preparation of the call for tender drawings
- The correct application of the ITER CAD Manual (RDB1\_04) shall be used for the reintegration of models into the IO's system. In particular, the link management 3D/2D in the case of assembly drawings has a specific importance. Please refer to the ITER CAD Manual (RDB1\_04) Section 4, chapter. 4.2.8.2
- IO propose the DA submits a set of representative data for ITER evaluation at the beginning of the task to ensure the above point
- The new method for the generation of 2D drawings from an Enovia database is described in the ITER CAD Manual (RDB1\_04). This method is described in the IO document number (RDB1\_22).

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- CRYOSTAT.TCPH#WP#AFR7XV
- 24 TCPH\_TYPE\_A\_ASSY#WP#PRP3C3 \_ [24CRLC-P04] CM --A Approved
- 24 TCPH\_TYPE\_B\_ASSY#WP#PRP3DK \_ [24CRLC-P06] CM --A Approved
- 24 TCPH\_TYPE\_A\_ASSY#WP#PRP3C3 \_ [24CRLC-P10] CM --A Approved
- 24 TCPH\_TYPE\_B\_ASSY#WP#PRP3DK \_ [24CRLC-P12] CM --A Approved
- 24 TCPH\_TYPE\_A\_ASSY#WP#PRP3C3 \_ [24CRLC-P16] CM --A Approved
- 24 TCPH\_TYPE\_C\_ASSY#WP#PTNU9K \_ [24CRLC-P18] CM --A Approved
- RH\_TEMPORARY\_FLANGE\_ASSY#WP#Q6QQWZ \_ [24CRLC-J] CM --- Approved
- RH\_TEMPORARY\_FLANGE\_ASSY#WP#Q6QQWZ \_ [24CRLC-J] CM --- Approved
- Applications

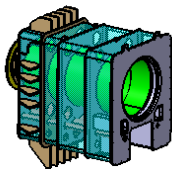
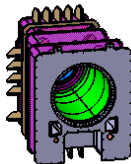
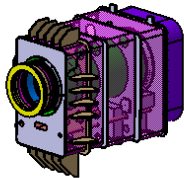
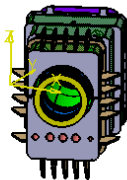
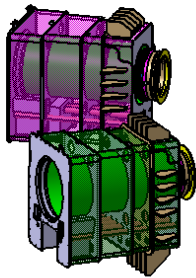
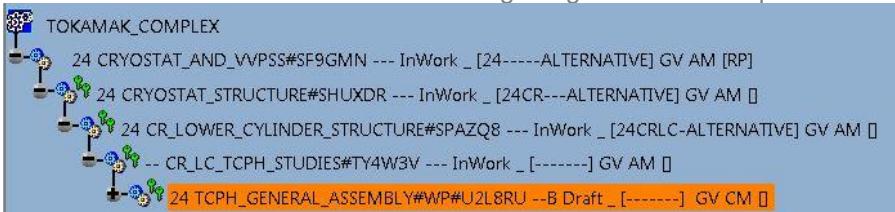


FIG 1: 3D Model of ITER Torus Cryopump Housing

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A) Data Request			
<b>Title</b>	<b>TCPH Design</b>		
<b>DA Contract</b>	Enter the contract number	<b>Prev DET Number</b>	DET-Number
<b>IO Agreement/PA</b>		<b>Date</b>	18/01/2017
<b>Purpose</b>	This DET is to provide to INDA the latest design of TCPH. This design includes INDA comments and the last updates regarding the VV or RH interfaces.		
	<b>Sender</b>	<b>Receiver</b>	
<b>Name</b>	Julien VAUQUELIN	Vipul MORE	
<b>Company/Organization</b>	ITER IO	ITER INDA	
<b>E-mail</b>	Julien.vauquelin@iter.org	Vipul.more@iter-inda.org	
<b>Requested Data</b>	Click to enter information regarding the requested data 		

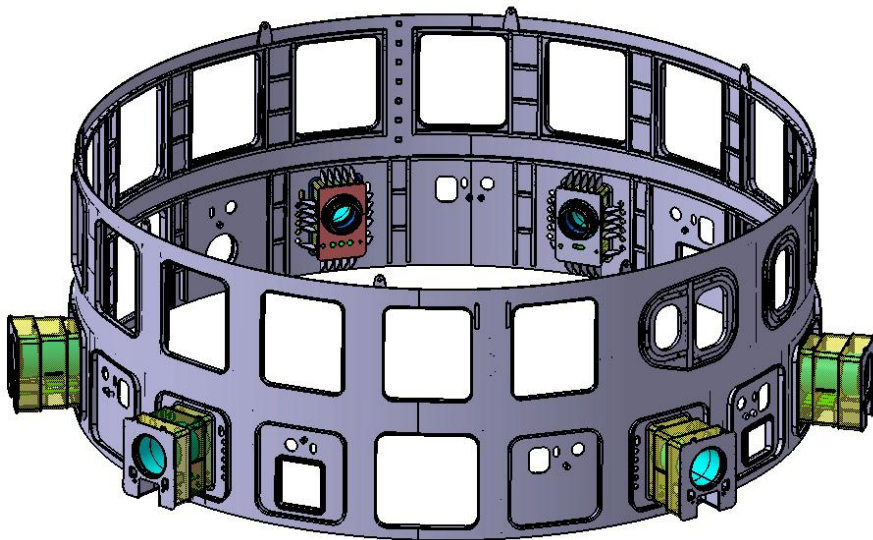
B) Exchange Authorization		
	Name	Date
<b>Data prepared by</b>	Julien VAUQUELIN	18/01/2017
<b>Reviewer</b>	Olivier TAILHARDAT	18/01/2017
<b>Approver</b>	Anil BHARDWAJ	18/01/2017

C) Exchange Description			
<b>Data Use</b>	DMU REINTEGRATION (Data meant to be stored in IO ENOVIA data base) (Data supplied to IO for IO promotion)	with TO	<input type="checkbox"/>
		w/o TO	<input type="checkbox"/>
	DESIGN (Data meant to be modified according to the provided BoM)	<input type="checkbox"/>	
	CONTEXTUAL (Data is not meant to be modified: analysis, manufacturing, context for design...)	<input checked="" type="checkbox"/>	
	INFORMATION (Data not relevant for CAD design)	<input type="checkbox"/>	
<b>Collaboration Scheme</b>	SYNCHRONOUS (CAD design performed with direct connection to IO ENOVIA data base)		<input checked="" type="checkbox"/>

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	ASYNCHRONOUS (CAD design performed out of to IO ENOVIA data base)	<input type="checkbox"/>
Comments on Exchange	<p><u>These models are provided as Contextual data through database replication in the INDA database:</u></p> <ul style="list-style-type: none"><li>• The data here in after has been successfully replicated into INDA database.</li><li>• The file named <b><i>"BOM_DET-04121-IN.xls"</i></b> enclosed in the notification delivery mail containing this document is reporting to the corresponding data replicated into INDA database to suit this DET needs.</li><li>• This data has not to be modified because still belonging to ITERPRJ.</li></ul>	

D) Data Description		
PBS	24 CR LC	
Design Maturity	Detailed Design (DD)	
Bill of Models (BoM)	BOM_DET-04121-IN.xls	
Root Assembly	Click to enter root assembly filename	
The CAD data opened at partner's site should look this way:		
		
Data collection	Site:	INDA ENOVIA database
	File:	Click here to enter the data package filename

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### E) Data Exchange Actors

	Name	Date
Data requested by:	Vipul MORE	18/01/2017
Task owner: ITER RO:	Anil BHARDWAJ	
DA's Task officer:		
Reviewed by ITER DI RO:		
Data prepared by:	Julien VAUQUELIN	18/01/2017
Data DET sent by:	Guillaume DAVIN	03/02/2017
Final Receiver of Data:	Vipul MORE	03/02/2017

### F) Interface Description and Corresponding RO

Geometrical Interface description	Responsible Officer	Comments including CAD model number
Non-geometrical Interface description	Responsible Officer	Comments