Workshop on Vacuum extension diagnostic systems, from design to operation

Monday, 30 October 2023 - Tuesday, 31 October 2023

Book of Abstracts

Contents

Welcome Message	1
Workshop description	1
Design of the baking jacket for 55.E5 XRCS Core	1
Vacuum extensions: relevant aspects of loads definition, engineering analysis and integrity assessment	1
Universal circular bellows conceptual design for XRCS edge & survey	1
Introduction to SJM, a bellows specialist company	1
Design and development of the bellows for vacuum extension pipes of ITER VUV spectrometers	1
Status of double wall safety bellows based rotary feedthrough development	1
Implementation of a maintainable vacuum extension in the ITER Port Cell environment	2
Installation strategy of PortPlug - ISS and PCSS for Port with vacuum extensions	2
Technical Specifications of the pipes in-bore cutting and welding tool	2
ISS disconnection strategies	2
Foreseen maintenance operations to be held in L3 of the Hot Cell Complex	2
Status of R&D for Diamond based X-ray filter	2
Development of electrical feedthrough for Radial Xray external camera	3
VAT Valves qualification (temporary title)	3
Grounding scheme guidance for vacuum extensions	3
Guidelines for preparing the Concept of Operation for diagnostics systems	3
System commissioning and integrated commissioning	3
JET return of experience	3
Coffee break	3
Open discussion: open issue to address, design/development needs, actions to follow-up	3

Universal circular bellows conceptual design for XRCS edge & survey

7

Introduction to SJM, a bellows specialist company

8

Design and development of the bellows for vacuum extension pipes of ITER VUV spectrometers

9

Status o	f double wa	ll safety l	oellows	based	rotary	feedthrou	ıgh de-
velopm	ent	•			•		

10

Implementation of a maintainable vacuum extension in the ITER Port Cell environment

12

Installation strategy of PortPlug - ISS and PCSS for Port with vacuum extensions

13

Technical Specifications of the pipes in-bore cutting and welding tool

14

ISS disconnection strategies

15

Foreseen maintenance operations to be held in L3 of the Hot Cell Complex

16

Status of R&D for Diamond based X-ray filter

24

23

Coffee break

Open discussion: open issue to address, design/development needs, actions to follow-up

 $\textbf{Corresponding Author:} \ raphael.tieulent@iter.org$