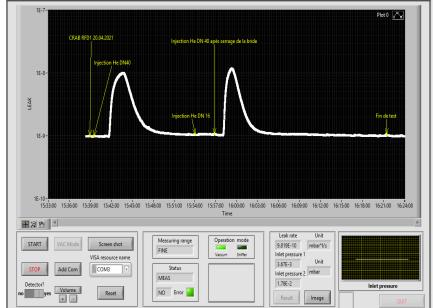
Leak in RFD1-DC









HL-LHC follow-up/ Couplers

HOM couplers: drawing folders to be Released: URGENT!

RFD HOM Couplers	CDD number	Drawing folder
H-HOMC feedthrough	LHCACFHC0324	2266941
H-HOMC	LHCACFHC0151	2302298
V-HOMC	LHCACFHC0322	2271762
Field antenna	LHCACFHC0321	2266953

 Gasket drawings for HHOM and Pick-up/VHOM. New version created with material CuOFE, to be released.

Drawing ref.	Status	
LHCACFHC0259	Released	DN40 special
LHCACFHC0261	Released	DN100



HL-LHC follow-up/ MTF

Missing reports in MTF:

Docs to be uploaded in MTF				
<u>H-HOMC</u>	RF measurements report (test box) (James). EDMS 2506309			
H-HOM	Leak test report HCACFHC007-CR000002			
VHOM 45	Leak test report HCACFHC006-CR000004			
Field antenna 47	Leak test report HCACFPU004-CR000004			
HHOM feedthrough	Leak test report – No reference on the piece?			

Equipment Identifier: HCACFHC007-CR000001

Other Identifier: None

Description: CERN RFD H-HOM Coupler Prototype

<u>167</u>	0	BCP (*)	Done	Ok
<u>170</u>	0	Leak test	Done	Ok
175	0	RF measurement	Pending	
180	0	Conditioning to enter in clean room	Done	Ok



HL-LHC follow-up/ MTF

- Create a NCR for the RFD2_DC adaptor. URGENT!
 - Template for NCR: EDMS <u>1501109</u>
- Reports for RFD2-DC and RFD1-DC MTF:
 - Step 55 Installation adaptors and verification
 - Step 65 High order mode measurement at warm
 - Step 75 High order mode measurement at cold

Equipment Identifier: HCACFDC004-CR000002

Other Identifier: None

Description: RFD Dressed Cavity Prototype CERN

	e of 🍸 Equip				
Actions: Ad	d extra ste	p			
Workflow I	Diagram				
P		No workflow diagram is defined for this equipment			
Workflow !	Steps			Last Repe	eated
Step 13 R/E	Other nam	ne Description	Status	Result	INC
<u>5</u>	()	Transfer of the JC to the Clean Room	Done	Ok	
<u>10</u>	()	HPR	Done	Ok	
<u>15</u>	()	Clean room assembly: HOMs, pick-up field antenna, etc	Done	Ok	
<u>20</u>	()	Step 20 (TE-VSC) - Leak Test after installation of antennas (ISO 4)	Done	Ok	
<u>25</u>	()	Step 25 (TE-VSC) - RGA Analysis of cavity vacuum (ISO 4)	Done	Ok	
<u>30</u>	()	Preparation for Cold Test	Done	Ok	
<u>35</u>	()	Step 35 (TE-VSC) - Leak Test (on the insert)	Done	Ok	
<u>40</u>	()	Step 40 (TE-VSC) - RGA Analysis (on the insert)	Done	Ok	
<u>45</u>	()	Step 45 (TE-VSC) - Bake-out		Cancelled	
<u>50</u>	()	Step 50 (TE-VSC) - RGA Analysis after bake-out		Cancelled	j
<u>55</u>	()	Installation 25/50 Ohm adaptors and verification	Pending		
<u>60</u>	()	Sensors location and verification, freq. measurement and TDR verification	Done	Ok	
<u>65</u>	()	High order mode measurements at warm	Pending		
<u>70</u>	()	Step 70 (TE-VSC) - Continuous RGA Analysis during cool down		Cancelled	i
<u>75</u>	()	High order mode measurements at cold	Pending		
<u>80</u>	()	RF Measurement at cold	Pending		
<u>85</u>	()	Step 85 (TE-VSC) - Continuous RGA Analysis during warm-up	Cancelled	Cancelled	į.
<u>90</u>	()	Step 90 (TE-VSC) - RGA analysis of cavity vacuum after cold phase	Pending		
<u>95</u>	()	Slow cavity venting N2 on insert	Done	Ok	
100	()	RF measurements after cold phase	Pending		

Equipment Identifier: HCACFDC004-CR000001
Other Identifier: None

Description: RFD Dressed Cavity Prototype CERN

Norkflow D	iagram				
		No workflow diagram is defined for this equipment			
Norkflow S	teps		1	Last Repo	ate
Step 13 R/E	Other nan	ne Description	Status	Result	IN
<u>5</u>	()	Transfer of the JC to the Clean Room	Done	Ok	
<u>10</u>	()	HPR	Done	Ok	
<u>15</u>	()	Clean room assembly: HOMs, pick-up field antenna, etc	Done	Ok	
<u>20</u>	()	Step 20 (TE-VSC) - Leak Test after installation of antennas (ISO 4)	Pending		
<u>25</u>	()	Step 25 (TE-VSC) - RGA Analysis of cavity vacuum (ISO 4)	Pending		
<u>30</u>	()	Preparation for Cold Test	Done	Ok	
<u>35</u>	()	Step 35 (TE-VSC) - Leak Test (on the insert)	Pending		
<u>40</u>	()	Step 40 (TE-VSC) - RGA Analysis (on the insert)	Pending		
<u>45</u>	()	Step 45 (TE-VSC) - Bake-out	Cancelled		
<u>50</u>	()	Step 50 (TE-VSC) - RGA Analysis after bake-out	Cancelled	Cancelled	i
<u>55</u>	()	Installation 25/50 Ohm adaptors and verification	Pending		
<u>60</u>	()	Sensors location and verification, freq. measurement and TDR verification	Done	Ok	
<u>65</u>	()	High order mode measurements at warm	Pending		
<u>70</u>	()	Step 70 (TE-VSC) - Continuous RGA Analysis during cool down	Cancelled	Cancelled	i
75	()	High order mode measurements at cold	Pending		
<u>80</u>	()	RF Measurement at cold	Pending		
<u>85</u>	()	Step 85 (TE-VSC) - Continuous RGA Analysis during warm-up	Cancelled	Cancelled	1
<u>90</u>	()	Step 90 (TE-VSC) - RGA analysis of cavity vacuum after cold phase	Pending		
<u>95</u>	()	Slow cavity venting N2 on insert	Pending		
100	()	RF measurements after cold phase	Pending		

HL-LHC follow-up

- Documents needed for UK:
 - James: Post transport qualification of HOMs. Document to be uploaded in EDMS <u>2507161</u>
 - Sebastian: instruction for assembly of adaptors on the cavity in UK.
- Eric: Engineering spec for FPC. to be finalized before starting fabrication.
- Eric/James: CRAB CAVITY HOMs- DETAILS and QUALIFICATIONS: https://edms.cern.ch/document/2488213/0.9 URGENT!
- Eric: Comments to WP4 Cryomodule engineering spec : EDMS 2043014
- Antoine/ Agibail: To upload documentation in EDMS and MTF for the SPS RFD FPC
- New request (email 07/04 from Luca Dassa): To provide the 3D model of HOM coupler for DQW cavity to Luca Dassa to verify if we can use material in stock at CERN with lower yield strength



HL-LHC follow-up/ AUP

Documents from AUP uploaded in EDMS to be reviewed by WP4, related to

couplers:

AUP ANCILLARIES				
AUP DOCUMENTATION	REFERENCE	N.EDMS	VERSION	STATUS
RFD HHOM Suppressors				
Manufacturing drawings				
Manufacturing drawings H-HOM suppressor		2402596		In work- to be reviewed by CERN
Manufacturing drawings HHOM Feedtrhough		2414230		In work- to be reviewed by CERN
Manufacturing procedures				
AUP Acid Etching at the chemical Fume Hood procedure		2365955		In work- to be reviewed by CERN
AUP cavity components and parts degreassing		2205064		
procedure		2365964		In work- to be reviewed by CERN
High Sensitivity Vacuum leak check requirements		2407362		In work- to be reviewed by CERN
Manufacturing inspection plan : RFD cavity Horizontal				
HOM Damper		2379706		In work- to be reviewed by CERN
Inspection test procedure				
				Not received
Qualifications				
				Not received
RFD VHOM Suppressors				
Manufacturing drawings				
Manufacturing drawings V-HOM suppressor		2402597		In work- to be reviewed by CERN
Manufacturing procedures				
AUP Acid Etching at the chemical Fume Hood procedure				In work- to be reviewed by CERN
AUP cavity components and parts degreassing				
procedure				In work- to be reviewed by CERN
High Sensitivity Vacuum leak check requirements				In work- to be reviewed by CERN
Manufacturing inspection plan : RFD cavity vertical		1 [_	
HOM Damper		2419694		In work- to be reviewed by CERN
Inspection test procedure				
				Not received
Qualifications				
				Not received
RFD Pick-up Field Antenna				
Manufacturing drawings				
Manufacturing drawings Pick-up Field Antenna		2402598		In work- to be reviewed by CERN
Manufacturing procedures				
Manufacturing inspection plan : RFD cavity field				
antenna		2419695		In work- to be reviewed by CERN
AUP Acid Etching at the chemical Fume Hood procedure		2365955		In work- to be reviewed by CERN
AUP cavity components and parts degreassing procedure		<u>2365964</u>		In work- to be reviewed by CERN
High Sensitivity Vacuum leak check requirements		2407362		In Work to be reviewed by CERNEIDE



HL-LHC follow-up/ AUP

Nuria: Share MIP with AUP:

- HHOM: done.
- VHOM: waiting for MME to modify the drawing ref.
- Field antena :waiting for MME to modify the drawing ref.
- Feed through HHOM :waiting for MME to modify the drawing ref.

