



HL-LHC

WP3 Meeting Documentation D2

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- Which magnets will never be in MTF according to your plans
- Are the collaboration systematically loading data, and in which stage
- What is the situation for the drawings - are they in CDD?
- Did we have already NC and were they circulated?

Which magnets (short model, prototype etc) are today in MTF, and which data

All manufacture drawings are uploaded on EDMS/CDD as main production data for coil #01 in [D2 MTF](#), coil #02 as soon as available

Documents	B.O.M	Assets	Used in	Access rights	History
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Asset id	Description	Manufacturer	Serial Number	Status	
<input type="checkbox"/> HCMBRDM001-02000001	HL Recombination Dipole (...)	ANSA		Installed	
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MTF
Equipment Management Folder

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Assembly Tree

Equipment Folder: Manufacturing Workflow

Equipment Identifier: HCMBRDMC002-02000001
Other Identifier: None
Description: Top Coil

Assembly Tree

HCMBRDM001-02000001 - HL Recombination Dipole (D2) Model

- HCMBRDMC001-02000001 - Aperture (MBRDM)
- HCMBRDMC002-02000001 - Top Coil**
 - HCMBRDMC004-02000001 - Cable
 - HCMBRDMC005-02000001 - End Spacers
 - HCMBRDMC006-02000001 - Wedges
- HCMBRDMC003-02000001 - Down Coil

HCMBRDMC001-02000002 - Aperture (MBRDM)

- HCMBRDMC007-02000001 - Collars
- HCMBRDMC008-02000001 - Aluminum alloying ring
- HCMBRDMC009-02000001 - Iron Yoke
- HCMBRDMC010-02000001 - Instrumentation
- HCMBRDMC011-02000001 - Steel plates
- HCMBRDMC012-02000001 - Supporting system
- HCMBRDMC013-02000001 - Circular shape adapter

Workflow Diagram

No workflow diagram is defined for this equipment

Workflow Steps

Step ID	R/E	Other name	Description	Status	Last Reported	Result	INC
10	()		Winding coils	Pending			
20	()		Dimensional Control	Pending			
25	(E)		Polymerization	Pending			
30	()		Electrical Integrity Test	Pending			
40	()		E Modulus measurement	Pending			
50	()		Internal V - tap Wires Soldering	Pending			
60	()		Protection heater assembly	Pending			
70	()		Magnetic measurements. Collared coils	Pending			

EDMS D2 short model structure

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1858812 v.0.1 In Work Restricted access

Electrical tests quench heaters by Juan Carlos Perez

Created on 2017-10-2
Last Modified on 2017-10-2

Edit Status Share Visibility More

Info

Description: Electrical tests of quench heaters for D2 short model. External reference: Keywords:

Details

Local administrators: [List of Administrators](#) Equipment code: HL-OWNER
Context: HL-LHC-WP3-ANS-INFN-D2 Release procedure: HL-OWNER Release Procedure
For D2 - USE FOR ANSALDO

Associated Links:

This page <https://edms.cern.ch/document/1858812/0.1>

Files

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Name	Size	Last modified date	Last modified by
MBRD_Trace_electrical_tests.xlsx	990.1 KB	2017-10-20 14:07:30	SYLVIE LACHAVANNE-DUFOUR

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More info

Sub-Documents Used In Approval & Comments Access rights Versions History

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#	Id	Title	Fl...	Status	Created...	Author	Docume...	Tags
No documents								

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Navigator

No active tags.

- MBRD Model
 - Minutes, Presentations and Administrative documents
 - Engineering Drafts & Notes
 - Fabrication & Assembly Drafts & Notes
 - Manufacturing drawings
 - 1979060 (v.1) MBRD Recombination Dipole Model Drawings
 - 1979061 (v.1) Aluminum Alloy Ring
 - LHCMBRDMC0006 (v.AD) ALUMINUM SLEEVE
 - 1979063 (v.1) Aperture
 - LHCMBRDMC0007 (v.0) ASSEMBLED AND POLYMERISED
 - 1979069 (v.1) Coil Type A
 - 1979070 (v.1) Coil Type B
 - 1979086 (v.1) Collars
 - 1979089 (v.1) Iron Yoke
 - 1979090 (v.1) Supporting System
 - LHCMBRDMC0117 (v.AA) GENERAL ASSEMBLY
 - Manufacturing procedures
 - 1959711 (v.1) MIP D2 Model (Magnet Assembly)
 - 1959718 (v.1) MIP D2 (coil type B)
 - 1959716 (v.1) MIP D2 Model (coil type A)
 - Inspection & test procedures
 - Quench heaters
 - 1858812 (v.0.1) Electrical tests quench heaters
 - Qualifications
 - Manufacturing records
 - Ridgway Company
 - CERN free issued components
 - HCMBRDM001-02000001 - HL Recombination Dipole (D2) Model
 - HCMBRDMC001-02000001 - Aperture (MBRDM)
 - HCMBRDMC001-02000002 - Aperture (MBRDM)
 - HCMBRDMC007-02000001 - Collars
 - HCMBRDMC008-02000001 - Aluminum alloying ring
 - HCMBRDMC009-02000001 - Iron Yoke
 - HCMBRDMC010-02000001 - Instrumentation

- <https://edms.cern.ch/document/1959718/1>

West. 026.07 May 3

Model CDD-07 Rev. 3

Which magnets will never be in MTF according to your plans

All D2 magnets will be in MTF

Are the collaboration systematically loading data, and in which stage

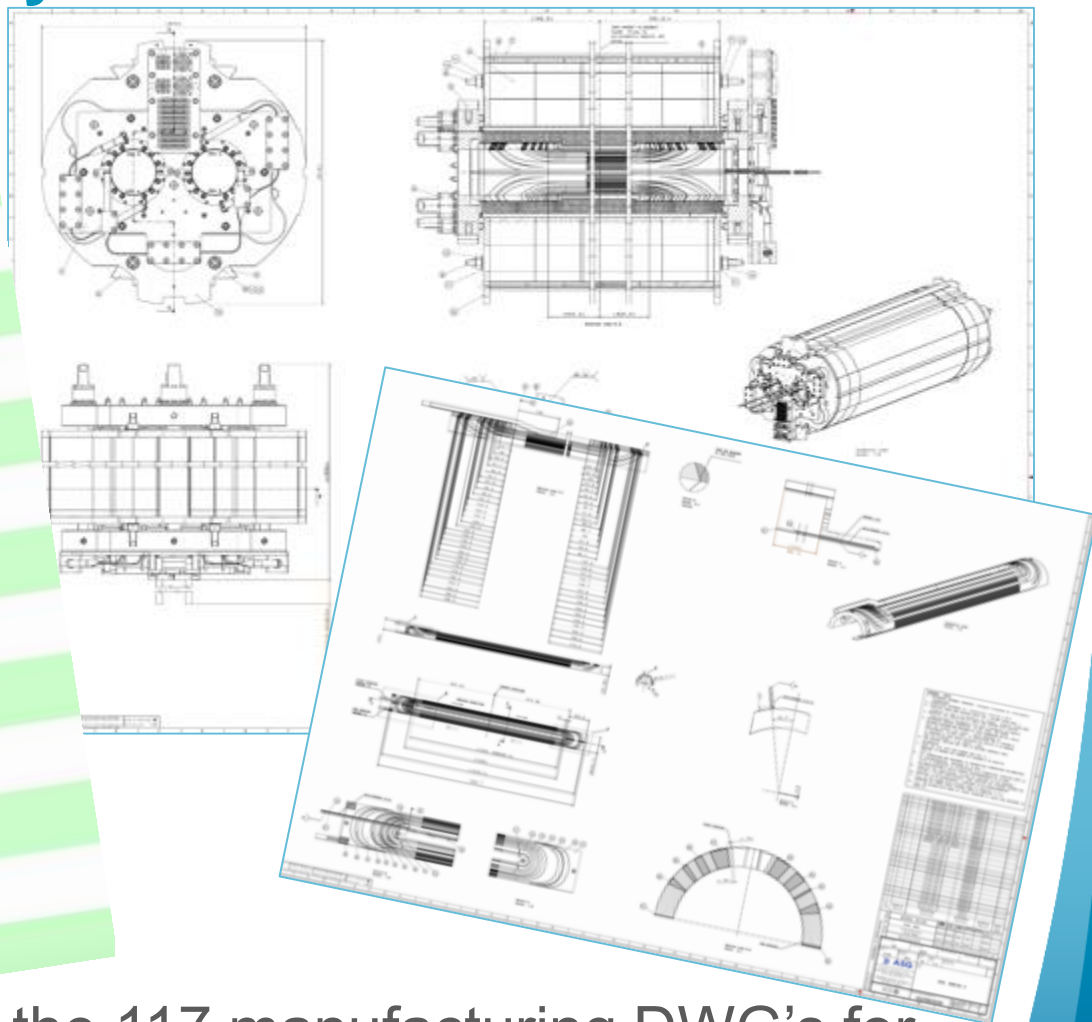
At moment, in Short model contract, ASG contractor feed production files on INFN server.

Together with CERN help, all the data, procedures are uploaded in D2 MTF by INFN.

In future, for **prototype, series contract**, contractors should be able to upload on CERN MTF server on behalf of INFN.
(To be discussed if different approach)

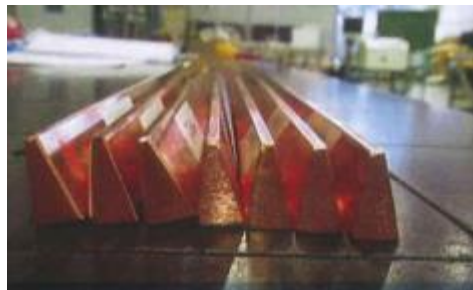
What is the situation for the drawings - are they in CDD?

■ LHCMBRDMC0104	ΔΔ	none	A0	IM	-	ext. ref: 671RM21437 HALF YOKE HEAD
■ LHCMBRDMC0105	ΔB	none	A0	IM	-	ext. ref: 670RM21465 PLATE HEAD YOKE
■ LHCMBRDMC0106	ΔΔ	none	A0	IM	-	ext. ref: 671RM21576 YOKE PLATE
■ LHCMBRDMC0107	ΔB	none	A3	IM	-	ext. ref: 600RM21574 C-CLAMP
■ LHCMBRDMC0108	ΔC	none	A3	IM	-	ext. ref: 670RM21461 M16 TIE ROD
■ LHCMBRDMC0109	ΔΔ	none	A3	IM	-	ext. ref: 670RM21462 M24 TIE ROD
■ LHCMBRDMC0110	ΔΔ	none	A3	IM	-	ext. ref: 670RM21463 M33 TIE ROD
■ LHCMBRDMC0111	ΔB	none	A0	IM	-	ext. ref: 660RM21467 COIL PLATE LC
■ LHCMBRDMC0112	ΔΔ	none	A2	IM	-	ext. ref: 660RM21621 MEZZELUNE L.C
■ LHCMBRDMC0113	ΔΔ	none	A2	IM	-	ext. ref: 660RM21622 MEZZELUNE L. O.C
■ LHCMBRDMC0114	1st	none	A3	IM	-	ext. ref: 600RM21623 GRANO M16 L50
■ LHCMBRDMC0115	1st	none	A3	IM	-	ext. ref: 600RM21624 GRANO M12 L40
■ LHCMBRDMC0116	1st	none	A3	IM	-	ext. ref: 600RM21625 GRANO M12 L30
■ LHCMBRDMC0117	ΔΔ	none	A0	IM	-	ext. ref: 600RM20542 GENERAL ASSEMBLY



All the 117 manufacturing DWG's for components, coils, magnet are in CDD

A single minor NCR so far on Copper wedge components



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Info

Description: Non Conformities of the wedges involved in MBROSM External reference:
Keywords:

Details

Local administrators: List of Administrators Equipment code: HL-NCR
Context: HL-LHC-WP3-MBRD-MTF Release procedure: Release procedure for HL-LHC NCRs
HL Recombination Dipole (D2) Model & Prototype
Associated Links:

This page <https://edms.cern.ch/document/1982035/1>

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Name	Size	Last modified date	Last modified by							
NC-wedges-1-3-8.pdf	344.2 KiB	2018-06-04 18:29:40	PASQUALE FABRICATORE							
NC-wedges-2-4-5-6.pdf	319.7 KiB	2018-06-04 18:29:40	PASQUALE FABRICATORE							

Total: 2 (displaying 1 - 2)



Conclusions

- Which magnets (short model, prototype etc) are today in MTF, and which data => **ALL**
- Which magnets will never be in MTF => **NONE**
- Are the collaboration systematically loading SM data, and in which stage => **YES, during manufacturing by INFN**
- What is the situation for the drawings - are they in CDD? => **YES (short model)**
- Did we have already NC and were they circulated? => **YES**

Thank you...

Better sooner than



"You call it clutter. I call it free-range paperwork."

....Later



**"I'm afraid it's too late to clean up my desk
without disturbing the delicate ecosystem."**