



D2: Plans for prototype and series

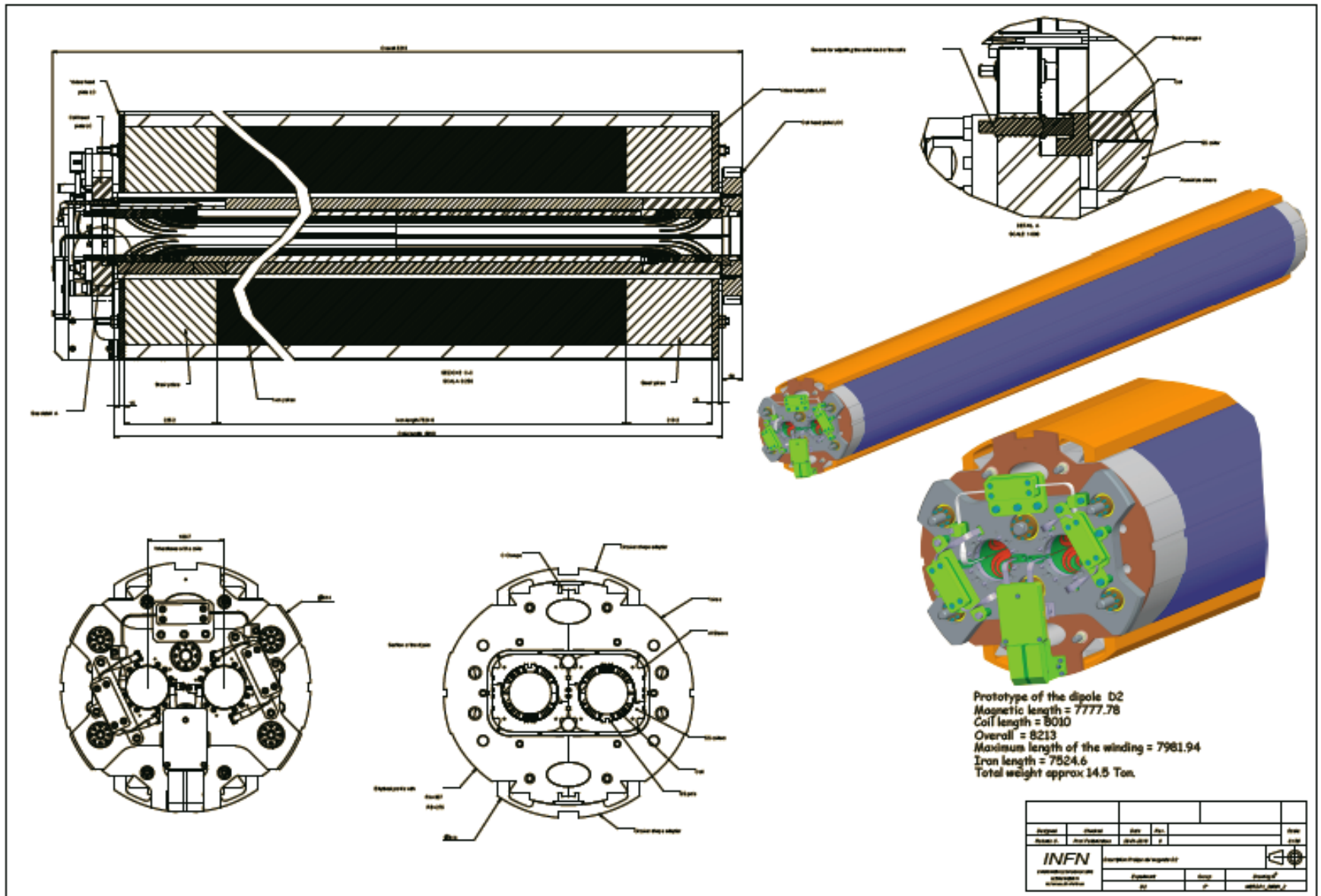
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- From Short Model to Prototype
- Status of Prototype Tender
- From Prototype to Series

CERN_INFN Agreements for D2

- KE 2291/TE/HL-LHC (Started: April 2014 – Deadline: Dec 2018)
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 - D2 (MBRD) engineering design - Status- Completed
- KN 3083 Framework agreement
- Addendum n.1 KE3084 (Started: July 2016- Deadline: December 2019)
 - D2 Short Model (MBRDS1) (1.6 m) and Prototype (MBRDP1) (8 m) construction of cold mass. *Status- Short Model under construction. Tender for prototype in final phase.*
- Addendum XX
 - D2 Series (6 magnets) . (Status: In preparation)

The Prototype Design



Prototype: Activities for finalising the contract for the prototype construction

- 1) All the documents for launching the tender for prototype (request to INFN) were ready since March 2018: Technical Specification, Contract Terms and Conditions (including deposit, guarantee, warranty, penalties, ..), The criteria used for evaluating the offers.
- 2) A new agreement is in preparation for extending the INFN contribution to the six D2 magnets of the series. CERN would provide materials (as for prototype) and some critical components.
- 3) The tender for prototype had to include the series as future option to be activated under some conditions.
- 4) Tender launched on August 7th and offers received on September 17th.
- 5) Evaluation Board will meet on October 23rd
- 6) INFN approval on Nov.14th
- 7) Contract in January

From Short Model to Prototype

Short Model-MBRDS1	
I aperture collared	August 2018 ✓
II aperture collared	September 2018 (NC) October 2018 ✓
Apertures assembled	October 2018
Iron Yoke integration	November 2018
Finished	December 2018
Delivery to CERN	December 2018
Cold test at CERN	February 2019

Prototype-MBRDP1	
March 30 2018	SPEC ready ✓
July 2018	INFN approves the tender process ✓
Aug. 7 th 2018 Sept 17 th	RfQ and answers ✓
October 23 rd 2018	Industry selected
November 14 th 2018	INFN Giunta approves tender
January 2019	Contract start
March 2019	Confirmation of some design parameters
	Design Review
March 2020	Prototype delivered to CERN

From Prototype to Series (6 magnets)

	2019	2020	2021	2022
MBRDP1 (Prototype)		Cern activities for assembly and test		
MBRD1 (Series)				
MBRD2 (Series)				
MBRD3 (Series)				
MBRD4 (Series)				
MBRD5 (Spare)				
MBRD6 (Spare)				

The tender for prototype included the series as an option to be confirmed after the cold test of the prototype.

Extracted from the Prototype Technical Specification

DO2 Optional construction of six complete magnets identical to the prototype. The construction of six magnets is optional. Relatively to this item the tenderer is mandatory requested to provide a quotation. INFN will reserve to apply or not apply this specific option within two years after the terms of validity of the offer for the prototype.



Thank you for your attention

