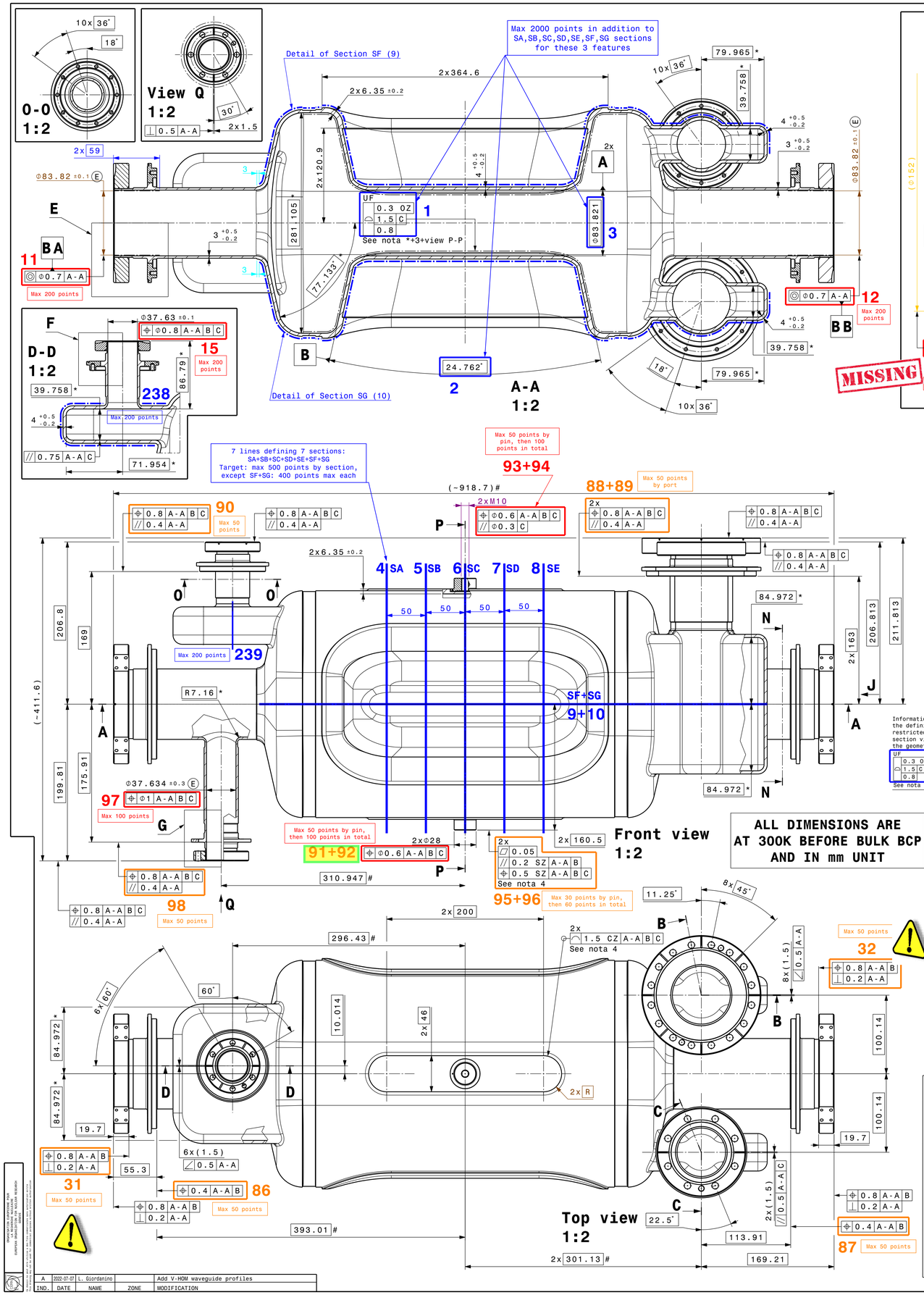

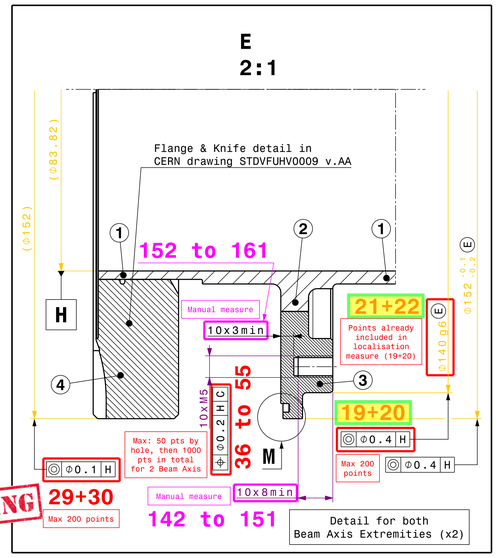

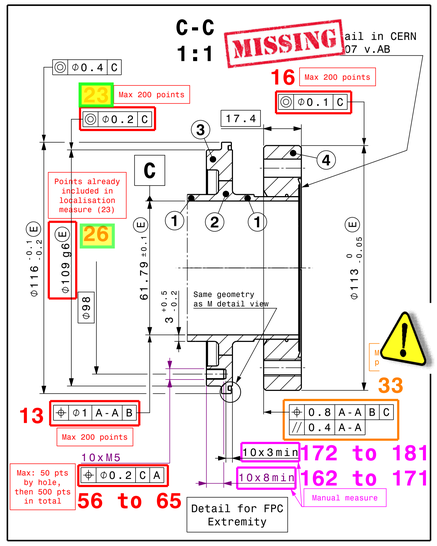

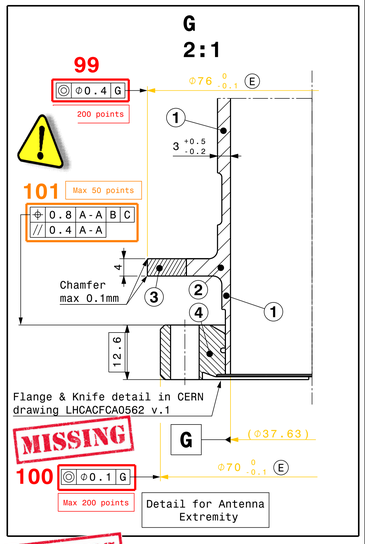

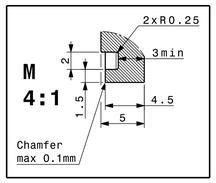

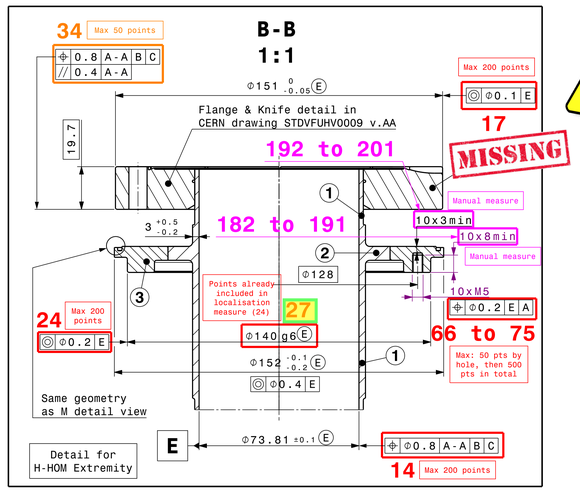

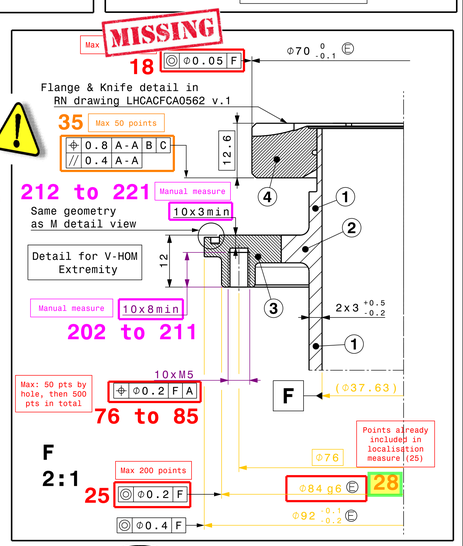

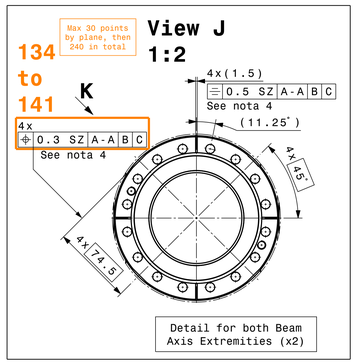

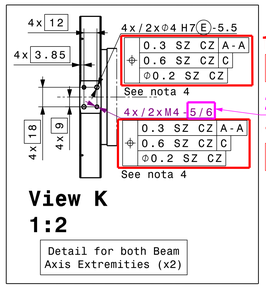

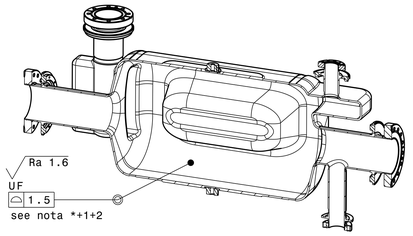

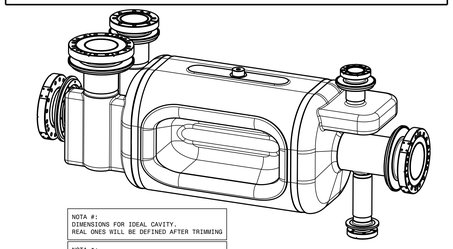

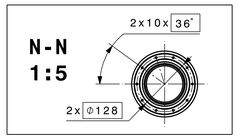

NOTA #:
DIMENSIONS FOR IDEAL CAVITY.
REAL ONES WILL BE DEFINED AFTER TRIMMING

NOTA *:
THEORETICALLY EXACT FEATURE ACCORDING TO 3D MODEL AVAILABLE IN EDMS: 1409742 v4

NOTA 1:
SPECIFICATION OF SURFACE PROFILE ONLY FOR INNER SURFACES(All over symbol "-◎-" = INNER SURFACE DELIMITED BY FLANGES GASKET FACES) COMPLIANT WITH ISO 1101:2017, §9.1.2

NOTA 2:
"UF" IS DEFINED ACCORDING TO ISO 1101:2017, §8.4.2

NOTA 3:
"OZ" IS DEFINED ACCORDING TO ISO 1101:2017, §8.2.2.1.4.1

NOTA 4:
"CZ"+ "SZ" ARE DEFINED ACCORDING TO ISO 1101:2017, §8.2.2.1.2 + ISO 5458:2018, §5.4.5.2

MANUFACTURING OF THIS ASSEMBLY MUST FOLLOW THE CERN SPECIFICATION EDMS N°1389669

Mass: ~43.5kg

EDMS SPECIFICATIONS		
No	TITLE	EDMS REFERENCE
1	Material Technical Specification N° 3300. Pure Niobium sheets, grade RRR300.	1095252 v.5
2	Spec. N°3301_Nb_RRR300_bars-plate	1476934 v.4
3	Spec. N°4055_Nb55Ti_wrought products	1485727 v.5
4	Spec. N°1001_1.4429_316LN_blanks	790775 v.3
5	Engineering Specification for the dressed bulk niobium Crab Cavities	1389669 v.2.5

ISO STANDARDS	
ISO 4063:2009	ISO 2553:2013

ISO GPS STANDARDS		
ISO 2768-mK	Ra 3.2	ISO 13715

Unless otherwise mentioned, applicable ISO GPS standards are those prior to 2010-08-01 regardless of the drawing date

WHERE USED: Multiple (Last checked at 2022-07-07 15:17)

Profile measures (blue)
Hole axis and Ø measures (red)
Plane measures (orange)
Manual measures (pink)

TOTAL: 14 400 points max
(for the 239 elements to measure)

DRAWING FOR FINAL METROLOGY OF RFD CAVITY

DESIGNATION: RFD CAVITY SPECIFICATION SPS CRAB CAVITY
DRAWING DEFINITION: RFD CAVITY METROLOGY SPS CRAB CAVITY
EQUIPMENT CODE: LHCACFCA-RC-LMC - Inflating Cavity Crab Cavity - Bare Cavity

DESIGNED	L.GIORDANINO	FORMAT A0
CHECKED		
RELEASED		SCALE 1:2
APPROVED		
DESIGNED 2022-07-07		

REFERENCES: Doc No: ST0642860_16
LABEL: LHCACFCA0565
INDEX: AA
SAC: -
SHEET: 1/1
NOT VALID FOR EXECUTION

IND.	DATE	NAME	ZONE	MODIFICATION
A	2022-07-07	L. Giordanino		Add V-HOM waveguide profiles

ORGANISATION EUROPEENNE POUR LA RECHERCHE NUCLEAIRE
EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH
CERN

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