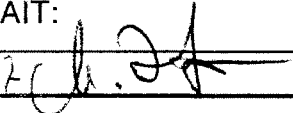
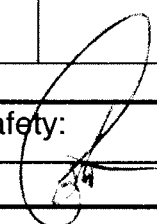


EADS Astrium HERSCHEL H-EPLM	ACTIVITY CONTROL	SHEET	HP-2-ASED-SD-0153 Iss: 1	Page 1 of 13
--	------------------	-------	-----------------------------	--------------

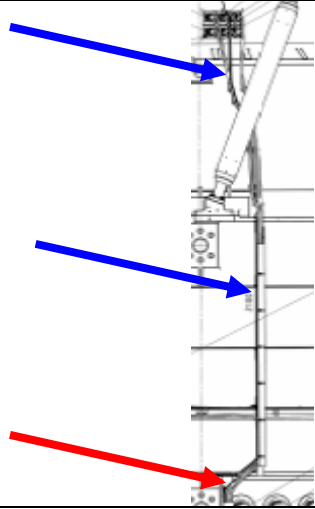
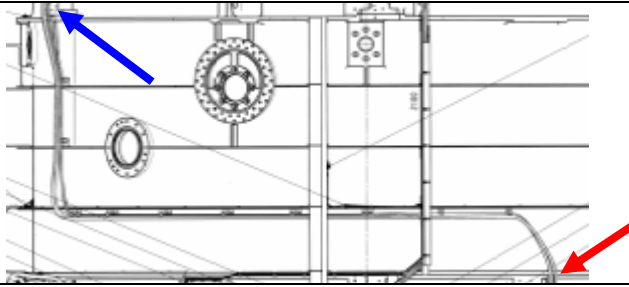
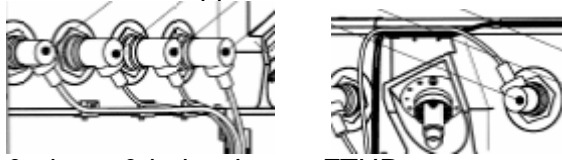
Location : FN	Title: TEMPORARY DEMATING OF PFM CVV EXT CCH / SIH BUNDLES & FIXATION ON DUMMY STRUCTURE			
Facility : Class 100	Model: PFM	Subsystem: CVV ext CCH & SIH	Date: 14.03.07	
CI No 121431/2-02	Test Conductor:	NCR Ref:		CIL No:
	Prepared By: J. Lang			

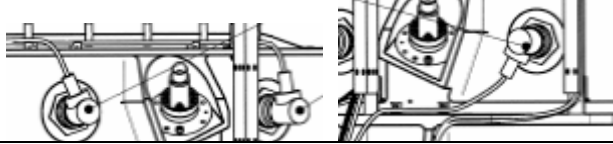
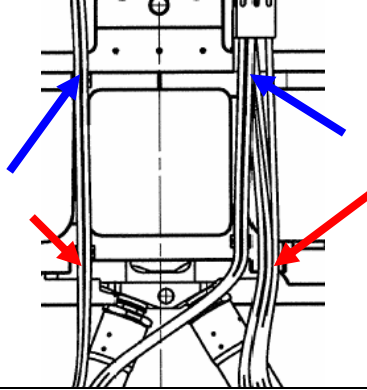
Scope: This Procedure covers the activities of the temporary CVV external CCH & SIH bundle demating from the CVV central cylinder prior to the extraction of CVV internal structures for Removal of STM2 OBA Instrument Cold-units. This ACS shall be used in conjunction with the following Procedures and reference documents:	Procedures and reference documents:- Ref.1: Satellite AIT Plan HP-2-ASED-PL-0025 iss 2 Ref.2: HP-2-ASED-TP-0076 CVV ext CCH & SIH Integration (Reverse) Ref.3: HP-2-ASED-TN-0062 ESD Rules for He PLM & S/C Integration Act. Ref.4: SPIRE-RAL-NOT-002028 Rev. Dr2 Making SPIRE ESD Safe Ref.5: HP-2-ASED-ID-0081 iss.D CVV ext SIH & CCH Ref.6: SPIRE-RAL-PRC-002642 Issue:1 SPIRE FPU Handling & Integration Procedure	
Facilities required:	GSE: PLM & Harness Bondstraps & Ground-plates MGSE: PLM on Rotary Table Inspection equipment: Visual inspection Consumables: NA	Drawings:- HP-2-ASED-ID-0081
Personnel required:	3 AIT eng 1 QA	MASS:-
Safety and Hazards:	No specific safety precautions or hazards identified.	Take care when walking on the TTAP, that Nobody stand on the remaining PFM CVV ext. bundles - nor step backwards without control
Constraints:	Class 100 clean room EPLM mounted on Rotary Table, ESD constraints to be followed	

No:	Activity	Proc/Drg	Results	Responsible & sign off
01	Perform photos from all Harness bundles routed around the CVV			

Release AIT:	Release SE:	Release PA/Safety:	Sign off (PA/QC/Team Leader)
15/3/07 	15.3.07 J. Lang		

No:	Activity	Proc/Drg	Results	Responsible & sign off
	De-Mating of CVV ext Instrumentation Harness			
02	Open Instrumentation harness on Lower CVV bulkhead			
03	Separate TC-Lines and identify open ends			
04	Seaparate PT 100 Sensor-Lines and identify open ends			
05	Separate Heater-lines and identify open ends			
06	Open Instrumentation harness on upper CVV bulkhead			
07	Separate TC-Lines and identify open ends			
08	Seaparate PT 100 Sensor-Lines and identify open ends			
09	Separate Heater-lines and identify open ends			
	Opening of CCH & SIH Bundles fixations prior to FTTH connector De-mating			

No:	Activity	Proc/Drg	Results	Responsible & sign off
10	Open all Cryo-cover harness fixations in C-profile 2100 TOP, but do not disconnect CC CCH connectors from CC I/F-CB , meanwhile Cryo-SCOE T-Sensor reading is aktiv.			
11	Open all harness fixations to C-profile 2300 TOP as far as cables routed over the upper bulkhead separation plane			
12	Open all Telescope CCH fixations from upper bulkhead down to upper end of the lower C-profile 2300 , along the CVV cylinder (blue = open lacing from & red = stop opening)			
13	Open harness lacing cord fixation close to upper & lower CVV FTNR ring connectors - Do NOT cut lacing cords within the C-profile & store all spacers in small plastig bags with identification of allocation, from where the spacers have been taken.		<p style="margin: 0;">below & over upper FTNRs</p>  <p style="margin: 0;">& above & below Lower FTNRs</p>	

No:	Activity	Proc/Drg	Results	Responsible & sign off
	C-profiles installed on CVV cylinder: 4401-4200-4300-lower 2100-2122-lower 2300- 24002526-2728-2900			
14	Open all ENN 411 & TC-105 CCH & SIH bundle fixations between lower end of on lower bulkhead down to upper end of the SVM struts 21-22-23-24-25-29-30-36-37-38-39-40-41-42-43			
15	CVV ext CCH & SIH Dummy Fixation Structure			
16	Install the 4 Dummy frame-work structures on TTAP around CVV			
17	PA to control harness structure as-built for save integration handling			
	PACS MTD & CVV ext SIH Demating from Upper FTTH connectors		Note: All de-mated CVV ext. Harness connectors shall be protected on ESD plastic foils, w.r.t. Re-integration with PFM FPU's installed.	
18	Demate 211121 P02 - SIH-IP-03, Mate connector saver & metal protection Cap		PA or De-mating Operator to inspect both connector coupling halves after de-mating and record healthness here in.	
19	Demate 211121 P03 - SIH-IP-14, Mate connector saver & metal protection Cap			

No:	Activity	Proc/Drg	Results	Responsible & sign off
20	Demate 211121 P04 - SIH-IP-15, Mate connector saver & metal protection Cap			
21	Demate 211121 P05 - SIH-IP-05, Mate connector saver & metal protection Cap			
22	Demate 211121 P06 - SIH-IP-06, Mate connector saver & metal protection Cap			
23	Demate 211121 P07 - SIH-IP-13, Mate connector saver & metal protection Cap			
24	Demate 211121 P08 - SIH-IP-02, Mate connector saver & metal protection Cap			
25	Demate 211121 P09 - SIH-IP-01, Mate connector saver & metal protection Cap			
26	Demate 211121 P10 - SIH-IP-07, Mate connector saver & metal protection Cap			
27	Demate 211121 P11 - SIH-IP-08, Mate connector saver & metal protection Cap			
28	Demate 211121 P12 - SIH-IP-09, Mate connector saver & metal protection Cap			

No:	Activity	Proc/Drg	Results	Responsible & sign off
29	Demate 211121 P13 - SIH-IP-10, Mate connector saver & metal protection Cap			
30	Demate 211121 P14 - SIH-IP-11, Mate connector saver & metal protection Cap			
31	Demate 211121 P15 - SIH-IP-12, Mate connector saver & metal protection Cap			
	HIFI CQM FPU & CVV ext SIH Demating from upper FTTH connectors		Note: All de-mated CVV ext. Harness connectors shall be protected on ESD plastic foils, w.r.t. Re-integration with PFM FPUs installed.	
32	Demate 211121 P16 - SIH-IH-02, Mate connector saver & metal protection Cap		PA or De-mating Operator to inspect both connector coupling halves after de-mating and record healthness here in.	
33	Demate 211121 P17 - SIH-IH-05, Mate connector saver & metal protection Cap			
34	Demate 211121 P18 - SIH-IH-01, Mate connector saver & metal protection Cap			
35	Demate 211121 P19 - SIH-IH-03, Mate connector saver & metal protection Cap			
36	Demate 211121 P20 - SIH-IH-04, Mate connector saver & metal protection Cap			
37	Mate SMA Male 50 Ohm Termination or metal cap on 211121 P21-1, P21-2, P21-3, P21-4 SMA FTTH Bulkhead connectors			

No:	Activity	Proc/Drg	Results	Responsible & sign off
	SPIRE CQM FPU & CVV ext SIH Demating from upper FTTH connectors		<p>Note1: All de-mated CVV ext. Harness connectors shall be protected on ESD plastic foils, w.r.t. Re-integration with PFM FPUs installed.</p> <p>Note2: Demating sequence according SPIRE-RAL-PRC-002642 Issue:1 SPIRE FPU Handling & Integration Procedure is defined</p> <p>Note 3: PA or De-mating Operator to inspect both connector coupling halves after de-mating and record healthness here in.</p>	
38	Check all Termination plugs still mated on SVM I/F-CBs as defined in SPIRE-RAL-NOT-002028 Dr2			
39	SIH handling operators to wear controlled ESD lenyards bonded to CVV structure / GND			
40	Install Ionizer van close to each Demating area			
41	Mate EQM Termination plug type V with 211121 J26 connector saver			
42	Demate 211121 P26 - SIH-IS-03 , Mate connector-saver with attached EQM Termination plug type V on FTTH 211121 J26			
43	Let PFM Termination plug type V mated on 312100 J04			
44	Disconnect PFM Termination plug type VII from 312100 J02 & protect connector J02 with a metal cap			
45	Demate 211121 P24 - SIH-IS-06 , Mate connector-saver & PFM Termination plug type VII on FTTH 211121 J24			
46	Disconnect PFM Termination plug type VII from 312200 J03 & protect connector J03 with a metal cap			
47	Mate EQM Termination plug type VI with 211121 J32 connector saver			

No:	Activity	Proc/Drg	Results	Responsible & sign off
48	Demate 211121 P32 - SIH-IS-01 , Mate connector-saver with EQM Termination plug type VI on FTNR 211121 J32			
49	Let PFM Termination plug type VI mated on 312200 J06			
50	Mate PFM Termination plug type VIII with 211121 J30 connector saver			
51	Demate 211121 P30 - SIH-IS-11 , Mate connector-saver with attached EQM Termination plug type VIII on FTNR 211121 J30			
52	Demate 211121 P34 - SIH-IS-10 , Mate connector-saver & PFM Termination plug type VII on FTNR 211121 J34			
53	Disconnect PFM Termination plug type VII from 312300 J06 & protect connector J06 with a metal cap			
54	Demate 211121 P22 - SIH-IS-04 , Mate connector-saver & EQM Termination Type VII on FTNR 211121 J22			
55	Disconnect PFM Termination plug type VII from 312100 J03 & protect connector J03 with a metal cap			
56	Demate 211121 P23 - SIH-IS-05 , Mate connector-saver & PFM Termination plug type VII on FTNR 211121 J23			
57	Demate 211121 P25 - SIH-IS-07 , Mate connector-saver & PFM Termination plug type VII on FTNR 211121 J25			
58	Disconnect PFM Termination plug type VII from 312200 J04 & protect connector J04 with a metal cap			
59	Demate 211121 P27 - SIH-IS-08 , Mate connector-saver & PFM Termination plug type VII on FTNR 211121 J27			
60	Disconnect PFM Termination plug type VII from 312200 J01 & protect connector J01 with a metal cap			
61	Demate 211121 P28 - SIH-IS-09 , Mate connector-saver & PFM Termination plug type VII on FTNR 211121 J28			
62	Disconnect PFM Termination plug type VII from 312200 J02 & protect connector J02 with a metal cap			

No:	Activity	Proc/Drg	Results	Responsible & sign off
63	Demate 211121 P31 - SIH-IS-02 , Mate connector-saver & PFM Termination plug type VII on FTHR 211121 J31			
64	Disconnect PFM Termination plug type VII from 312200 J05 & protect connector J05 with a metal cap			
65	Demate 211121 P33 - SIH-IS-12 , Mate connector-saver & PFM Termination plug type VII on FTHR 211121 J33			
66	Disconnect PFM Termination plug type VII from 312300 J05 & protect connector J05 with a metal cap			
67	Mate EQM Termination plug type VIII with 211121 J29 connector saver			
68	Demate 211121 P29 - SIH-IS-13 , Mate connector-saver with attached EQM Termination plug type VIII on FTHR 211121 J29			
69	Demate PFM Termination plug type VIII from 312300 J03 & protect J03 with a metal cap			
70	Let PFM Termination plug type VIII mated on 312300 J04			
71	Demate protection cover from 312300 J03 & mate PFM Termination plug type VIII on J03			
	CVV ext CCH Demating from upper FTHR connectors		All connectors disconnected shall be protected by conductive plastic bags or ESD caps & stored outside CVV cylinder.	
72	Mate 211121 J35 saver with metal cap			
73	Demate 211121 P35 & mate J35 saver with attached cap			
74	Mate 211121 J36 saver with metal cap			
75	Demate 211121 P36 & mate J36 saver with attached cap			
76	Mate 211121 J37 saver with metal cap			
77	Demate 211121 P37 & mate J37 saver with attached cap			

No:	Activity	Proc/Drg	Results	Responsible & sign off
78	Mate 211121 J38 saver with metal cap			
79	Demate 211121 P38 & mateJ38 saver with attached cap			
80	Mate 211121 J38 saver with metal cap			
81	Demate 211121 P38 & mateJ38 saver with attached cap			
	CVV ext CCH Demating from lower FTFR connectors			
82	Mate 211123 J01 saver with metal cap			
83	Demate 211123 P01 & mateJ01 saver with attached cap			
84	Mate 211123 J02 saver with metal cap			
85	Demate 211123 P02 & mateJ02 saver with attached cap			
86	Mate 211123 J05 saver with metal cap			
87	Demate 211123 P05 & mateJ05 saver with attached cap			
88	Mate 211123 J06 saver with metal cap			
89	Demate 211123 P06 & mateJ06 saver with attached cap			
90	Mate 211123 J07 saver with metal cap			
91	Demate 211123 P07 & mateJ07 saver with attached cap			
92	Mate 211123 J08 saver with metal cap			
93	Demate 211123 P08 & mateJ08 saver with attached cap			

No:	Activity	Proc/Drg	Results	Responsible & sign off
94	Mate 211123 J09 saver with metal cap			
95	Demate 211123 P09 & mateJ09 saver with attached cap			
96	Mate 211123 J10 saver with metal cap			
97	Demate 211123 P10 & mateJ10 saver with attached cap			
98	Demate A-Frame T-sensor connectors and store it on CVV ext side			
99	Demate ext. Ventline T-Sensor connectors & store it on CVV			
100	Demate T-Sensor connectors around CVV ext cylinder & store it on lower bulkhead area			
101	Demate 211xxxx Cryo-cover P01 & protect J01 with cap			
102	Demate 211xxxx Cryo-cover P02 & protect J02 with cap			
103	Demate 211xxxx Cryo-cover P03 & protect J03 with cap			
104	Demate 211xxxx Cryo-cover P04 & protect J04 with cap			
105	Demate 211xxxx Cryo-cover P05 & protect J05 with cap			
106	Demate 211xxxx Cryo-cover P06 & protect J06 with cap			
107	Fix all CCH bundles & connectors temporary on Dummy structure such, that upper & lower bulkhead fixation srews can be removed			
108	Fix all SIH bundles & connectors temporary on Dummy structure such, that upper & lower bulkhead fixation srews can be removed			
109	Store all parts removed, well identified in ESD plastic bags, but don`t use ESD Tapes on PFM structures			
110	Operator & PA check all steps & records are performed			

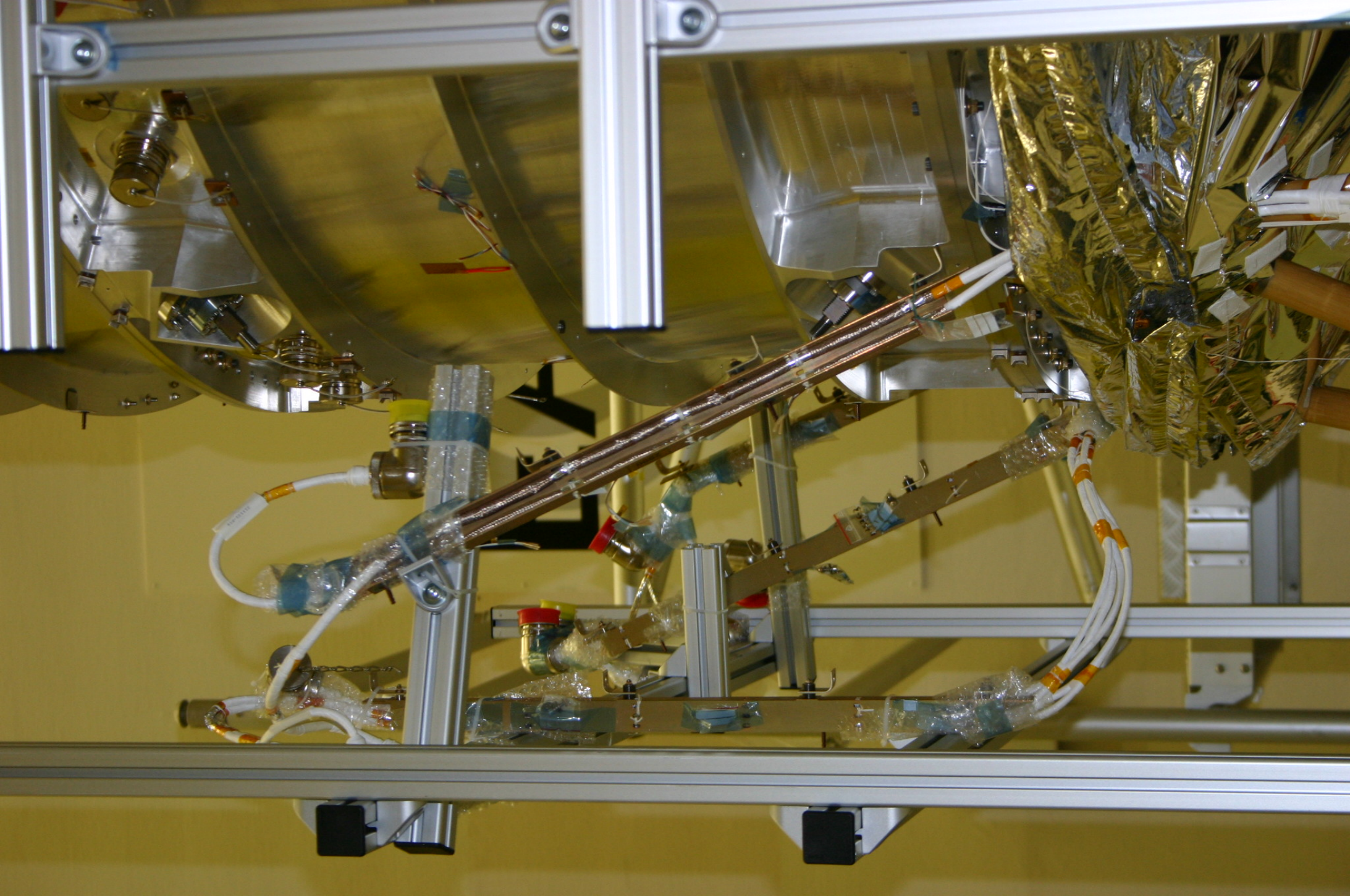
No:	Activity	Proc/Drg	Results	Responsible & sign off
111	RED-TAG items to be stored in dedicated Handcar			
112	Altered sequencies, except SPIRE FPU SIH, shall be to be recorded below. SPIRE Demating shall be performed as defined above.			
113	Perform photo documentation of all harness bundles detached and fixed on Dummy structures			
114				
115				
116				
117				
118				
119				
120				
121				
	END			

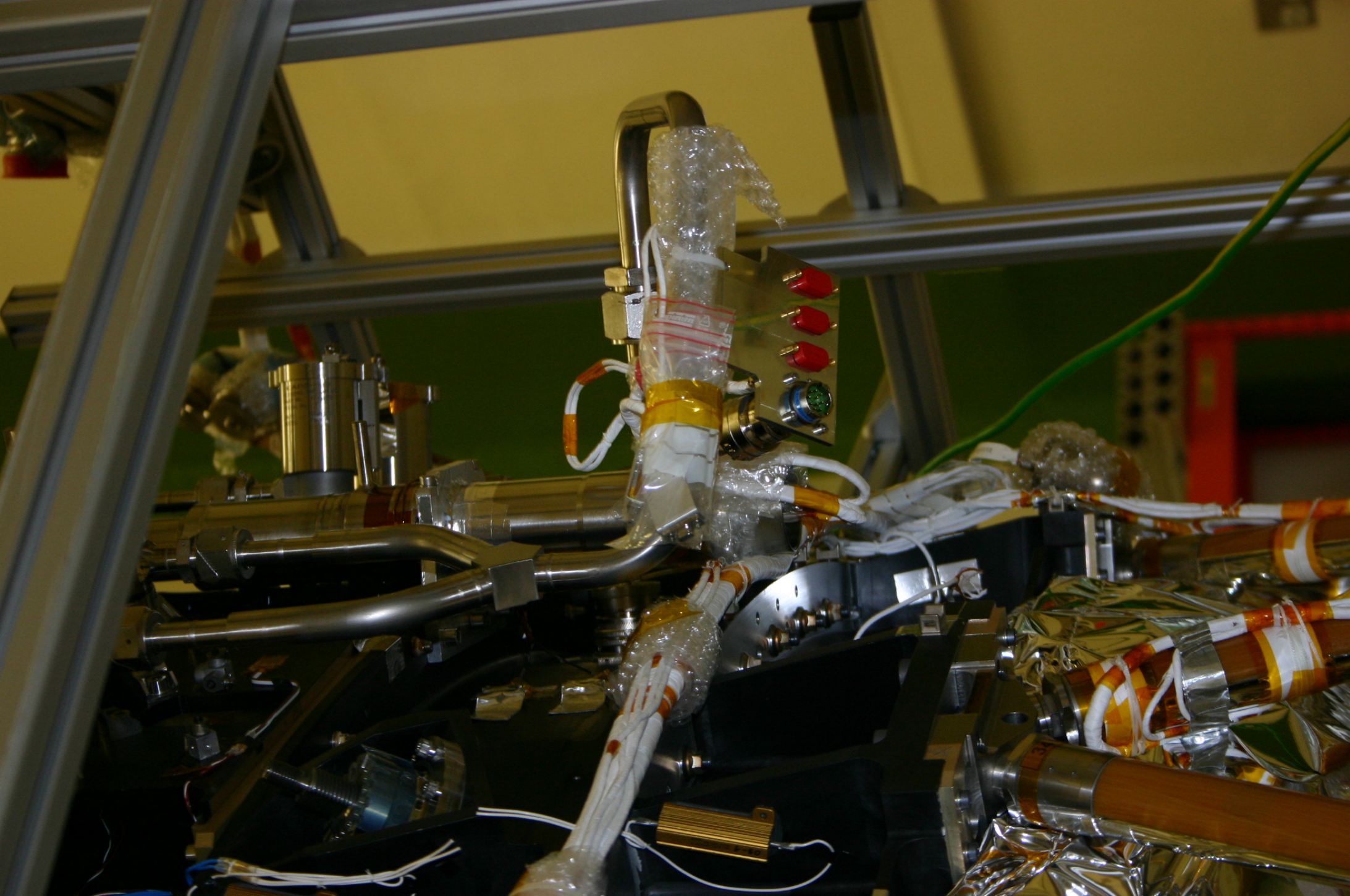
APPENDIX 1

Photo Documentation of CVV external Harness detachment after STM1 (20 pages)

APPENDIX 2

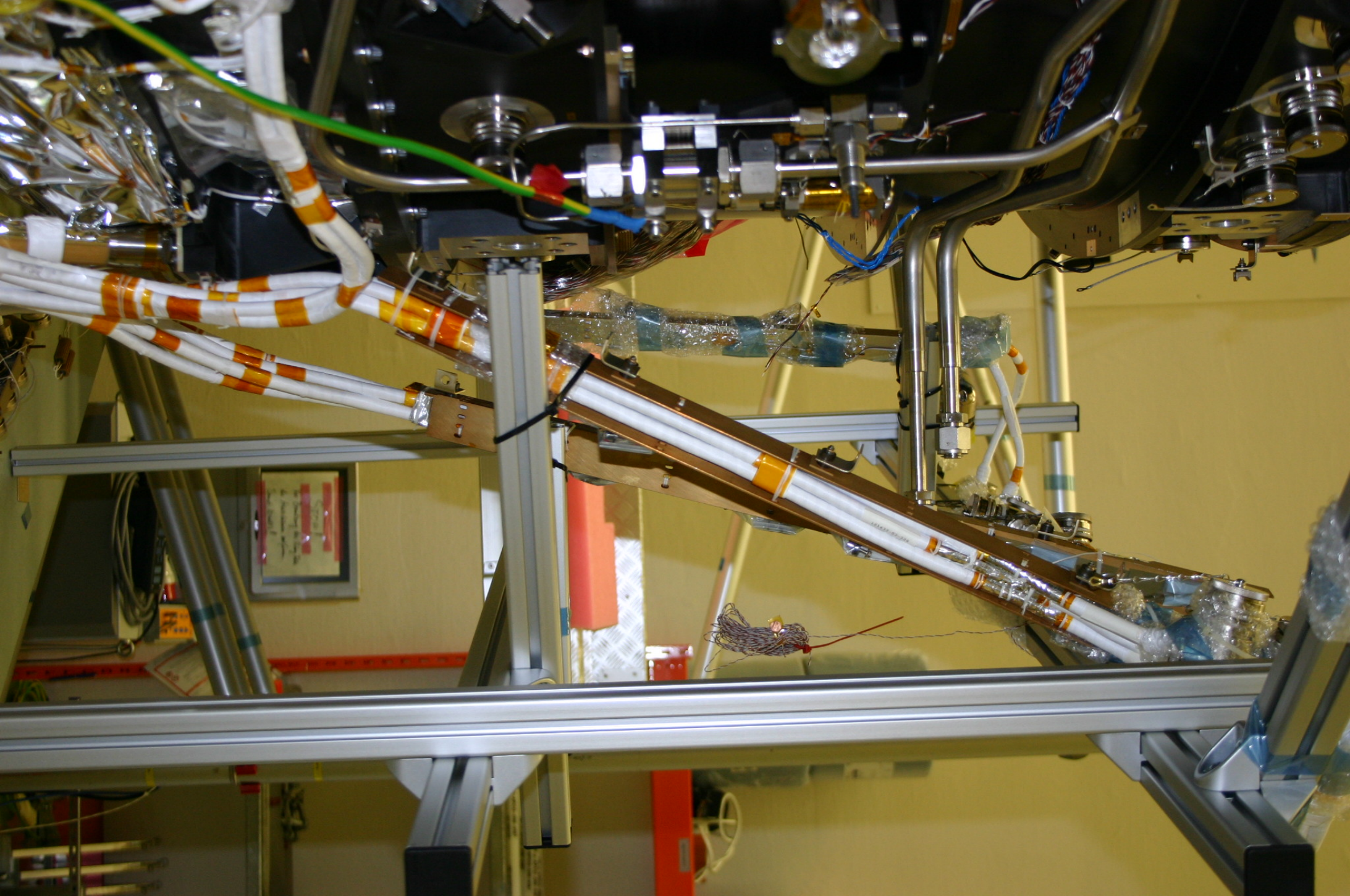
Photo Documentation of CVV external Harness detachment after STM2

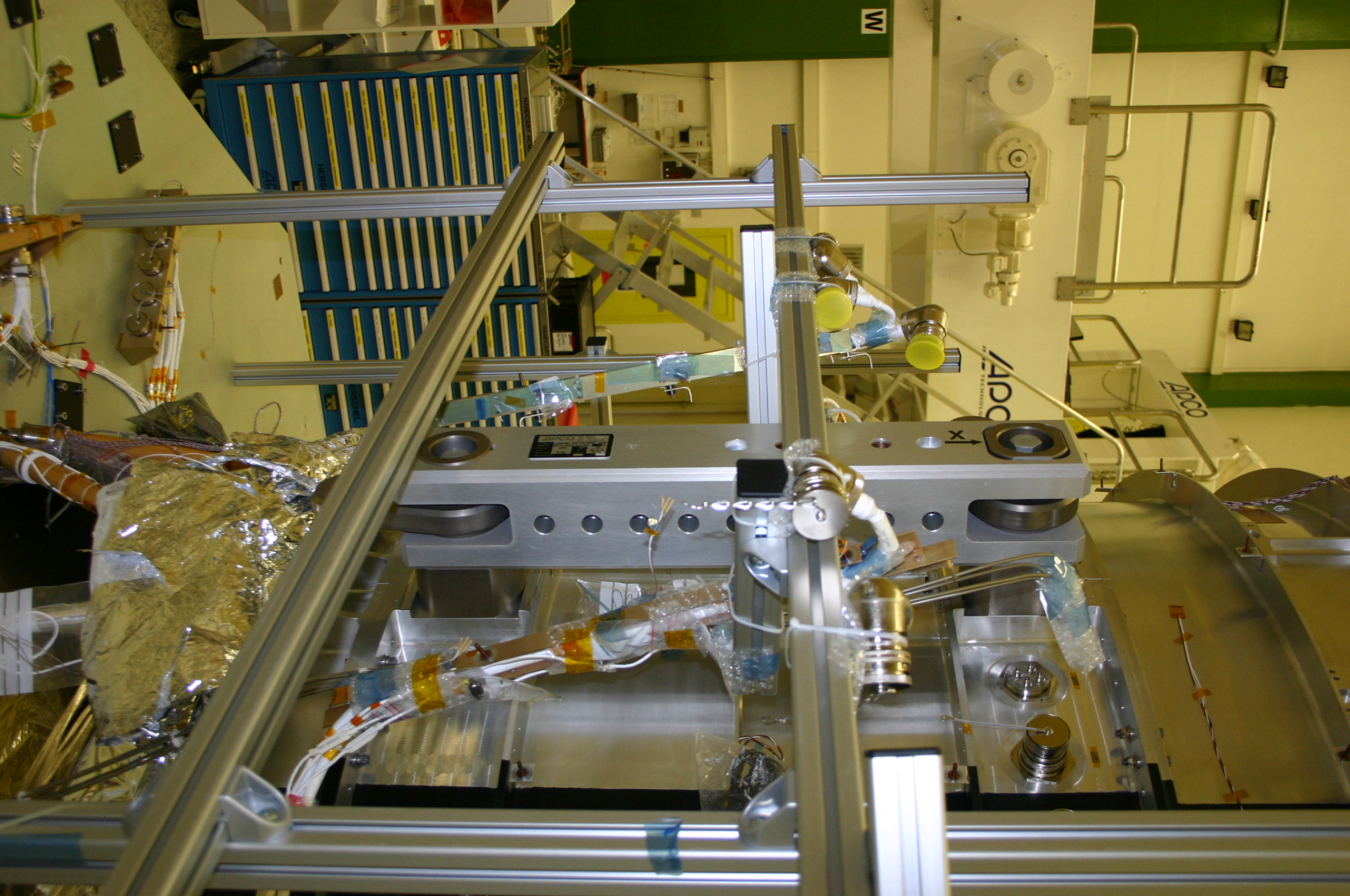


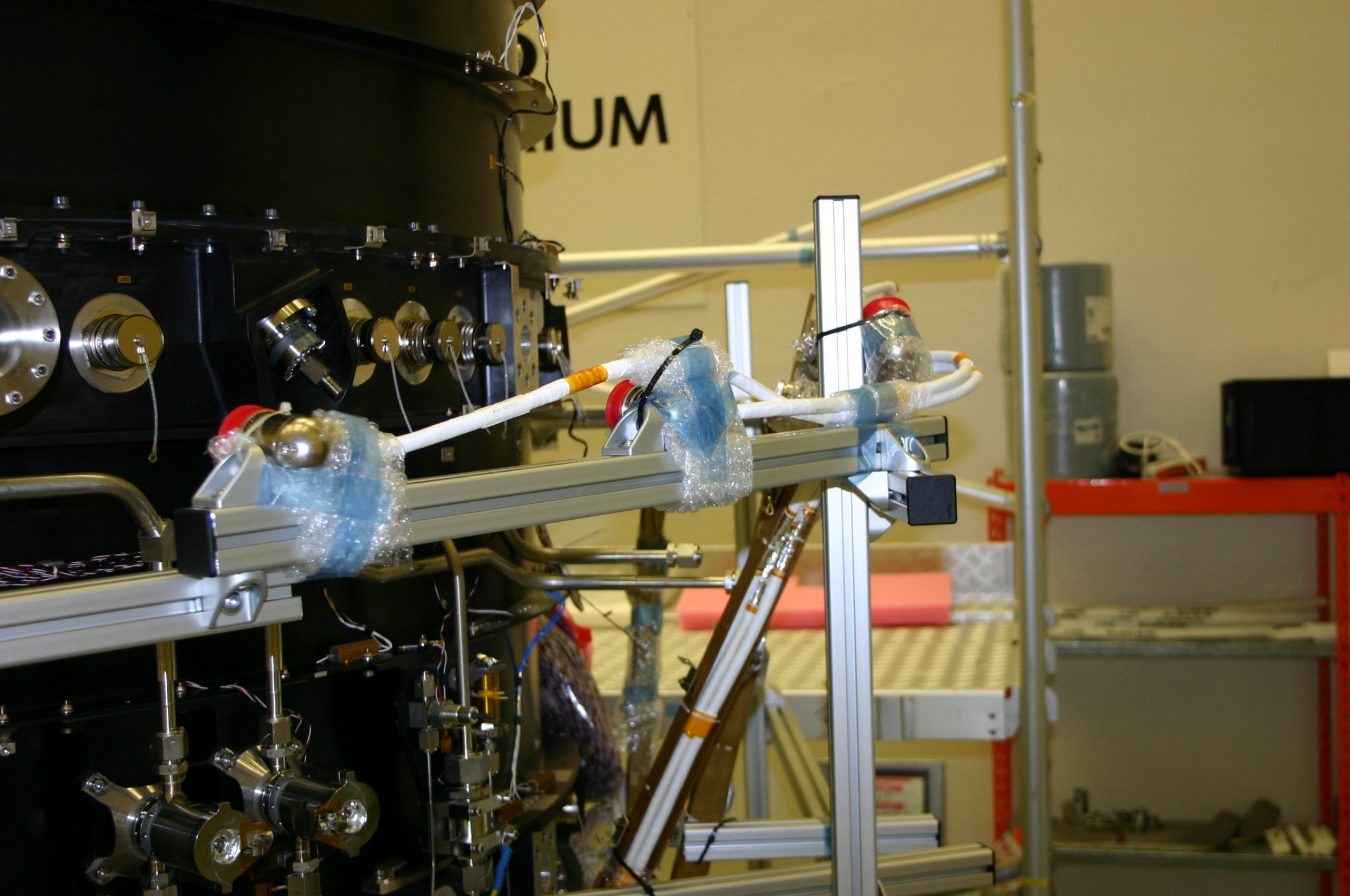


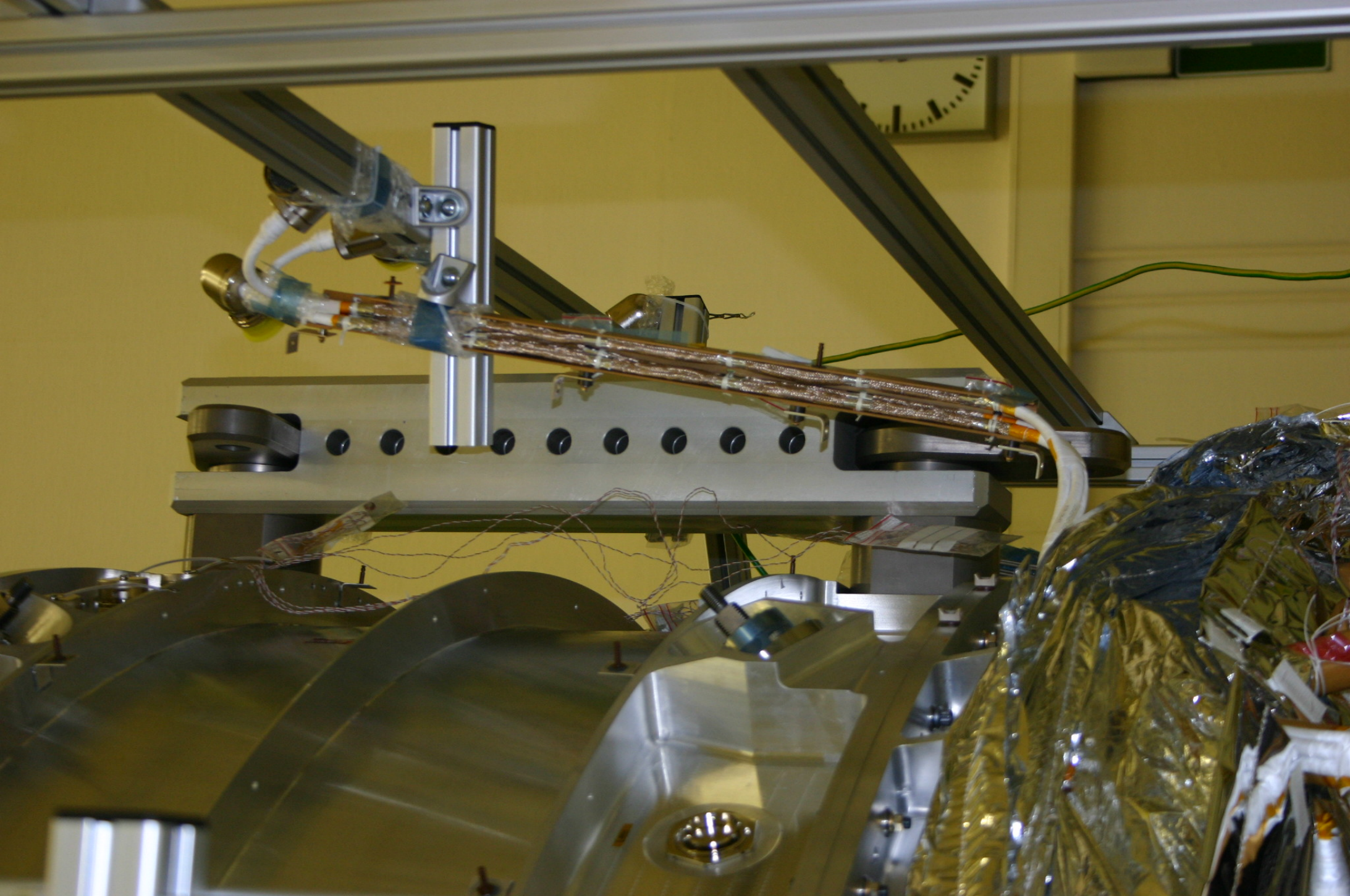


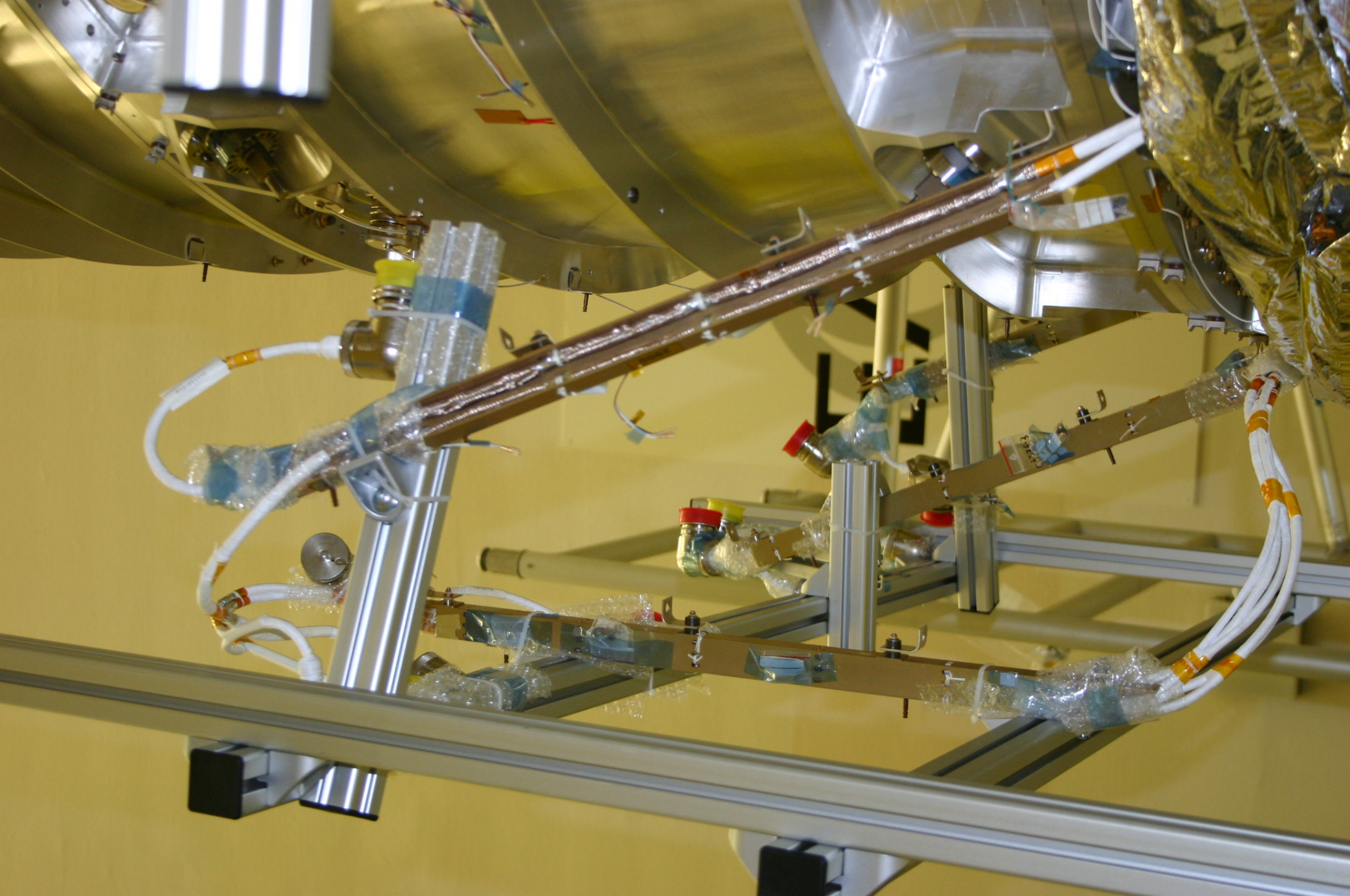


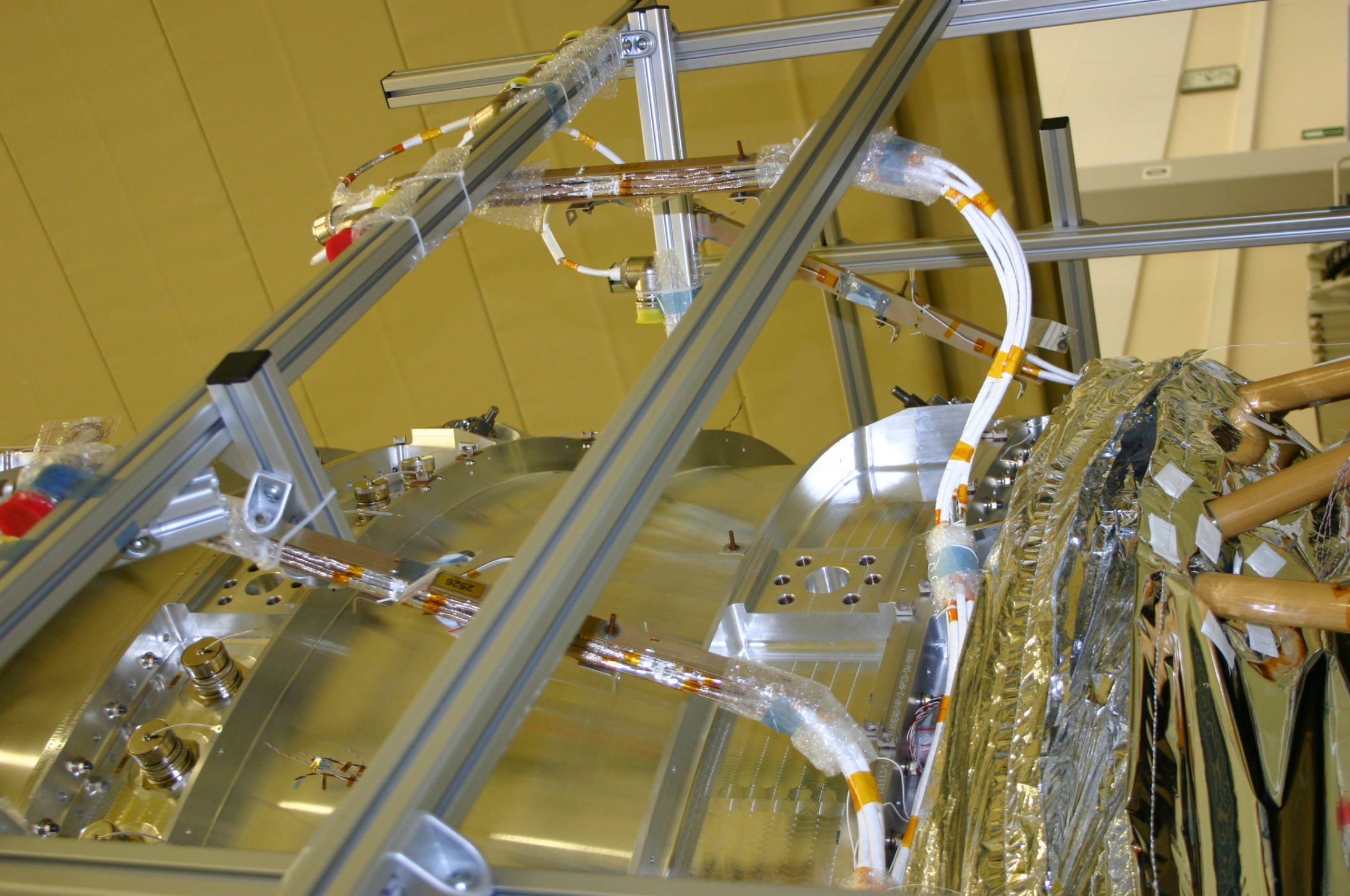


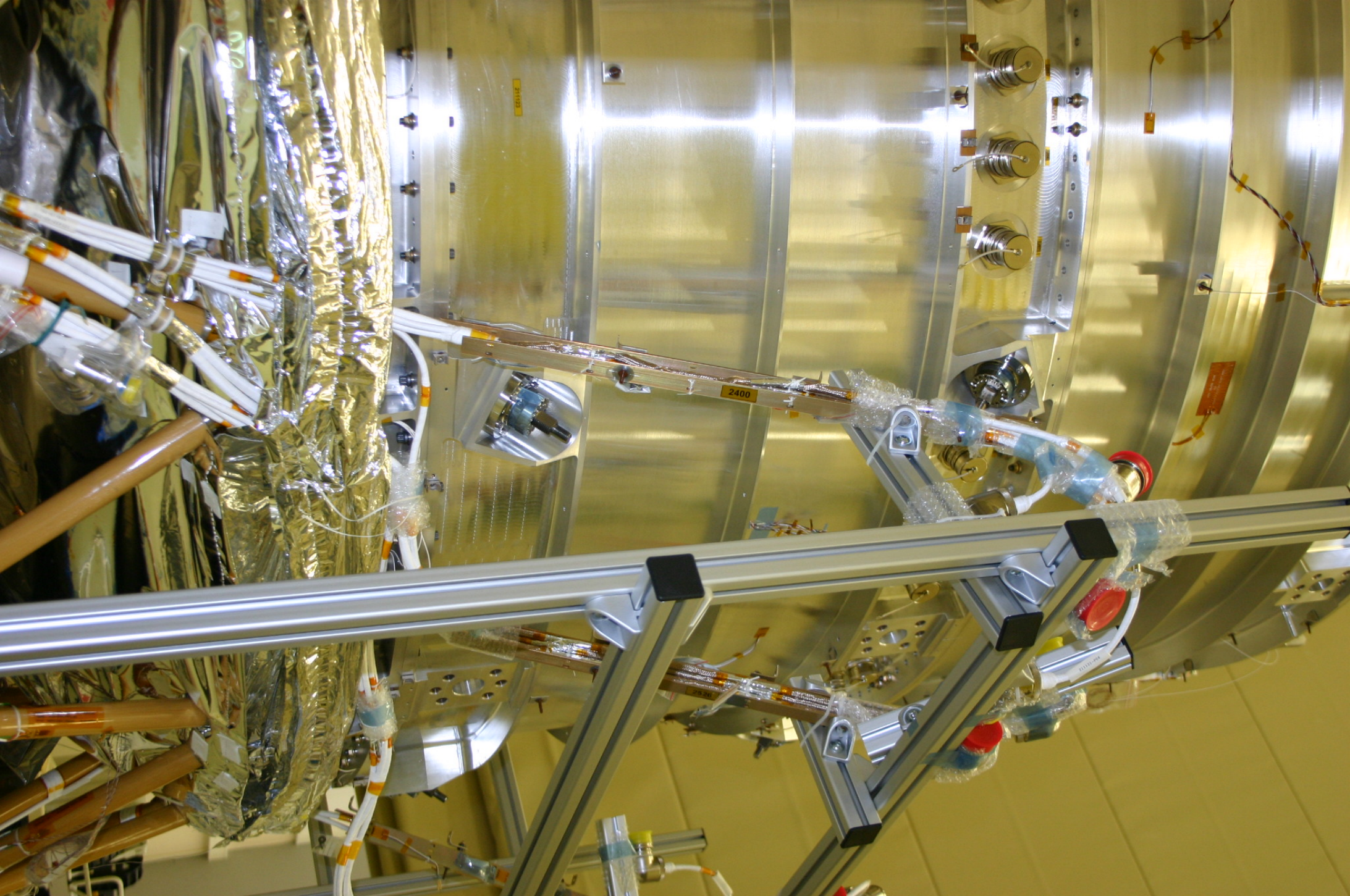


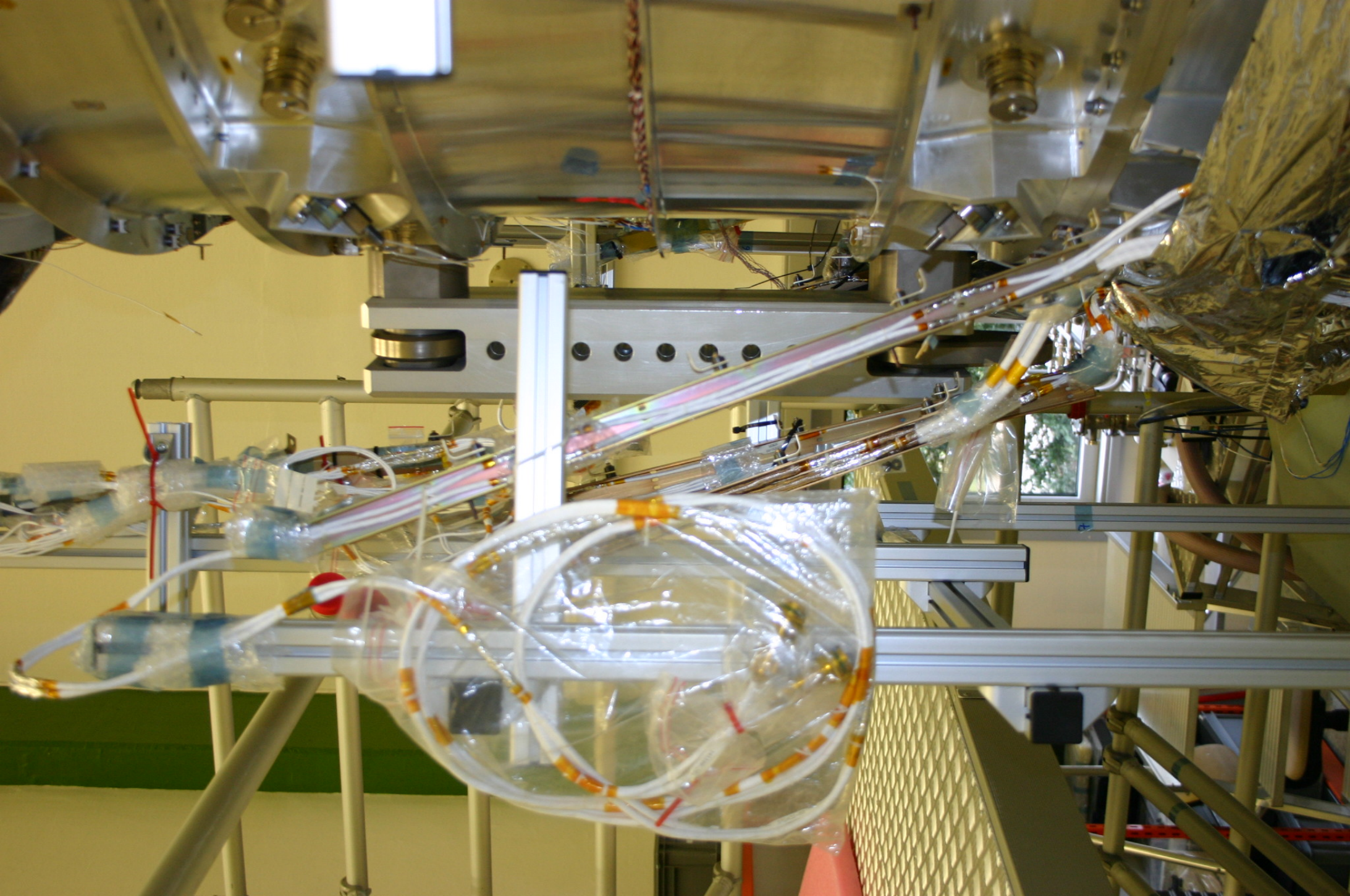






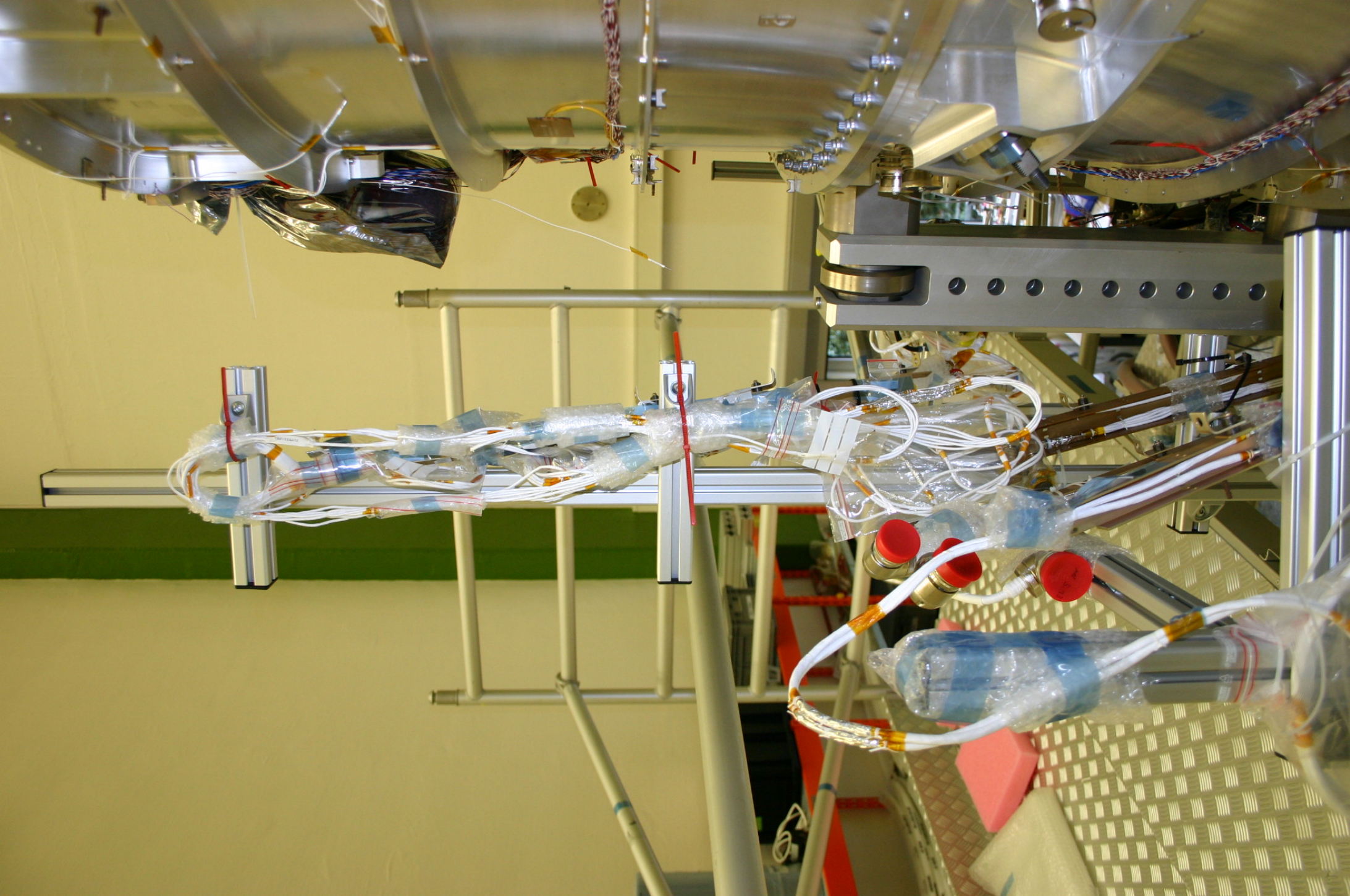




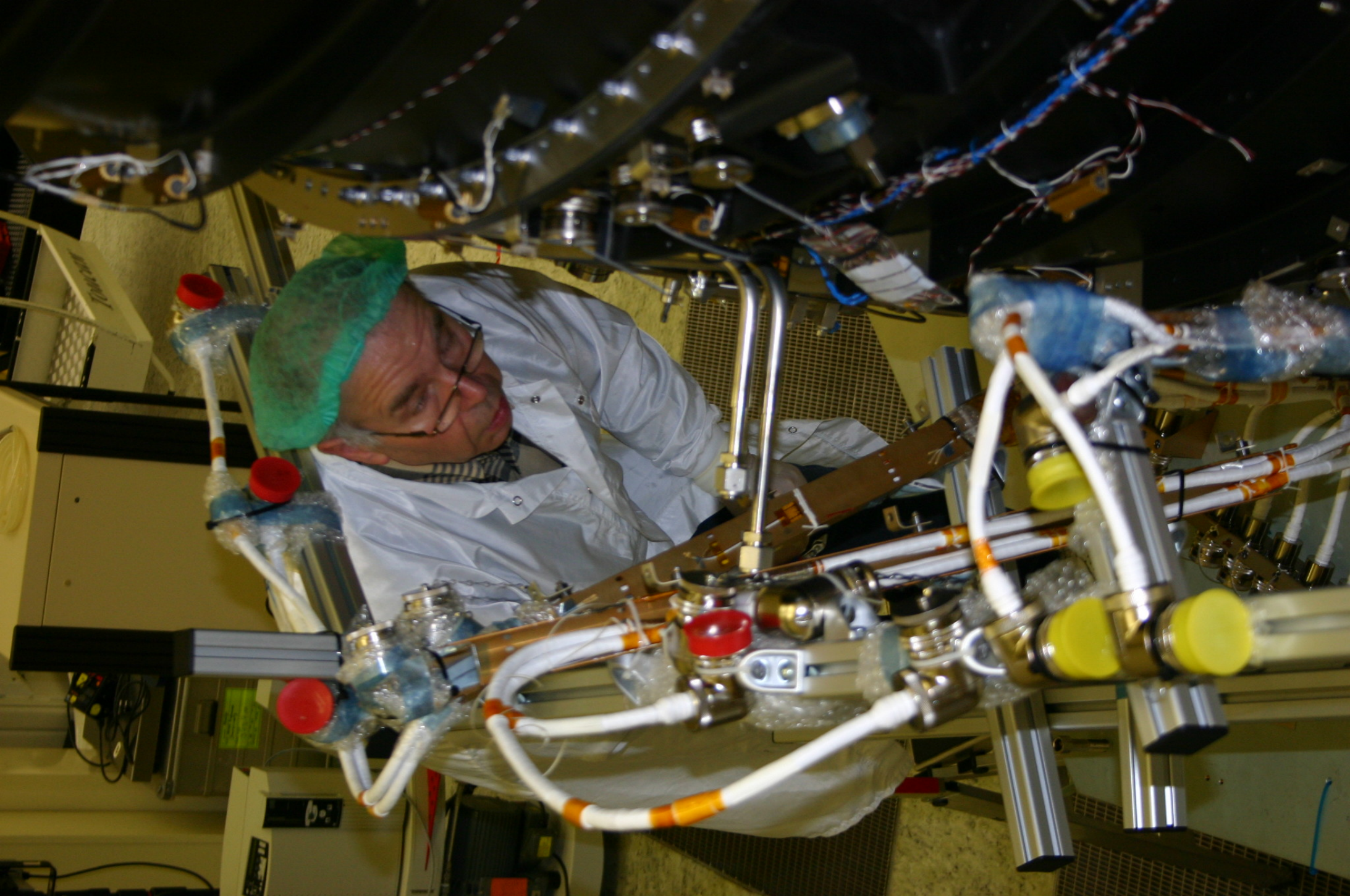


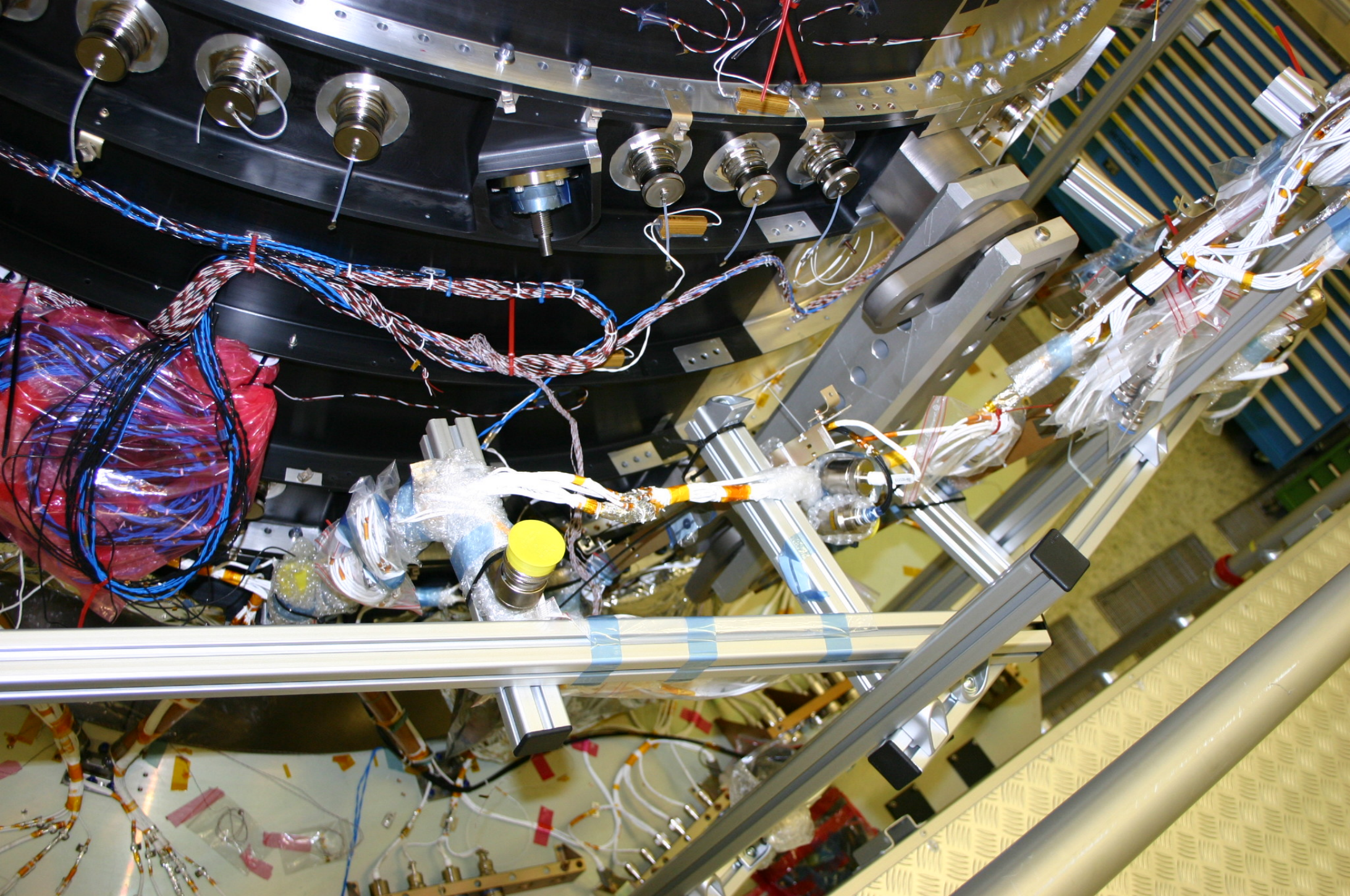


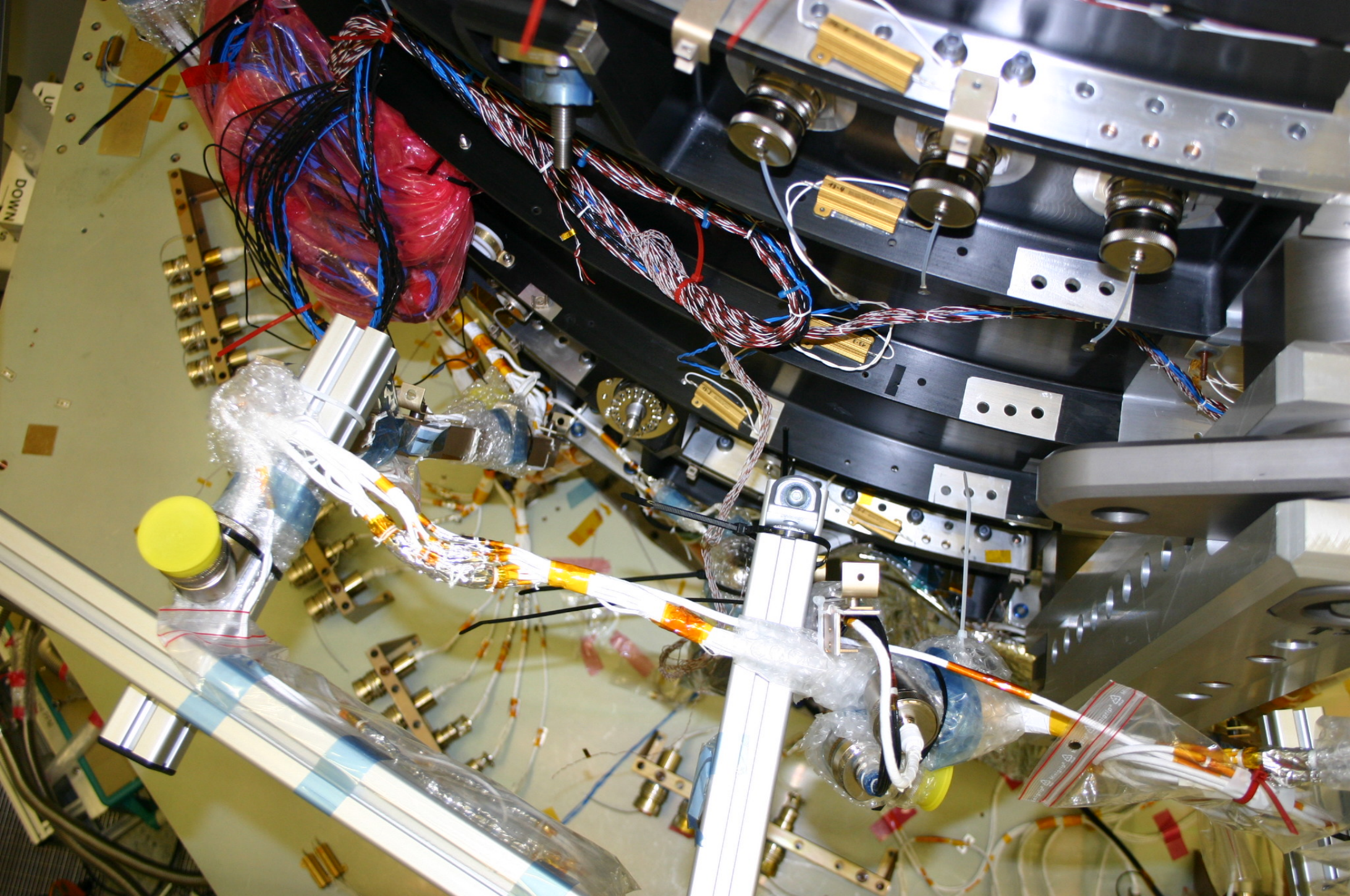


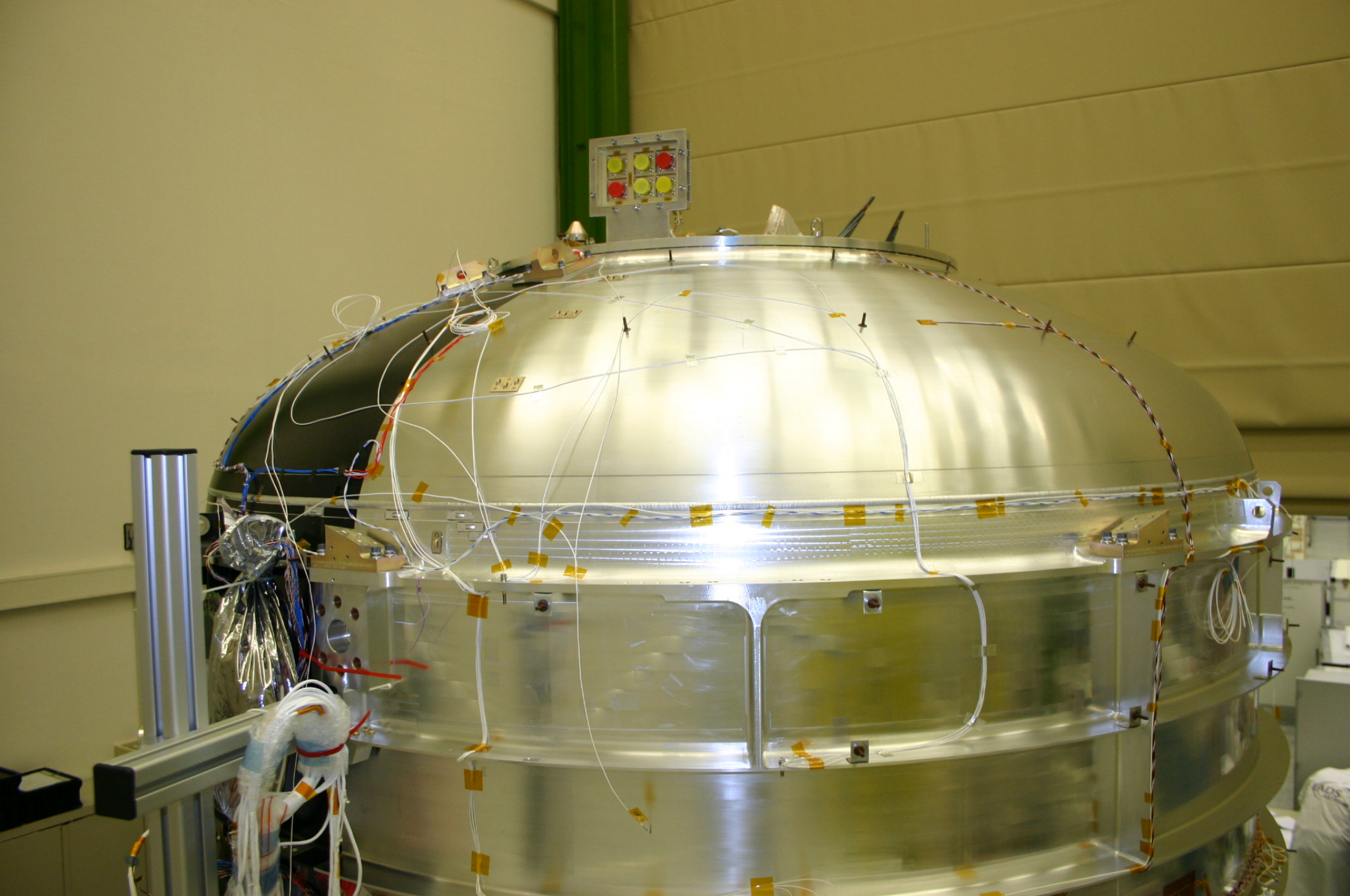












	Name	Dep./Comp.		Name	Dep./Comp.
	Alberti von Mathias Dr.	ASG22		Schuler Günter	ASA42
	Baldock Richard	FAE12		Schweickert Gunn	ASG22
X	Barlage Bernhard	AED13	X	Sonn Nico	ASG51
X	Bayer Thomas	ASA42		Steininger Eric	AED32
	Brune Holger	ASA45	X	Stritter Rene	AED11
	Edelhoff Dirk	AED2		Suess Rudi	OTN/ASA44
	Fehringer Alexander	ASG13		Theunissen Martijn	DSSA
X	Fricke Wolfgang Dr.	AED 65		Wagner Klaus	ASG22
	Geiger Hermann	ASA42	X	Wietbrock Walter	AET12
X	Grasl Andreas	OTN/ASA44		Wöhler Hans	ASG22
	Grasshoff Brigitte	AET12	X	Wössner Ulrich	ASE252
	Hamer Simon	Terma			
X	Hendry David	Terma			
X	Hengstler Reinhold	ASA42			
	Hinger Jürgen	ASG22			
X	Hohn Rüdiger	AED65			
	Hölzle Edgar Dr.	AED32			
	Huber Johann	ASA42			
X	Hund Walter	ASE252			
X	Idler Siegmund	AED312			
	Ivány von András	FAE12			
CP	Jahn Gerd Dr.	ASG22			
	Kalde Clemens	ASM2			
	Kameter Rudolf	OTN/ASA42			
	Kettner Bernhard	AET42			
CP	Knoblauch August	AET32	X	Alcatel Alenia Space Cannes	AAS-F
	Koelle Markus	ASA43		Alcatel Alenia Space Torino	AAS-I
X	Koppe Axel	AED312	X	ESA/ESTEC	ESA
CP	Kroeker Jürgen	AED65			
	La Gioia Valentina	Terma		Instruments:	
X	Lang Jürgen	ASE252		MPE (PACS)	MPE
X	Langenstein Rolf	AED15	X	RAL (SPIRE)	RAL
X	Langfermann Michael	ASA41		SRON (HIFI)	SRON
	Martin Olivier				
	Maukisch Jan	ASA43			
	Much Christoph	ASA43		Subcontractors:	
	Müller Jörg	ASA42		Alcatel Alenia Space Antwerp	ABSP
X	Müller Martin	ASA43		Austrian Aerospace	AAE
	Peltz Heinz-Willi	ASG13		Austrian Aerospace	AAEM
	Pietroboni Karin	AED65		BOC Edwards	BOCE
CP	Platzer Wilhelm	AED2		Dutch Space Solar Arrays	DSSA
	Reichle Konrad	ASA42		EADS Astrium Sub-Subsyst. & Equipment	ASSE
	Runge Axel	OTN/ASA44		EADS CASA Espacio	CASA
	Schink Dietmar	AED32		EADS CASA Espacio	ECAS
	Schlosser Christian	OTN/ASA44		European Test Services	ETS
	Schmidt Rudolf	FAE12		Patria New Technologies Oy	PANT
X	Schmidt Thomas	ASA42		SENER Ingenieria SA	SEN