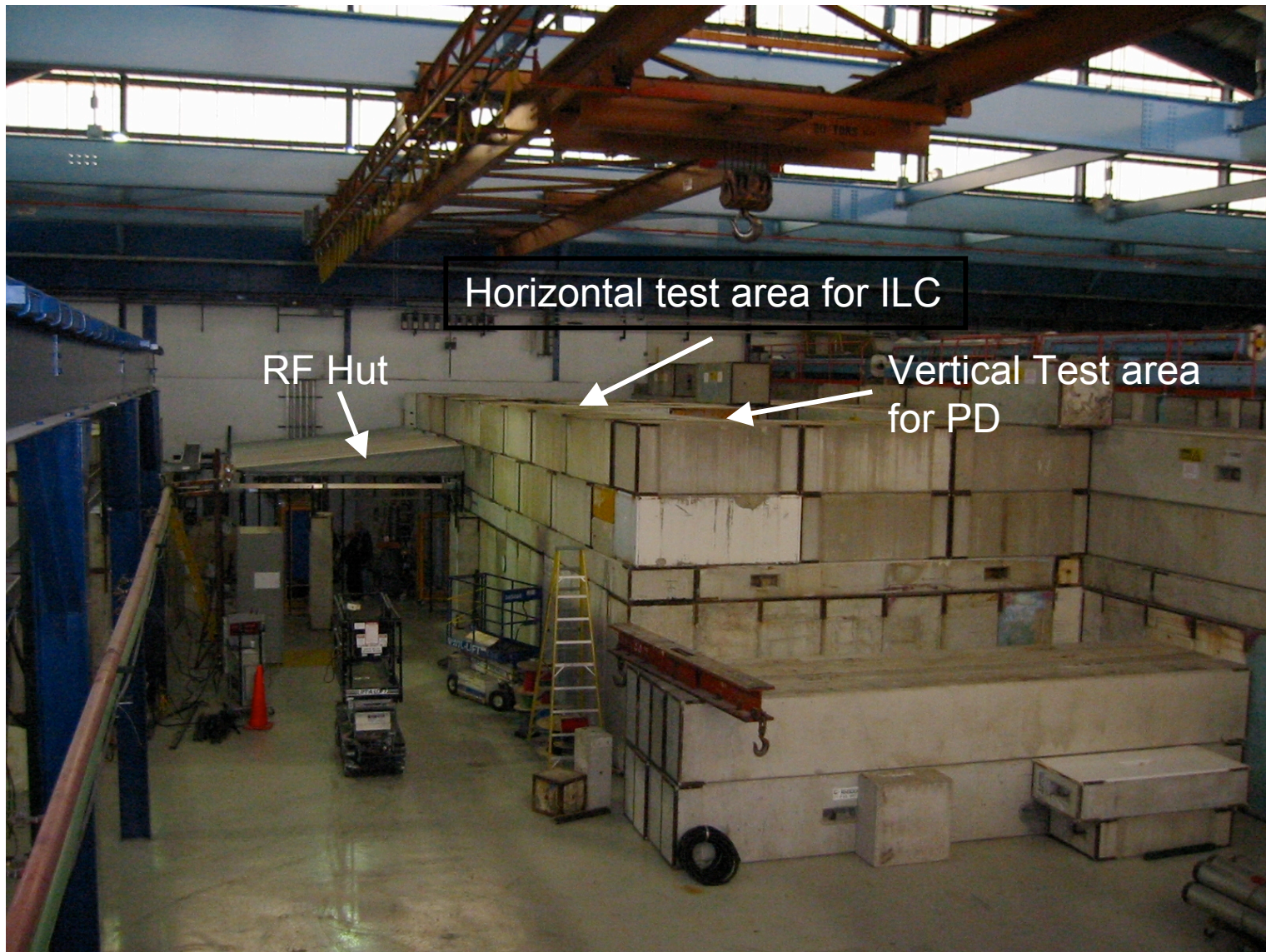
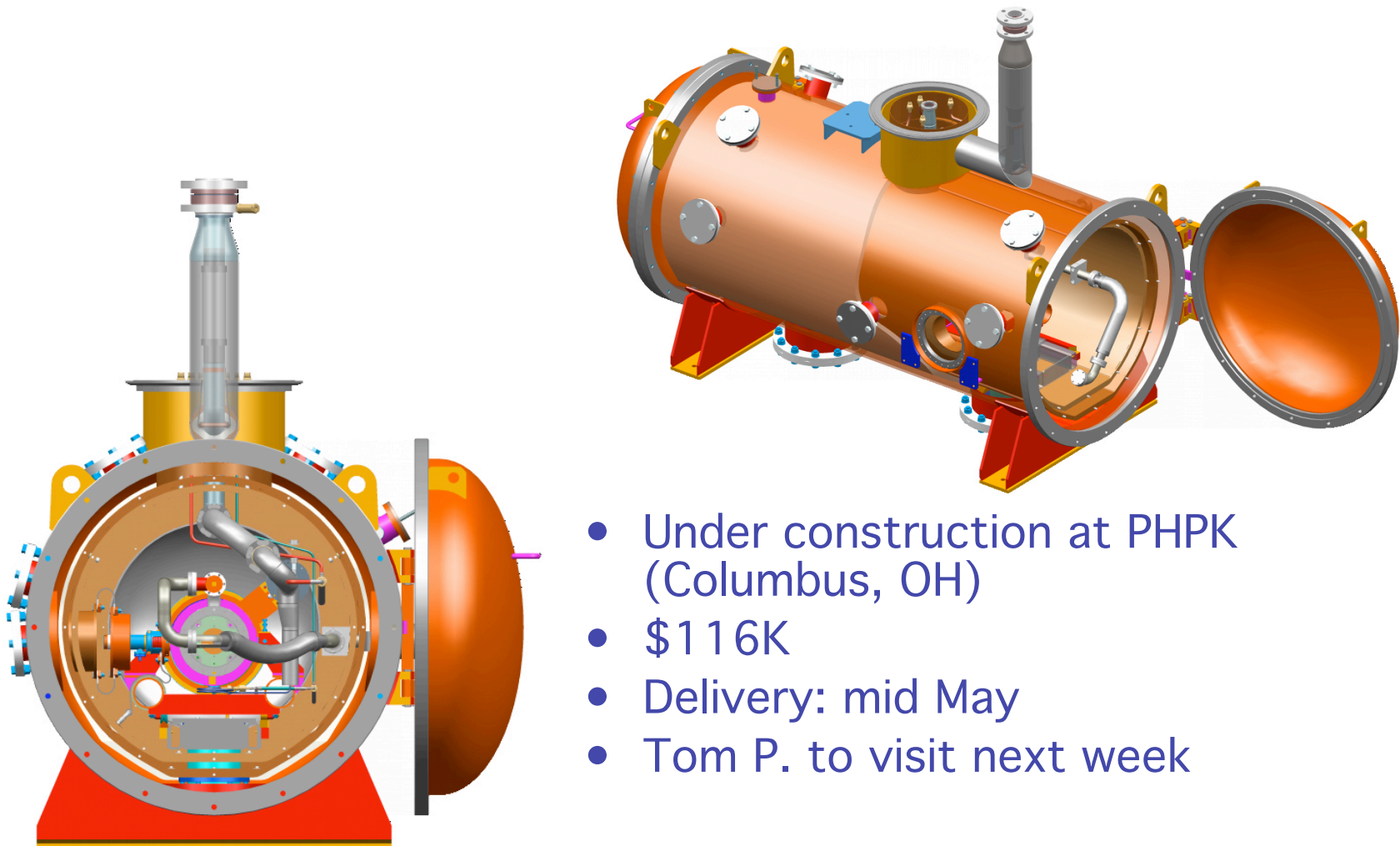


ILCTA_MDB Horizontal Test Facility Status



A. Hocker
19-APR-2006

Horizontal Cryostat Assembly



- Under construction at PHPK (Columbus, OH)
- \$116K
- Delivery: mid May
- Tom P. to visit next week

19 Apr 2006

ILCTA Meeting

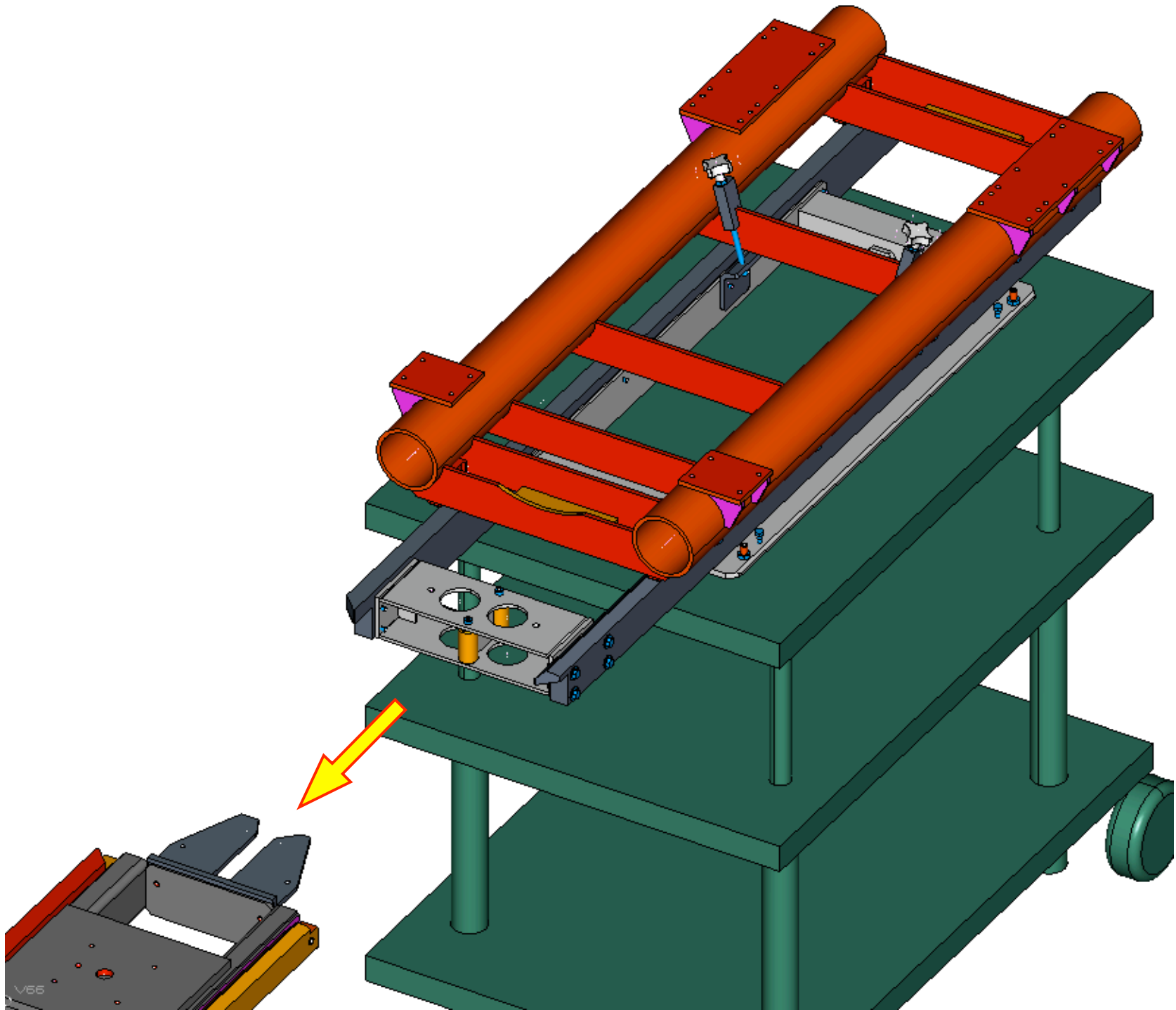
2

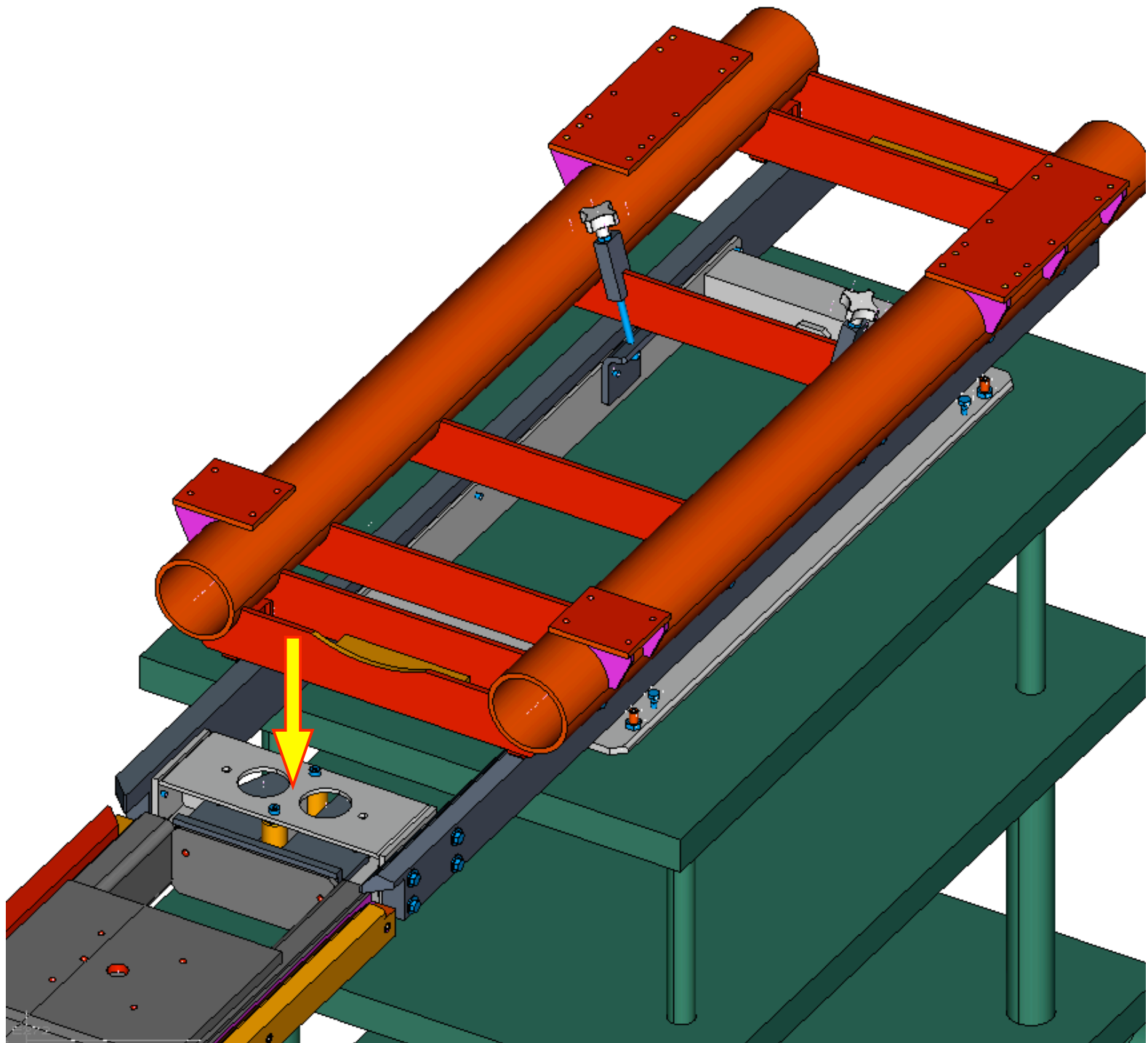
Plan for cryostat

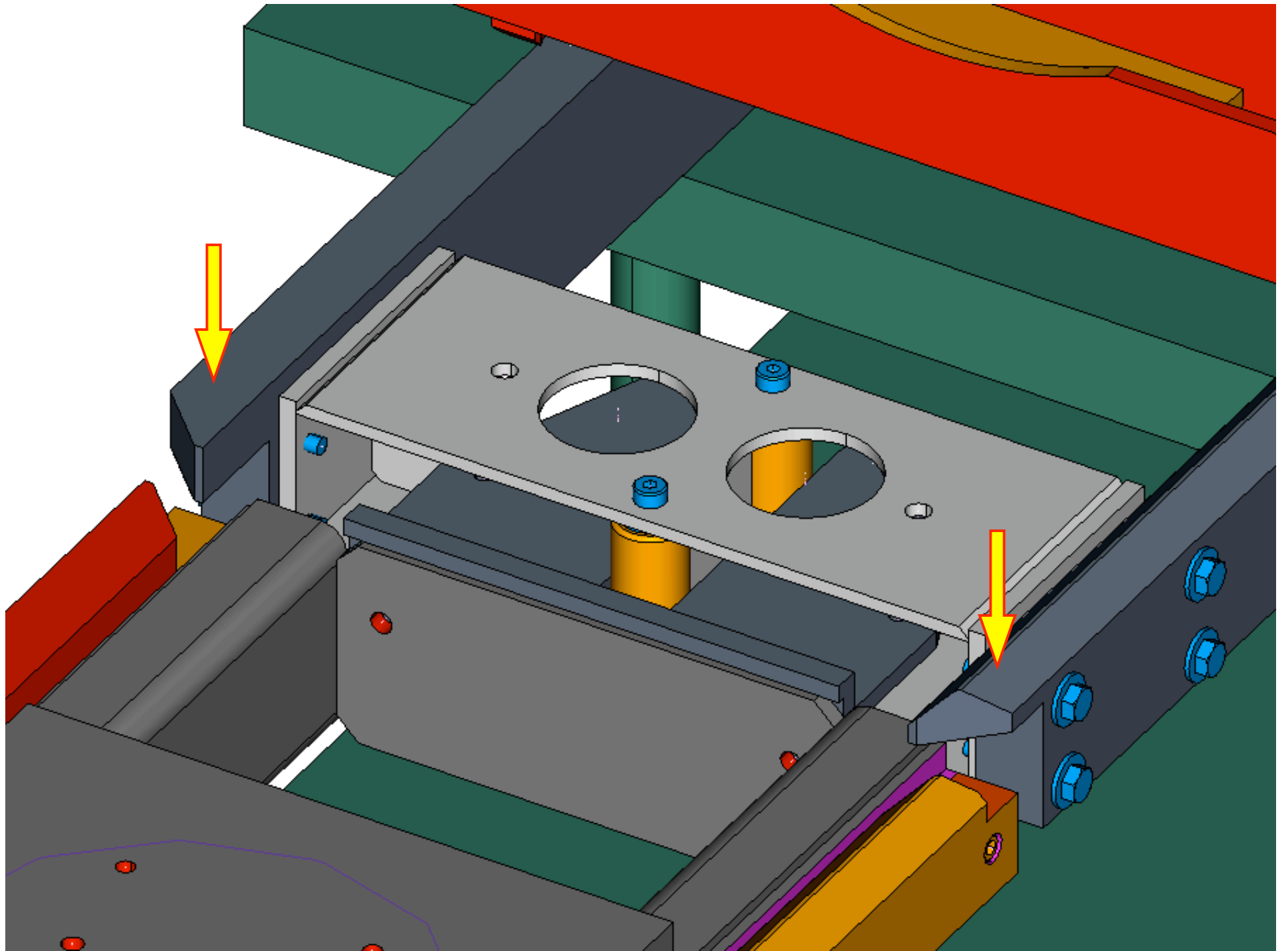
- Place on support cradle
- Initial leak-check
- Feed can installation, connection to MDB cryo
- Install insulating vacuum system
- Mount electrical feed-thru plates, wiring, instrumentation
- Instrumentation check-out
- Install cavity vacuum system
- Cavity vacuum “dry run”

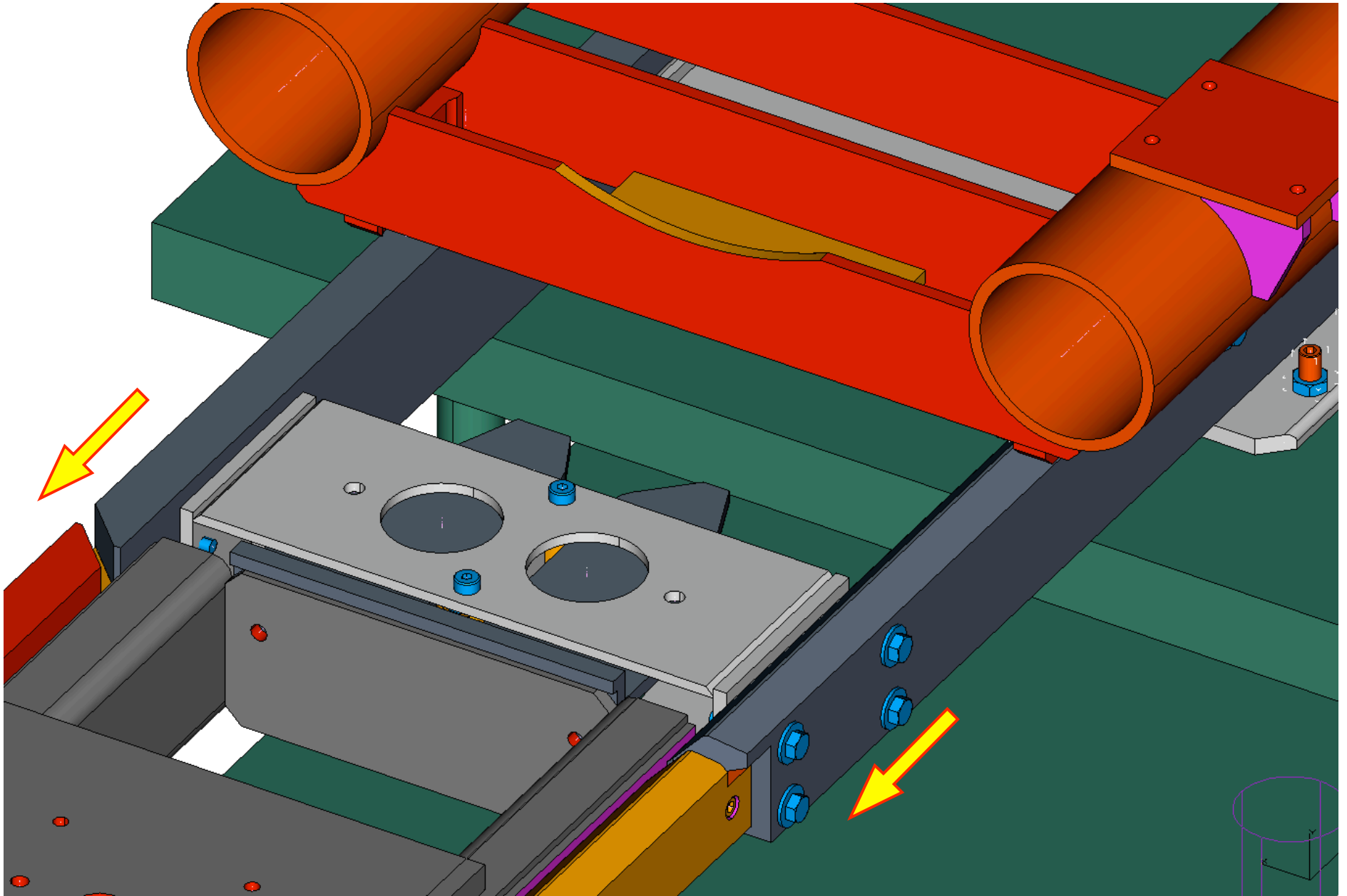
--> six weeks?

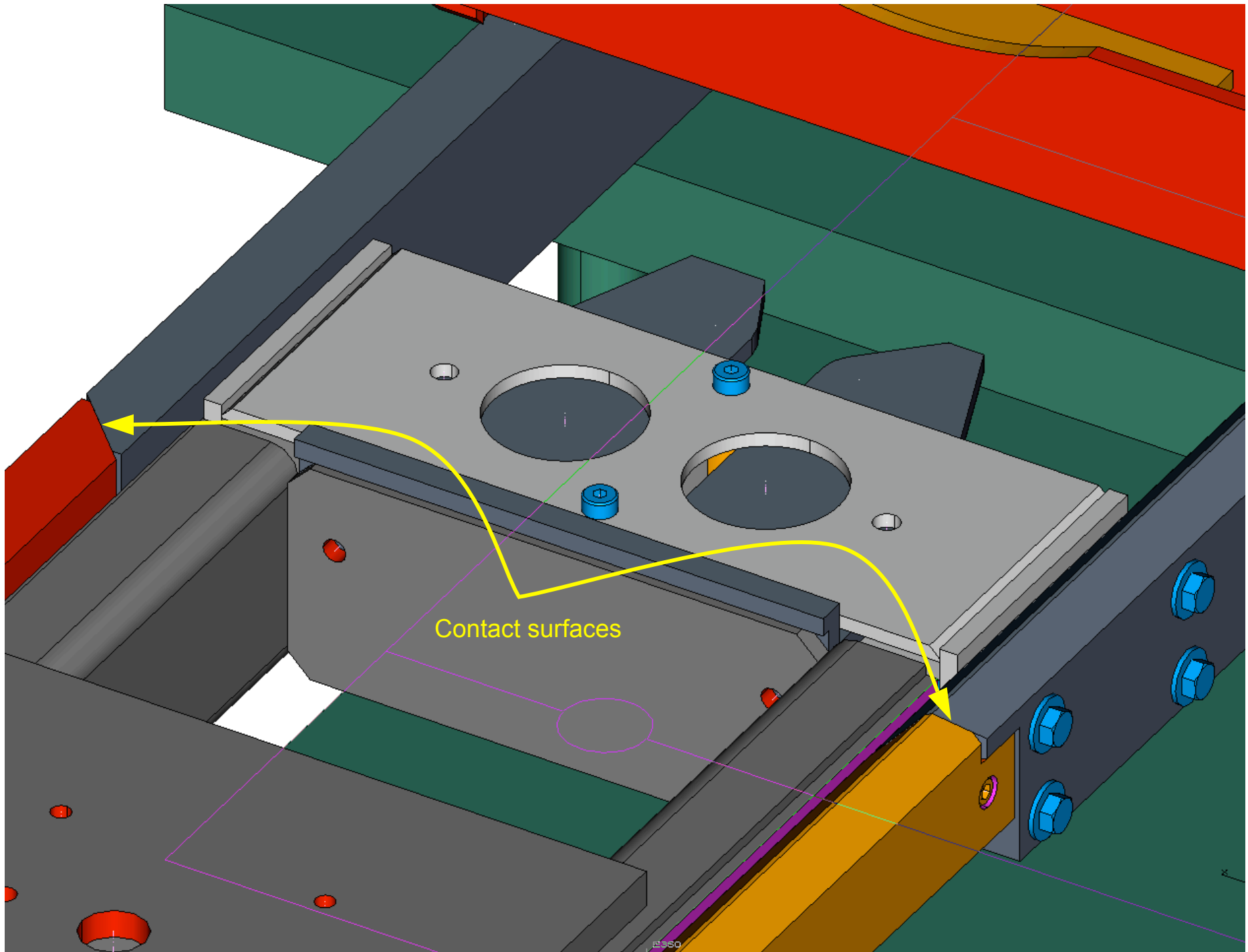
Installing a Cavity



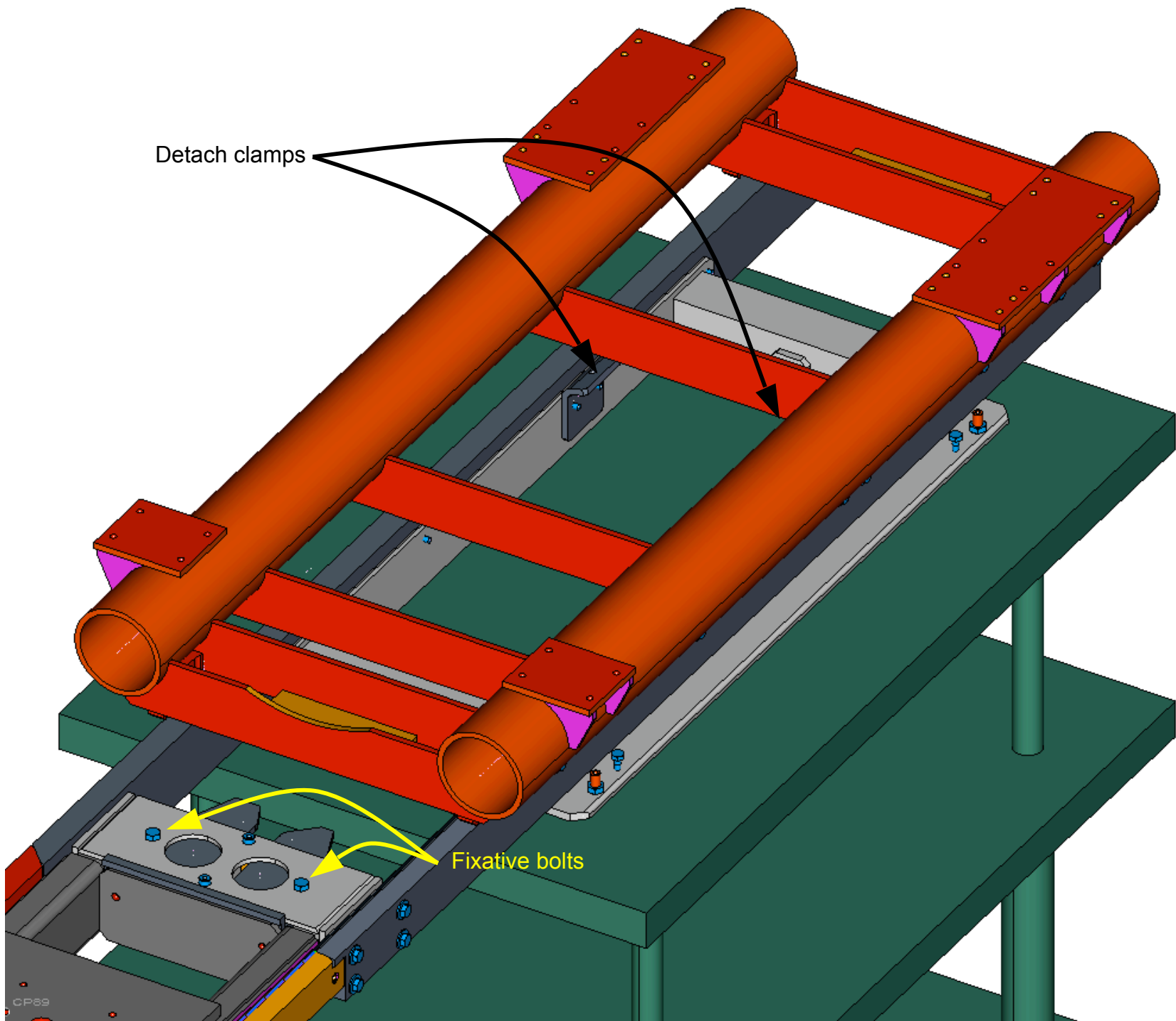








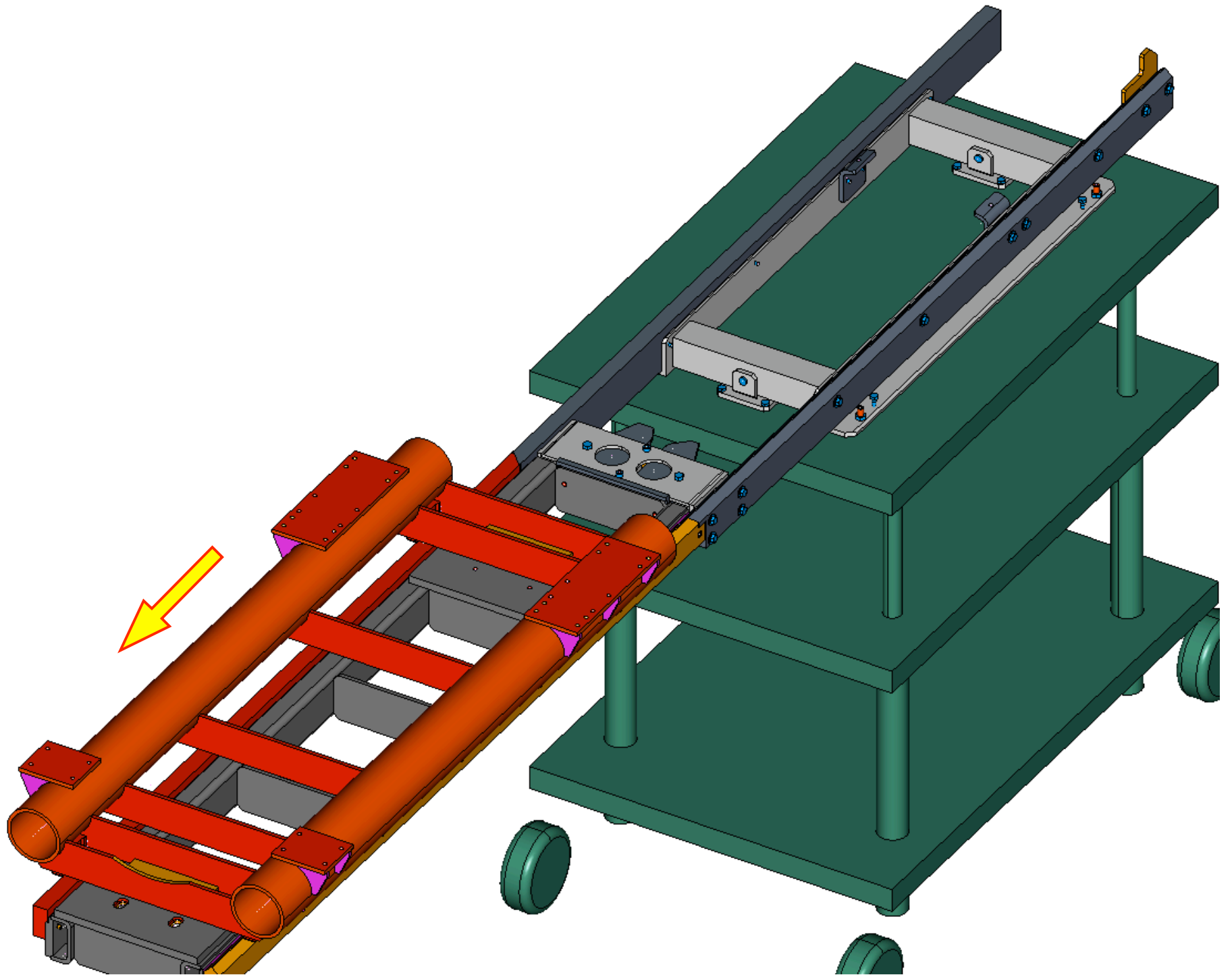
Contact surfaces



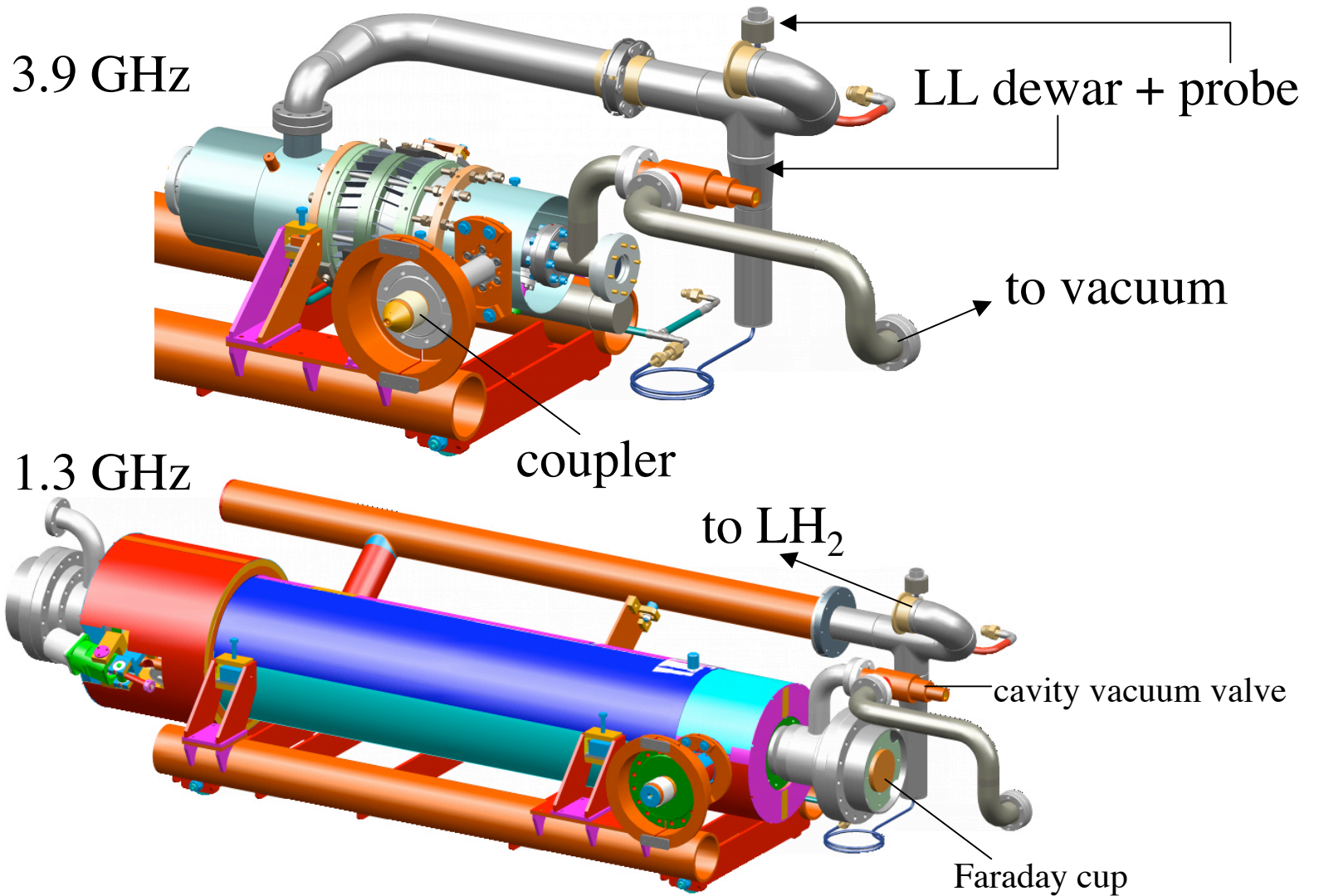
Detach clamps

Fixative bolts

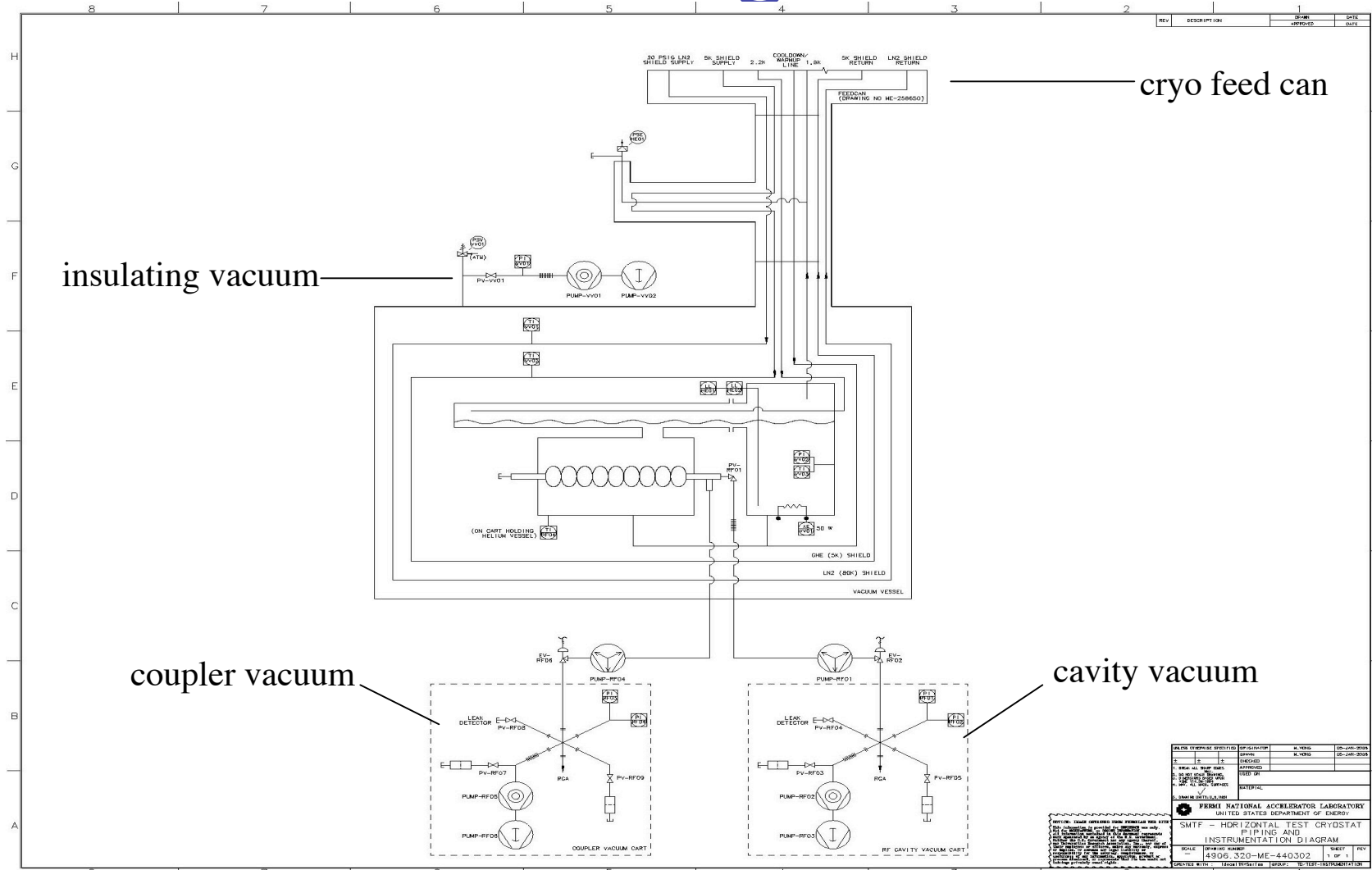
CP89



Connecting a Cavity



P&I Diagram



Electrical components

Instrumentation	Location	Range	Readback	Cryostat Port	Readout
LL-RF01	LHe level for RF vessel. Spare included	0 -100 %	4-20 mA		3 Cryo PLC
LL-RF02	Spare LHe level	0 -100 %	4-20 mA		3 Cryo PLC
PI-VV01	cryovessel vacuum pressure-low range	3.75E-10 - 750 torr	0-10 V	N/A	Cryo PLC
PI-VV02	LHe dewar	0-50 psia	4-20 mA		3 Cryo PLC
XE-VV01	Helium vessel dewar - cartridge heater	120V-50W	I/O		3 N/A (?)
TI-VV01	80K Thermal shield	40 K-300 K	4-20 mA		3 Cryo PLC
TI-VV02	5K Thermal shield	0.1K-300K	4-20 mA		3 Cryo PLC
TI-RF04	Helium cavity cart	0.1K-300K	4-20 mA		3 Cryo PLC
TI-VV03	LHe dewar	0.1K-300K	4-20 mA		3 Cryo PLC
	Cavity vacuum			N/A	IL PLC/interlock
	Coupler vacuum			N/A	IL PLC/interlock
	Coupler e- pickup 1 (warm)			N/A	IL ADC/interlock
	Coupler e- pickup 2 (cold)				1 IL ADC/interlock
	Coupler e- pickup 3 (cold)				1 IL ADC/interlock
	Coupler window temperature (IR)			N/A	IL PLC/interlock
	Coupler window temperature (RTD)			N/A	IL PLC/interlock
	Coupler PMT			N/A	IL ADC/interlock
	Coupler photodiode			N/A	IL ADC/interlock
	Cavity Pforward			N/A	IL ADC/interlock and LLRF ADC
	Cavity Preflected			N/A	IL ADC/interlock and LLRF ADC
	Cavity Ptrans				1 LLRF ADC
	HOM US P				1 IL ADC
	HOM DS P				1 IL ADC
	3.9 GHz blade tuner				
	1.3 GHz slow tuner?				
	Faraday cup US				2 IL PLC
	Faraday cup DS				2 IL PLC
	Strain gauges				4 Tuner readout system
	RTDs				5 Tuner readout system
	Piezo elements				4 Tuner readout system
	Magnetostrictive elements				5 Tuner readout system
	X-ray detector US			N/A	IL ADC
	X-ray detector DS			N/A	IL ADC