Olympus Vacuum System and Target Update

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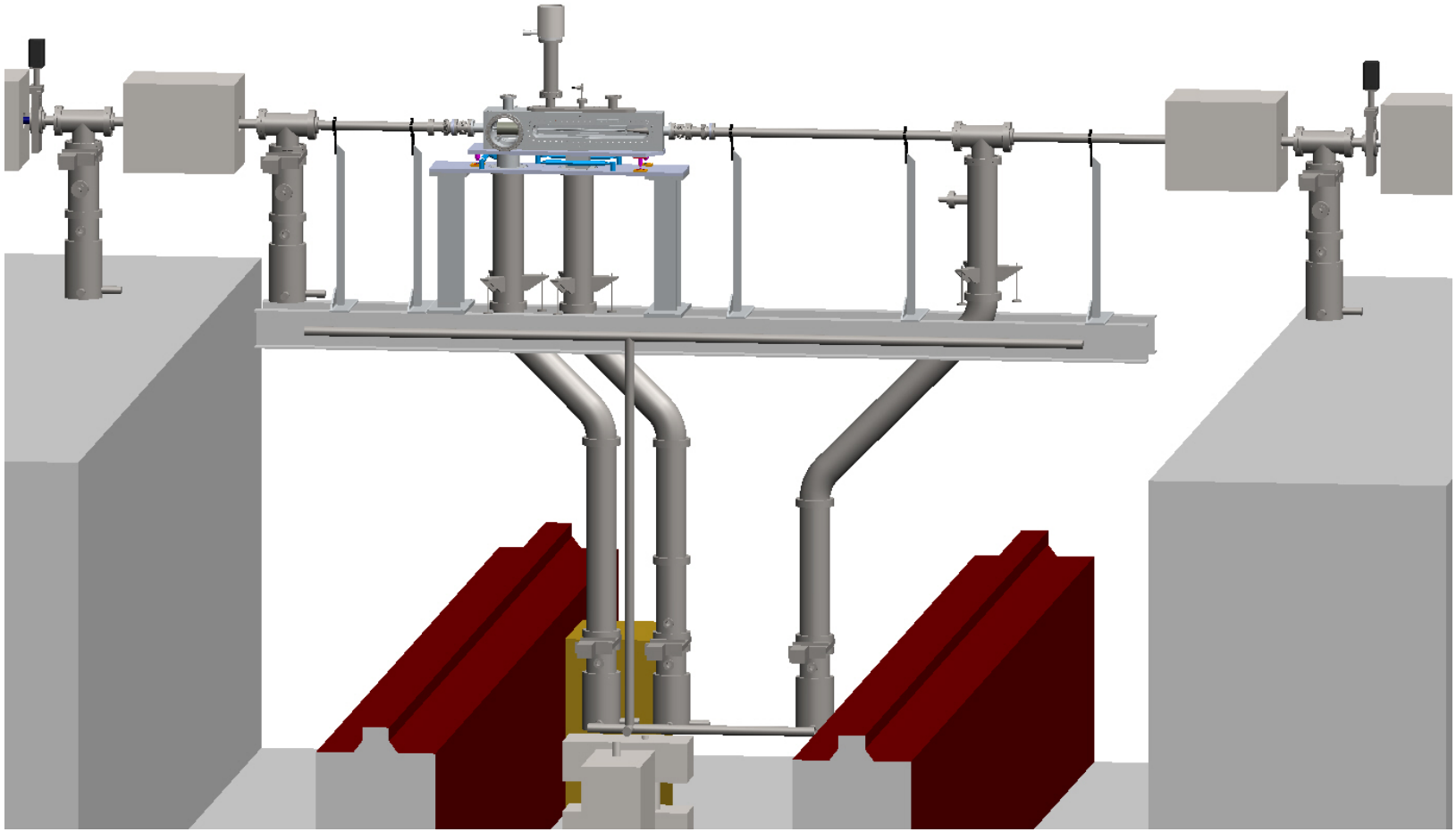
Vacuum System

- Scattering Chamber, supports, cryogenics, sensors, and prototype target have been assembled.
- System has been pumped into the low 10e-8 torr scale.
- Cryogenics tested. With 10 watts of power applied target temperature is 40 K.
- Improvements being made to cryogenic attachment to target.
- Collimator has been machined and is ready to install and align.
- Wakefield suppressor parts have been machined and will be assembled this week.

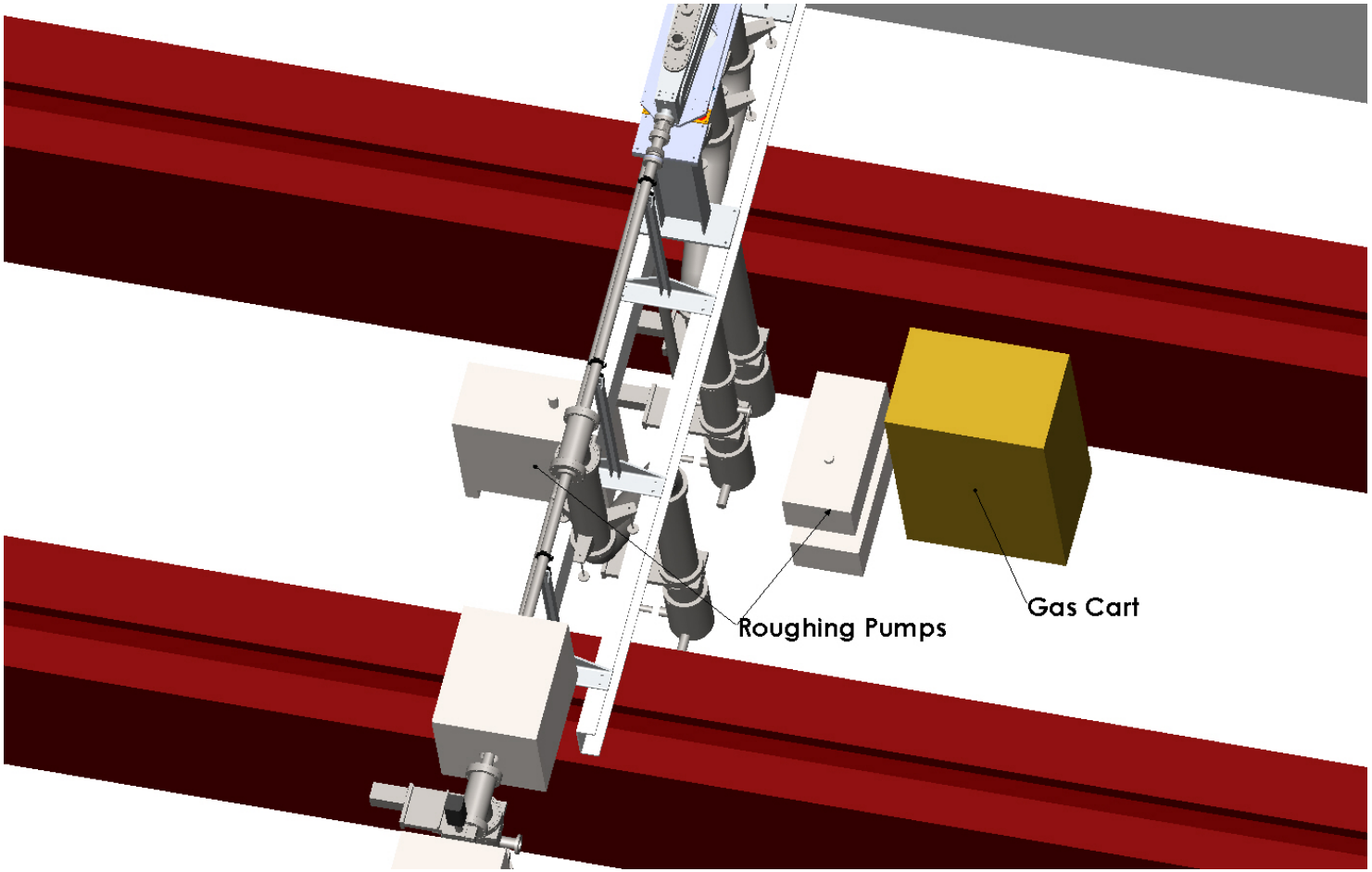
Vacuum System Cont'd

- All major components of high vacuum system have been produced.
- Several assemblies have been assembled and leak checked.
- Vacuum system supports will be manufactured in the next week.
- Roughing system has is being designed and 60% of parts exist.

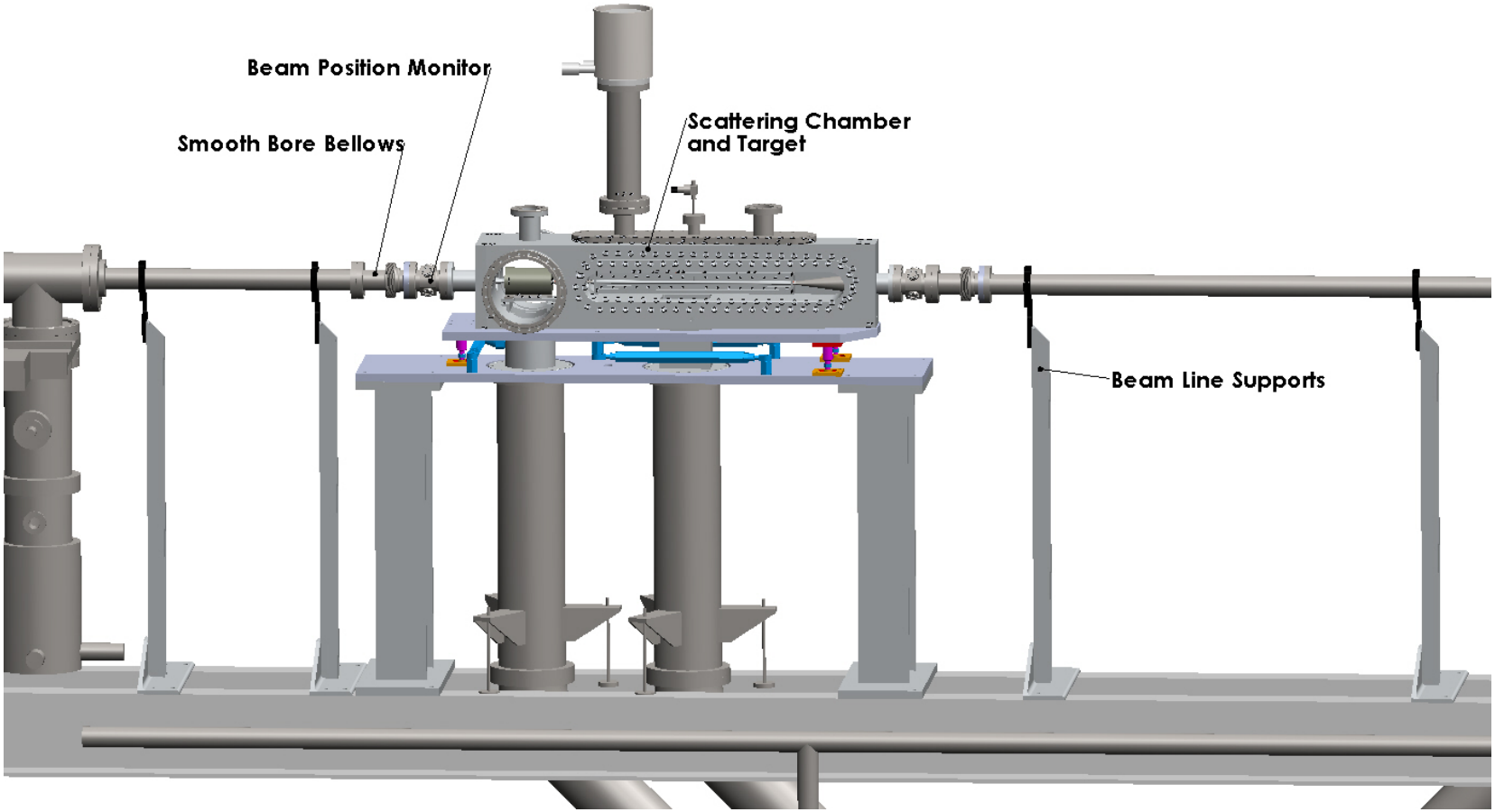
Vacuum System Layout



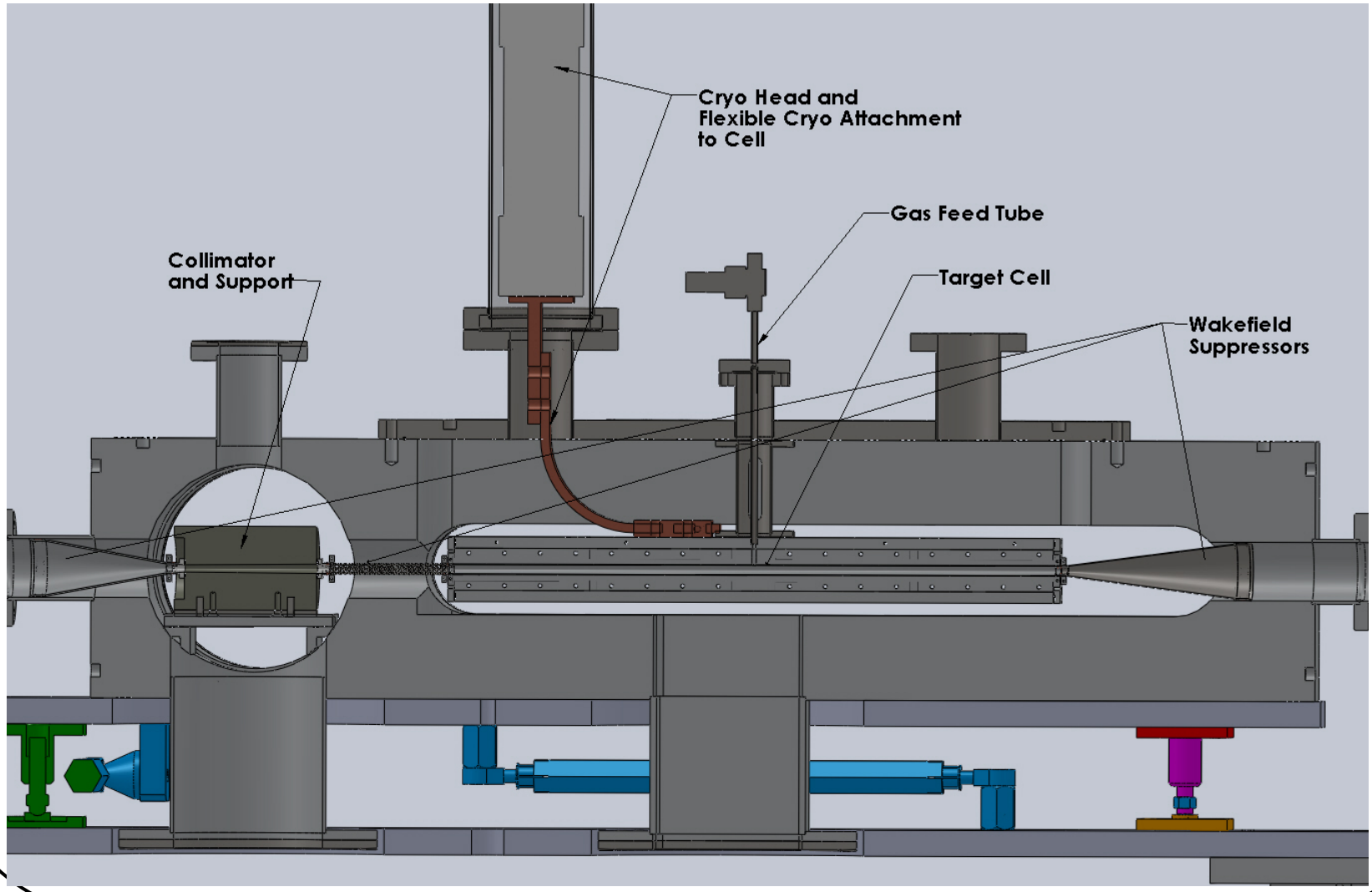
Pit Layout



Vacuum System IP Detail



Target Detail Section View



In Conclusion

- Will install final target as soon as it arrives at Bates.
- Will finish assemblies of wakefield suppressors when we get finger parts from Ferrara.
- All temperature sensors, heater, and controls for the target system have been installed and tested.
- Gas feed system is ready to produce high flows. Buffer system has been manufactured and will be installed and tested this week.
- All vacuum parts in house, all machining done, still some welding to finish.
- Many sub assemblies for vacuum system have been leak checked and are ready for packaging.
- Have contacted packing and shipping companies to get estimates.

Schedule

- Everything is contingent on arrival of new target.
- Current plan is to have all assembly and testing done by Nov. 16
- Pack all components by Nov. 24
- Ship everything to DESY Nov. 30
- Bates personnel arrive at DESY Dec. 11
- Assemble as much as possible by Dec. 21
- Bates personnel back at DESY by Jan. 4
- Assemble rest of vacuum system in sub assemblies on floor.
- Bates personnel will stay until we install vacuum system in Doris ring.