



# BT-9 COLD SOURCE INSTALLATION CO<sub>2</sub> SEAL REMOVAL

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# Cold Source Installation Tasks

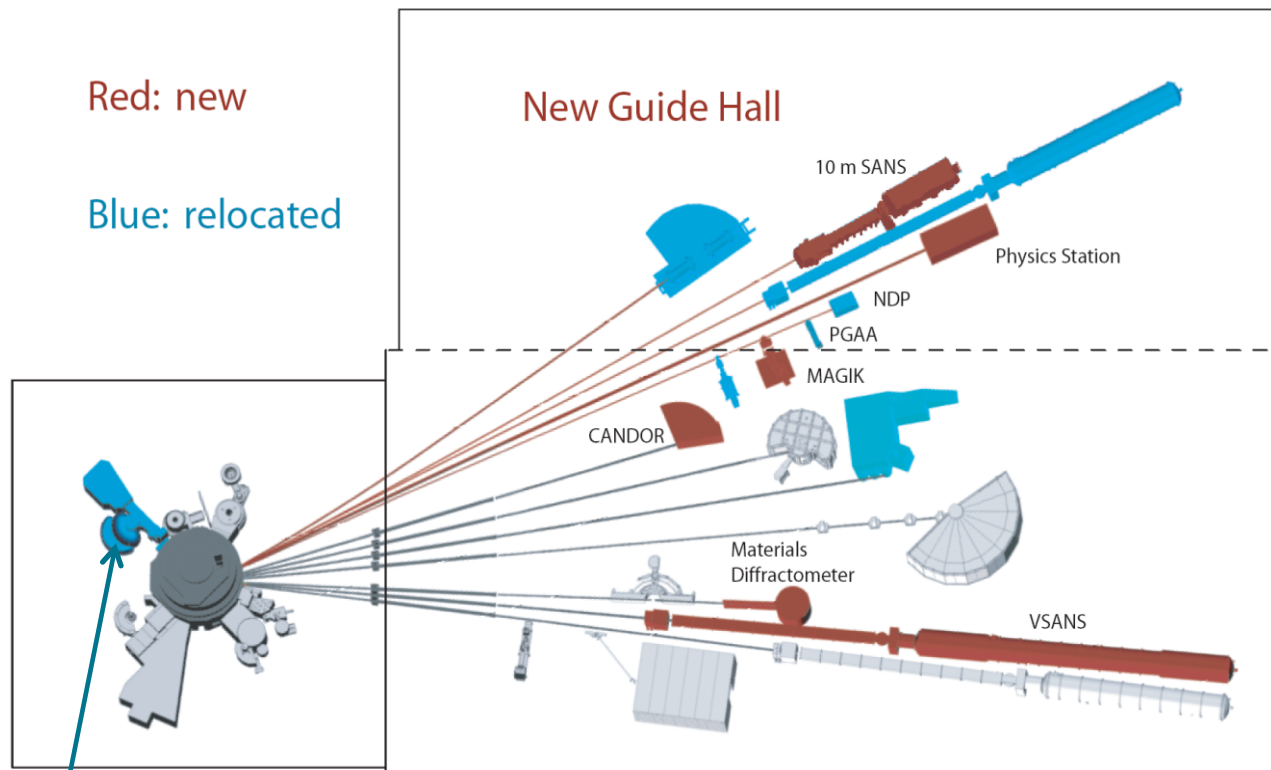
- REMOVE COLLIMATOR
- REMOVE CO<sub>2</sub> SEAL WINDOW
- ALIGN BT-9 COLD SOURCE
- INSTALL BT-9 COLD SOURCE
- ESTABLISH CO<sub>2</sub> SEAL



# Expansion of Cold Neutron Facilities

Red: new

Blue: relocated



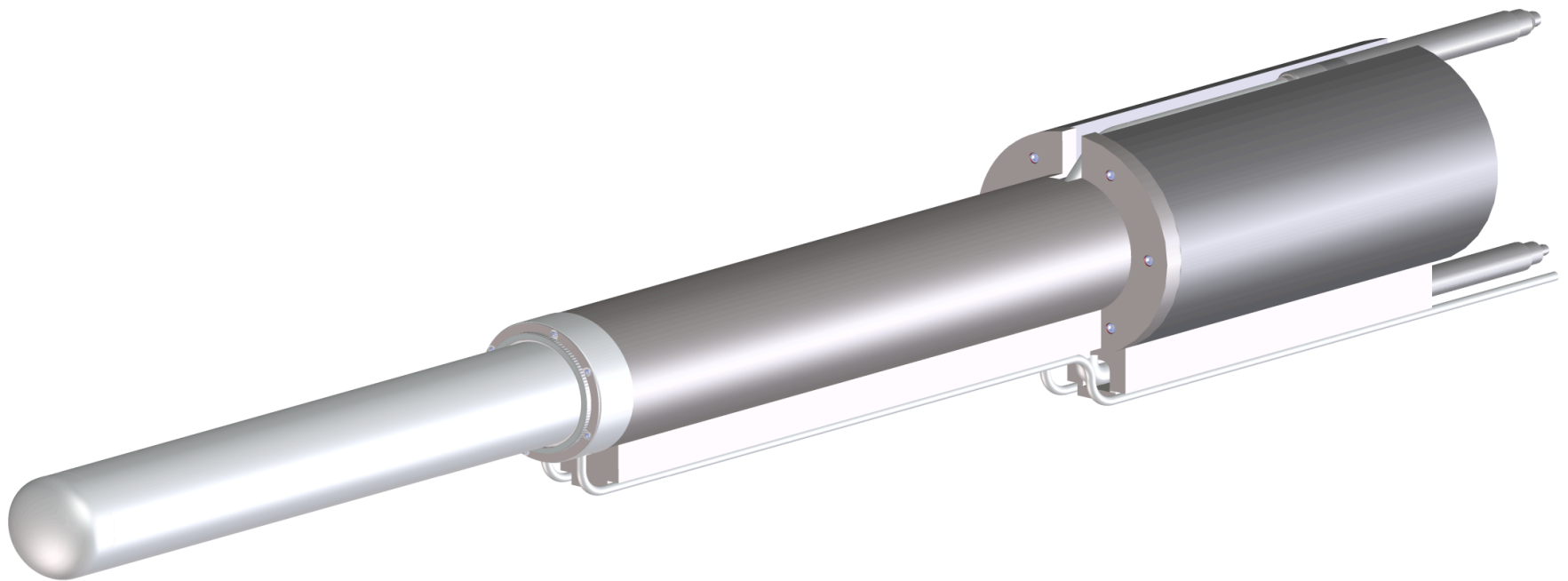
Five-year plan  
funded by  
American  
Competitive  
Initiative ~\$100 M

5 new guides, at  
least 6  
instruments

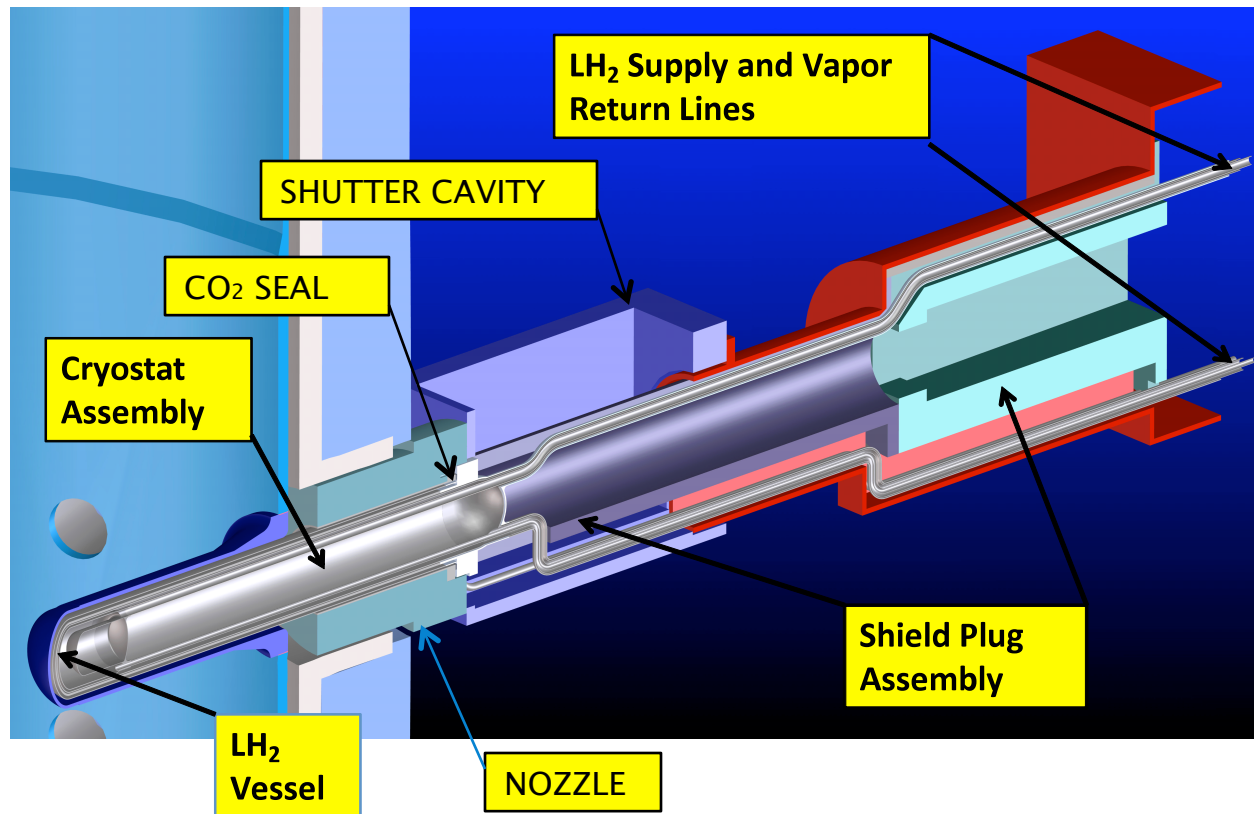
New guide hall  
nearly doubles  
space

**MACS\* moved to BT-9 to make  
room for new guides.  
\*Multi-Axis Crystal Spectrometer**

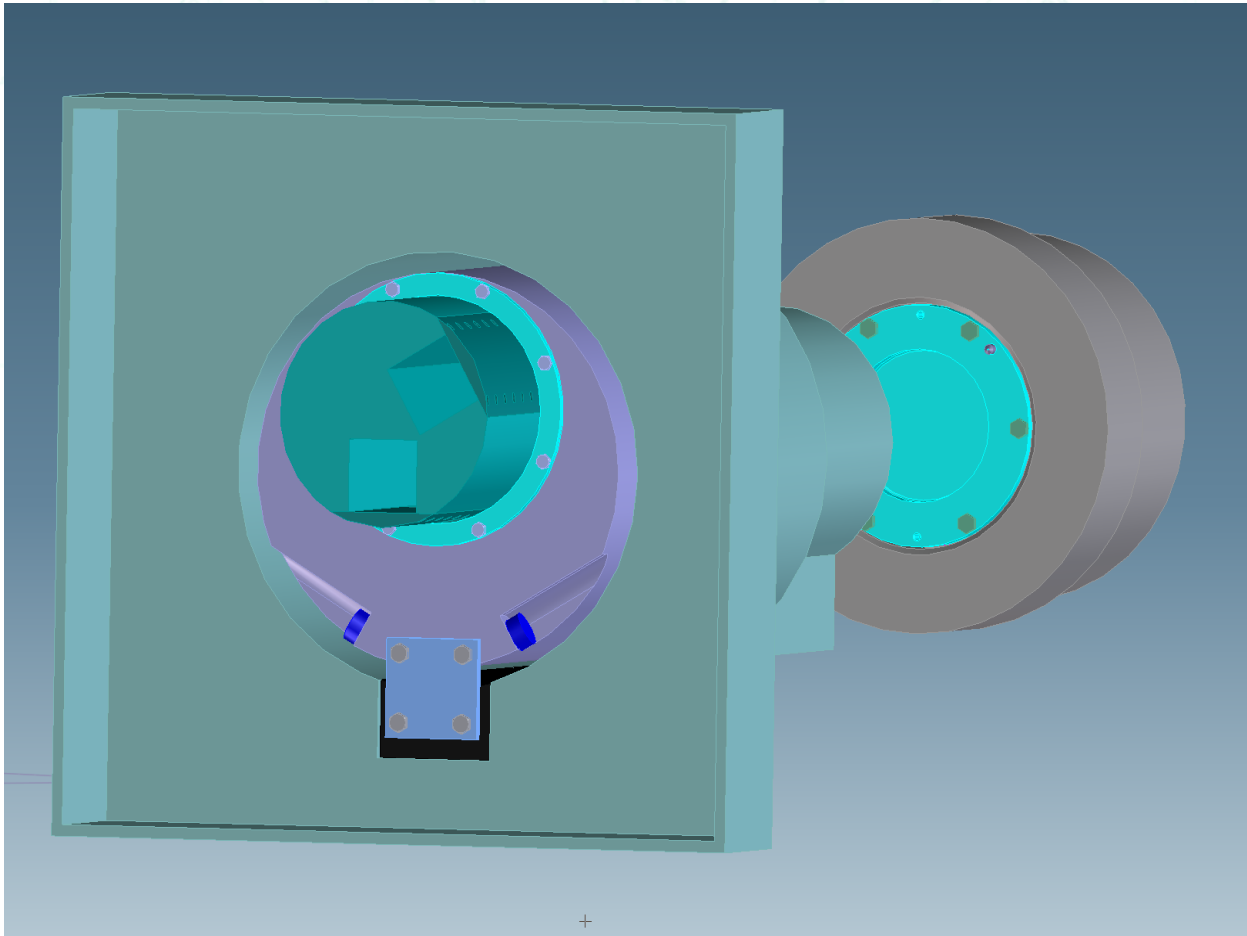
# BT-9 COLD SOURCE



# BT-9 COLD SOURCE CO<sub>2</sub> SEAL

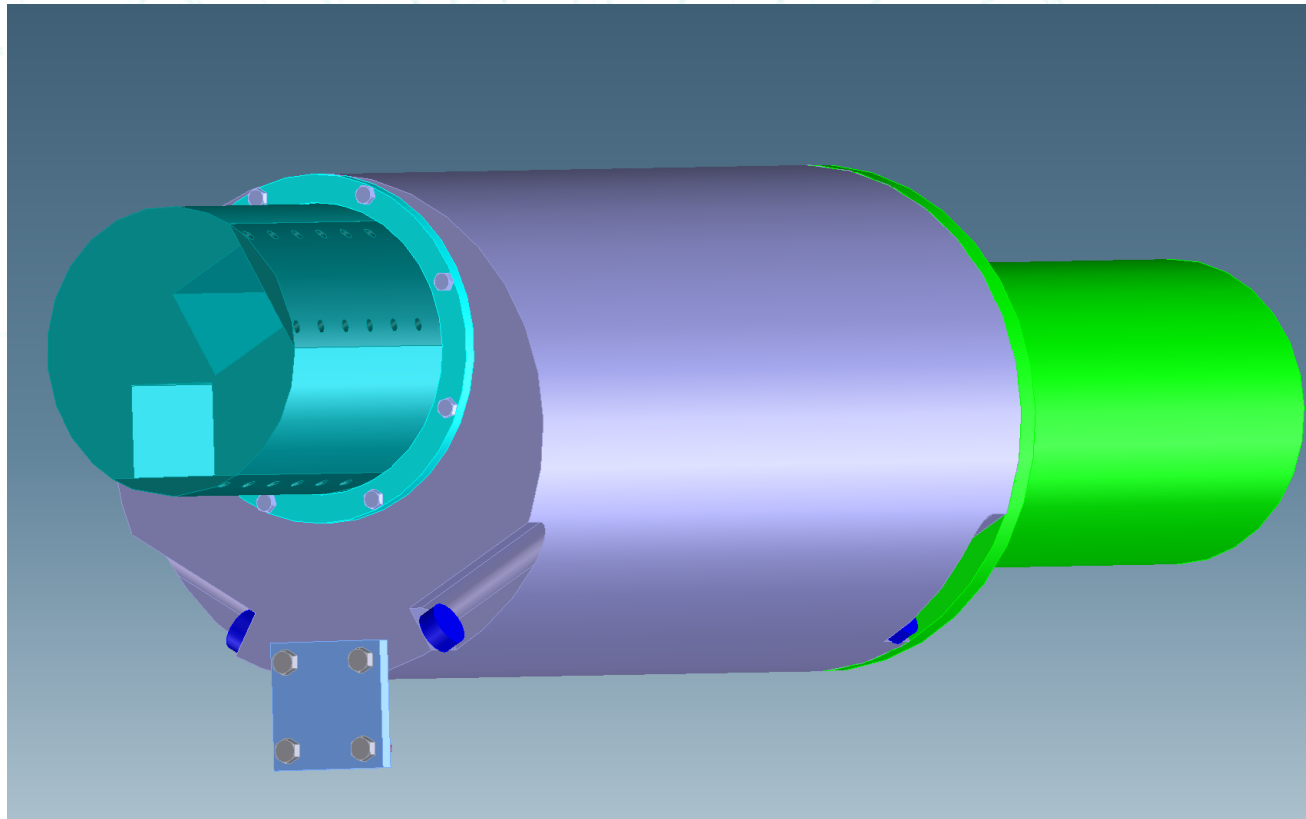


# OPENING TO BT-9

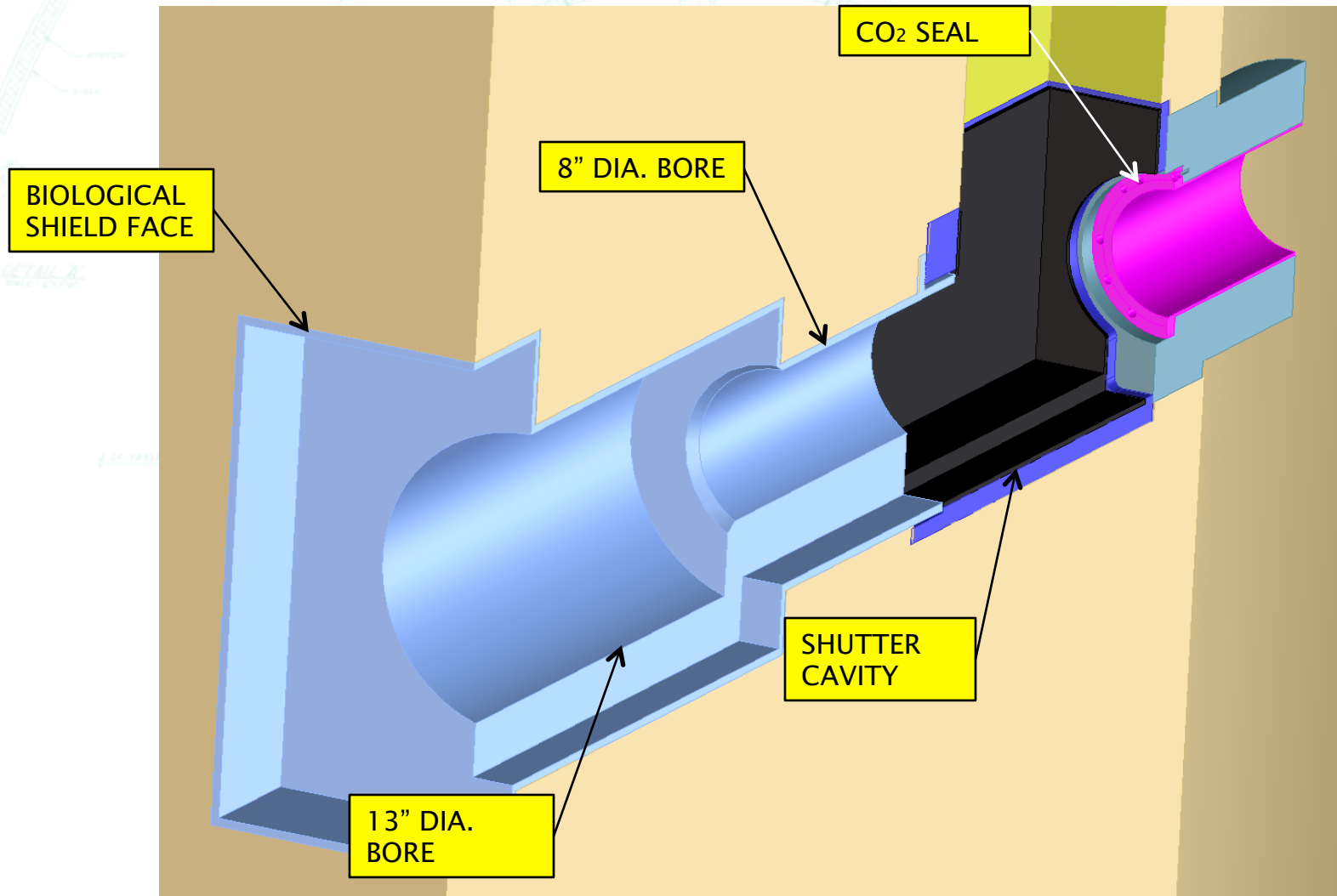




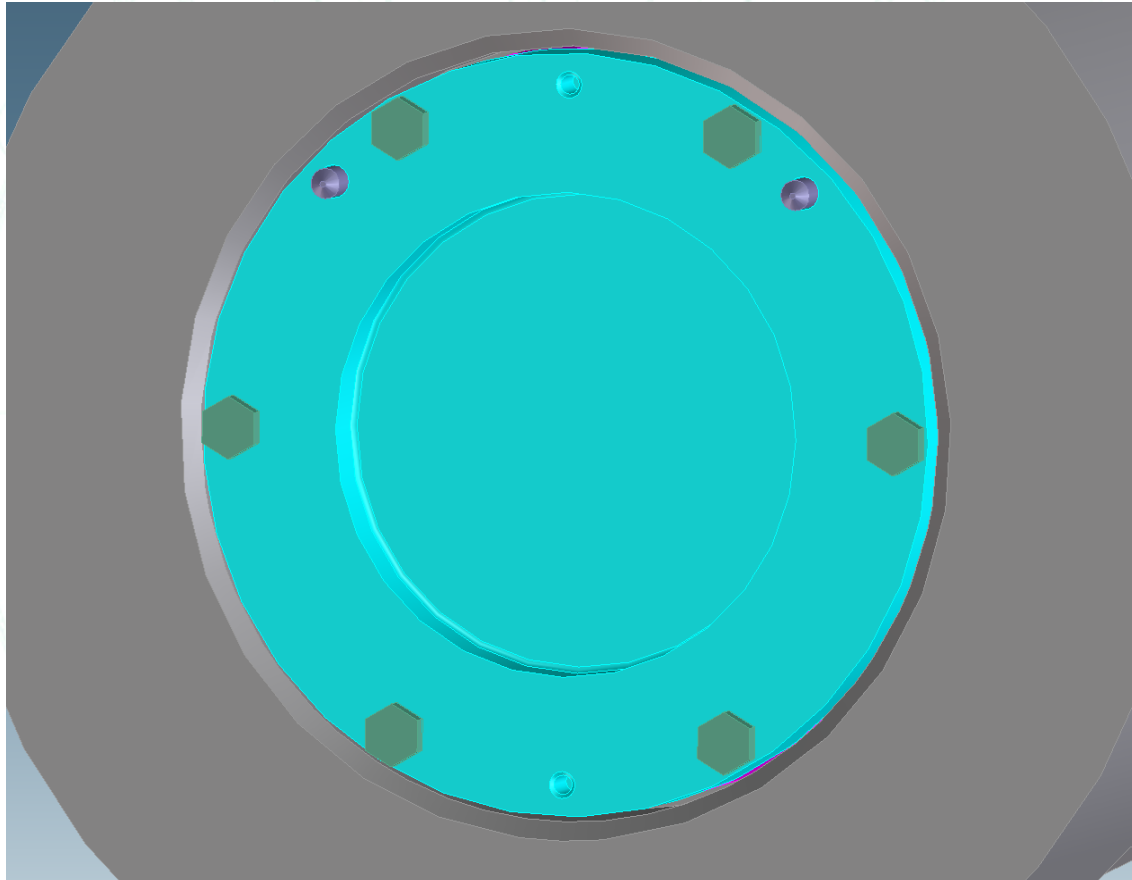
# BT-9 COLLIMATOR ASSEMBLY



# Cross Section of BT-9



# CO2 SEAL WINDOW



# CO2 SEAL PHOTO





# CO2 SEAL PHOTO



# BT-9 CHUTE





# BT-9 CHUTE



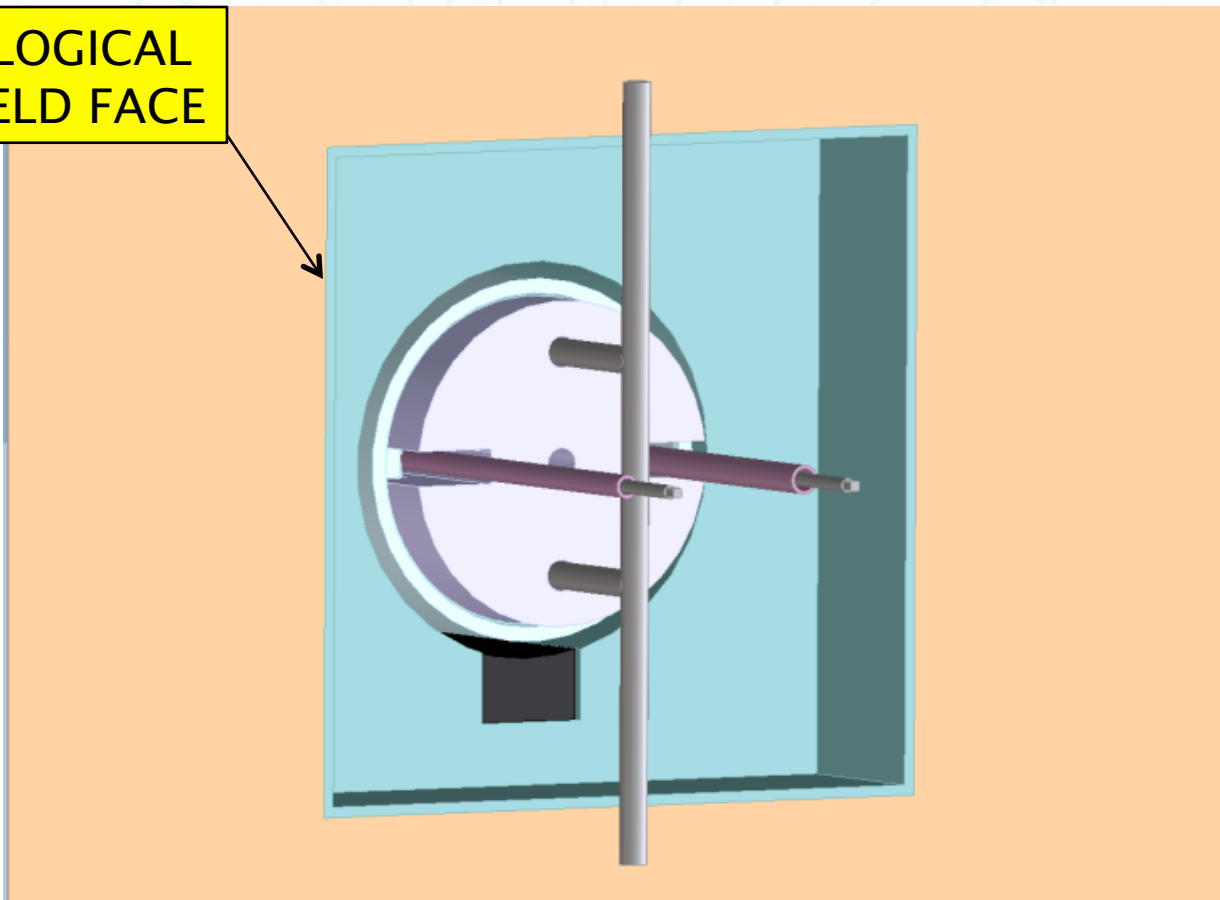
# BT-9 CHUTE



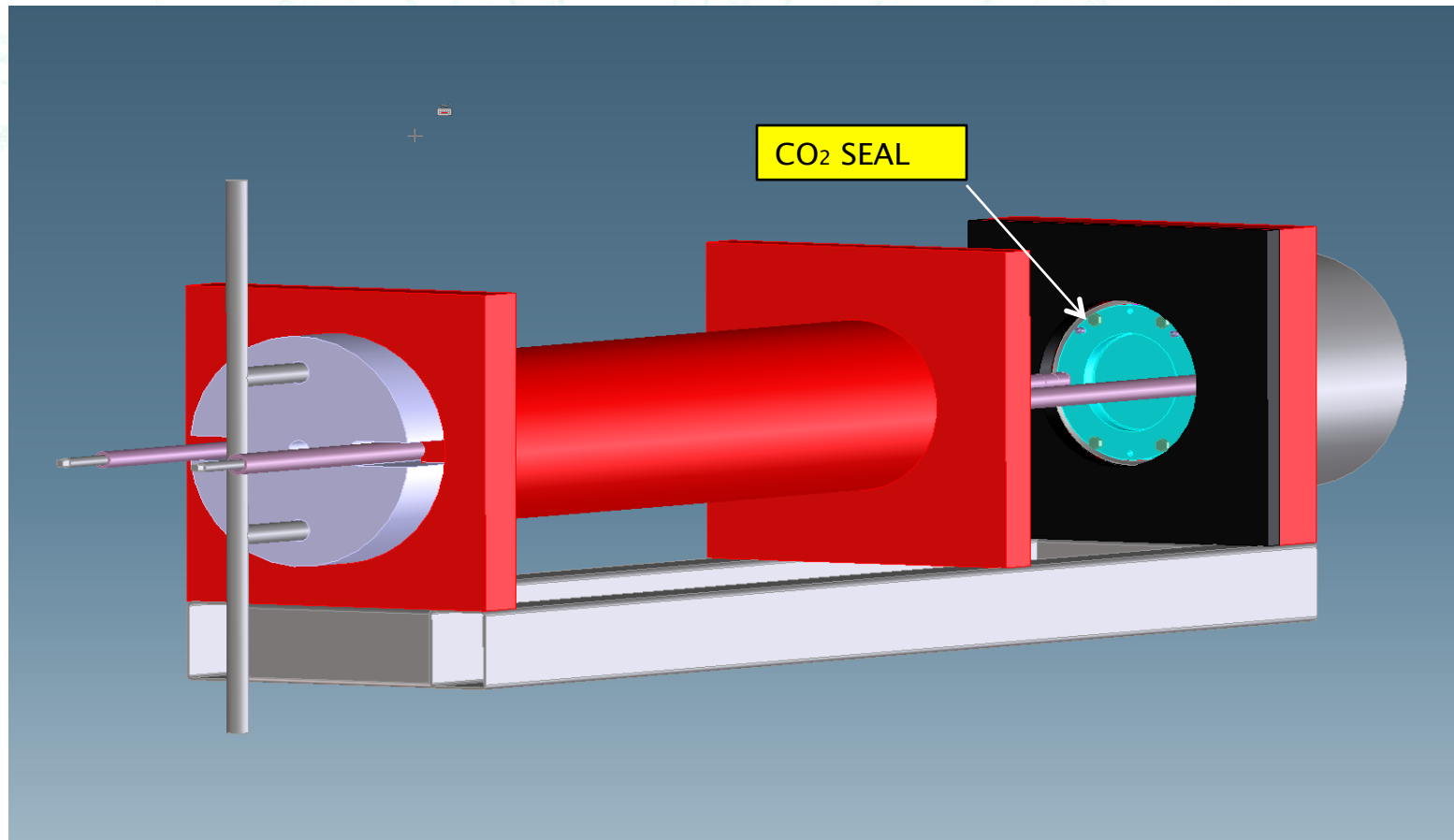


# BT-9 ACCESS POINT

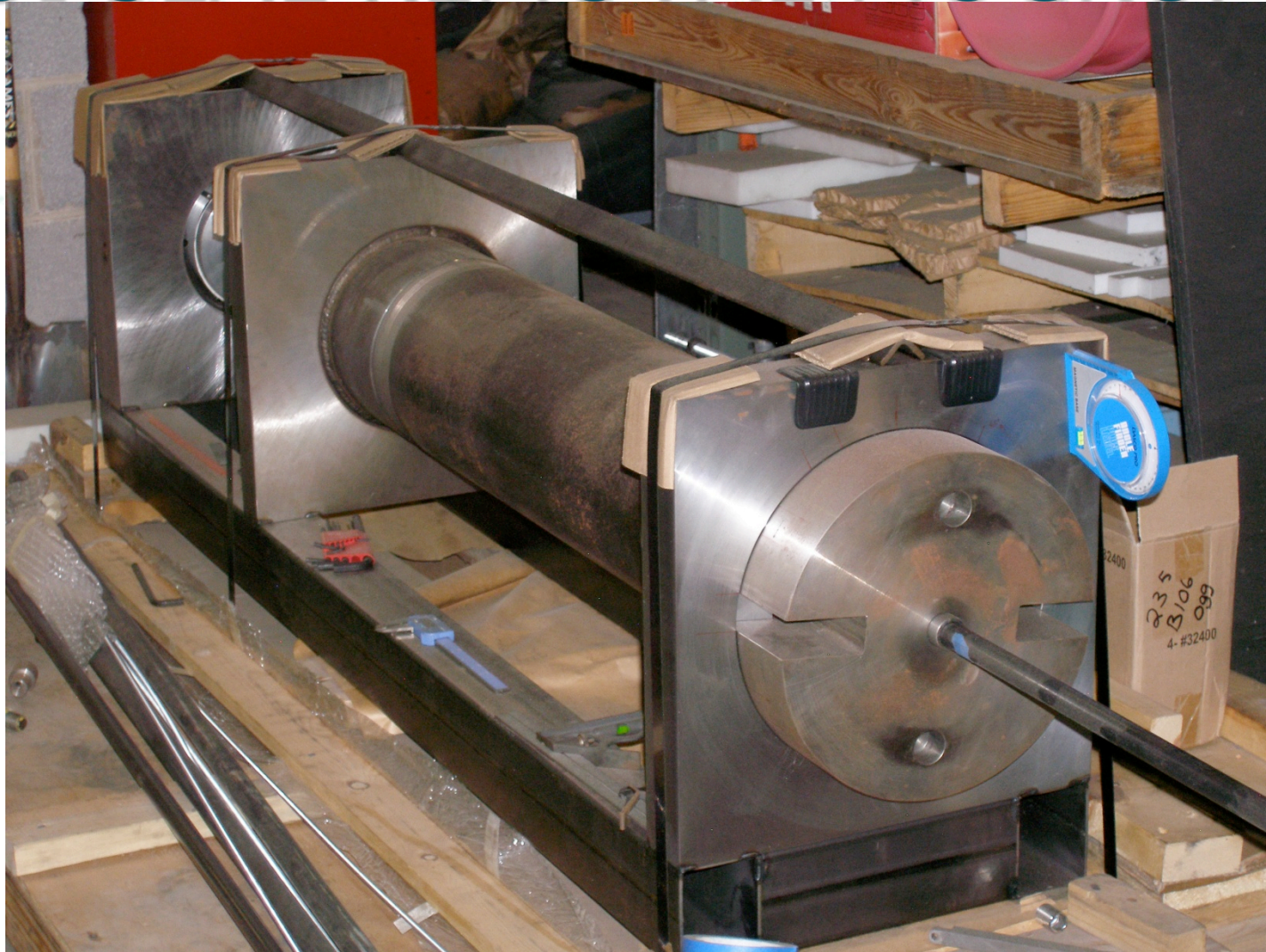
BIOLOGICAL  
SHIELD FACE



# CO<sub>2</sub> SEAL REMOVAL MOCKUP



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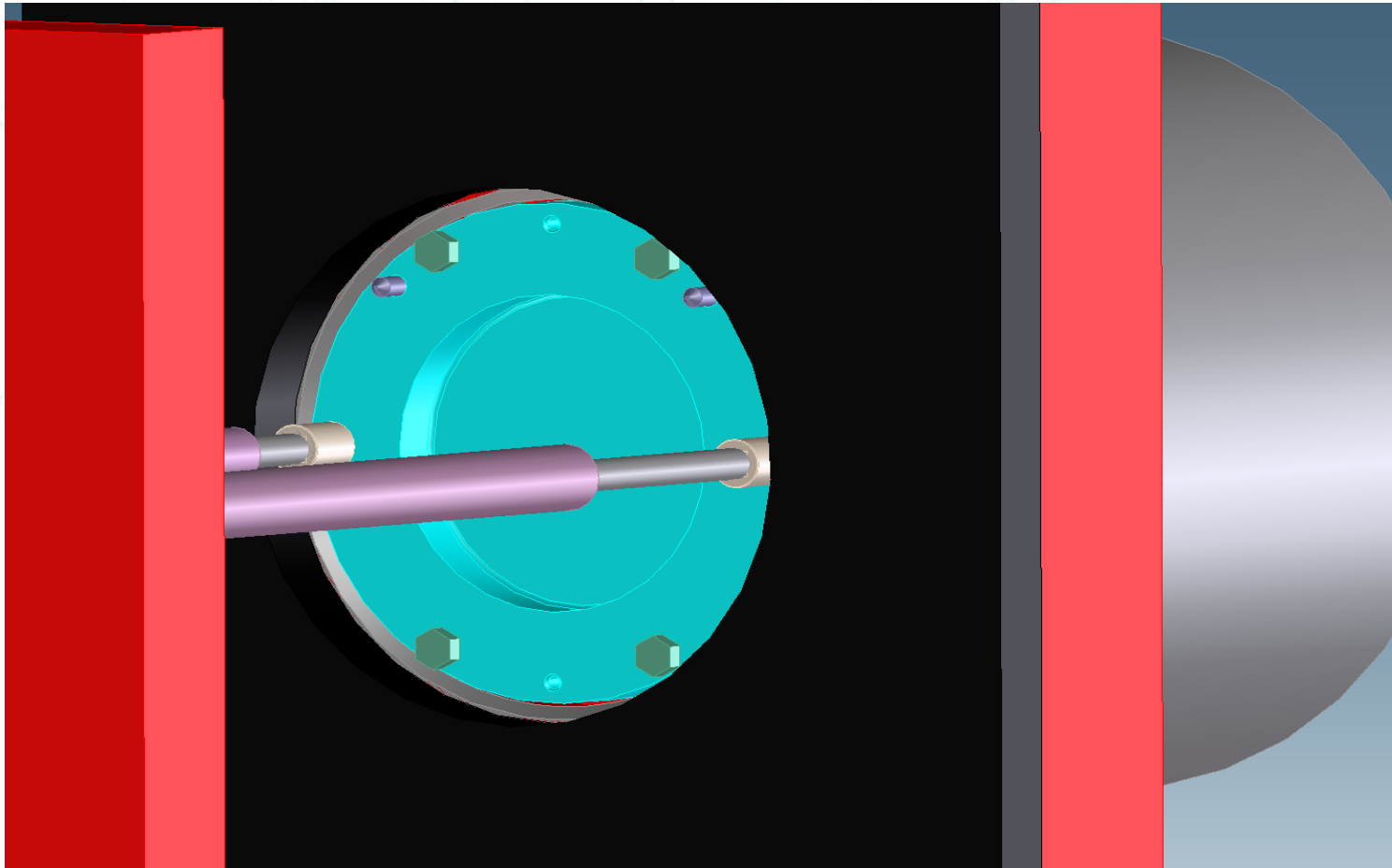




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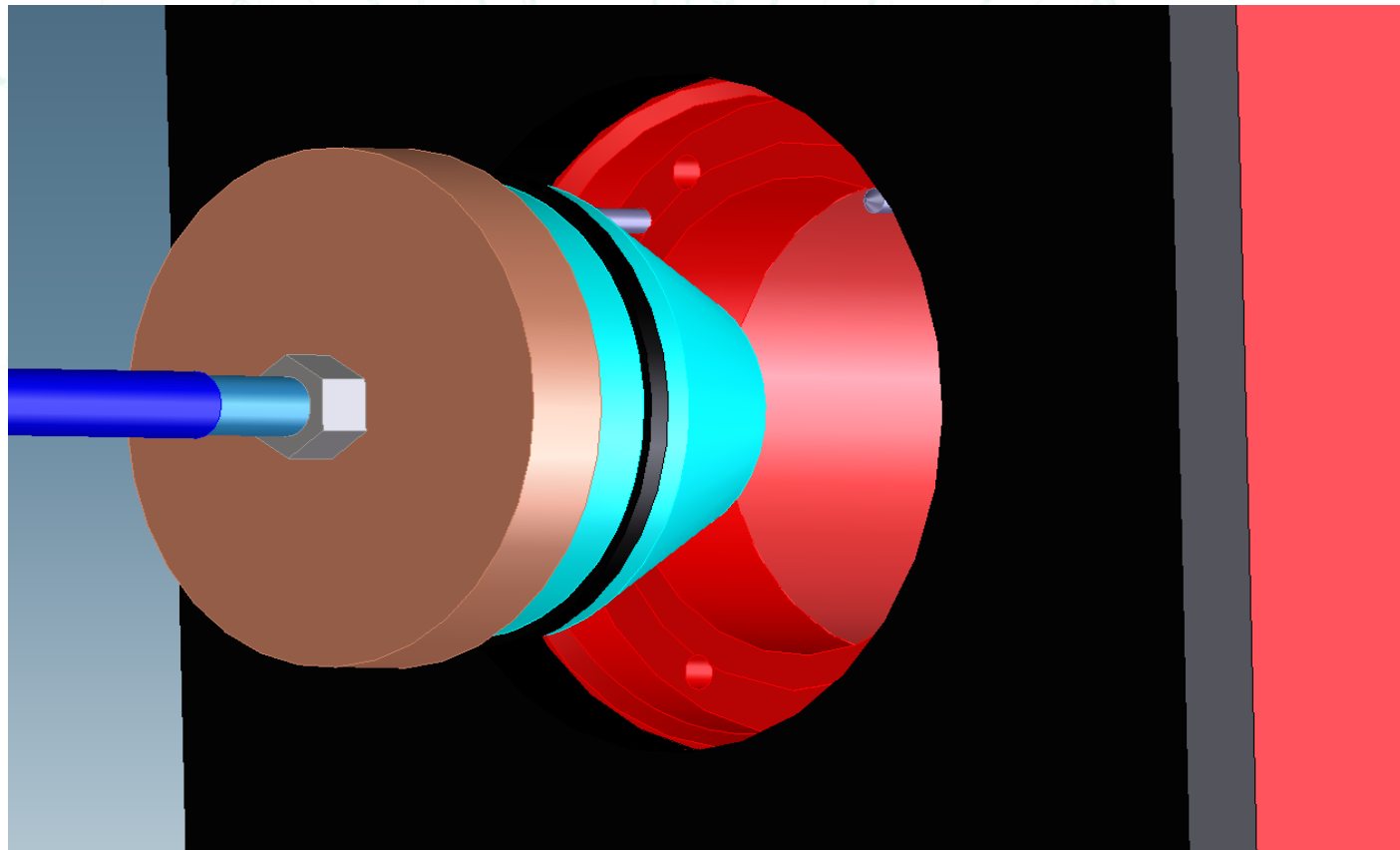


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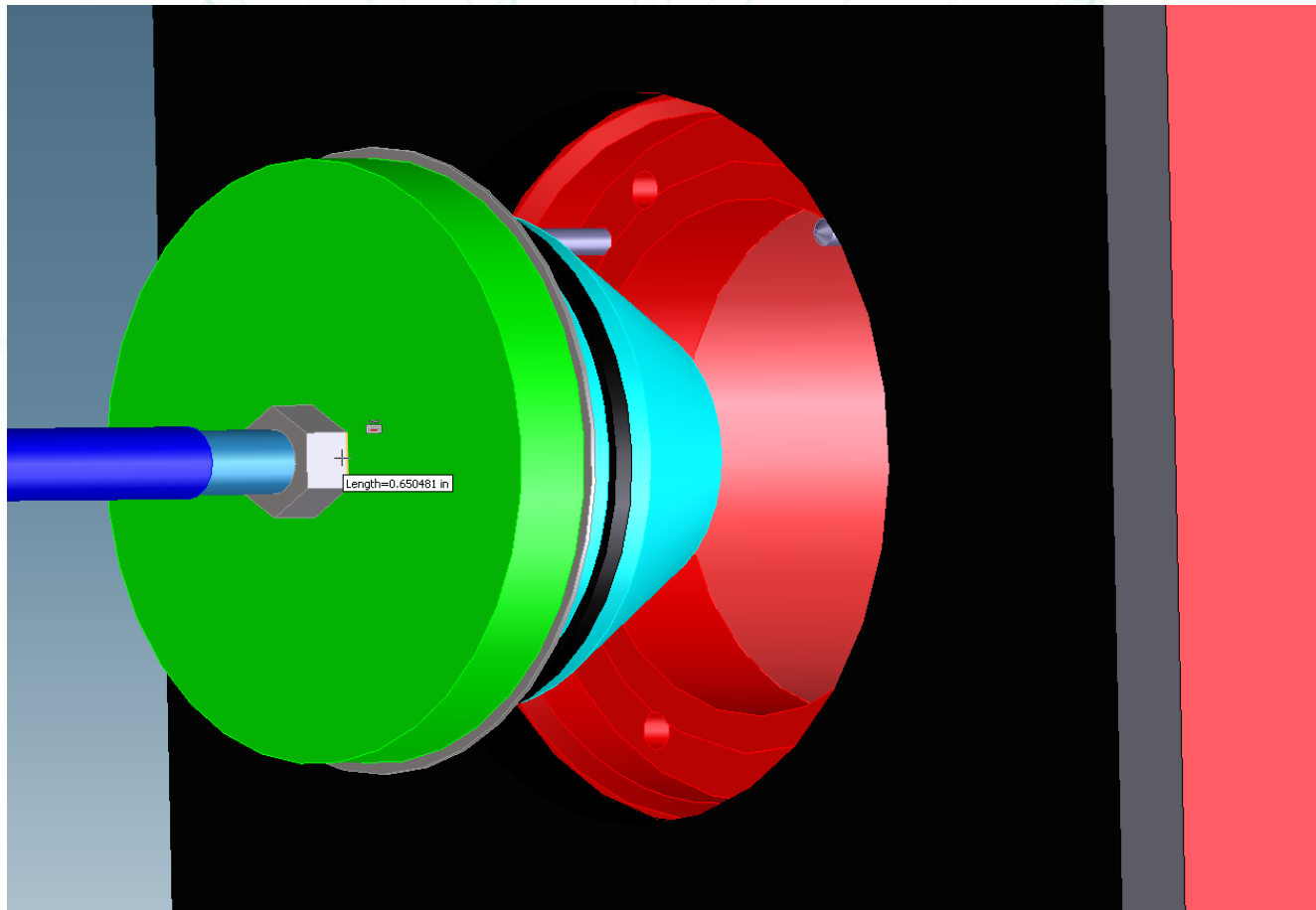




# CO2 SEAL REMOVAL BORE



# CO2 SEAL REMOVAL SURFACE

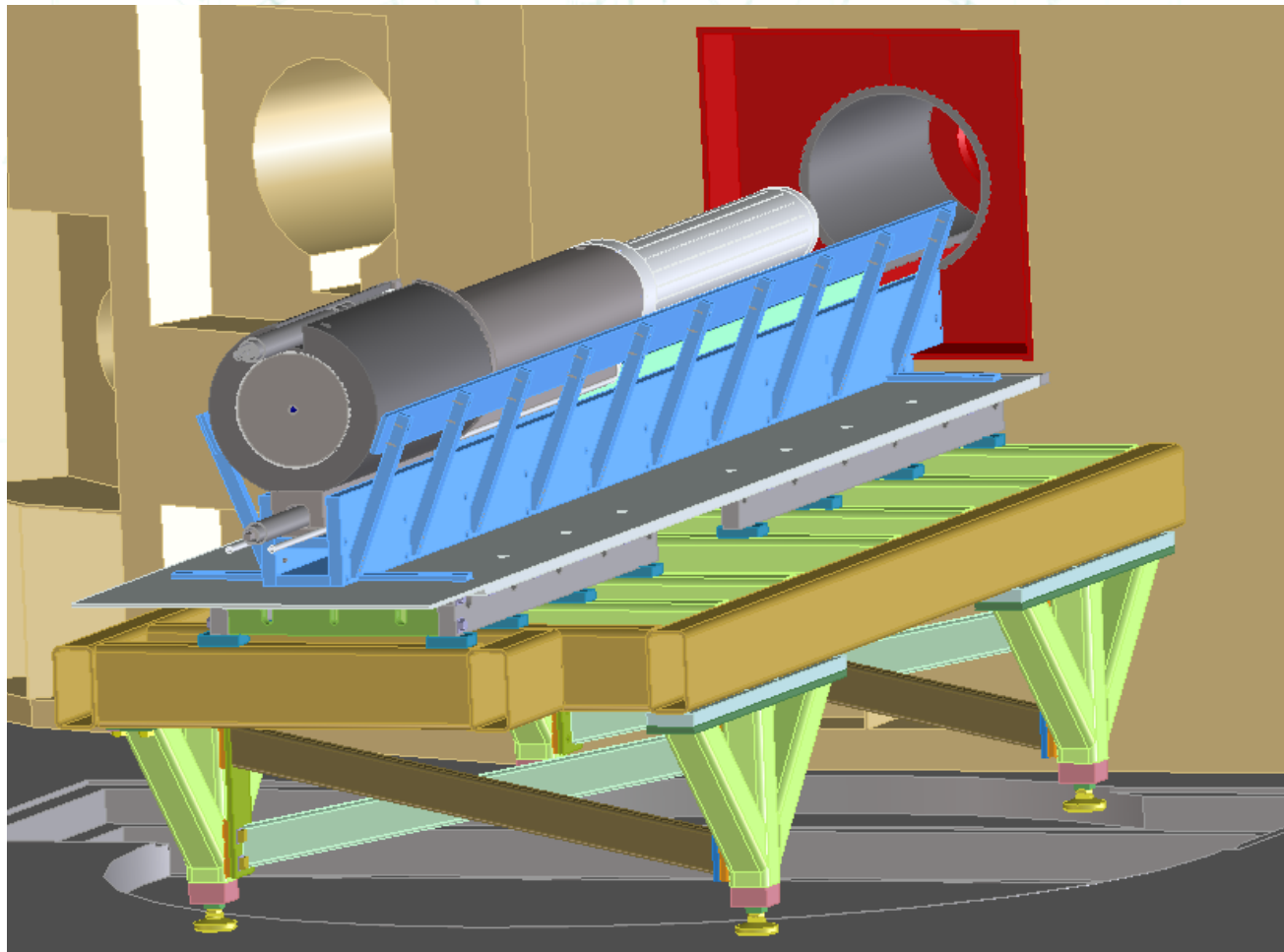


# CO<sub>2</sub> SEAL REMOVAL SURFACE

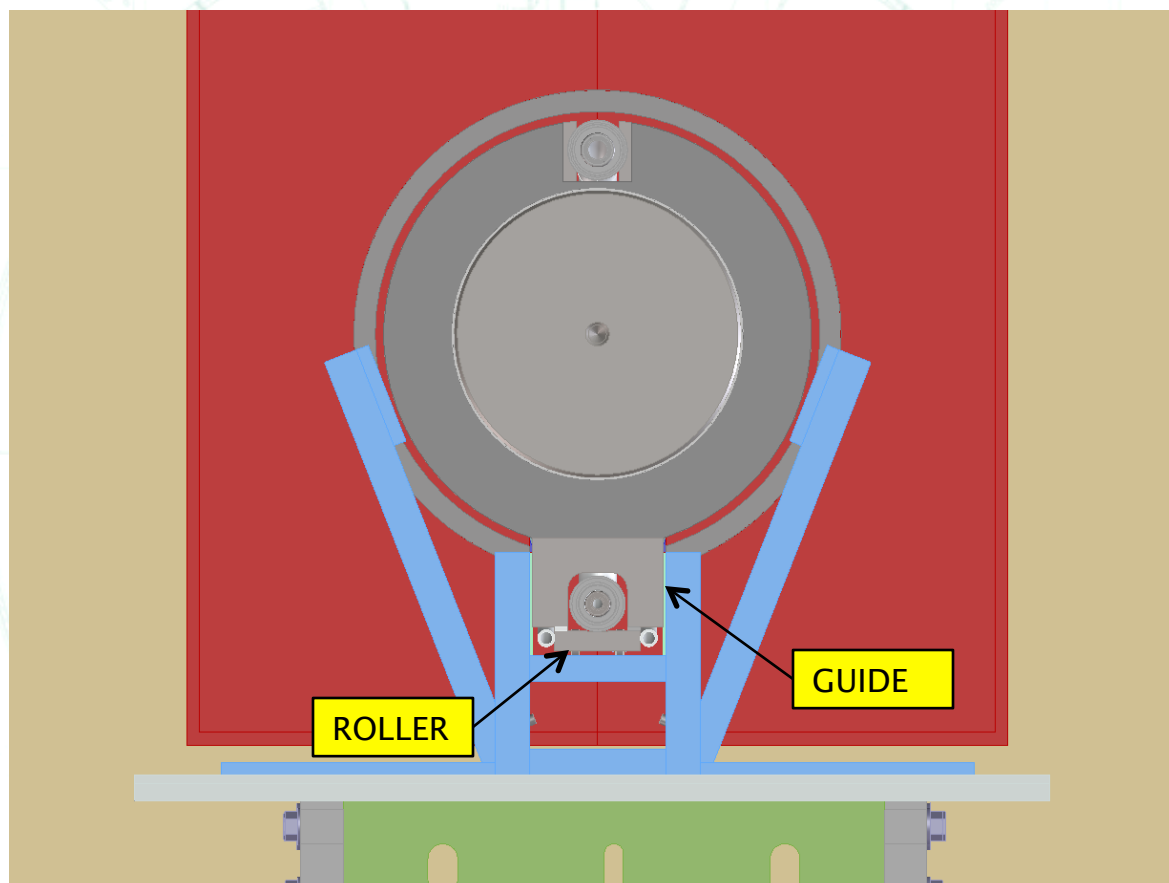




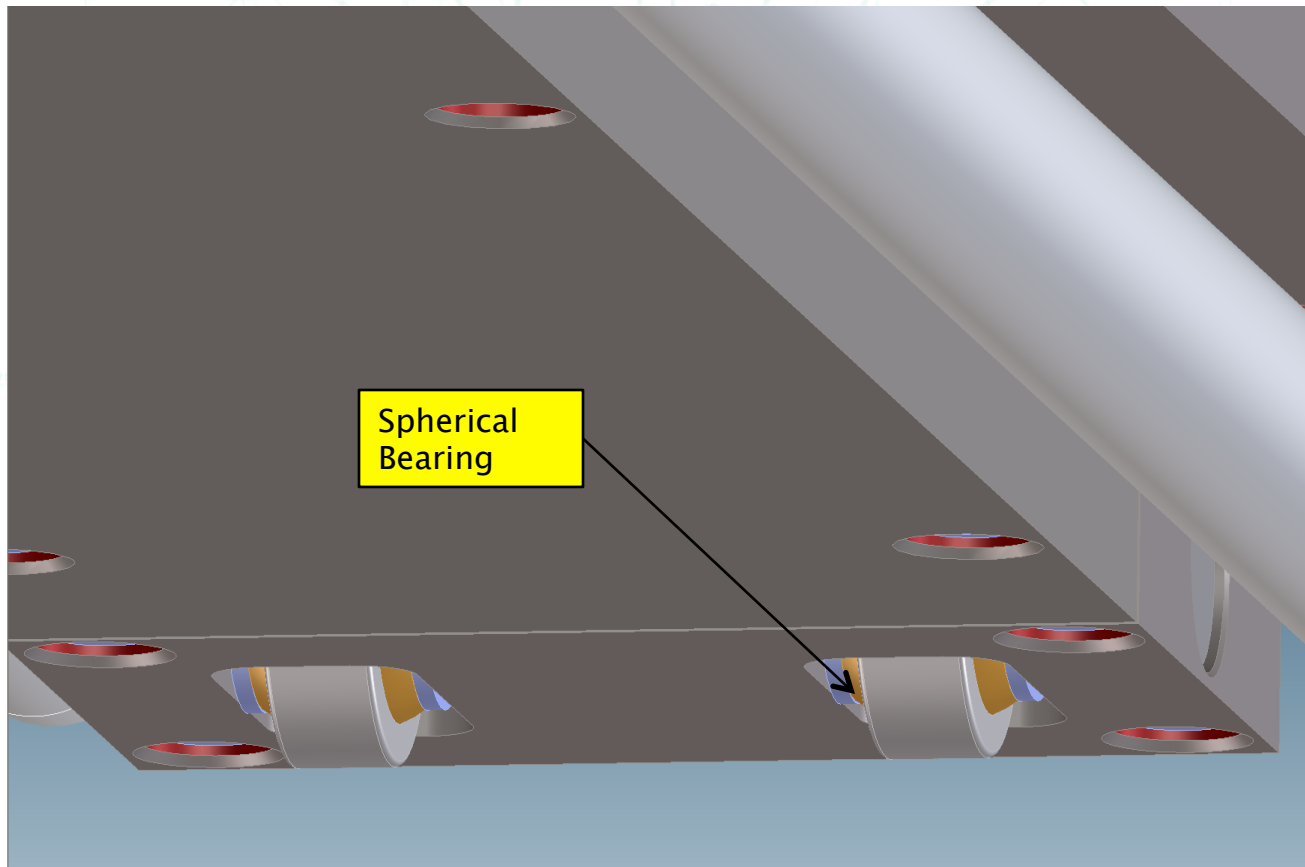
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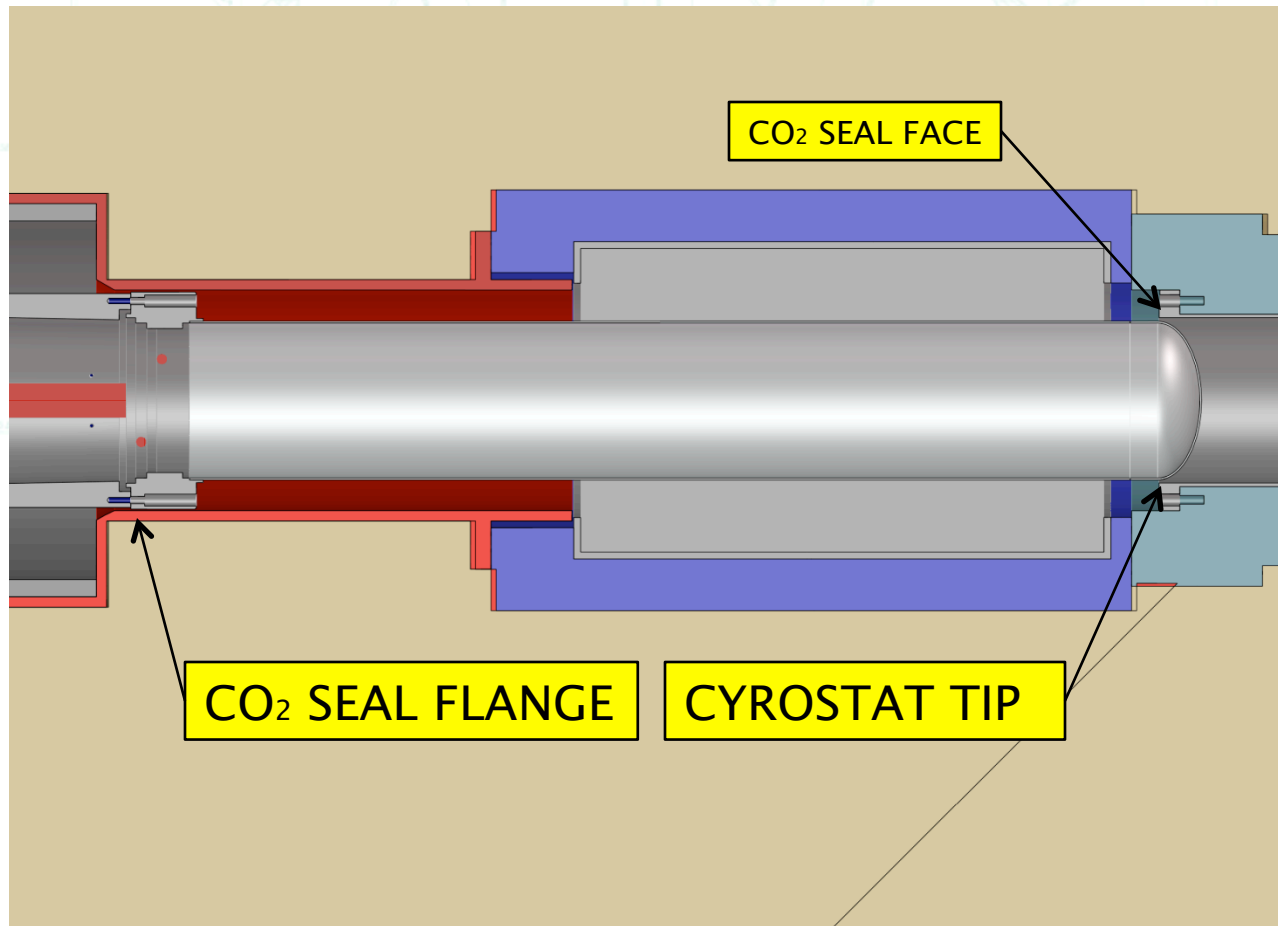


# BT-9 COLD SOURCE ROLLERS

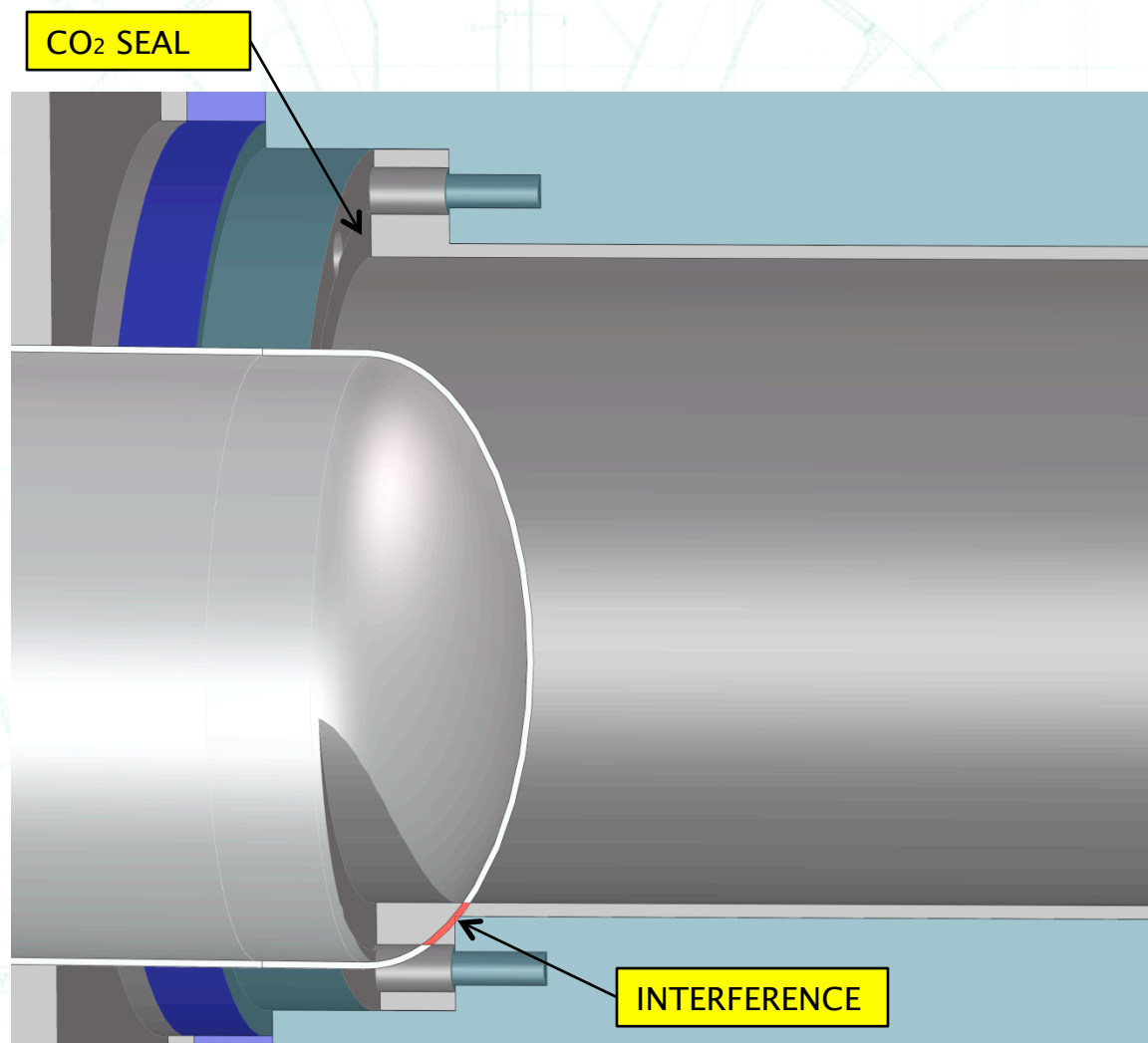




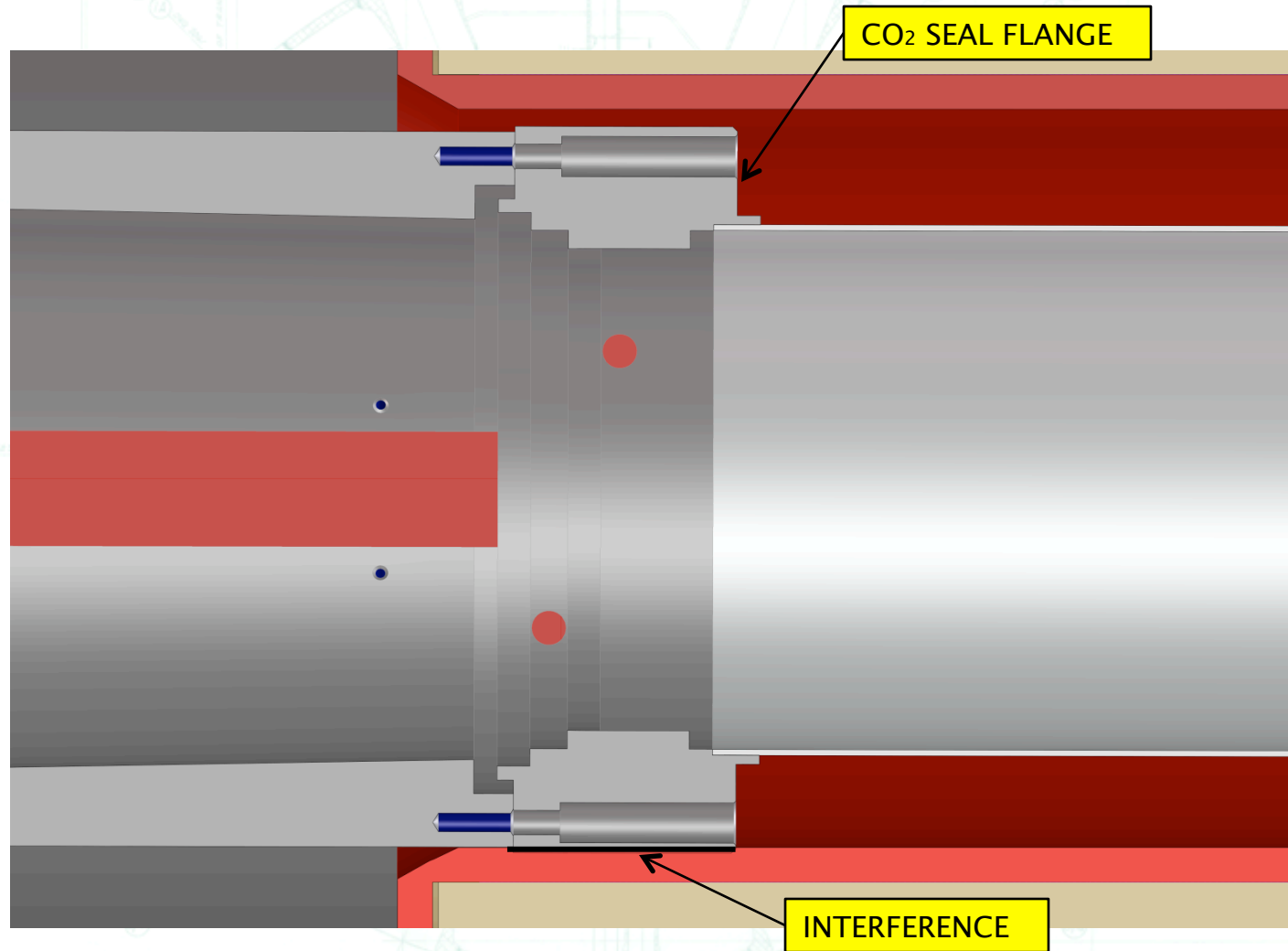
# INSTALLATION INTERFERENCE



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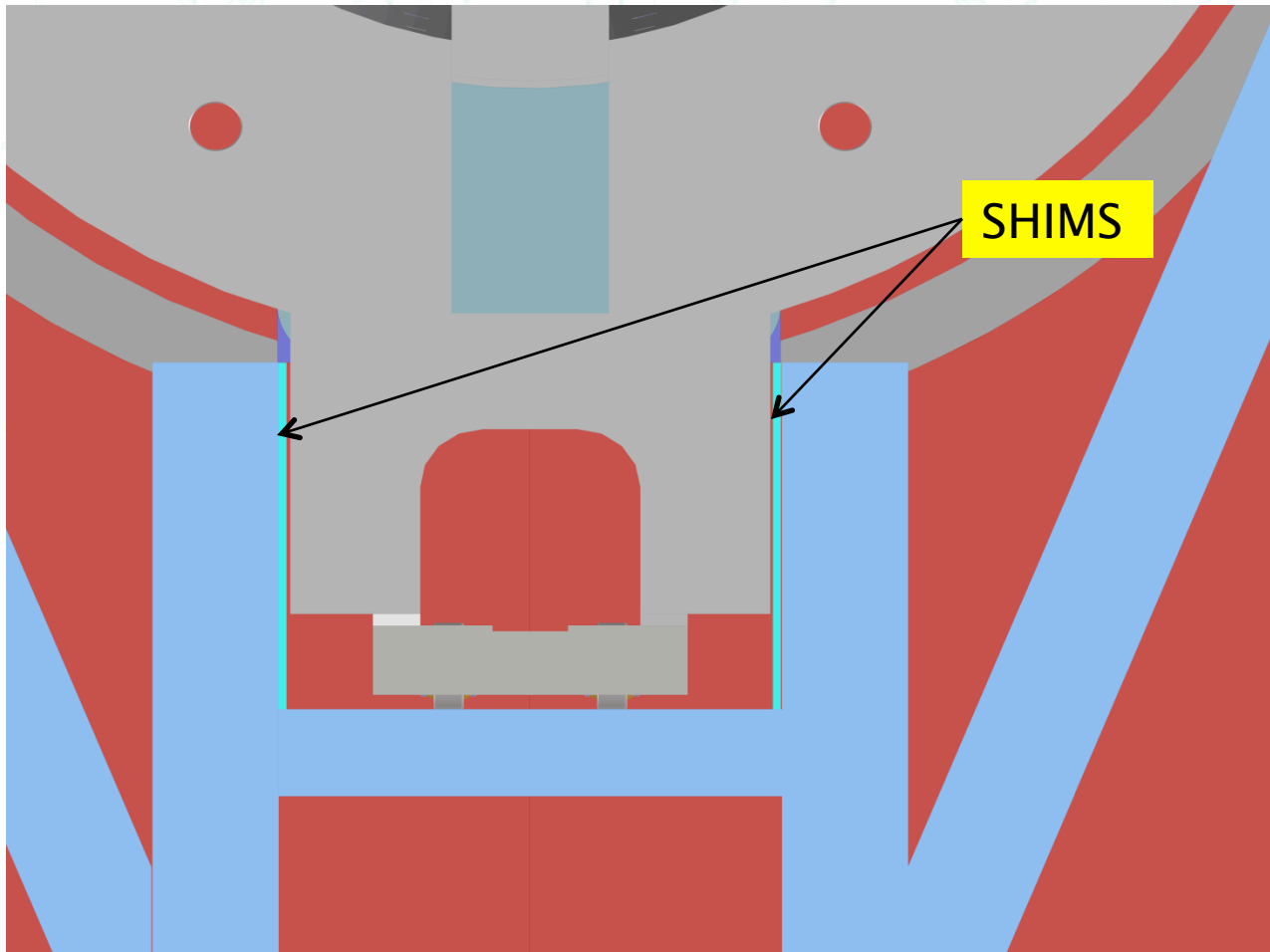


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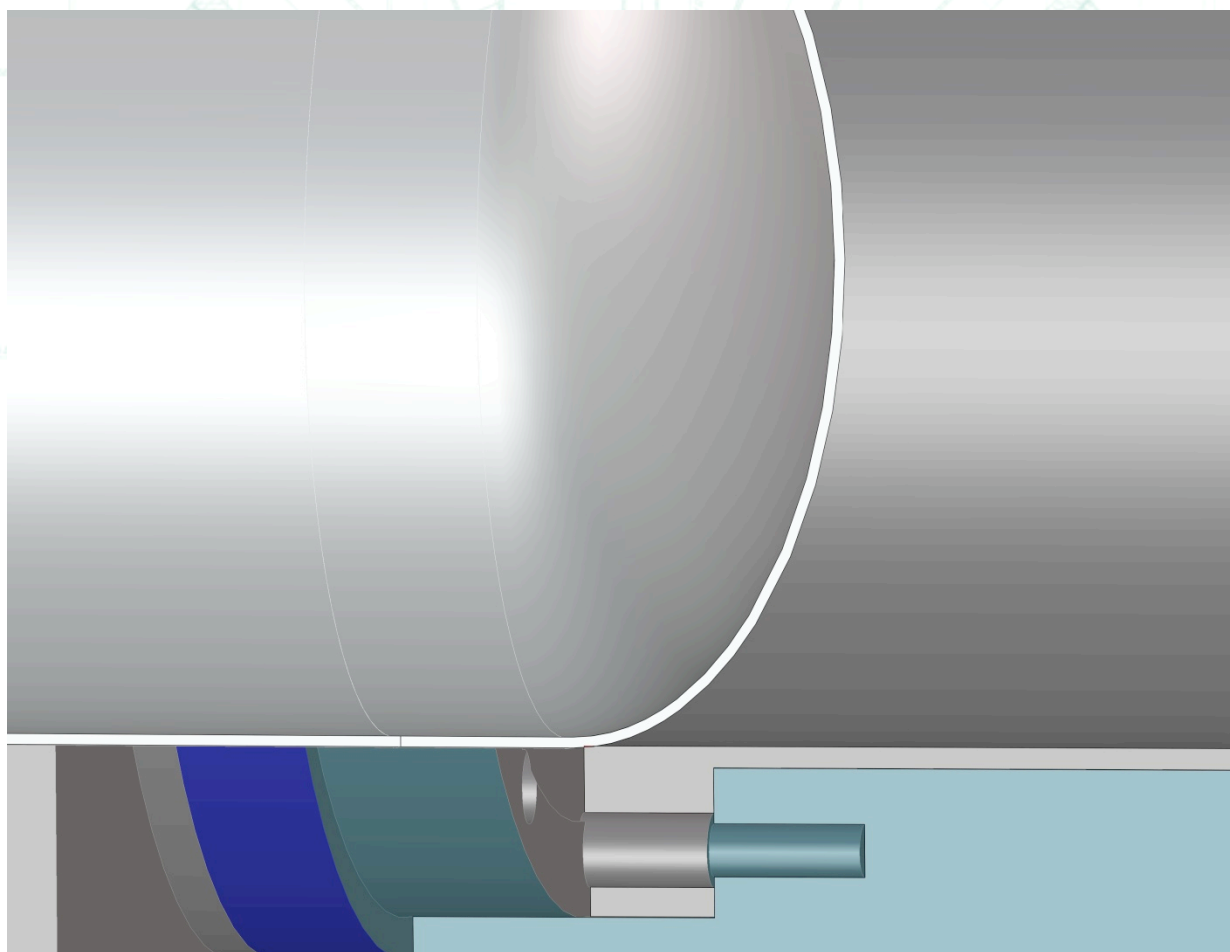




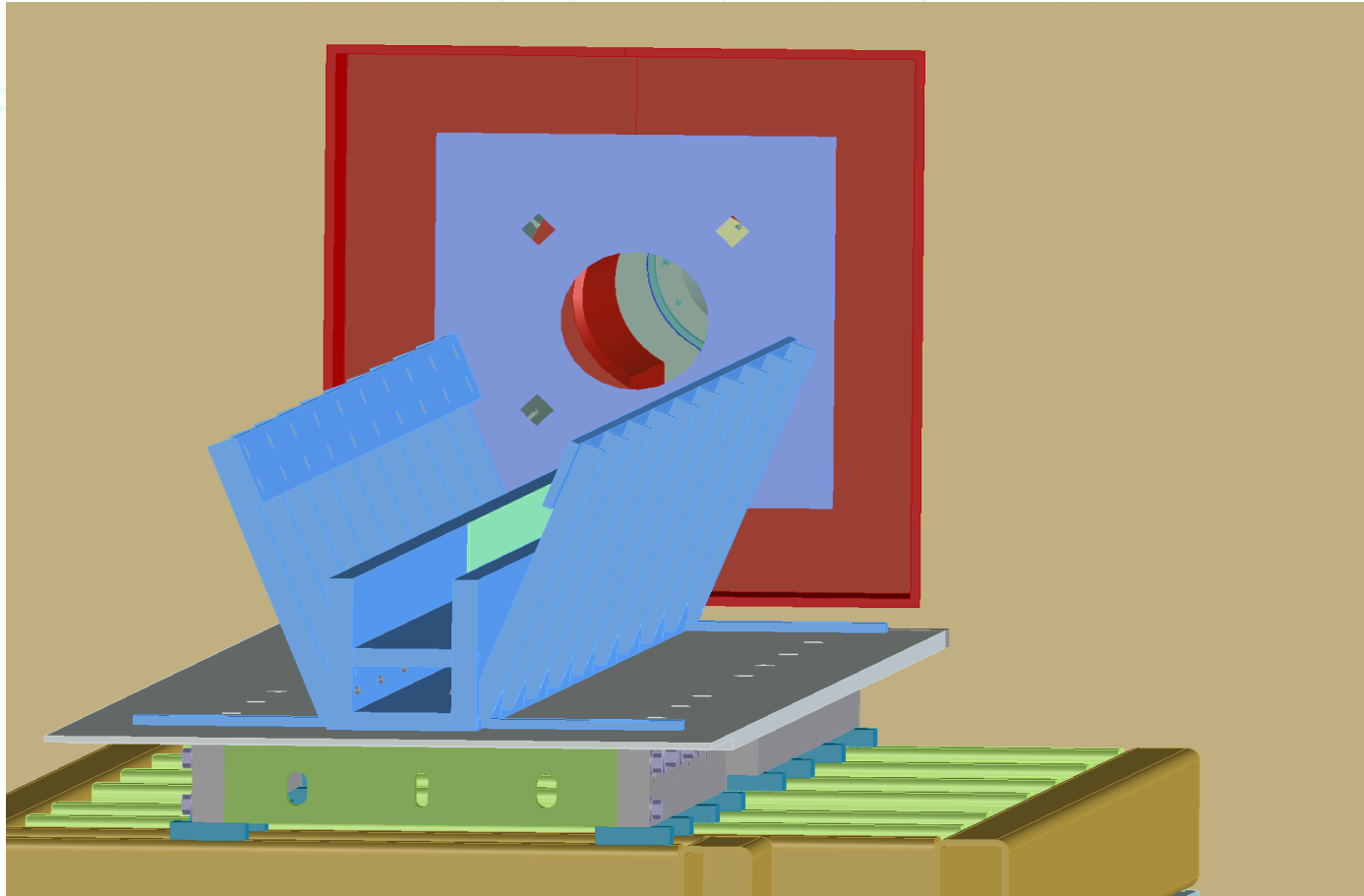
# BT-9 COLD SOURCE SHIMS



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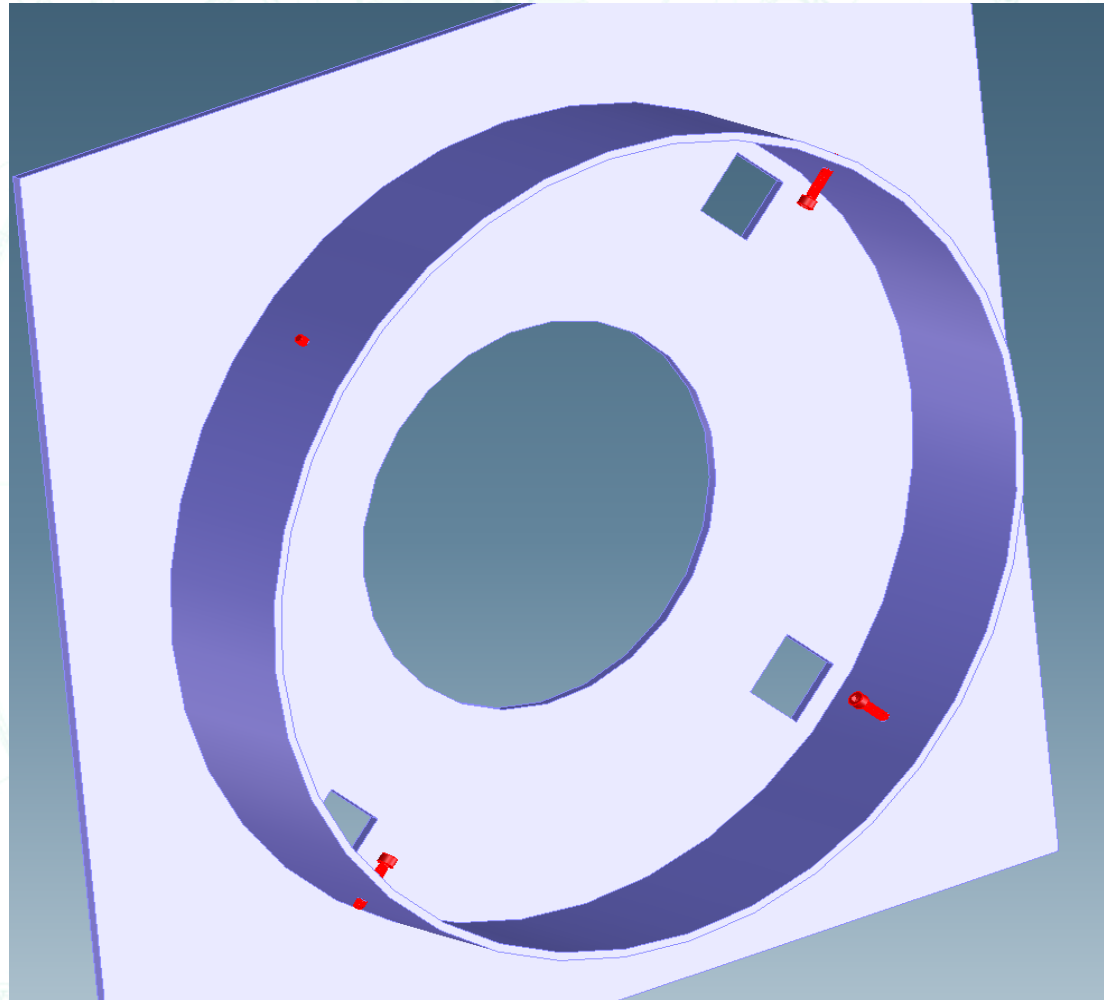


# Alignment Fixture





# Alignment Fixture



# Alignment Fixture

