

THE HI-STAR TRANSPORTATION PACKAGE

by

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Components of the Transport

- The Multi-purpose canister (MPC)
- The HI-STAR dual purpose overpack
- A set of two impact limiters
- Transport cradle
- Rail car
- Personnel barrier (non-structural)

HI-STAR Design Features

Diameter:

Bottom (foot print) - 83 1/4 inches

Top (top lid) - 77 3/8 inches

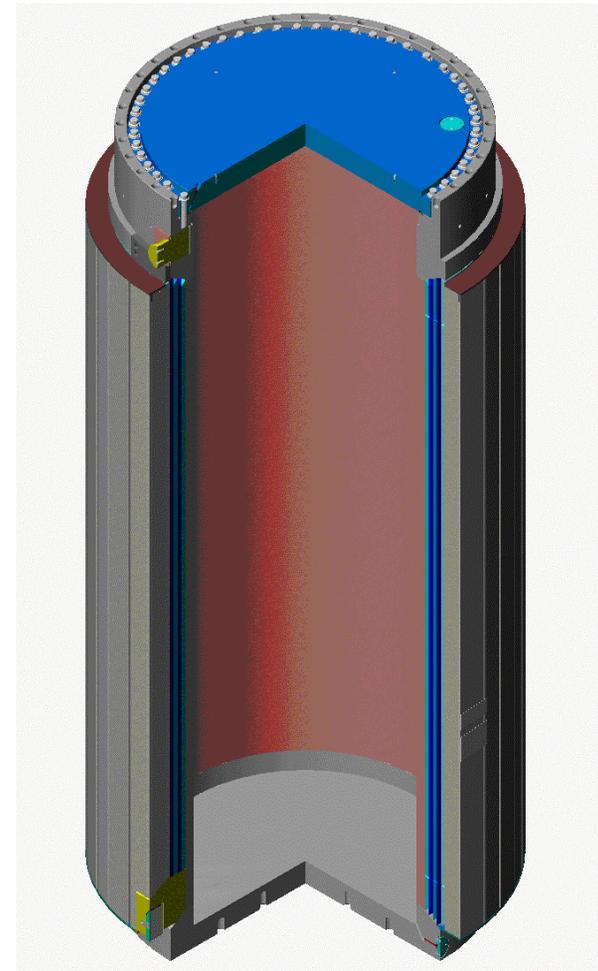
Mid-height - 96 inches

Weight:

Empty - 154,000 lbs

loaded w/MPC-32 - 243,000 lbs

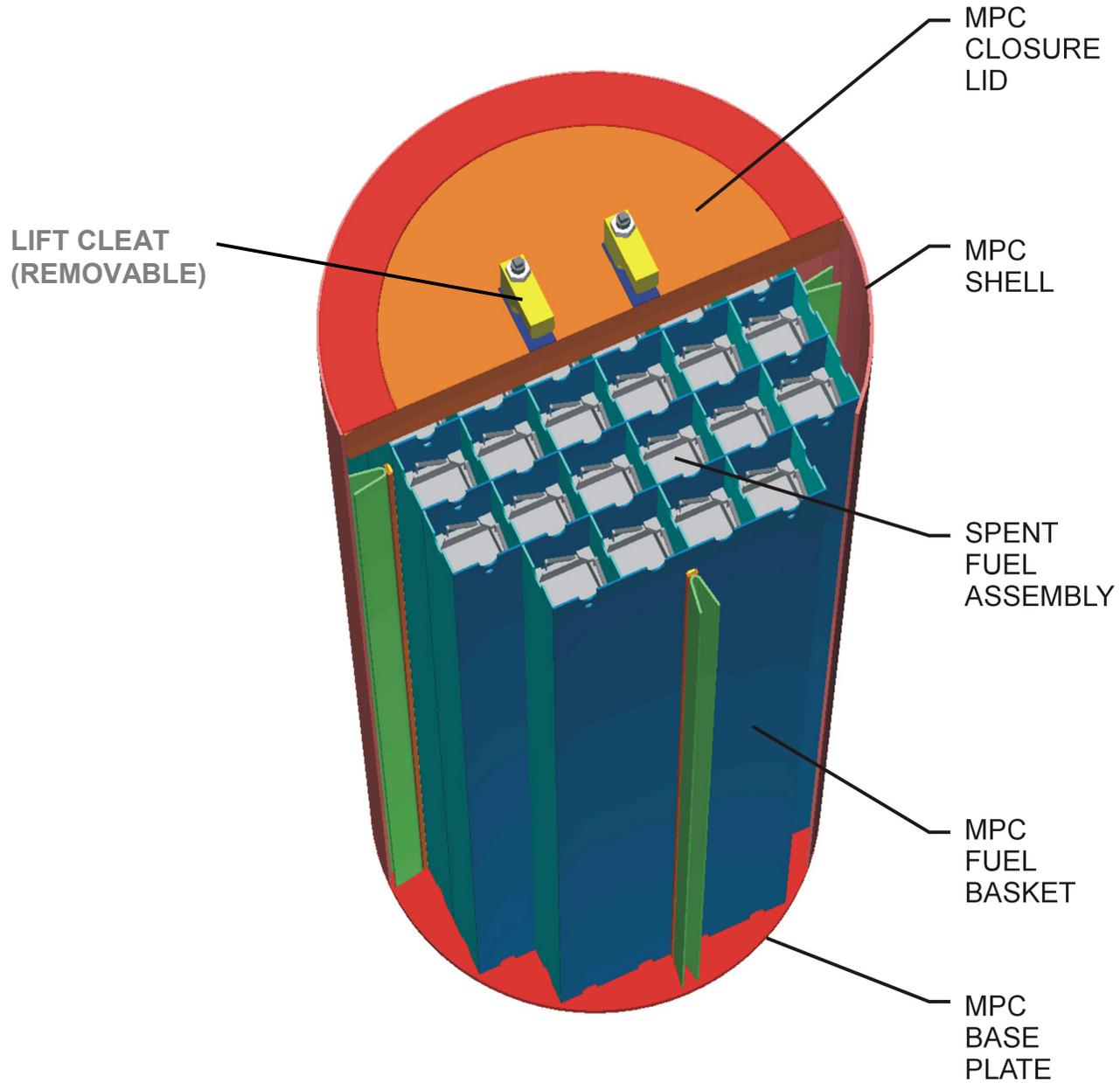
Height: - 203 1/4 inches



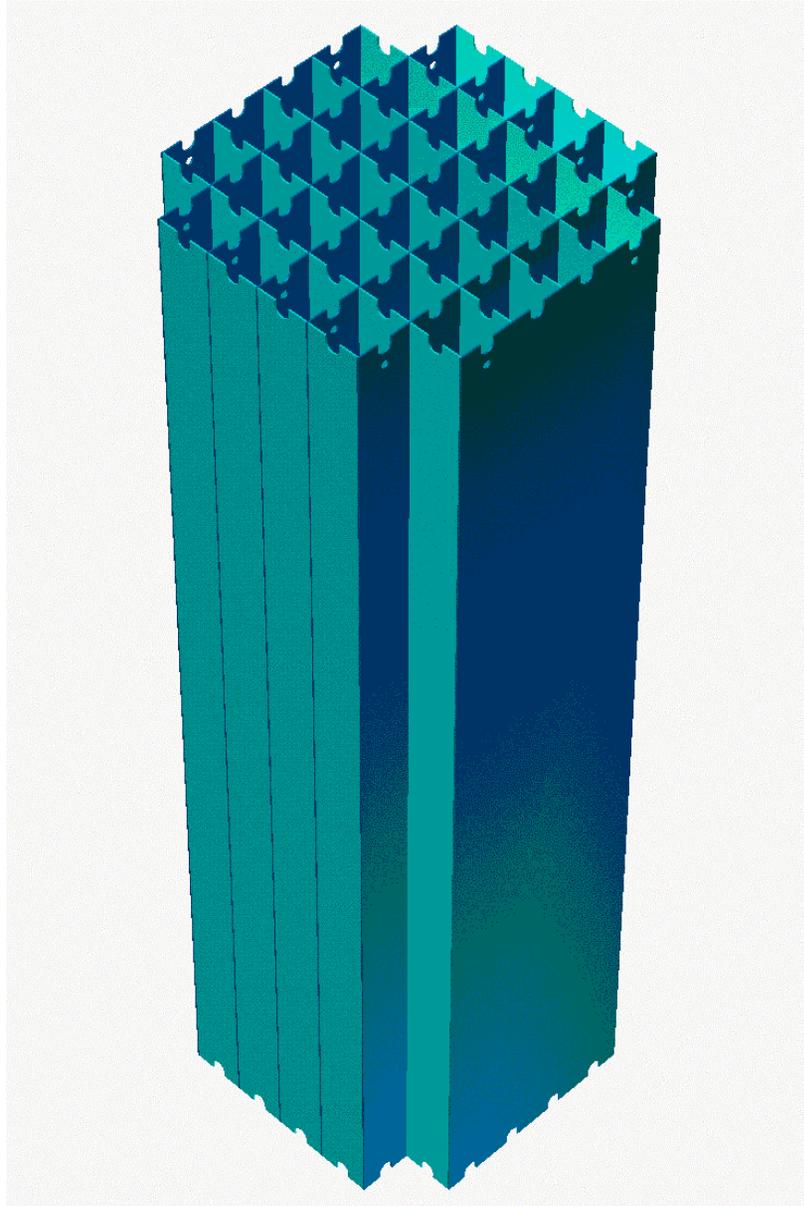
HI-STAR Materials

Part	Material	Thickness
Bottom forging	Ni - steel	6 inches
Top lid	Ni - steel	6 inches
Containment (inner most shell)	Ni - steel	2.5 inches
Gamma shells (4 total)	Carbon steel	1 1/4 inches each
Outer shell	Carbon steel	1 inch

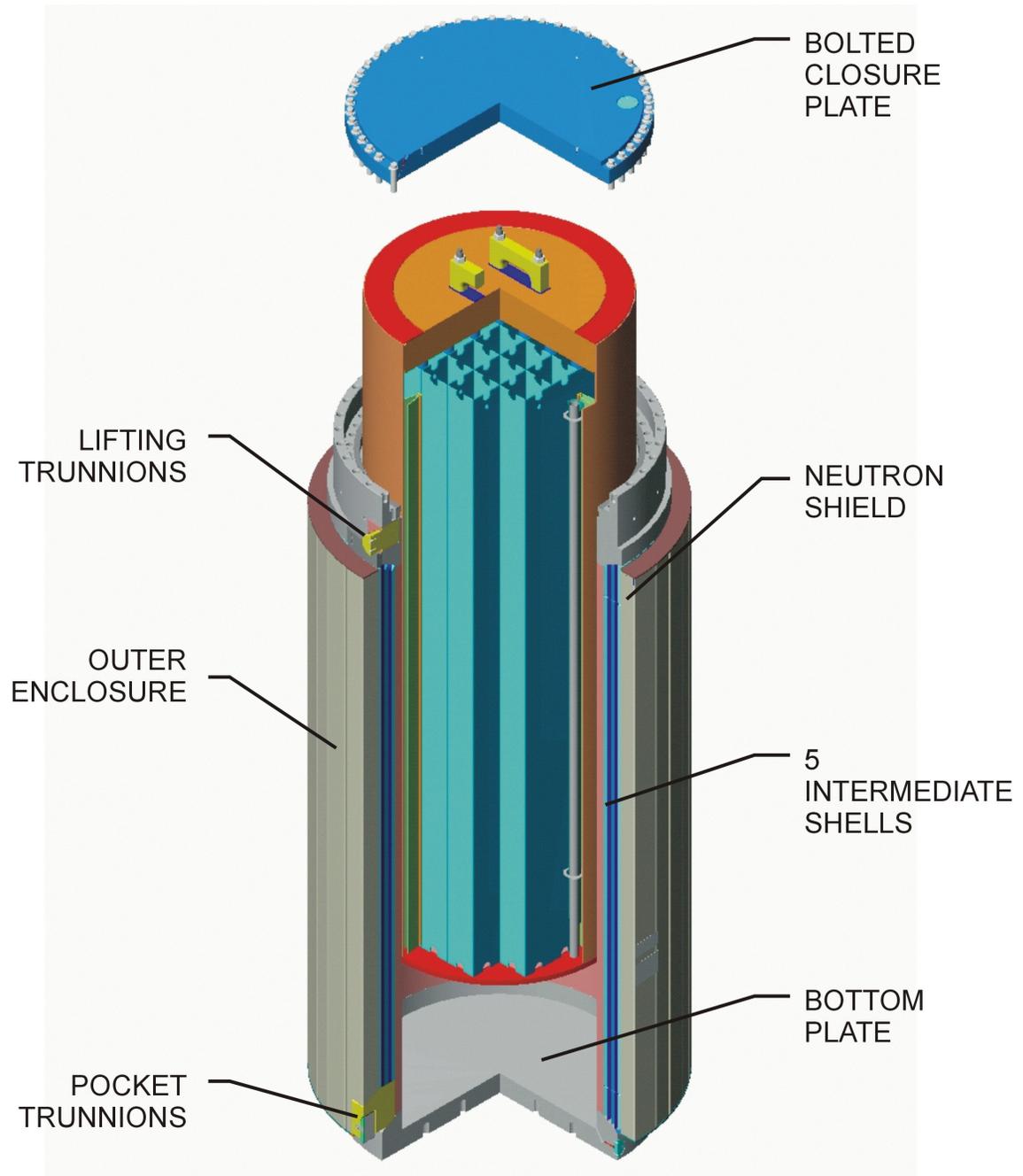
MPC-32 with SNF



MPC-32 Basket

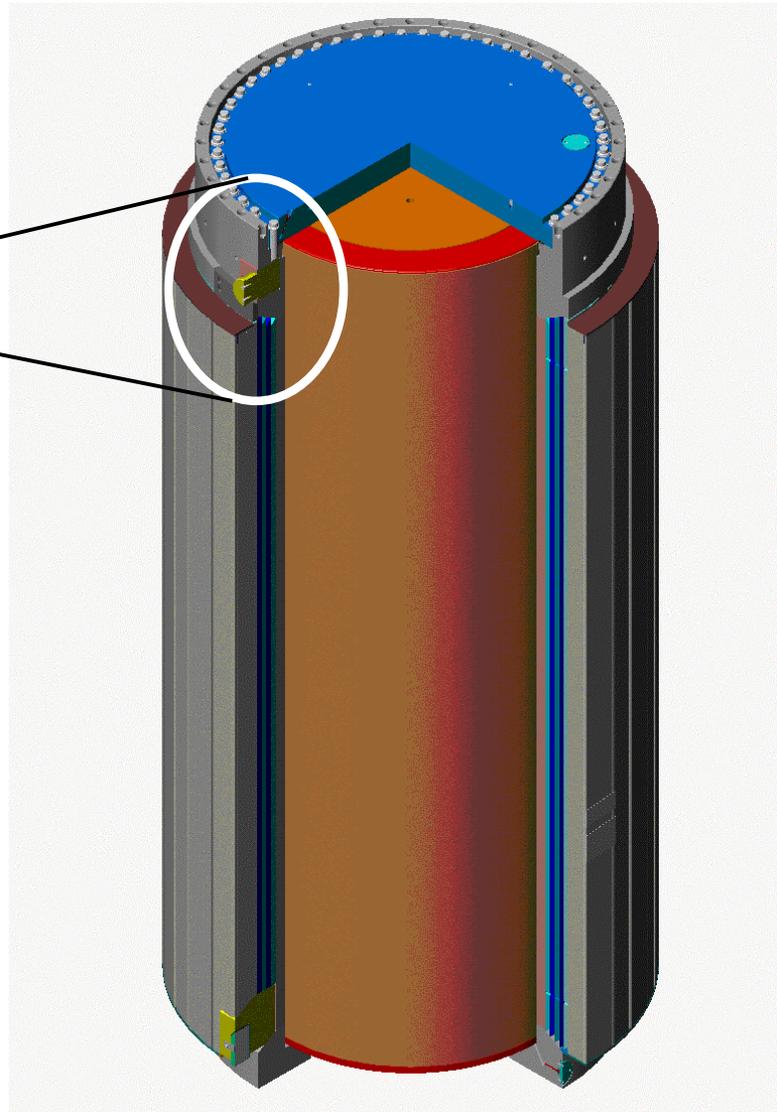


HI-STAR 100 Overpack with MPC Partially Inserted



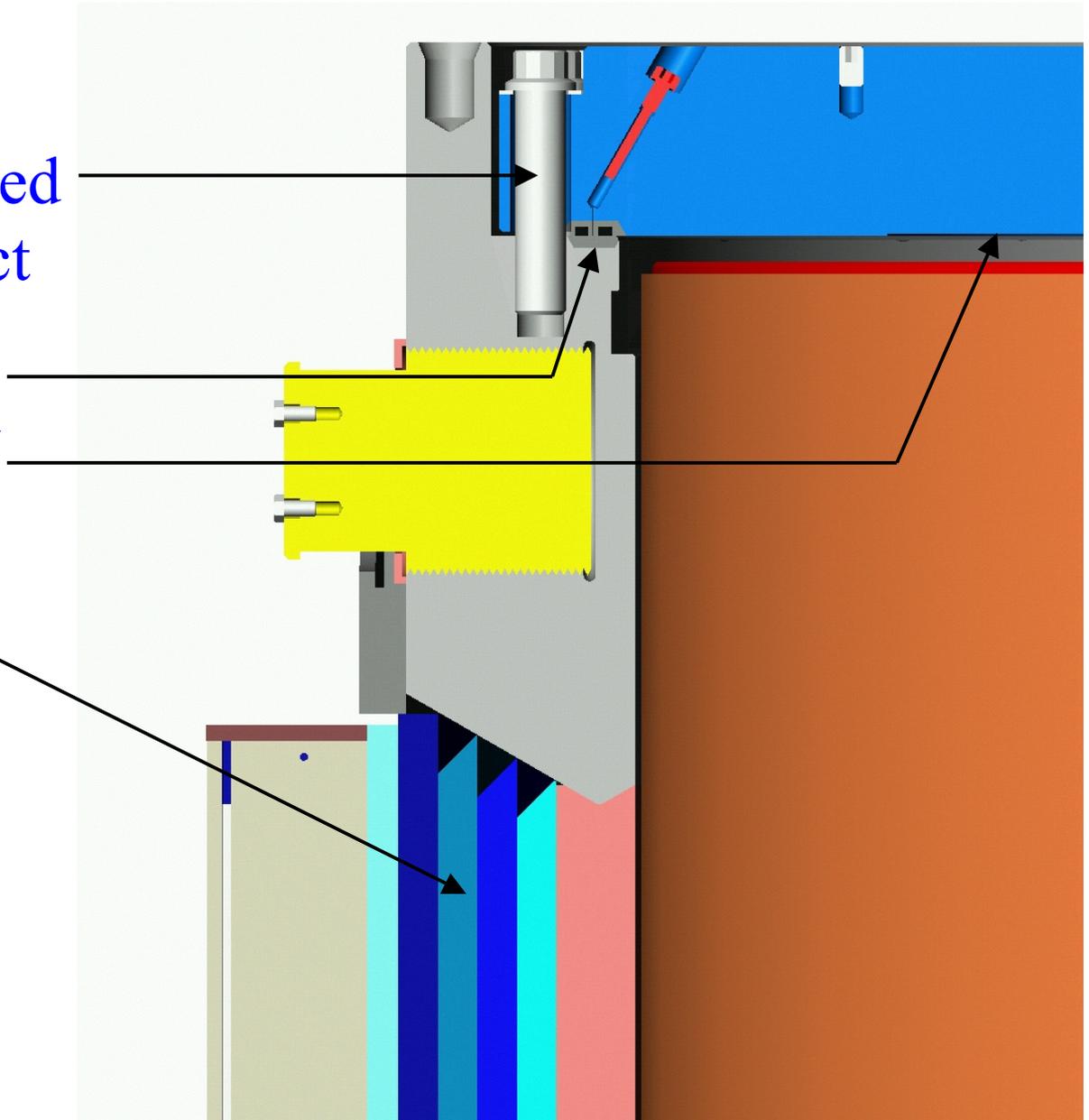
Design Features to Protect

Detail next slide

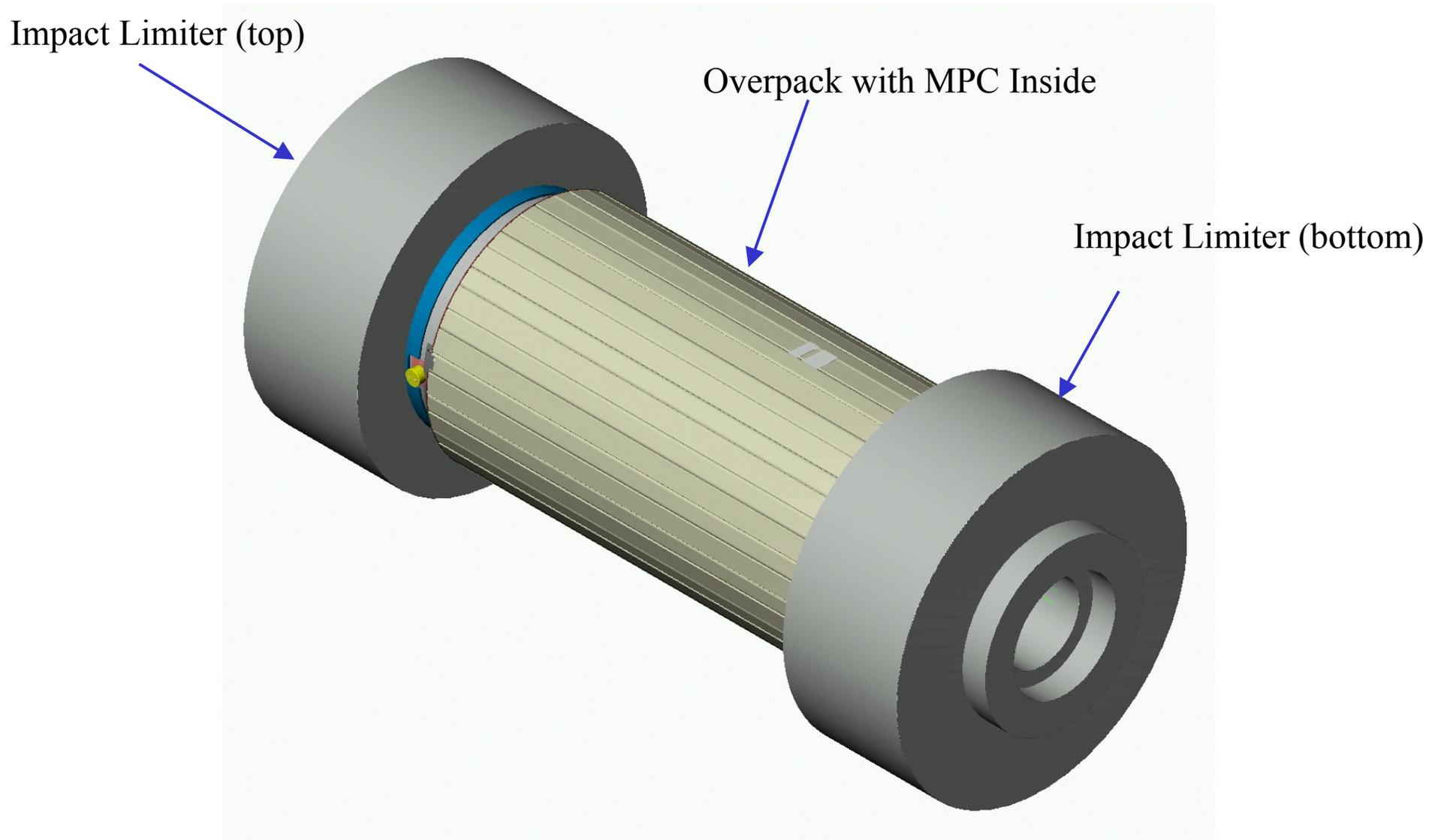


Design Features to Protect

- Lid bolts are protected against lateral impact
- Dual gasket closure
- Recess in the top lid
- Layered shell construction:
 - Eliminates crack propagation path

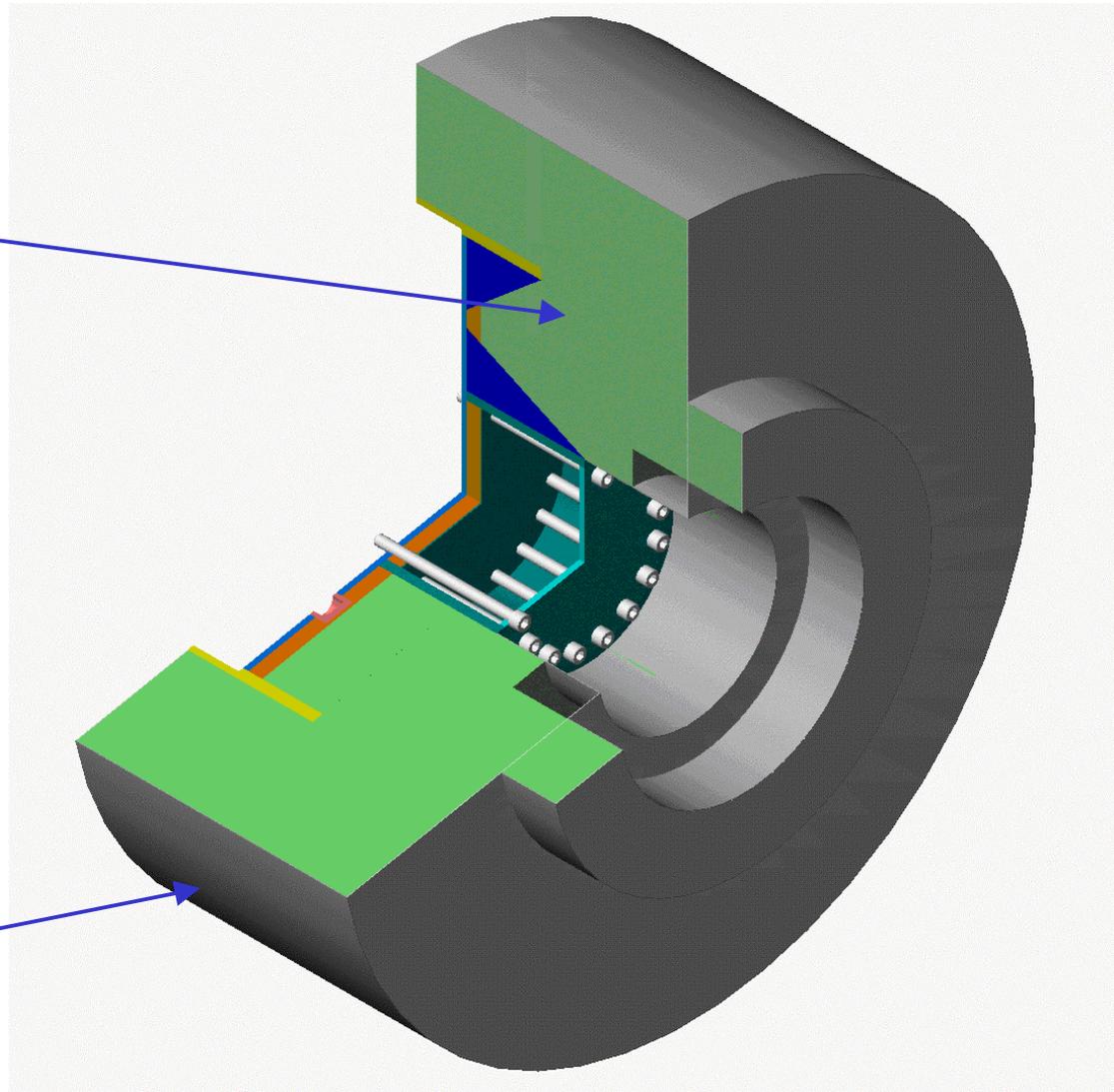


HI-STAR Package with Impact

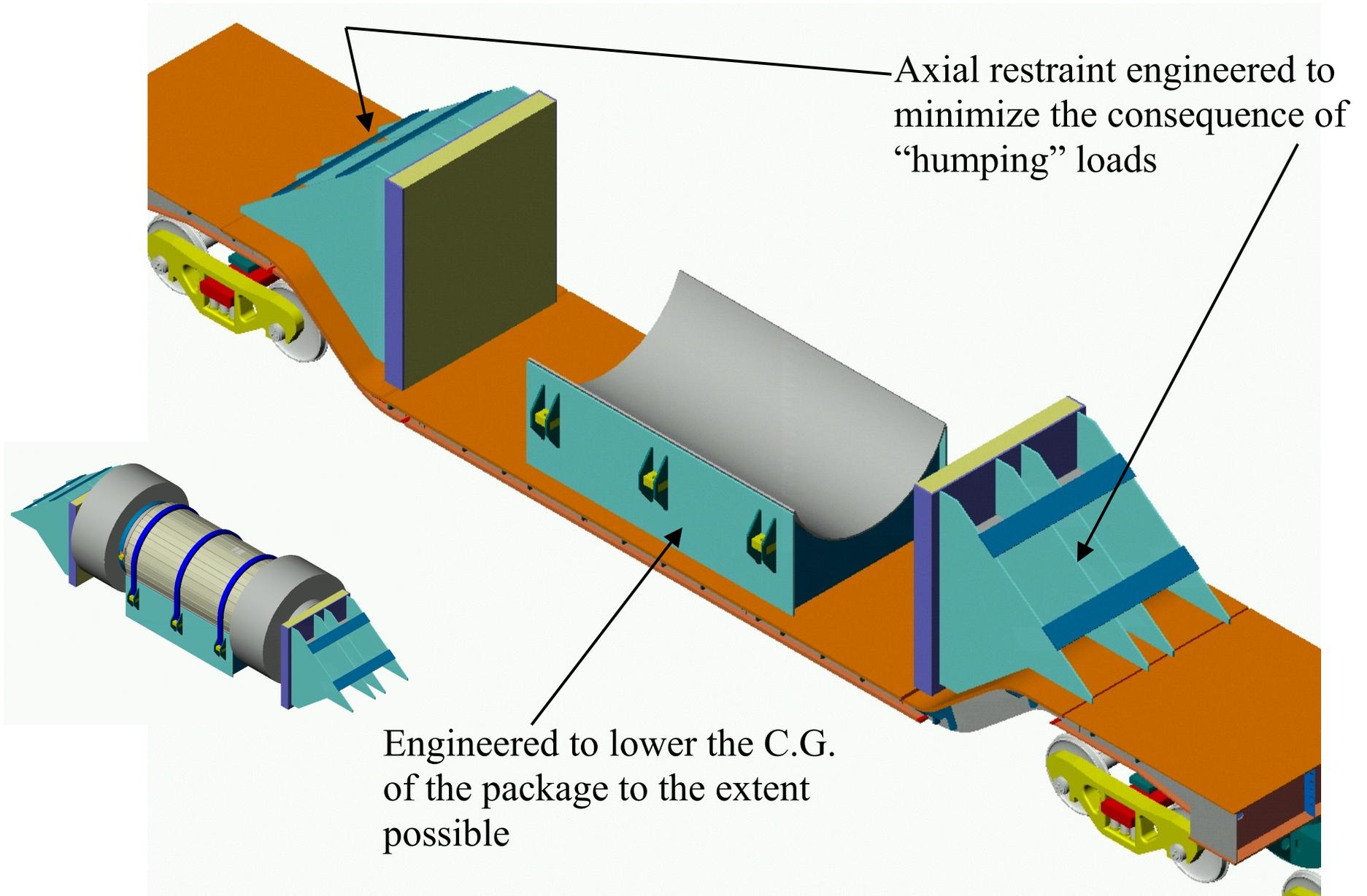


Impact Limiter Design Features

- Made of aluminum honeycomb
 - All-aluminum impact material eliminates weather (humidity and temperature) concerns
- Outer skin made of stainless steel



HI-STAR 100 Transport Cradle



HI-STAR Transport Package

