

PAR

SYSTEMS



- PaR Systems has been providing remote material handling solutions to the nuclear industry for over 50 years.
- PaR Systems is one of the oldest, if not the oldest robotics company in the world.
- 1000's of installed systems.



- Fully programmable, but can be spaceball operated.
- Installed in 10 in diameter opening for master-slave manipulator.
- Reach from the wall is 19ft.
- 50 in arms, 150 lb payload.
- Automatic or manual end effector change.
- Gripper, power tool, and camera end effectors.
- Electric, air, or hydraulic tools.
- Manipulator brought to end of thru wall stinger by crane and attached using X handle from cold side of wall.



- Three piece modular design to allow each module to fit through a small oval opening.
- No module over 500 lbs.
- In cell crane, places modules.
- Master-slave manipulator sets locking pins and makes final electrical connection.
- Seven axes in manipulator, a vertical self locking mast, and a crawler.
- 200 lb payload
- 400 lb drawbar pull.
- Joystick operated

Plug Manipulator





- Mounted to underside of shield plug.
- No wiring connections inside the cell.
- Main rotation axis, +/- 180 deg.
- Two independent horizontal telescopic axes.
- Telescopic mast
- Manipulator with shoulder rotate.
- 800 lb hook capacity.
- 150 lb manipulator capacity.
- Main rotation and first horizontal stage are manually recoverable using tool openings in top of the shield plug.

Mill Liner Handler



- Used to place sacrificial liners of ore crushing mills.
- Small openings and long reaches.
- Capacities for liners in excess of 10,000 lbs.
- Manual hydraulic operation.
- Rotating telescopic boom.
- Four wheel steering for positioning (must be anchored to prevent overturning, before extending horizontal boom)