

PAINTPRO REACH STUDY

Systems for Rock Island Arsenal

Rev. 0

PRELIMINARY PAINTPRO REACH STUDY

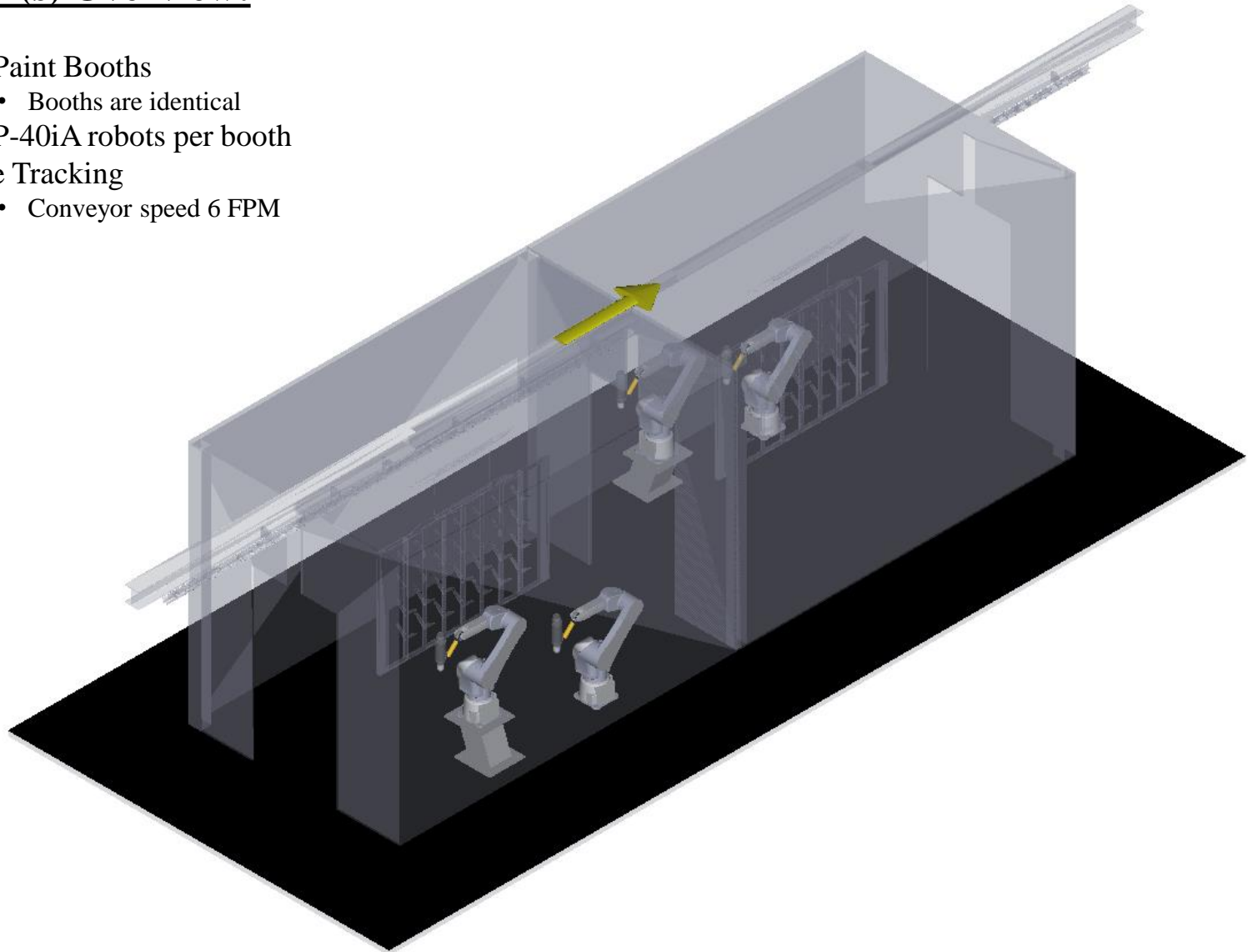
Revision History:

<u>Revision</u>	<u>Description</u>
1) Rev.0 / 11.16.2023	1) Cell created, booth CAD model imported, robots placed, reach confirmed, concerns identified

PRELIMINARY PAINTPRO REACH STUDY

Booth(s) Overview:

- (2) Paint Booths
 - Booths are identical
- (4) P-40iA robots per booth
- Line Tracking
 - Conveyor speed 6 FPM

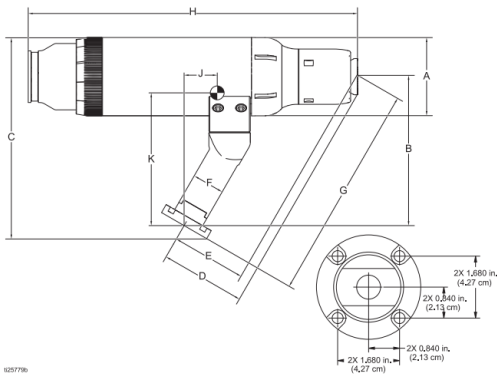


PRELIMINARY PAINTPRO REACH STUDY

Process Notes:

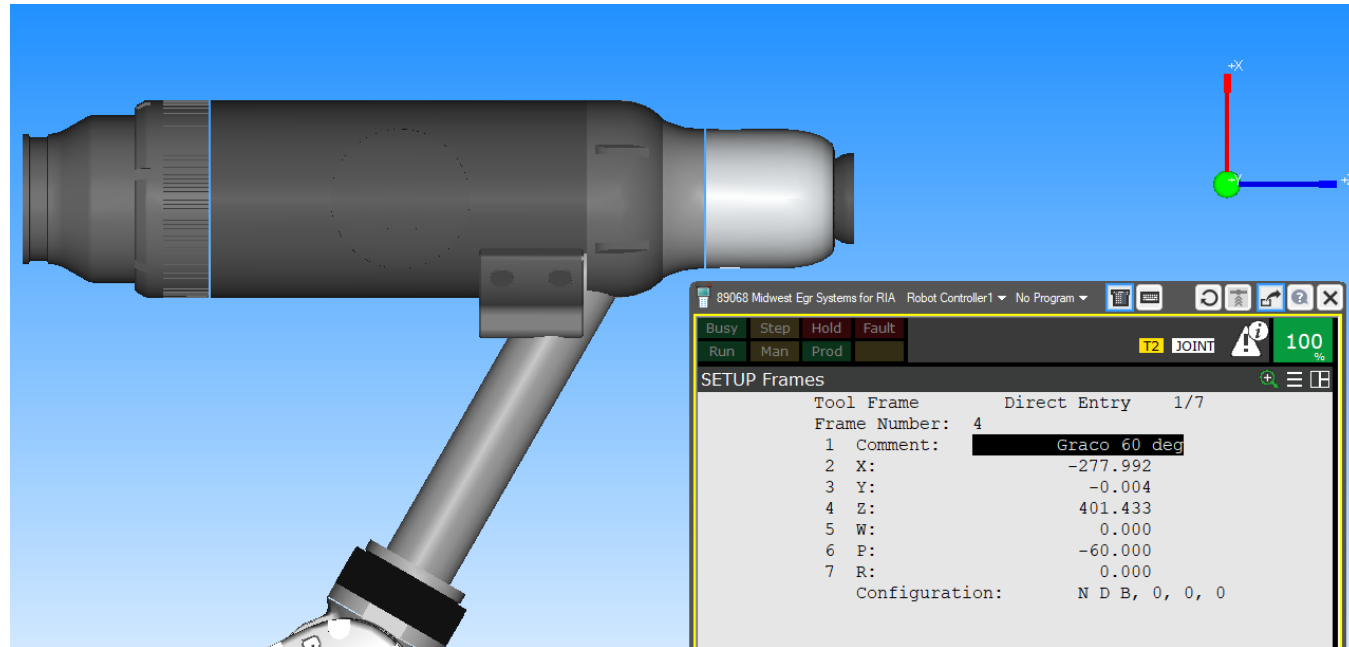
- (8) P-40iA robots (4 per booth)
- Line Tracking: 6 FPM
- Robot Arm Speed: TBD
- Applicator: Graco ProBell 60 degree
- Target Distance: 8”
- U-Tool:

60° Robot Mount - shown with mounting Kit 24Z179



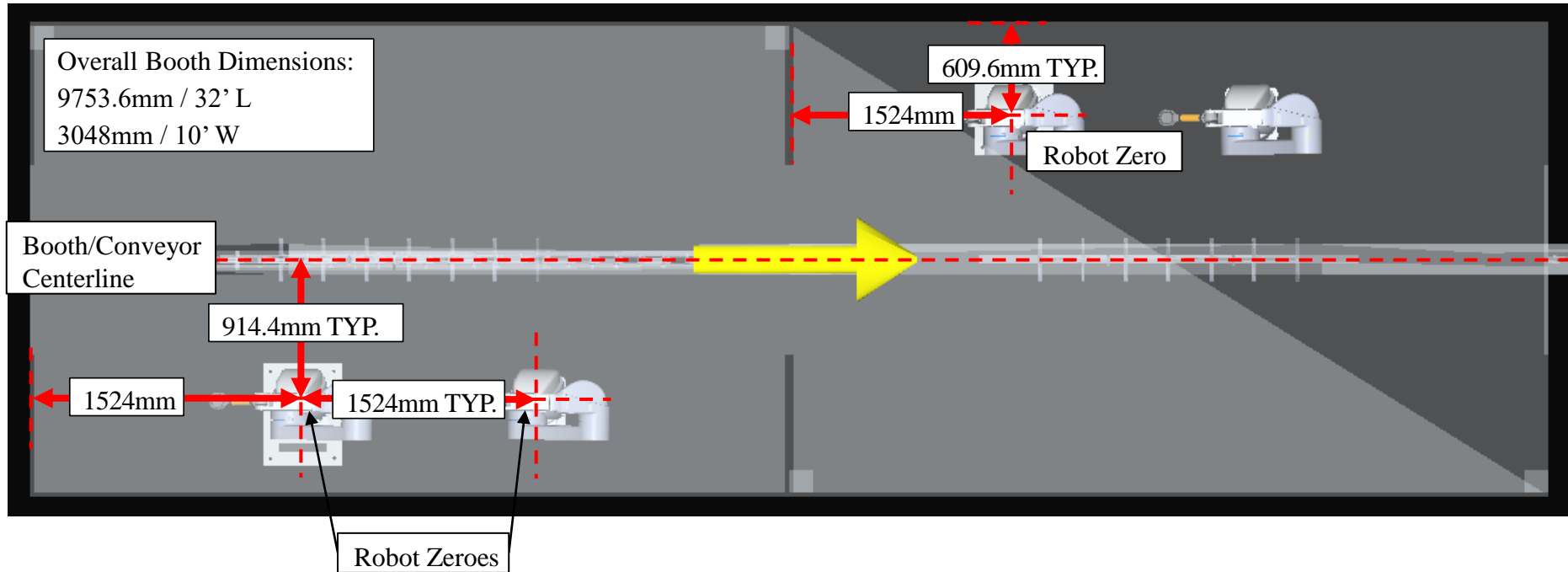
Ref.	Dimension					
	15 mm Cup		30 mm Cup		50 mm Cup	
	Inches	Centimeters	Inches	Centimeters	Inches	Centimeters
A	4.3	10.9	4.3	10.9	4.3	10.9
B	8.1	20.6	8.1	20.6	8.1	20.6
C	10.9	27.7	10.9	27.7	10.9	27.7
D	3.8	9.7	3.9	9.9	4.6	11.7
E	3.6	9.1	3.6	9.1	4.1	10.4
F	1.7	4.3	1.7	4.3	1.7	4.3
G	11.4	29.0	11.4	29.0	11.7	29.7
H*	17.3	43.9	17.3	43.9	17.9	45.5
J	Electrostatic models: 1.8 in. (4.6 cm) Non-Electrostatic models: 1.8 in. (4.6 cm)					
K	Electrostatic models: 7.2 in. (18.3 cm) Non-Electrostatic models: 7 in. (17.8 cm)					

* For non-electrostatic models, subtract 5.6 in (14.2 cm) from dimension shown.



PRELIMINARY PAINTPRO REACH STUDY

Booth Details: Top

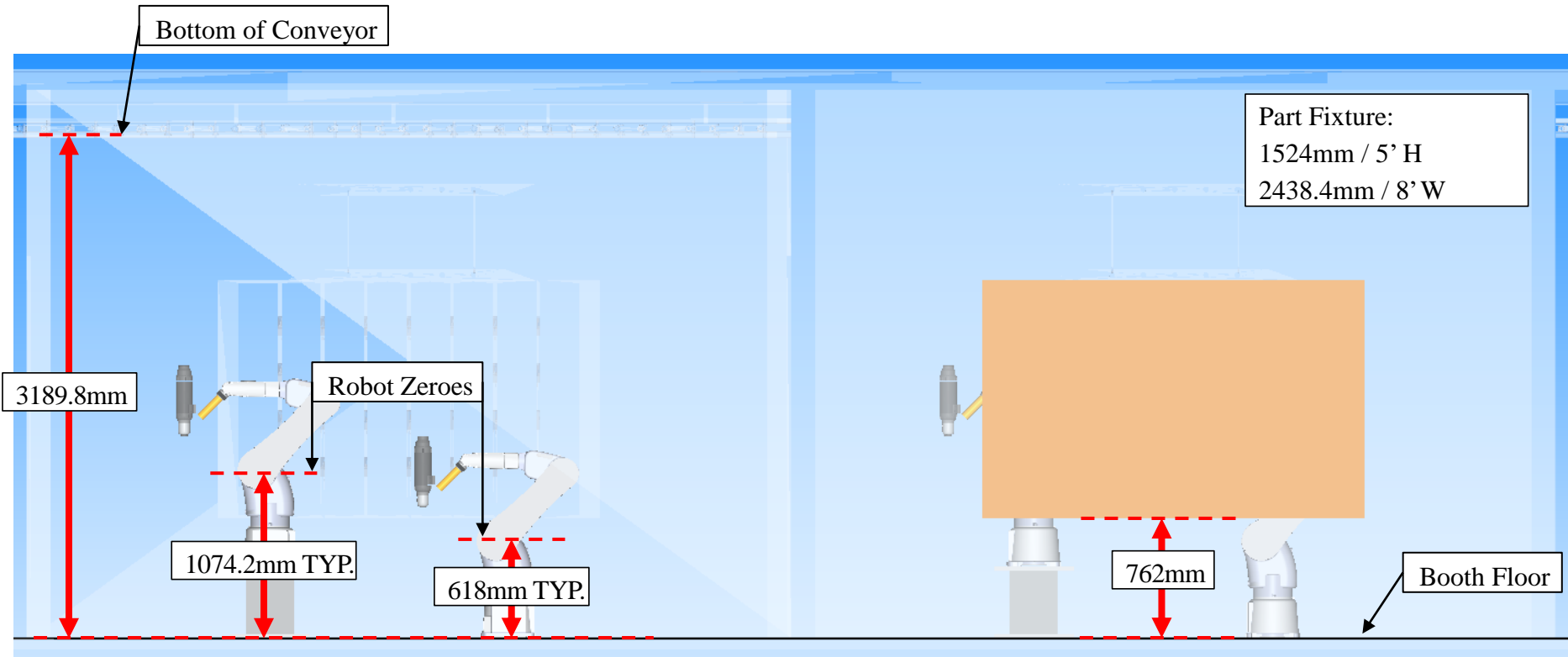


Notes:

- Overall booth dimensions/walls represented by grey rectangle- **9753.6mm L x 3048mm W** (32' L x 10' W) per customer supplied CAD file

PRELIMINARY PAINTPRO REACH STUDY

Booth Details: Side

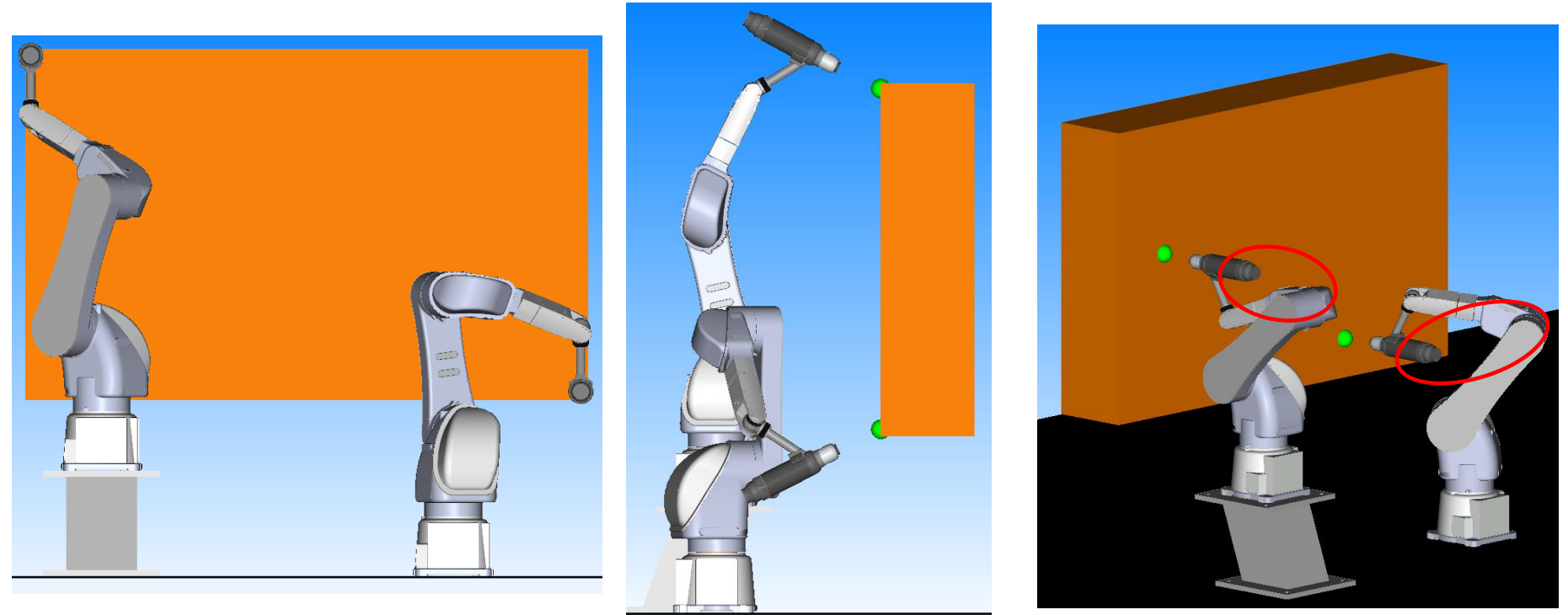


Notes:

- Part rack/fixture dimensions represented by orange rectangle- **1524mm H x 2438.4mm W** (5' H x 8' W) per customer supplied CAD file
- Booth height is **3535mm** per customer supplied file

PRELIMINARY PAINTPRO REACH STUDY

Reach Capability: P-40iA Solution

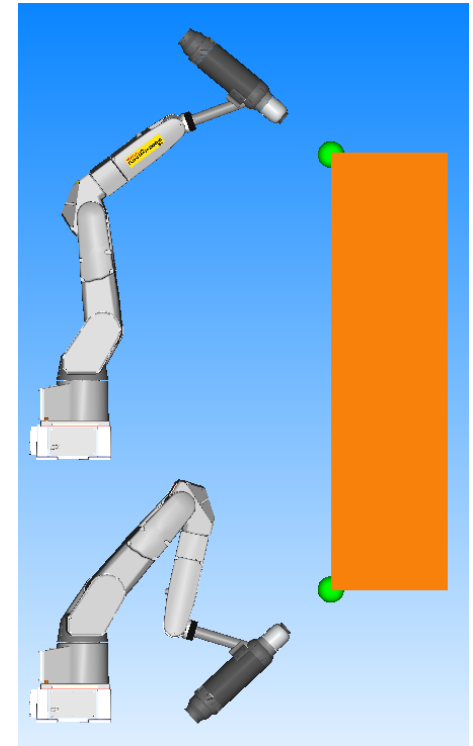
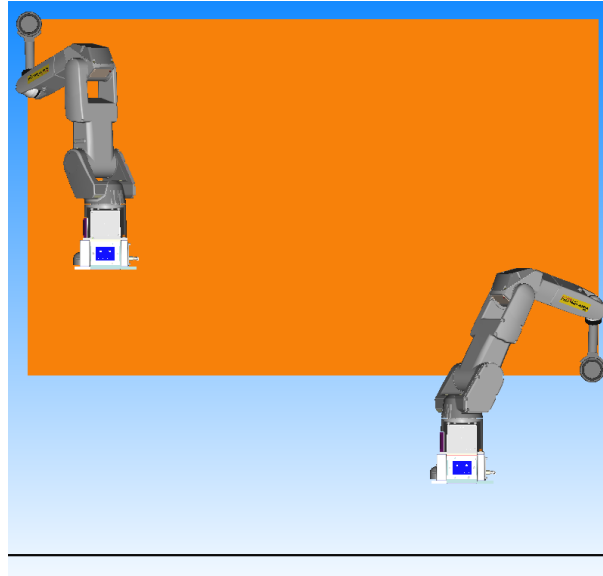
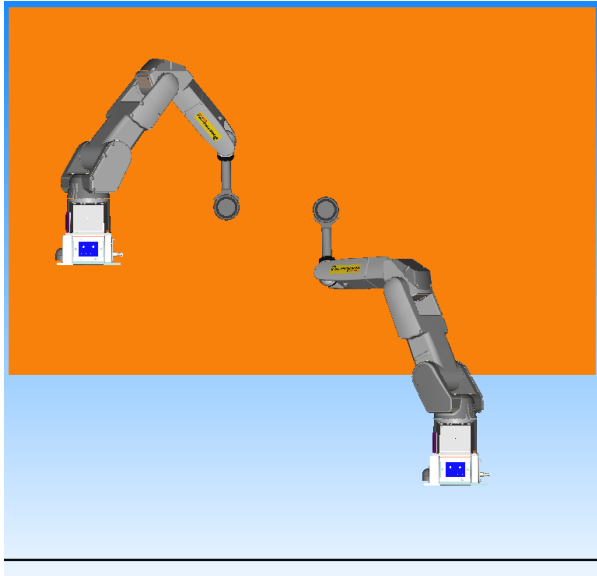


Notes:

- No initial concerns regarding reach capability with P-40iA robots
- Hose routing to the Graco ProBell may be a limiting factor to robot mobility, see above right
- **Need more part information to advise on processing capability**

PRELIMINARY PAINTPRO REACH STUDY

Reach Capability: PaintMate 200iA/5L Solution

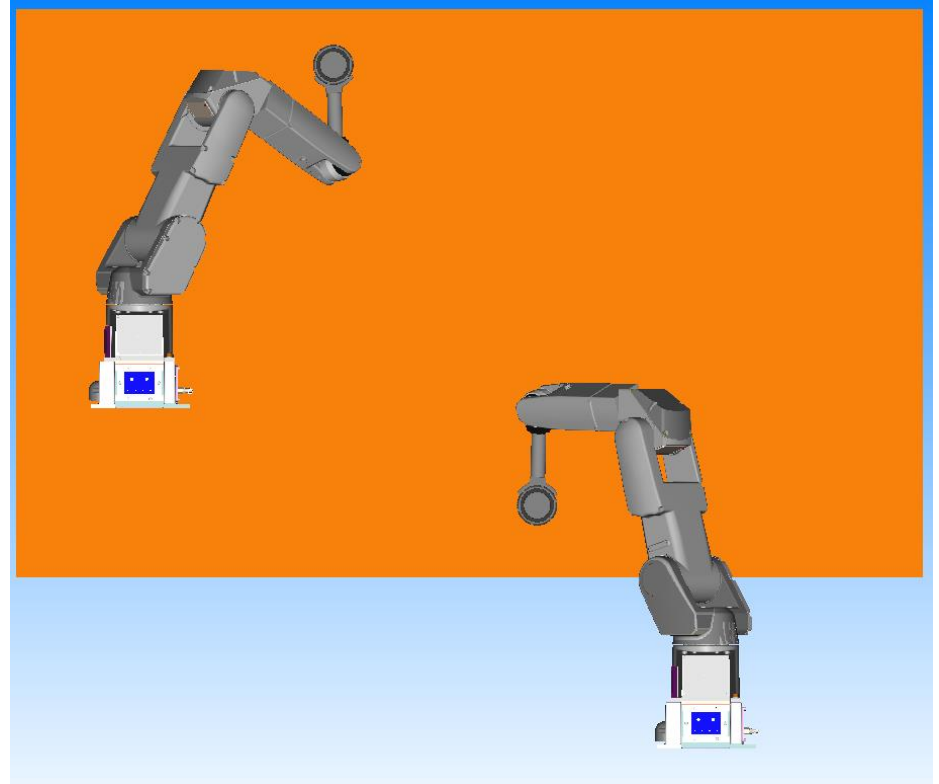
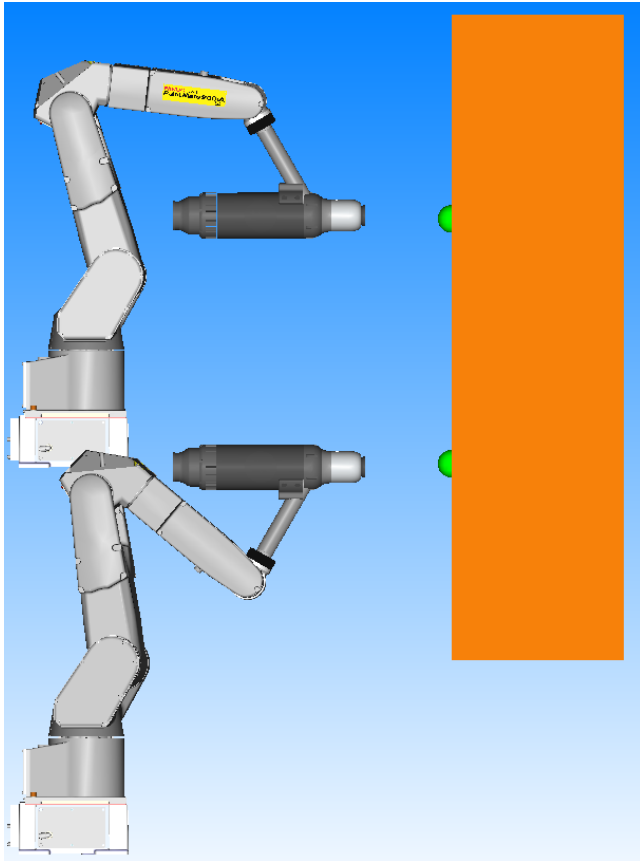


Notes:

- No concerns regarding reach capability with PaintMate 200iA/5L robots
- **Need more part information to advise on processing capability**

PRELIMINARY PAINTPRO REACH STUDY

Reach Capability: PaintMate 200iA/5L Solution



Notes:

- Concern regarding interference between hose routing and robot wrist
- Will limit robot mobility
- May need custom bracket for the Graco ProBell to distance the bell from the robot wrist