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So, You Want an X-Y Table?

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Cultural Heritage Imaging Professionals Conference
Stanford University
Stanford, CA
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How Large of a Capture Surface Is Best?

Make sure to not go too small… or what is the point? However, make sure to take into consideration the table's full x/y travel when space planning.

Table or Easel?


Y
nedcc.org
super precision

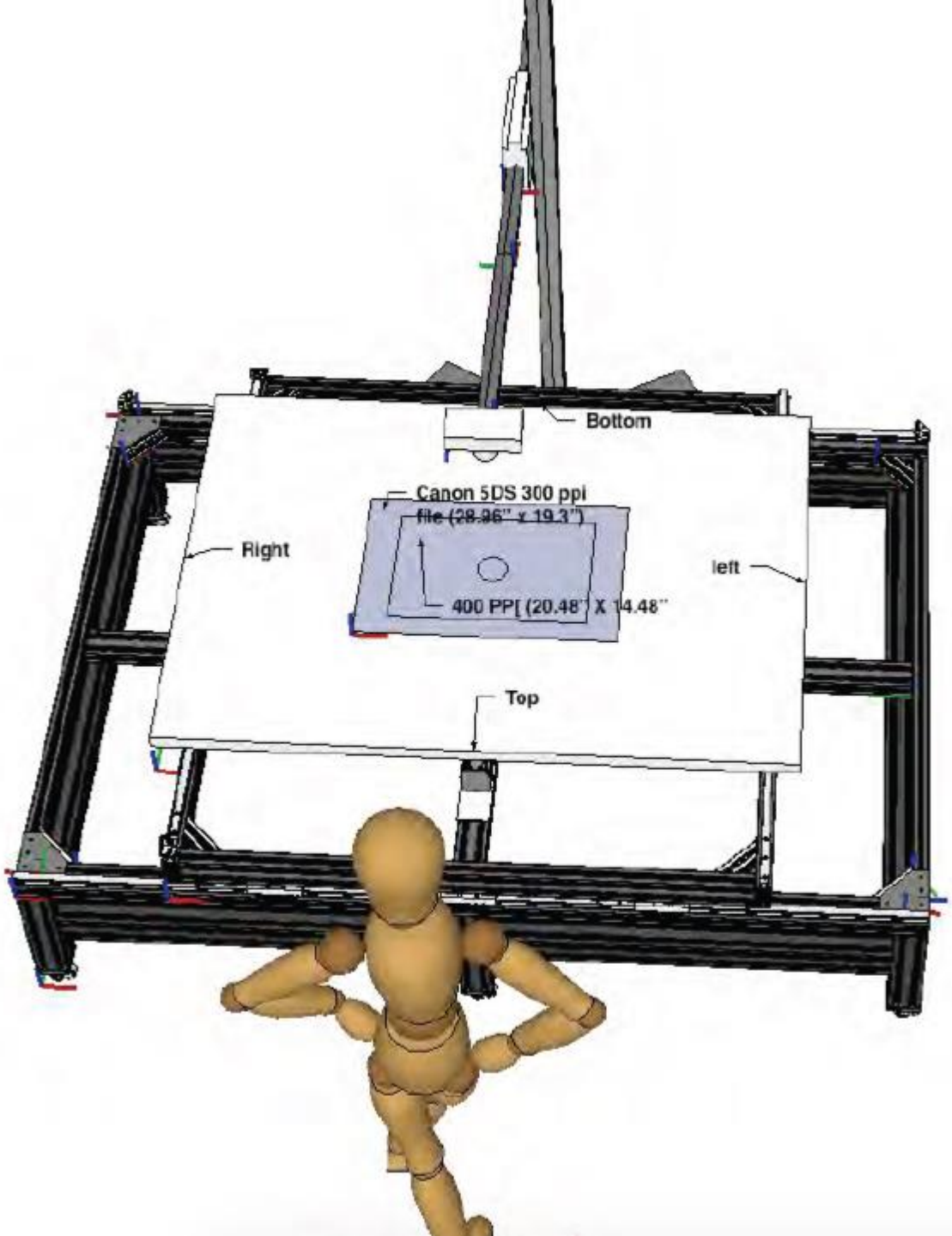
Automated? Manual? Or Both?

Camera & Lights Support Structures? Object Flattening Mechanism?

Tried and True Vacuum Bed, But We Didn’t Go This Route…

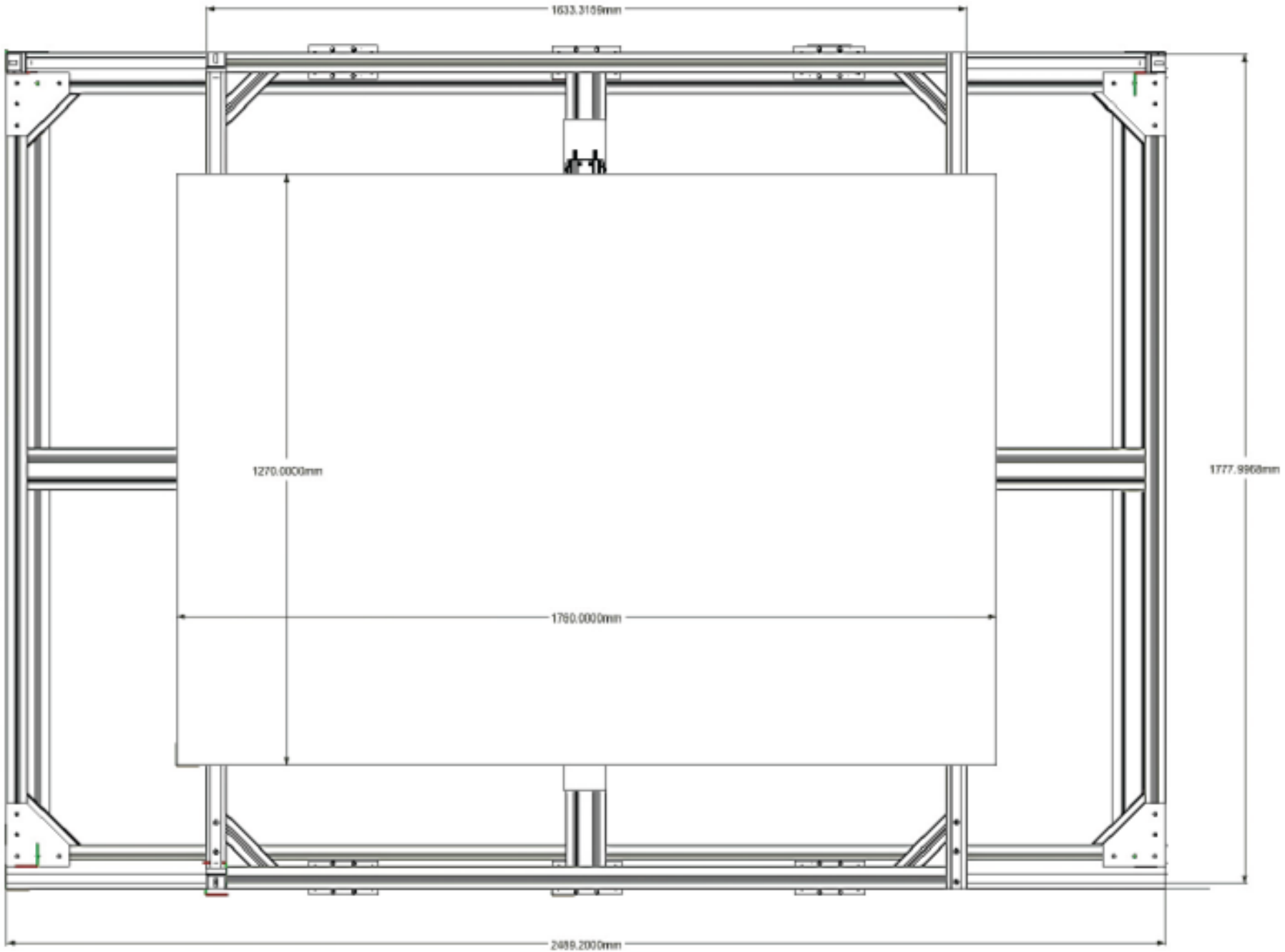
Ergonomic Considerations?

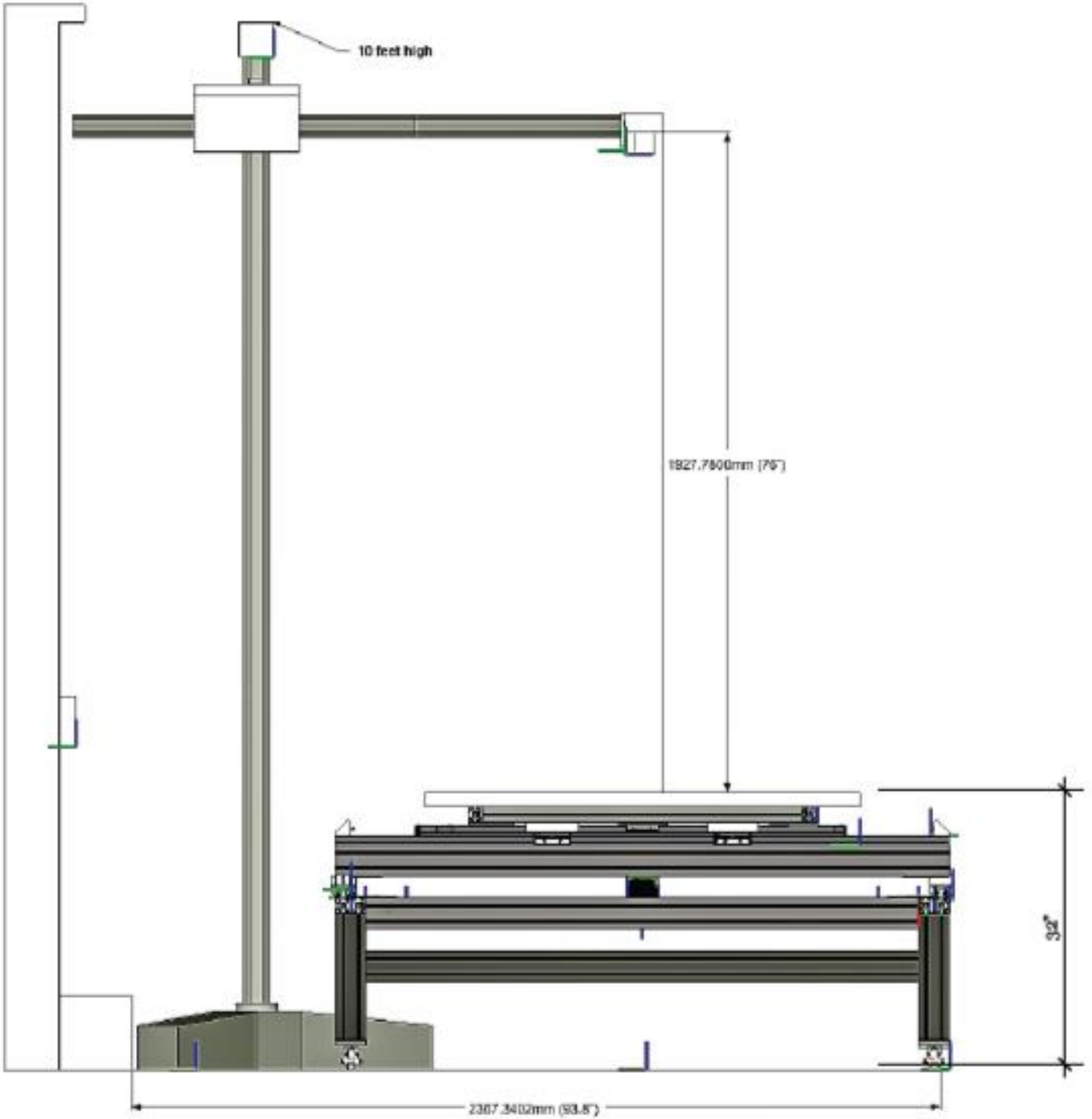
Table Height? Reach Needed To Manually Focus Camera?

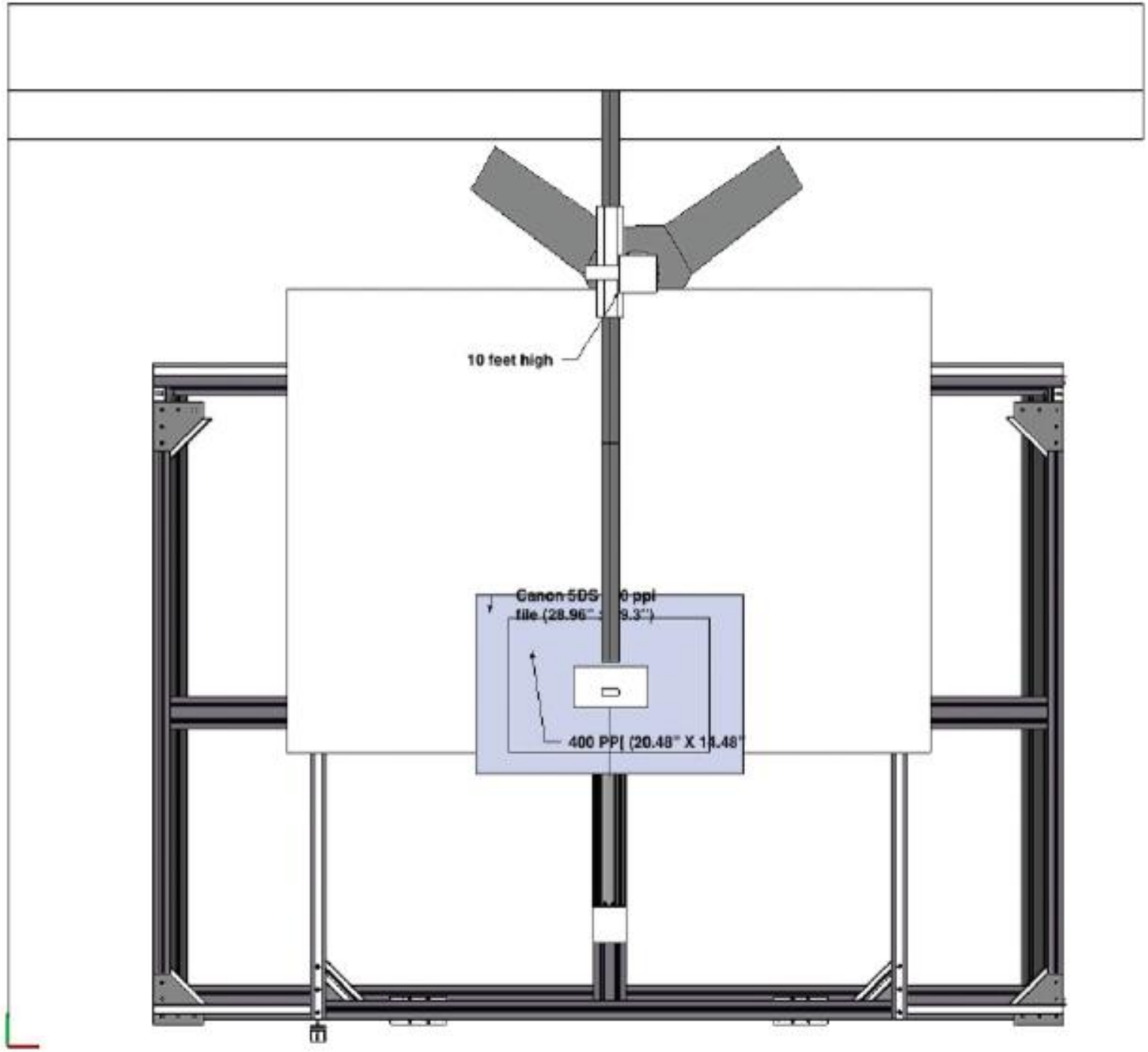

Bottom
Canon 5DS 300 ppi
file (28.96" x 19.3")
Right
left
400 PPI (20.48" X 14.48"
Top

Ready to Design? CAD is Your Friend!

Anticipate Problems. Quickly and Virtually Iterate Design and Engineered Feasibility. Accurately Purchase Pre-Cut Components for Final Assembly.

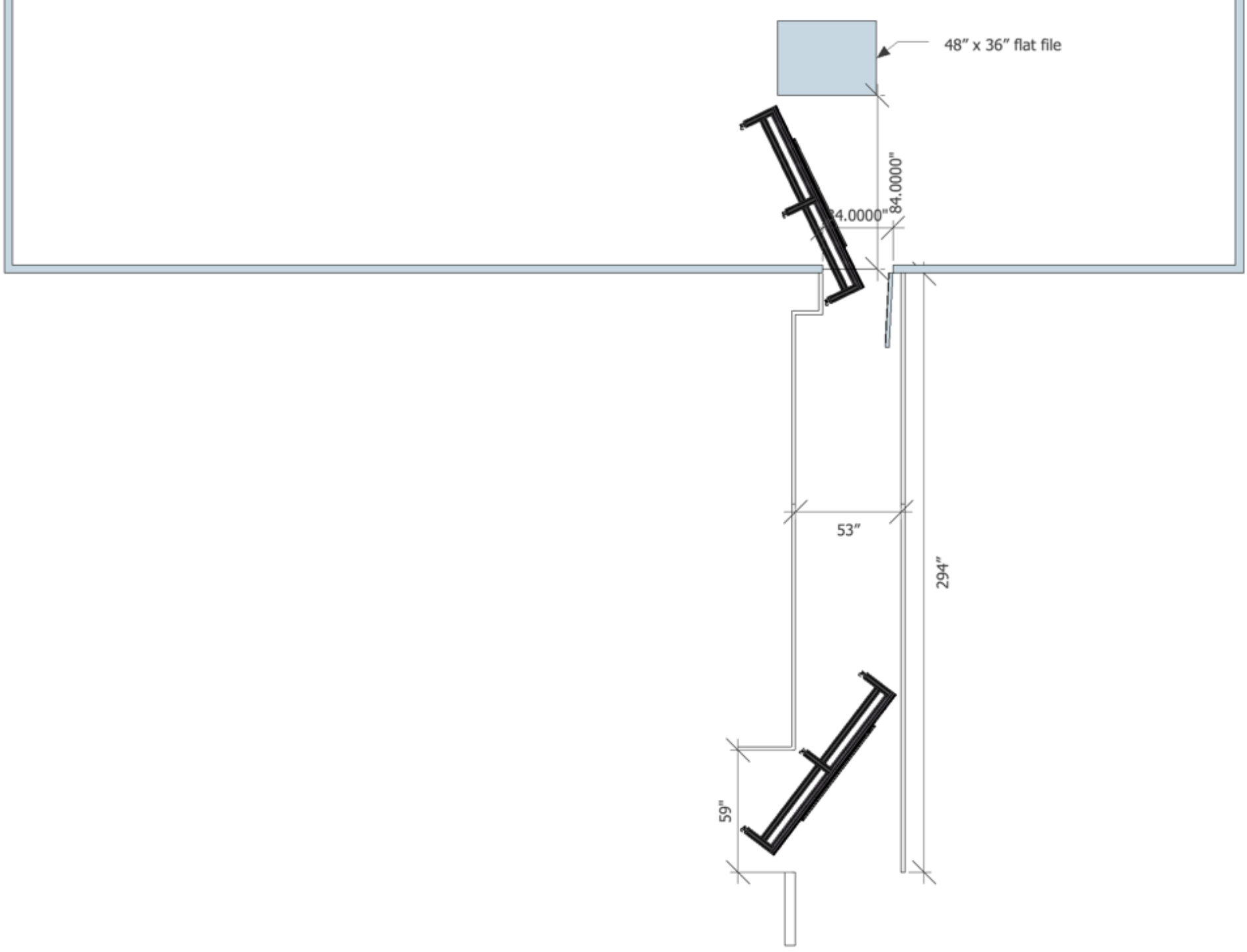

1633.3159mm
1270.0000mm
1760.0000mm
1777.9968mm
2489.2000mm


10 feet high
1927.7800mm (76")
32"
2387.3402mm (93.8")


10 feet high
Canon 5DS
file (28.96"
9.3")
400 PPI (20.48" X 14.48"

Ready for Delivery? CAD (again) is Your Friend!

Virtually “walk” table components through doors and hallways. This will help answer how much of the system needs to be broken down (and re-assembled) in studio.


48" x 36" flat file
84.0000"
84.0000"
53"
294"
59"

Design Decisions That We Ended Up Making…

1. Table's Surface Dimensions: 50" x 69"

2. Table's Footprint: 70" x 98"

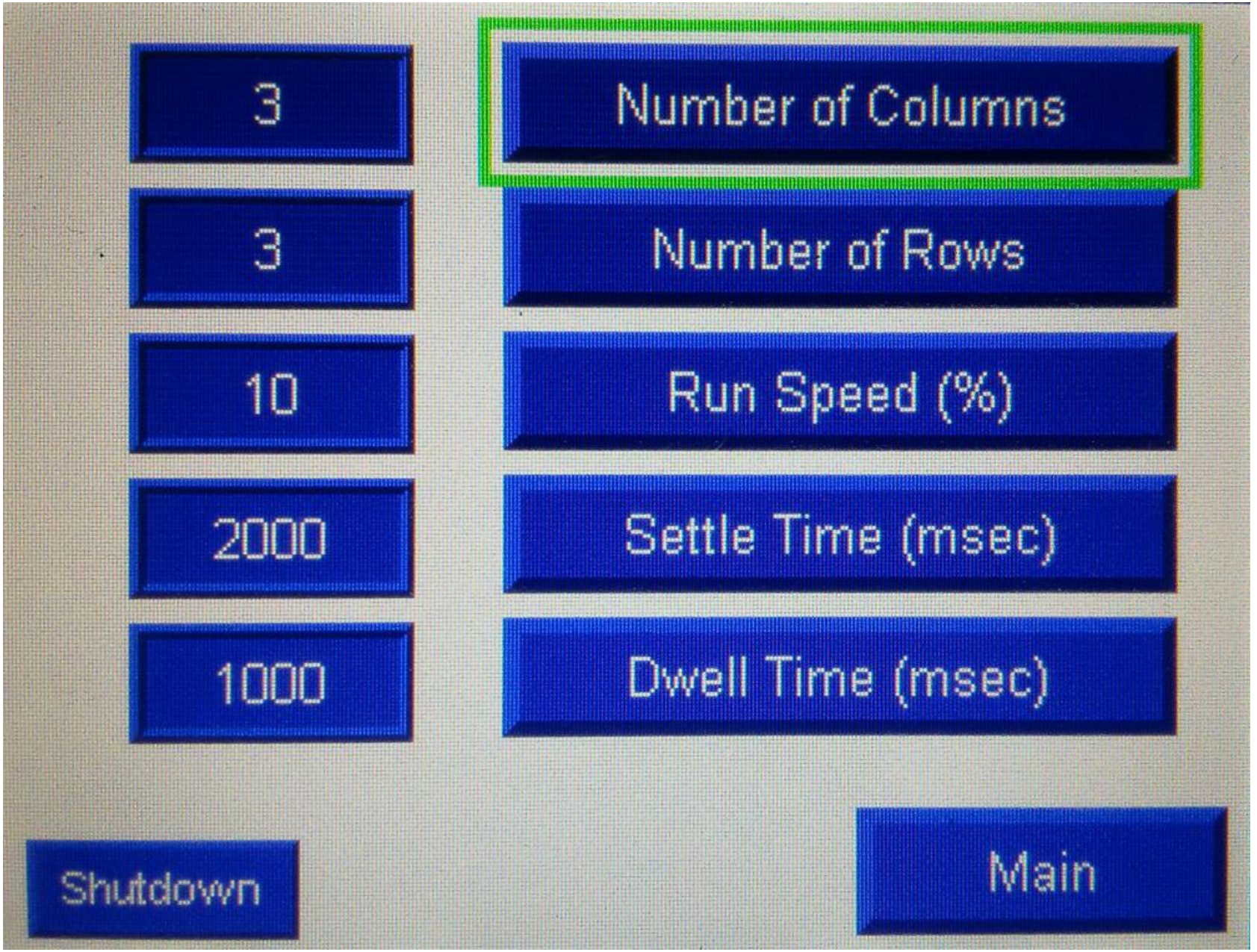
3. Table's Surface Height from Floor: 32"

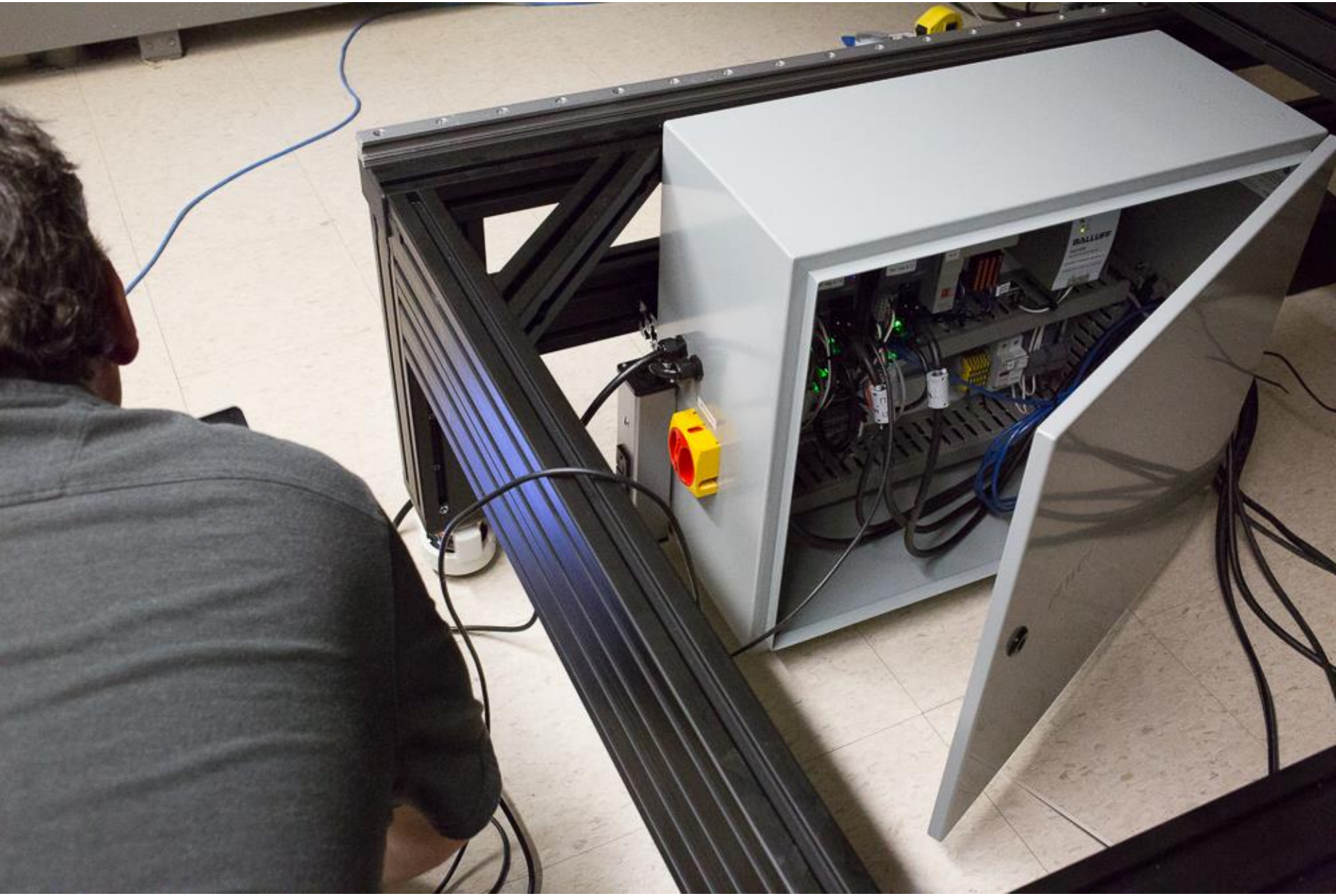
4. Table Components: 80/20 Aluminum Alloy CNC Cut to CAD Designed Specs. Yamaha Controllers & Servos. Foba Asaba Camera Stand w Extension Arm

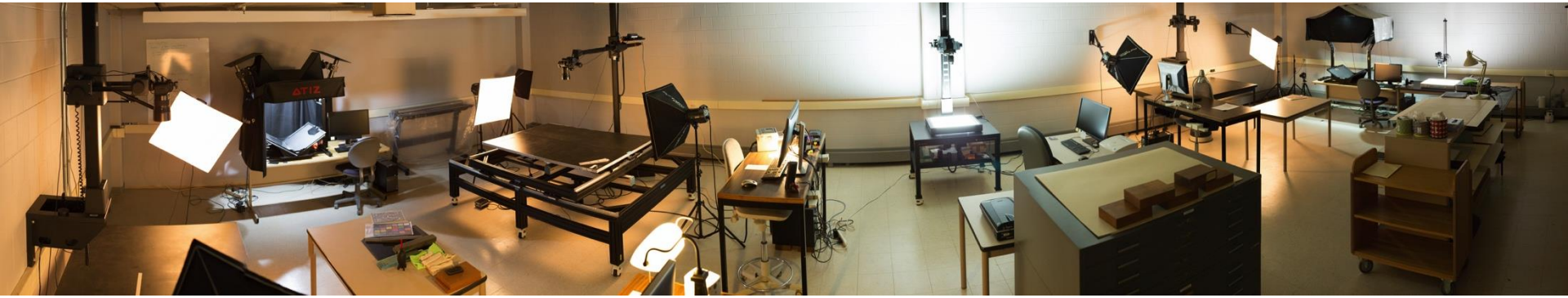
1. Table Control: Fully Automated Capture System (touchscreen controller) with Manual Override

2. Object Flattening: 50" x 69" Electrostatic Board Table Surface (also magnetic)


NEW HAVEN COUNTY


3
Number of Columns
3
Number of Rows
10
Run Speed (%)
2000
Settle Time (msec)
1000
Dwell Time (msec)
Shutdown
Main


BALLUFF



Acknowledgments

Michael Ulsaker, Ulsaker Studios, Glastonbury, CT

Mike Westkamper WEI Inc., Old Saybrook, CT

Watch It In Action…

https://youtu.be/5bIuRZjY--M