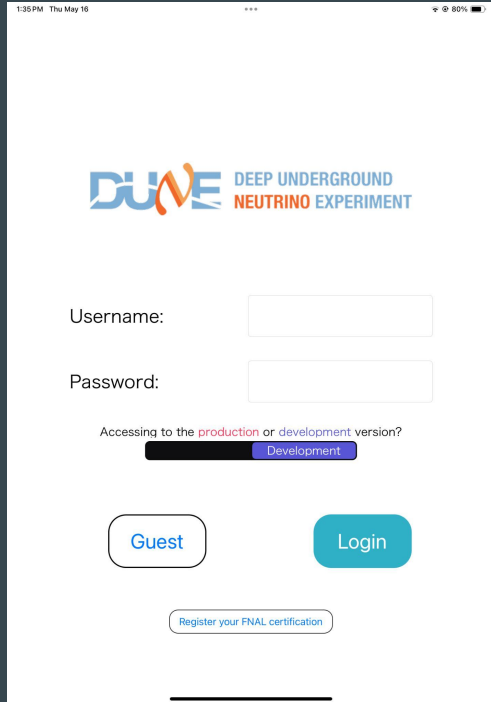


Hardware Database- HWDB App



By: Aubri Parris

Logging In To CPAProduction

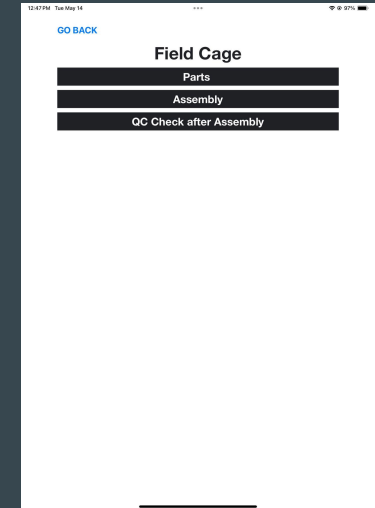
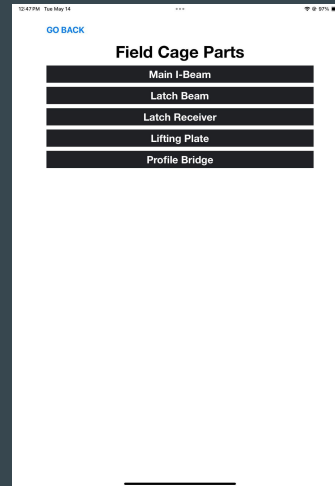
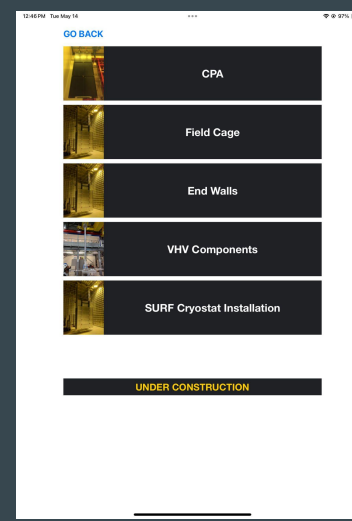
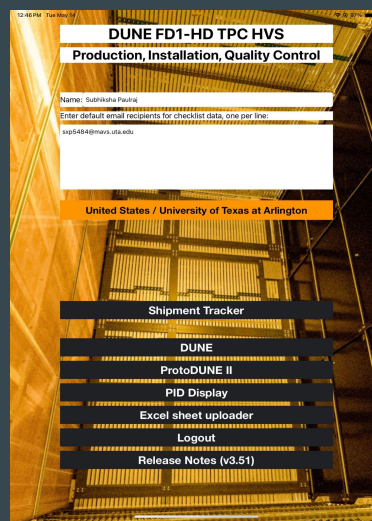


The screenshot shows the login interface for the DUNE (Deep Underground Neutrino Experiment) CPAProduction system. At the top, the DUNE logo is displayed, consisting of the letters 'DUNE' in a stylized font with an orange and blue gradient, followed by the text 'DEEP UNDERGROUND NEUTRINO EXPERIMENT'. Below the logo, there are two input fields: 'Username:' and 'Password:'. Underneath the password field, there is a question 'Accessing to the production or development version?' with a radio button selected for 'Development'. At the bottom, there are two buttons: 'Guest' and 'Login', and a link for 'Register your FNAL certification'.

- Login with a username and password or as a guest
- You can demo as a guest but to actually upload, you need a user and password

Getting There

- On each page you'll press a button to get to the next one
- Their respective order is DUNE, Field Cage, Parts, and then Main I-Beam or Latch Beam
- Use name and email to become a recipient



Visual Inspection

- Label code will be on each beam in the lab
- Check for structural damages, scratches along the surface, exposed fibers, bend profile, etc.

5:23PM Wed May 15 98%

Selected Country/Institution: United States / University of Texas at Arlington

Manufacturers:

Date: May 15, 2024 5:12 PM

Parts ID

Label Code

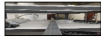
Drawing Number DFD-21-2101

Total # passed so far


Visual Inspection
Tap the available images below to enlarge them.

1. Structural Damage:


Any structural damage in beams including but not limited to fracture, extreme rough surface with exposed fiber.

2. Bend Profile: 

Check if the profile is bend with the tolerance of <3mm for entire beam.

3. Surface/Scratch check: 

Fail if there is any scratch in the profile.

4. Screw holes: 

Fail if hole is not smooth or exposed fiber, and could not be smoothen using sandpaper.

Latch Beam

- All the steps are the same as the main I-beam
- After visual inspection, measuring, save and upload to HWDB

1:26 PM Thu May 16

Close **Latch Beam** Print

Selected Country/Institution: **United States / University of Texas at Arlington**

Manufacturers:

Date:

Parts ID

Label Code

Drawing Number **DFD-21-111**

Total # passed so far

Visual Inspection
Tap the available images below to enlarge them.

1. Structural Damage:

Any structural damage, including fracture, extreme rough surface with exposed fiber.

2. Bend/Twisted:

Check if profile is bend or twisted.

3. Surface/Scratch check:

Failed for any scratch in the beams.

2:10 PM Thu May 16

Measurements show less

Laser Test: FAIL

Jigs A: (Diameter of A and the distance of A from the edge).
Jigs BCDEF (BCDEF Flange gaps).
Jig 3: FAIL

Units – all measurements are in mm.

	A Dia.	G Dia.	H Dia.	I Dia.	J Dia.	K Dia.	L Dia.
Mess. 1							
Mess. 2							
Mess. 3							
Mess. 4							
Mess. 5							
Ave.							
S.D.							
Expected	43.434	7.5	7.5	7.5	7.5	7.5	7.5
Tolerance	0.254	0.254	0.254	0.254	0.254	0.254	0.254
Diff.							

	A to Edge 4	F to Edge 4	E to Edge 6	FE Dis.	DC Dis.	CB Dis.	A to Edge 3
Mess. 1							
Mess. 2							
Mess. 3							
Mess. 4							
Mess. 5							
Ave.							
S.D.							
Expected	67.437	10.5816	10.5816	12	12	12	41.763
Tolerance	0.127	0.127	0.127	0.127	0.127	0.127	0.127
Diff.							

1:26 PM Thu May 16

4. Screw holes:

Fail if hole is not smooth or exposed fiber, and could not be smoothen using sandpaper.

Measurements show more

Length of Latch Beam (mm)

Mess. 1	<input type="text"/>
Mess. 2	<input type="text"/>
Mess. 3	<input type="text"/>
Ave.	<input type="text"/>
S.D.	<input type="text"/>
Expected	560.07
Tolerance	0.784
Diff.	<input type="text"/>

After Measurements
Tap the available images below to enlarge them.

5. Final Inspection (Entire Beam): FAIL

Comment:

When all look OK, tap "Upload to HWDB" below

[Send via email](#)

Saving and Uploading


- Saving can be done on or offline
- All data must be entered in order to upload

10:22 PM Thu May 16 66%

Length of I-Beam (mm)

Meas. 1	
Meas. 2	
Meas. 3	
Ave.	
S.D.	
Expected	3425.19
Tolerance	3
Diff.	

After Measurements
Tap the available images below to enlarge them.

5. Reinforcement plate: 

Properly glued and cleaned, clamped, and stored for ~2hrs for drying.

6. Final Inspection (Entire Beam): FAIL

Comment:

When all look OK, tap "Upload to HWDB" below

[Send via email](#)

[Upload to HWDB](#)

[Save](#) [Load](#)

Box Beams

- They will be QC'ed and stored in a separate FD2 app
- A proper process hasn't been made yet

