HWDB APIs

- **Web form**

- **API on iPad**

- **What (other) interfaces do you need?**

WEB Form

- WEB forms are provided by HWDBl.

User(s) can then fill the form

YOU define the form

Mobile device - 1

- MN group is developing an iPad app to do just that.

Supports multiple users/iPad

Makes uploading multiple entries easier

Corresponding mechanical drawing is easily reachable

Mobile device - 2

Can provide step-by-step assembly procedure

the 6th CPA Unit DFD-**20-G100** (DFD-**20-H100**) (top Unit Panel) using 1/2'' holes in the Top Main Support Bar.

14. Move to the tower CPA assembly frame and lower onto the 5th Unit, sliding the Horizontal FSS pieces over the 5th Unit Intermediate Bar.

15. Drive 0.25'' diameter X 2.5'' long dowel pins into frames and bolt together with 1/4 - 20 X 2.25'' SS socket head on each side of the CPA Units at the intersection.
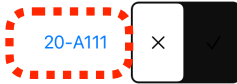
16. Lock the Unit into the pace on the tower frame by closing the safety [ ] using the safety pins.

17. Remove the lifting fixtures from the Unit.

18. At the Unit intersection, attach 4 Brass T-Straps DFD-**20-A111** (2 each side of CPA) using 3 - #8-32 X 1/2'' screws with a single Belleville washer each.

19. Route the 4 jumper wires DFD-**20-A113** from the upper Unit through the horizontal frame holes to the lower Unit at the Unit intersection and attach using #10-24 X 1/2'' screws with Belleville washer, 2 flat washers and a #10-32 nut. Order of connection should be: screw head - ring lug - flat washer - RP - flat washer - nut (flat washers in direct contact with RP).
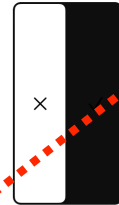
20. (Place holder) Hang the Panel by its hanger bar on its trolley and remove from the assembly frame.
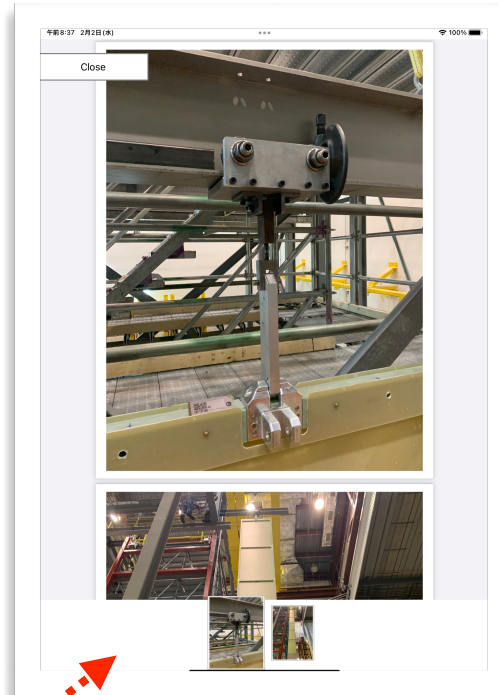
21. Fill in the "CPA Completed Panel Checklist".

22. Repeat steps 1-21 for the 2nd CPA Panel in the crate.

20-H100

20-A111

20-A113

Checklist

along with links to the corresponding pictures and drawings

Close

and link(s) to a checklist (form to be uploaded to HWDB)

CPA Completed Panel Checklist

Cancel   Print

Barcode

Date: 2/2/22   午前8:40

Name	NOT OK or OK	
Hinge Block to FSS connection	×	✓
HV Bus	×	✓
HV Bus connections	×	✓
FSS connections	×	✓
Profile connections	×	✓
Straightness	×	✓
Flatness	×	✓
Dust	×	✓

Other Comments:

⬆ Upload

Mobile device - 3

Units – all measurements are in **inches**.
Mechanical Drawing – Clicking a **drawing number** pulls up its full original drawing.

DFD-22-5523	Expected	Pass/Fail	Meas. Side T	Meas. Side B	Diff. Side T	Diff. Side B
Square Cut 1	19.19+-0.03	Failed Passed	19.20	19.20	-0.01	-0.01
Square Cut 2	19.18+-0.03	Failed Passed	18.99	19.31	0.19	-0.13

DFD-22-5523	Side T		Side B	
Tr. Sq. C. 1 L	Failed	Passed	Failed	Passed

can also take in the Excel-sheet style

午前8:47 2月2日(水)   •••   🛜 100% 🔋

Units – all measurements are in **mm**.

	A Dia.	B Dia.	C Dia.	D Dia.	AB Dis.	A to Edge 1	B to Edge 1	C to Edge 1	D to Edge 1
Meas. 1	11.20	20.34							
Meas. 2	11.16								
Meas. 3	11.32								
Meas. 4									
Meas. 5									
Ave.	11.22666...	20.34							
S.D.	0.04807...	0.0							
Expected	11.176	20	44.45	11.176	22.512	24.498	20.086	79.375	
Tolerance	0.254	0.254	0.254	0.254	0.254	0.127	0.127	0.127	
Diff.	0.05067	0.34							

	A to Edge 4	B to Edge 4	C to Edge 4	D to Edge 4	N to Edge 1	O to Edge 1	E Dia.	F Dia.	G Dia.	H Dia.
Meas. 1										
Meas. 2										
Meas. 3										
Meas. 4										
Meas. 5										
Ave.										
S.D.										
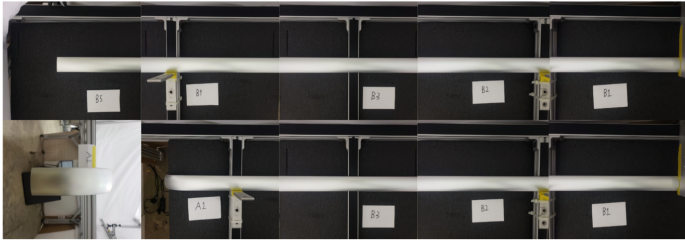
Mobile device - 4

helps uploading multiple image files

One could use different sources

for images to be uploaded

- **Camera (iPad's camera)**

- **Photos (images stored in Photos app)**

- **Files (provides direct access to other apps**

  on iPad, such as iClouds and MS OneDrive.

Mobile device - 5

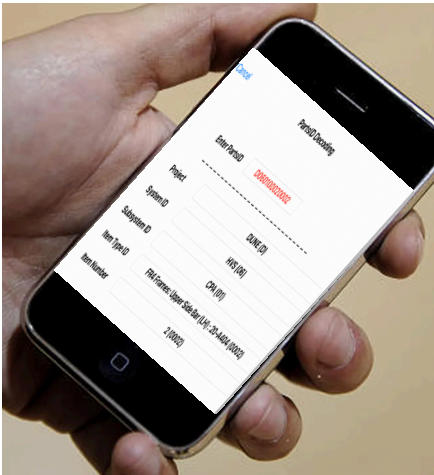can perform a quick analysis on the fly based on the info stored in HWDB

(non) Mobile device - 6

(via Catalyst)
- It can also run on macOS
  (both M1 and Intel), besides iOS.
- Maybe useful for ones need larger
  screen/keyboard (like me)?

NOT YET, but if requested...

ID scheme here is old.
Ignore it!

- **We could develop an iPhone app that allows to:**
  ▸ **scan bar/QC codes**
  ▸ **decode them and print its info in human-readable form**
  ▸ **show the corresponding contents on its browser (or within its app)**

Are there other Interfaces and functionalities that are needed and/or help the client side interface easier?

- Parse spreadsheets (csv) and directly upload to HWDB?

- ...?

- Devices other than Apple?

  ▸ **A python-based application (runs on any PC)?**

  ▸ **Android?**