

Special Technical Meeting on the 11T Dipole QH-Trace to Wire Jointing Proposal to move forward

F. Savary



CERN – Virtual room https://indico.cern.ch/event/978144/ – 2020.11.27

Statements, 1

Pin connector concept

- "General good quality, both connector and QH copper surfaces are in contact with the solder" [M.D. Crouvizier, M.D. Jedrychowski, M.S. Meyer]
- Can meet requirements, but two failure cases
- Caveat: the execution of the work requires great care
- The procedure is sensitive, relies too much on workmanship
- Direct connection between the QH-trace and the wire
 - "General good quality, wires and QH copper surfaces are in contact with the solder"
 - Meet requirements
 - Used in models (both QXF and 11T) and in full-length QXF, so far w/o a single failure



Statements, 2

Flat connector concept

- "General good quality, both connector and QH copper surfaces are in contact with the solder"
- Can meet requirements, however internal defects have been observed
- Flat connector concept, with Omega
 - Does not meet the requirements
 - "Majority of the connector is soldered but significant imperfections are noticed"
 - "Poor bonding with the presence of large bonding imperfections"
 - The execution of the work requires also great care



Proposal

 Based on the results of the work presented today, it is proposed to implement the solution relying on a direct connection between the QH-trace and the wire





Thank you for your attention! Questions?



2020.11.2

Special technical meeting on the 11T dipole QH trace to wire jointing