



Premounting of AOHs for the TEC in Hamburg



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AOH Meeting, CMS Week

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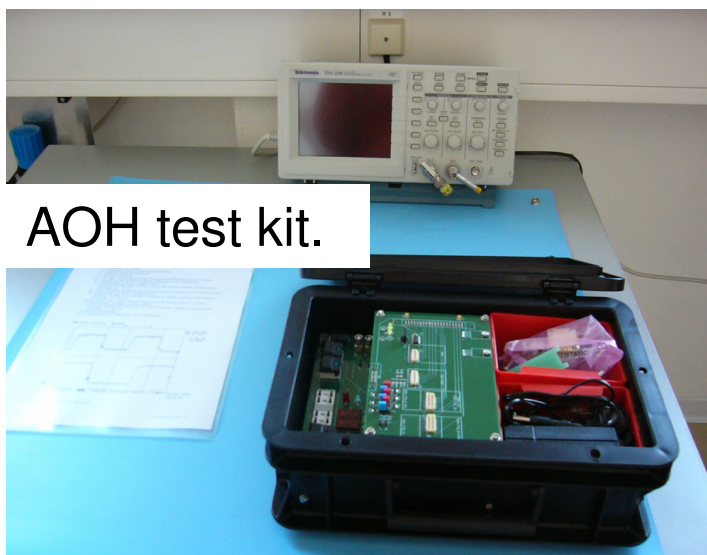
- **Status of AOH Mounting in Hamburg**
- **AOH related issues**
- **AOH availability for TEC**

AOH Mounting in TEC.



- In the context of the Tracker Reorganization it was decided in Dec 2004 to reduce the number of Petal Integration Centers for the TEC.
- Petal integration was delayed by the availability of modules (hybrids and sensors missing.)
 - Time waiting for modules can be used constructively by premounting AOHs on petals. Mounting of AOHs and handling of the fibers is a delicate task and takes up a considerable fraction of mounting petals.
- Hamburg agreed to take care of AOH mounting for TEC with two assembly lines.
- Rate: Mounting AOHs on two petals/day. → ~9 Months, starting April 2005

Grey room with two setups



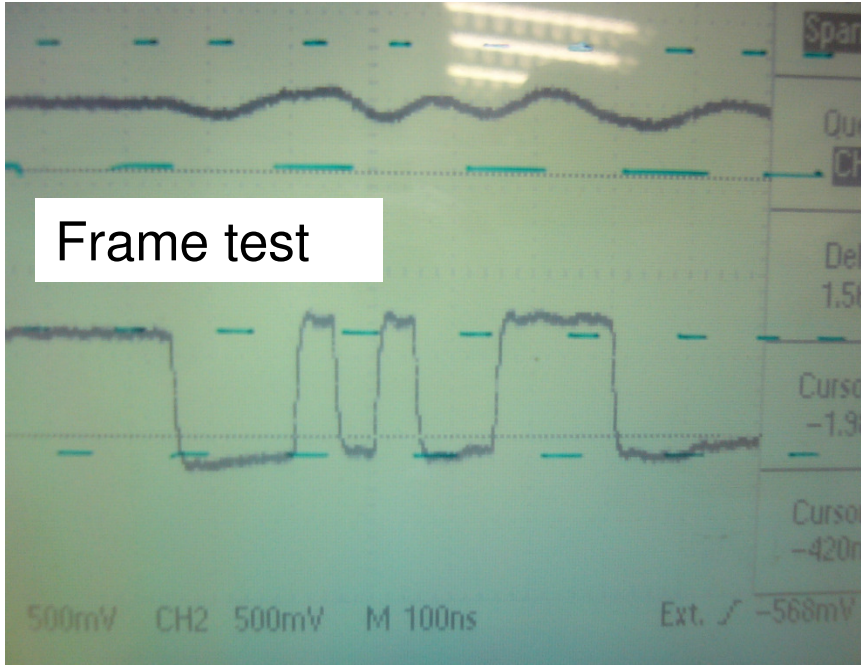
AOH test kit.



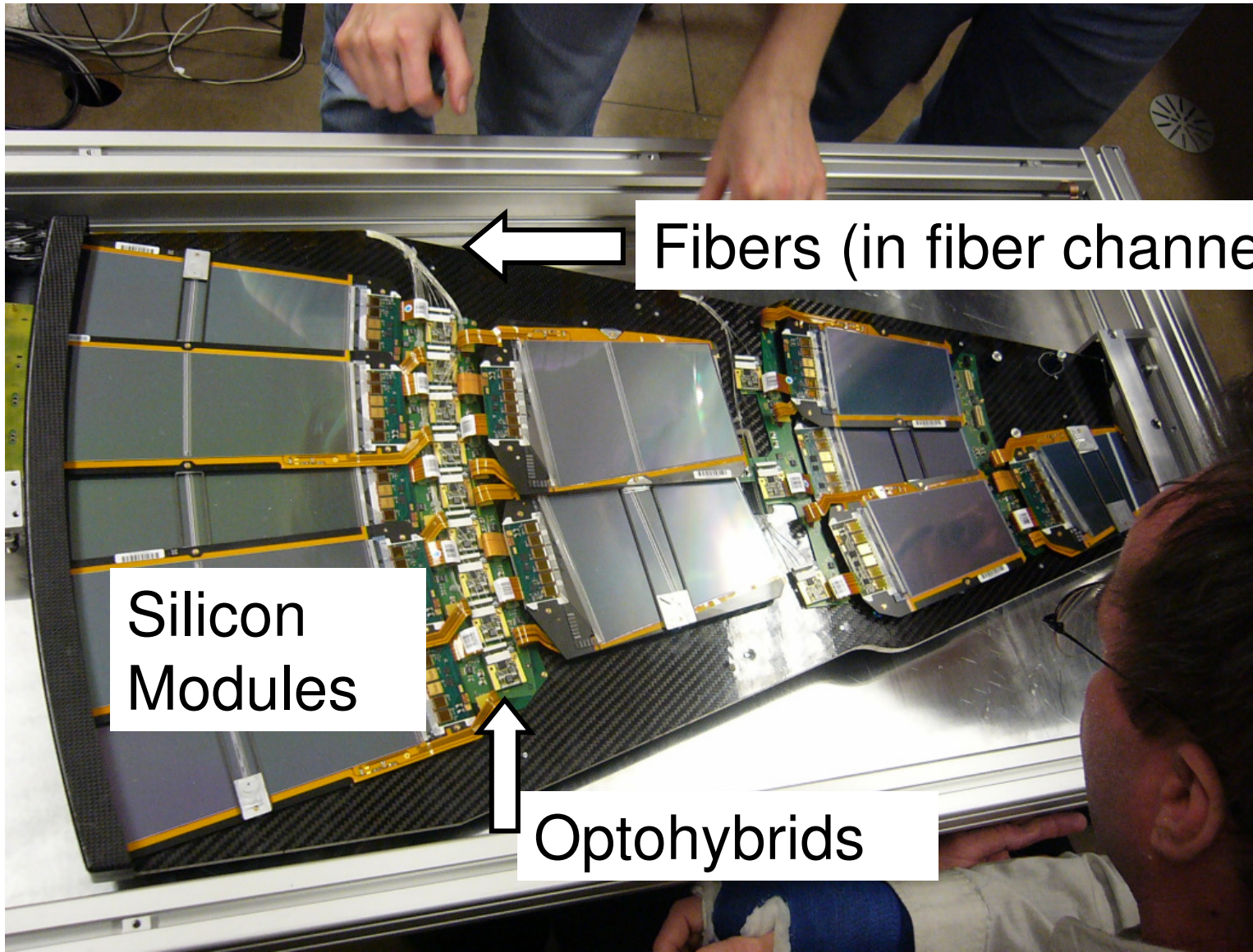
Fiber protection.

Procedure

- Optical inspection of petal and AOHs
- Mount CCUs, test
- Mount fiber clips.
- Mount AOHs in groups, connect fibers to patch panel, mount hybrids, perform tests: including baseline test, frame test with min. gain requirement.
- Disconnect fibers from patch panel and store in transport box.
- Store fibers in Fiber Channel and close fiber channel with carbon profile.
- Upload db xml file to db and make all xml files available on local WEB site.



Petal with AOHs (and Silicon)



Status

- AOH mounting going very well. Have mounted AOHs on 81 petals so far.
-Initially had problems with optical gains: baseline amplitude and/or frame amplitude often too low. →All solved by cleaning all optical connections properly! (Discussions with Francois Vasey).

-Few bad AOHs: 20/1000 lost in TEC so far

-14 in Hamburg:

-10 broken fibers

-2 different fiber length

-2 rejected by assembly program (1 bias scan failed, 1 wrong type in db)

-Other centers

-5 overvoltages

-1 damaged by closing fiber channel

Bad AOHs will be collected and sent back to CERN.

Availability of AOHs for TEC: See linked spreadsheet.



Web page

http://wwiexp.desy.de/elog/AOH-Assembly/

AOH-Assembly logbook, Page 1 of 4

New | Find | Select | CSV Import | Config | Logout | Help

Full | Summary | Threaded

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ID	Date	Petal #	Petal Type	assembled by	assembly date	Line	Location	
1	Mon Mar 14 12:12:06 2005	30250200000090	Front 1-3	Schuetz/Hamdorf	2/3/05	1	Aachen	CCU2 bad (part o Had to exchange.
2	Mon Mar 14 14:12:11 2005	30250300000083	Back 1-3	Schuch/Scharschmidt	2/28/2005	1	Aachen	
3	Mon Mar 14 14:18:49 2005	30250300000095	Back 1-3	Schuch/Scharschmidt	3/4/2005	1	Aachen	Exchanged ADH at light yield at c
4	Mon Mar 14 14:25:27 2005	30250400000007	Back 4-6	Schuch/Scharschmidt	3/7/2005	1	Aachen	Connector 1 on 5 Exchanged short (ADH channel 5_5
5	Mon Mar 14 16:15:13 2005	30250300000012	Back 1-3	Scharschmidt/Biskop/Schuch	3/8/2005	2	Hamburg (keep here as reference)	CCU (Typ B1) Nr -->Replace CCU. I2C test fails.
6	Mon Mar 14 16:22:31 2005	30250200000071	Front9	Buhmann/ Hamdorf	3/14/2005	1	Hamburg	Side1: Six holes
7	Mon Apr 4 15:34:48 2005	30250400000063	Back 4-6	Hamdorf/Buhmann	03/21/2005	1	Hamburg	Screw hole for A ADH 2420 exchange
8	Mon Apr 4 15:46:20 2005	30250400000024	Back 4-6	Schuch/Biskop	03/22/05	1	Hamburg	ADH 2767 exchange Frequent trippin
9	Tue Apr 5 10:14:15 2005	30250300000091	Back 1-3	Schuch, Scharschmidt	04/04/05	2	Hamburg	Rest of glue in