



Legnaro report

Items

- u **Chambers and SL review**
- u **Over pressure test**
- u **SL and glue thickness**
- u **Wire position measurements**
- u **Production line upgrades**
- u **Conclusions**



Chambers and SL review

Phi SL

Built : 20 # Wrong : 1 # Tested : 18

Theta SL

Built : 9 # Wrong: 1 # Tested: 9
(News)

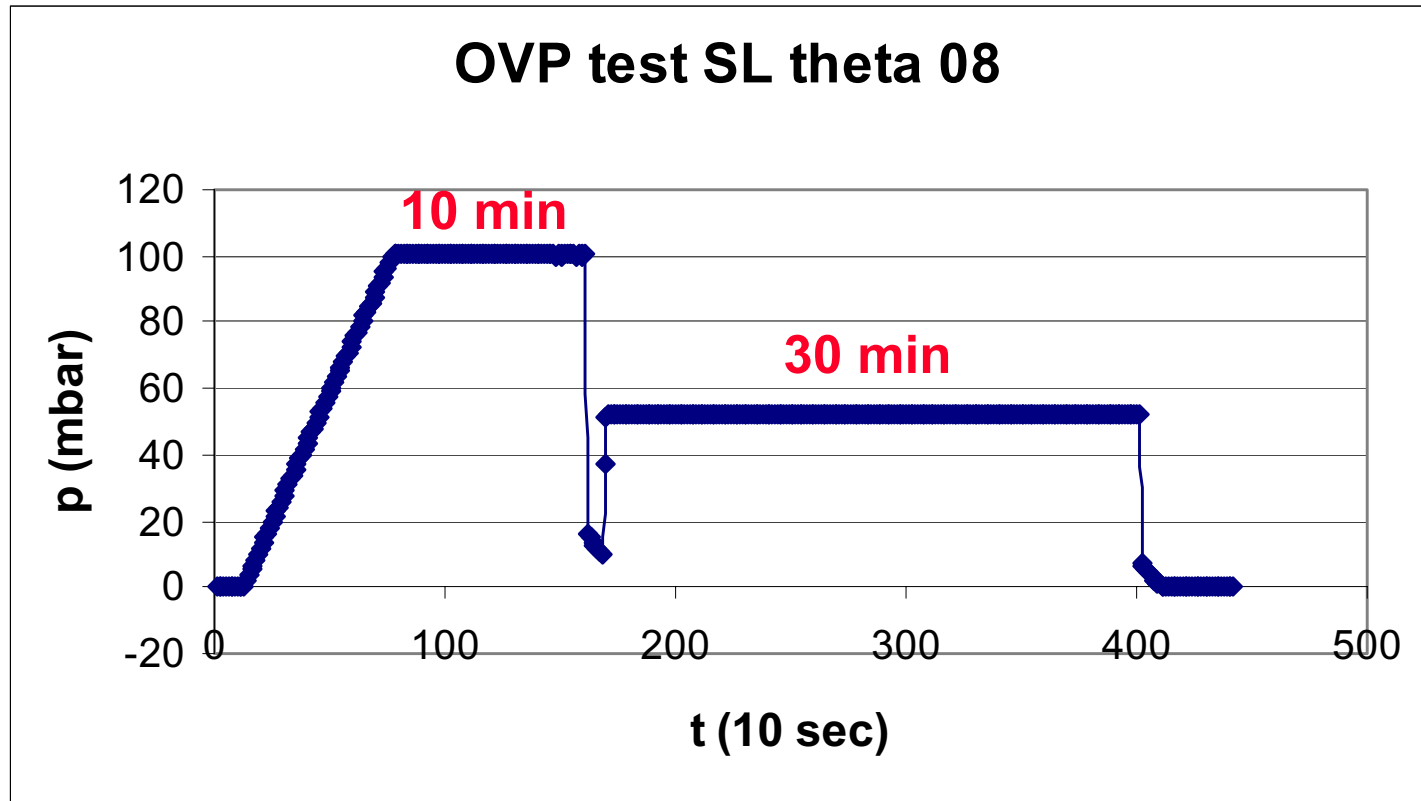
Chambers

Assembled: 4



Over pressure test

GOOD



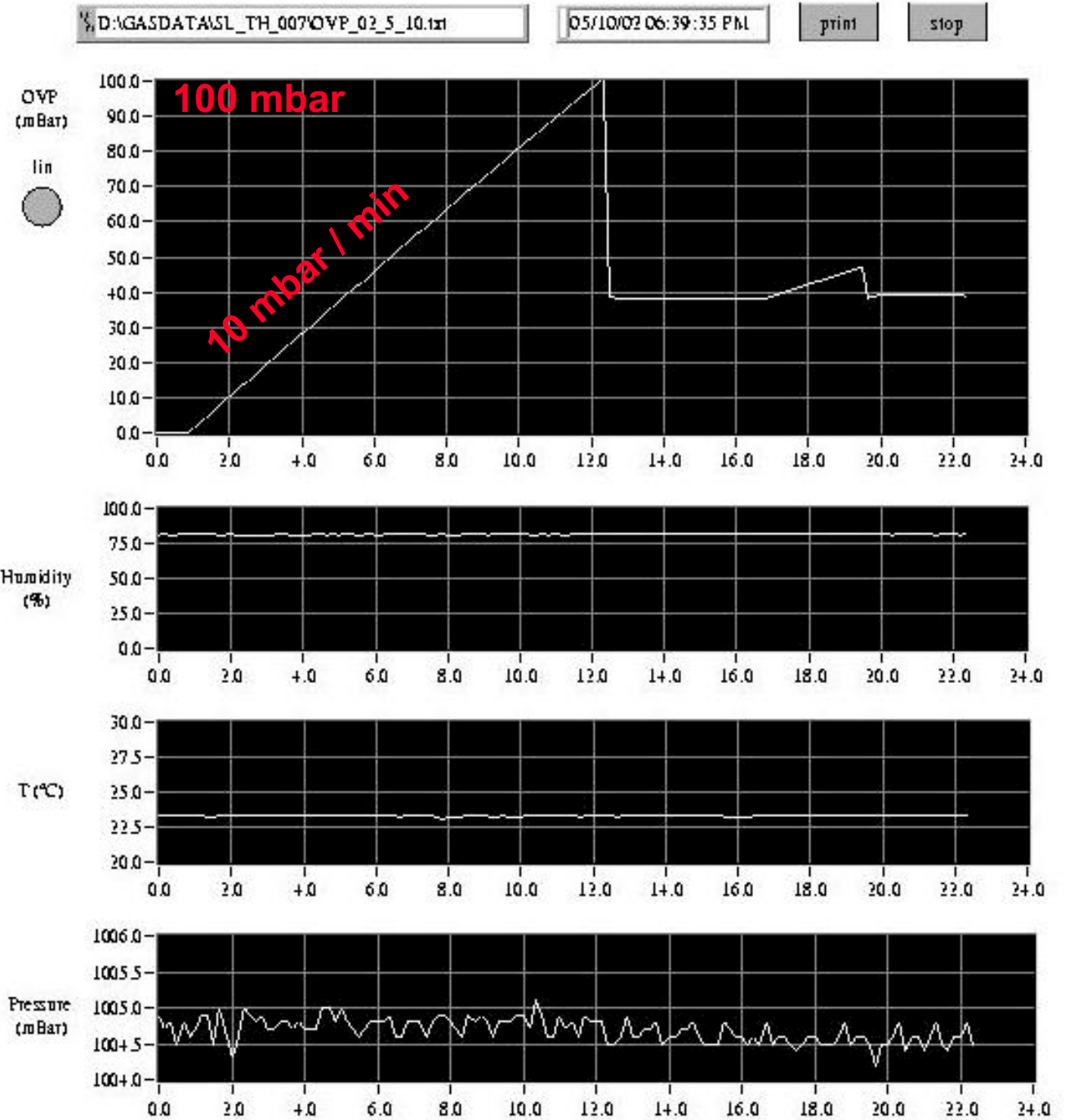


OVP test SL theta 07

BAD

Layer 1 I-beam 1-10 break off

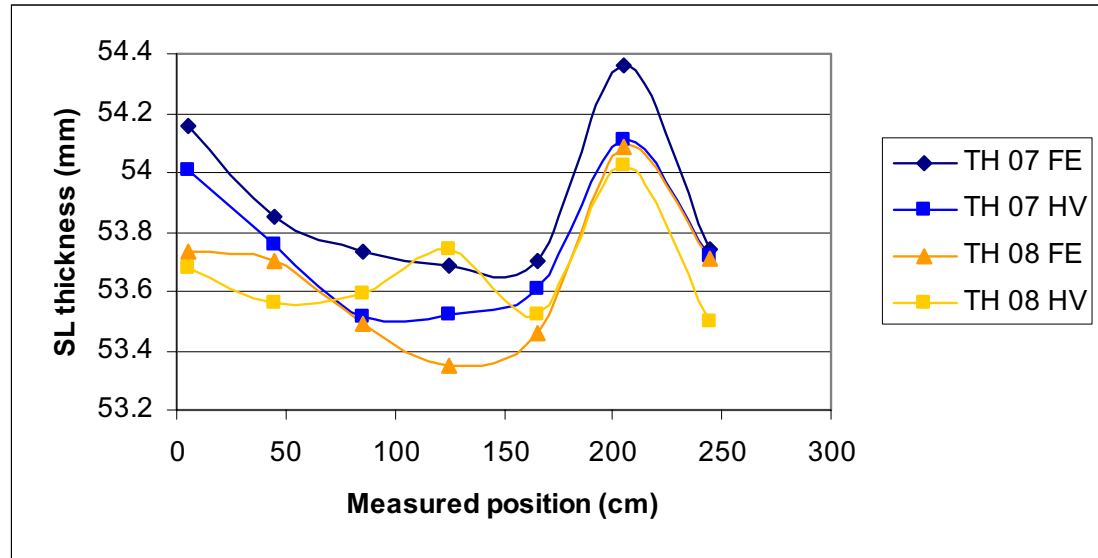
11/06/02 CERN CMS Week



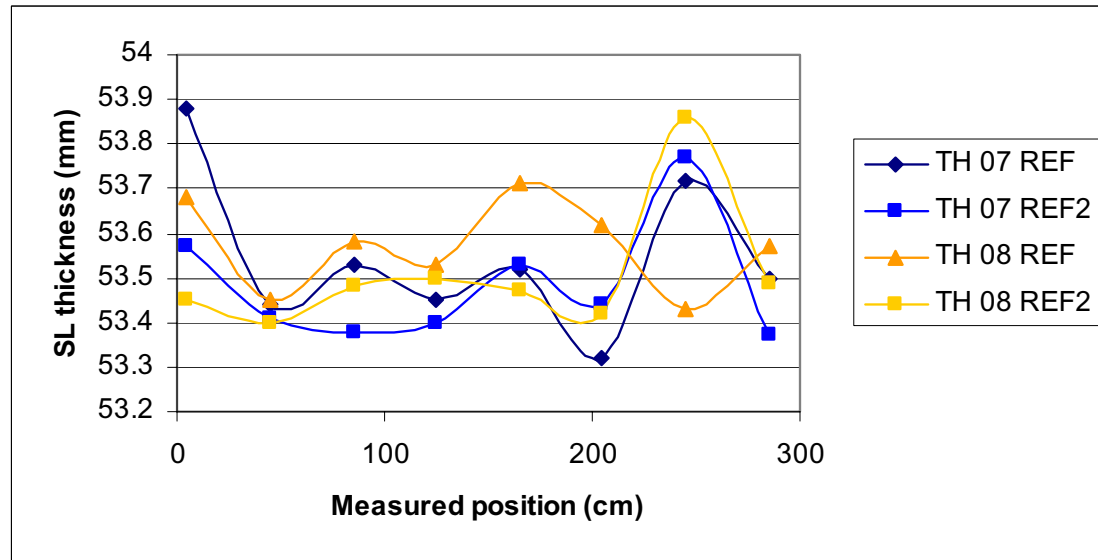


SL and glue thickness

TH 07 (OVP test BAD)



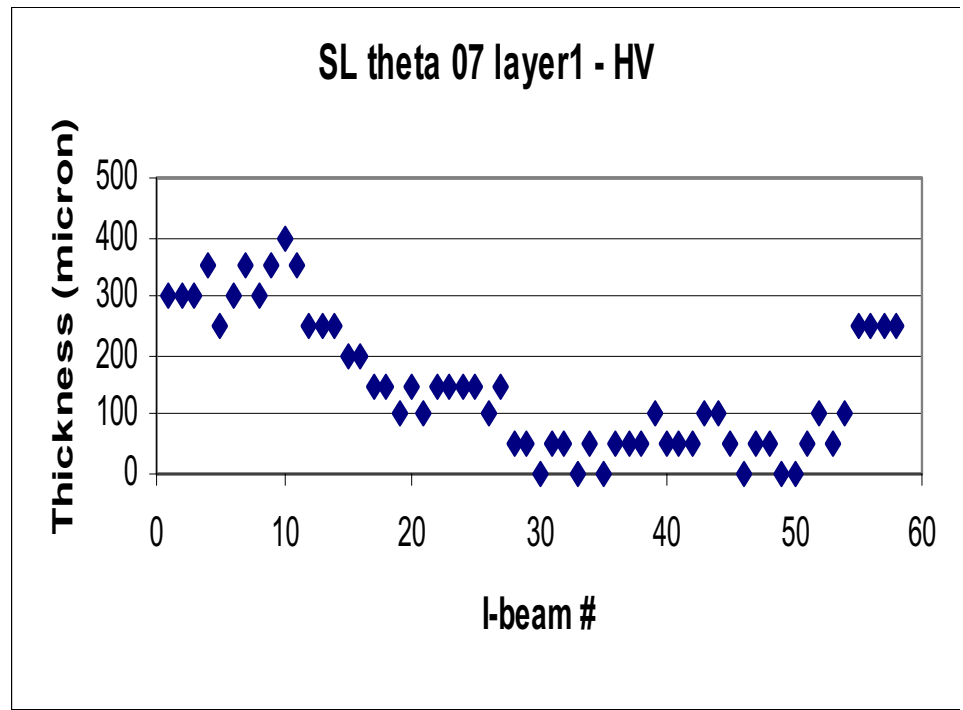
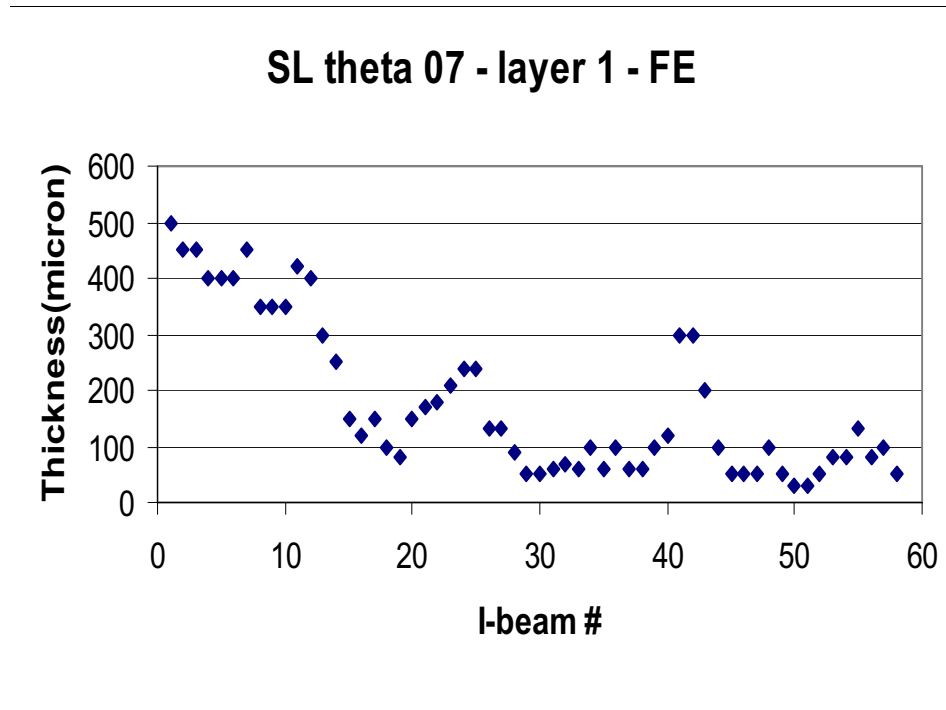
TH 08 (OVP test GOOD)





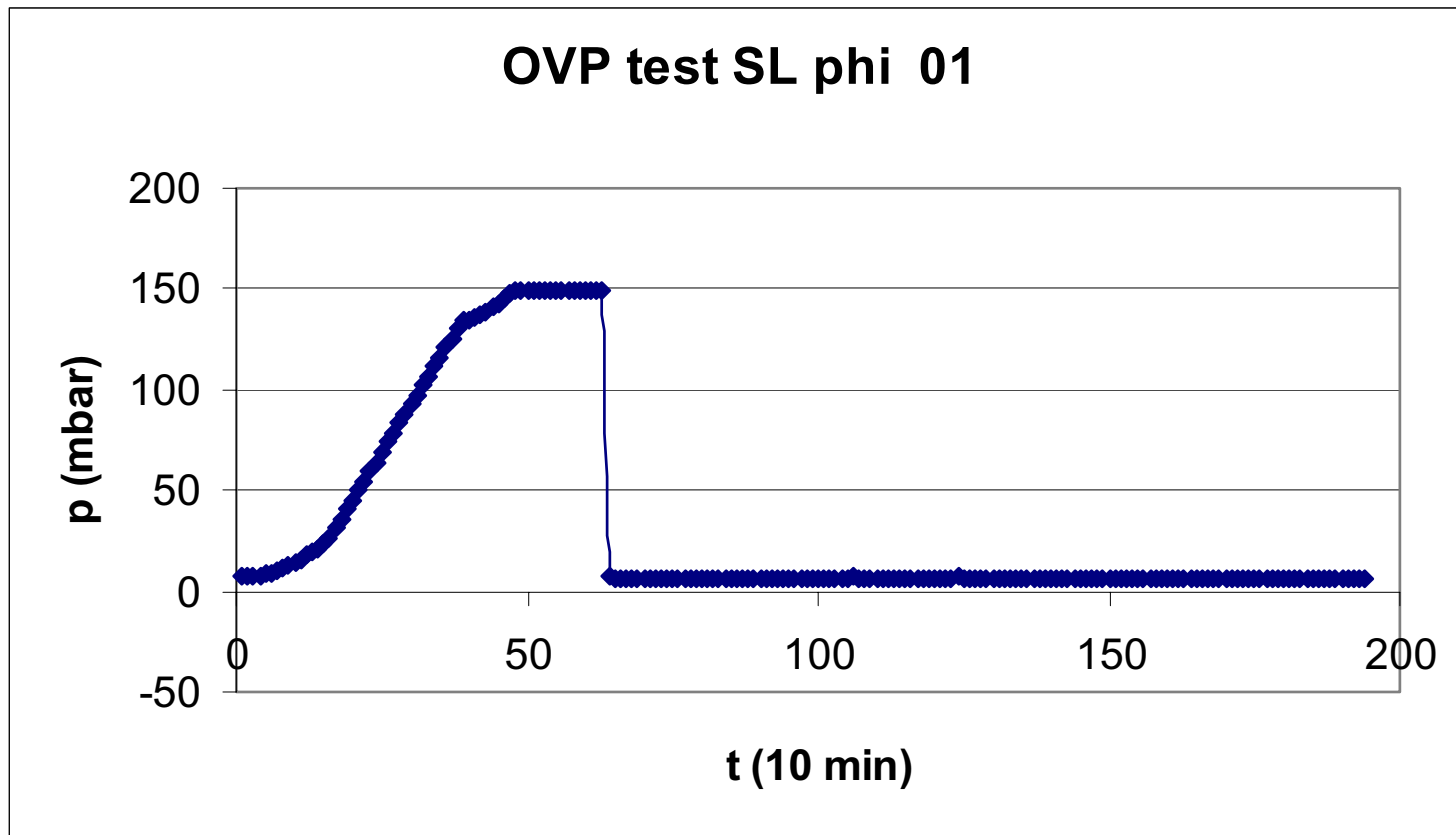
SL theta 07

**Extra glue thickness in layer 1 (up + down)
measuring each glue cordon thickness at
1 cm from FE and HV side**





TEST





Wire position measurement

Table Phi 1 FE side

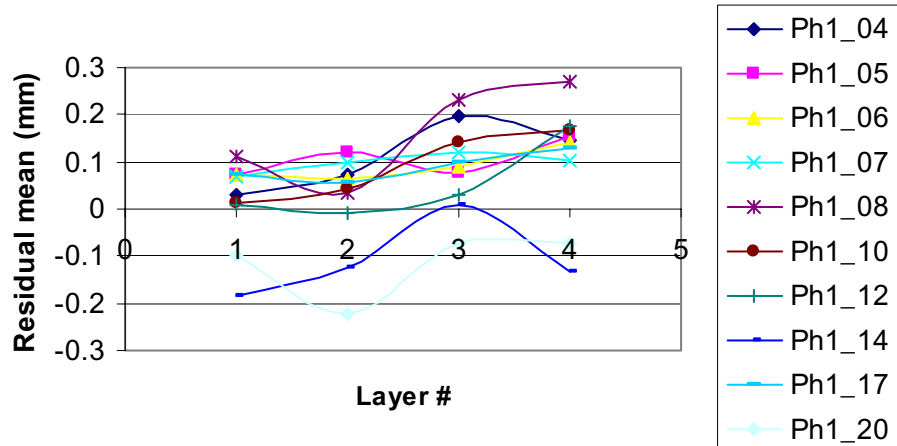


Table Phi 1 HV side

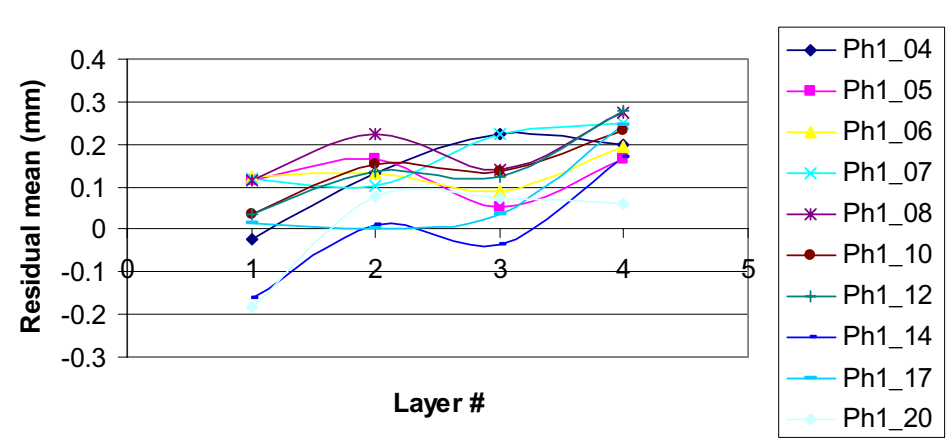


Table phi 1 FE side

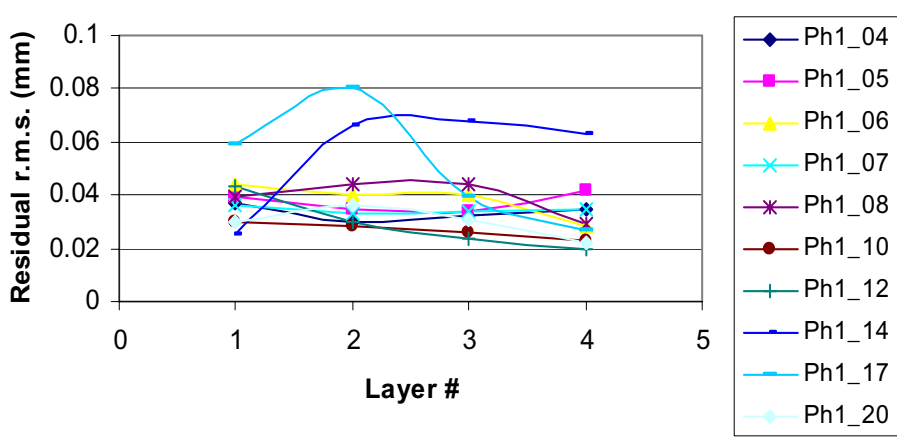
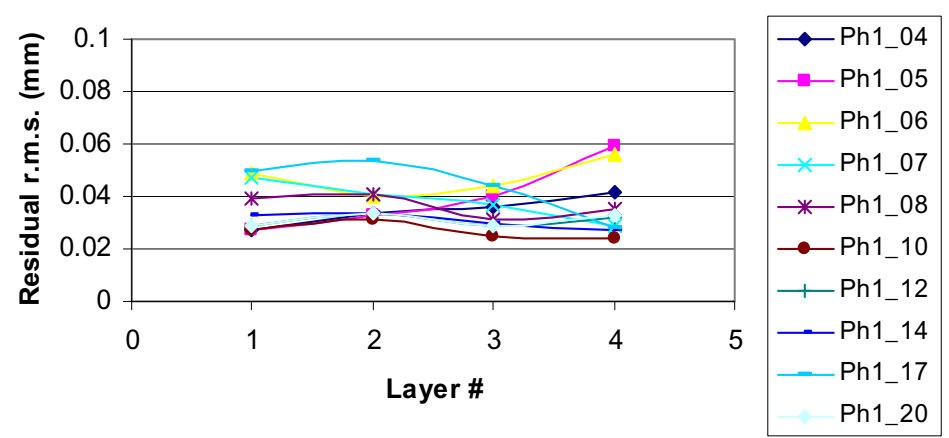
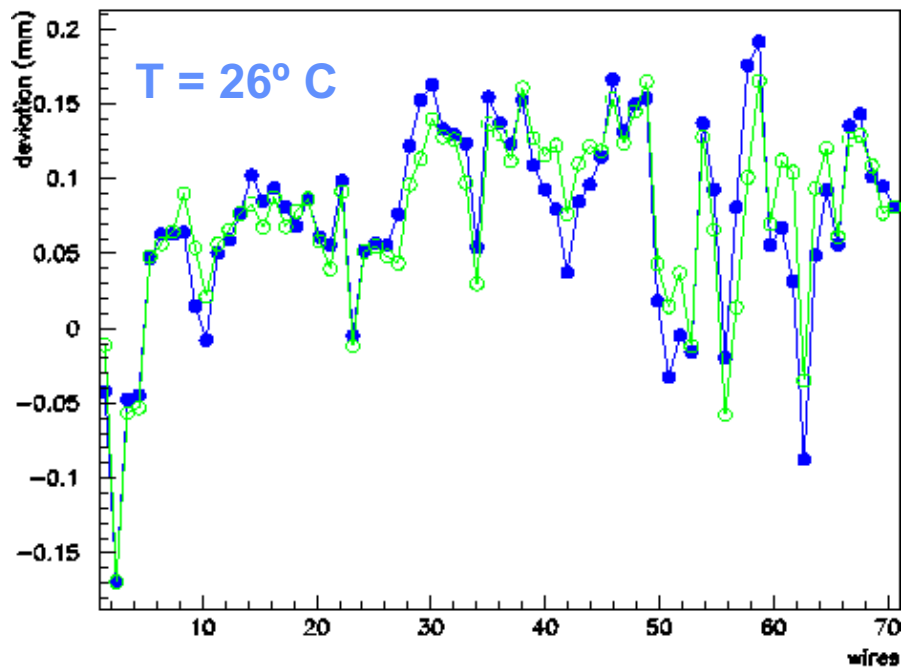


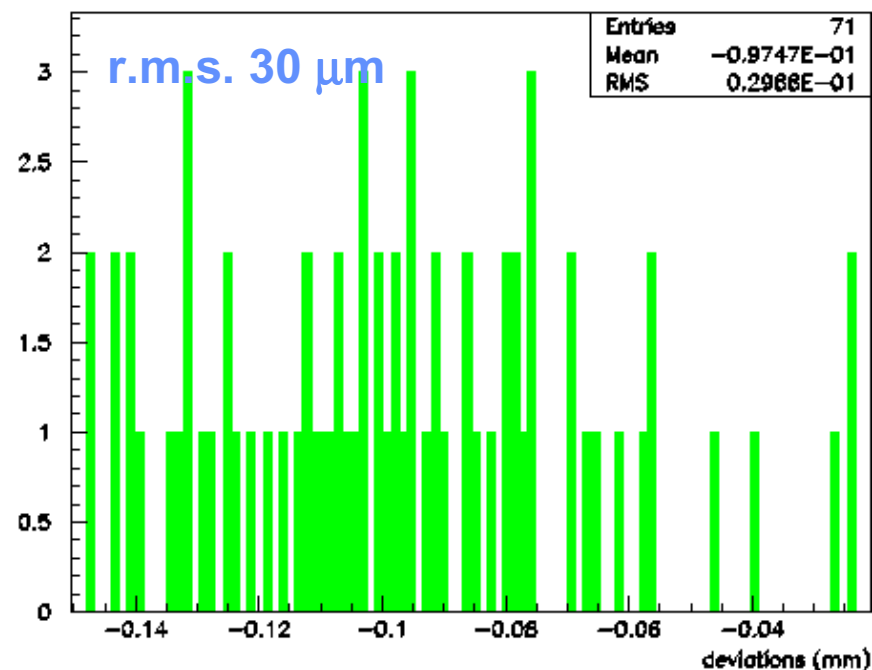
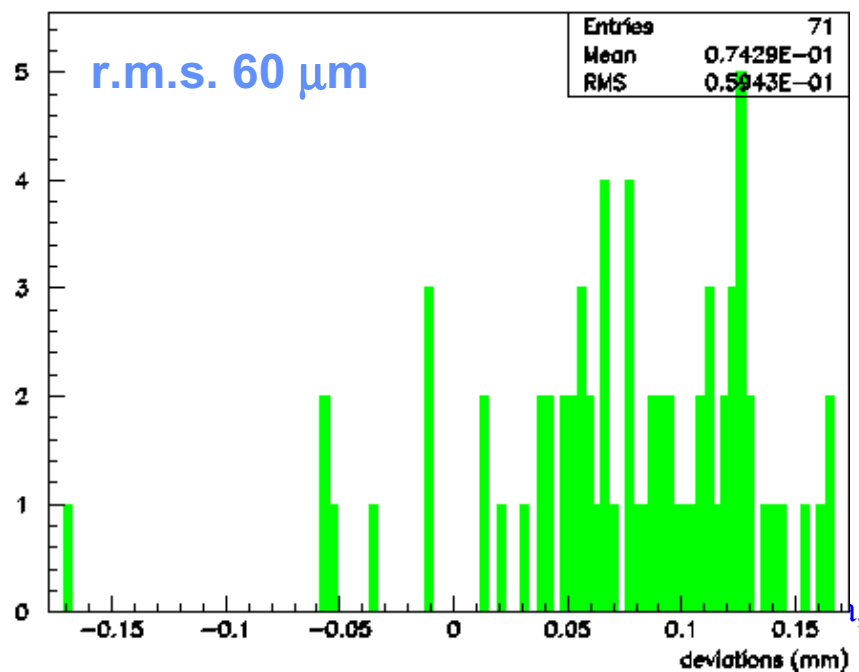
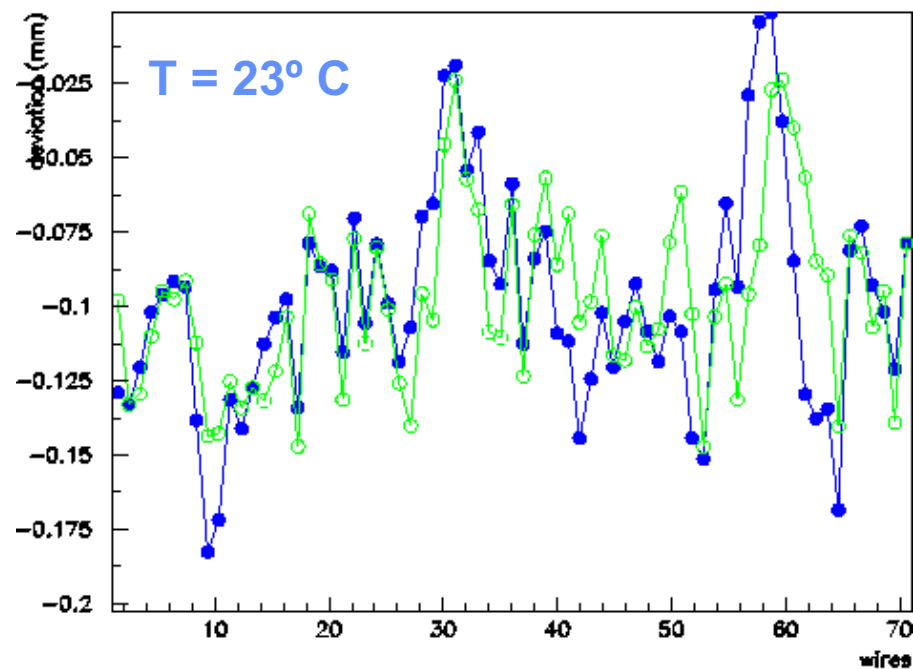
Table phi 1 HV side



Phi blu=raw, green= metro corr.



Phi blu=raw, green= metro corr.





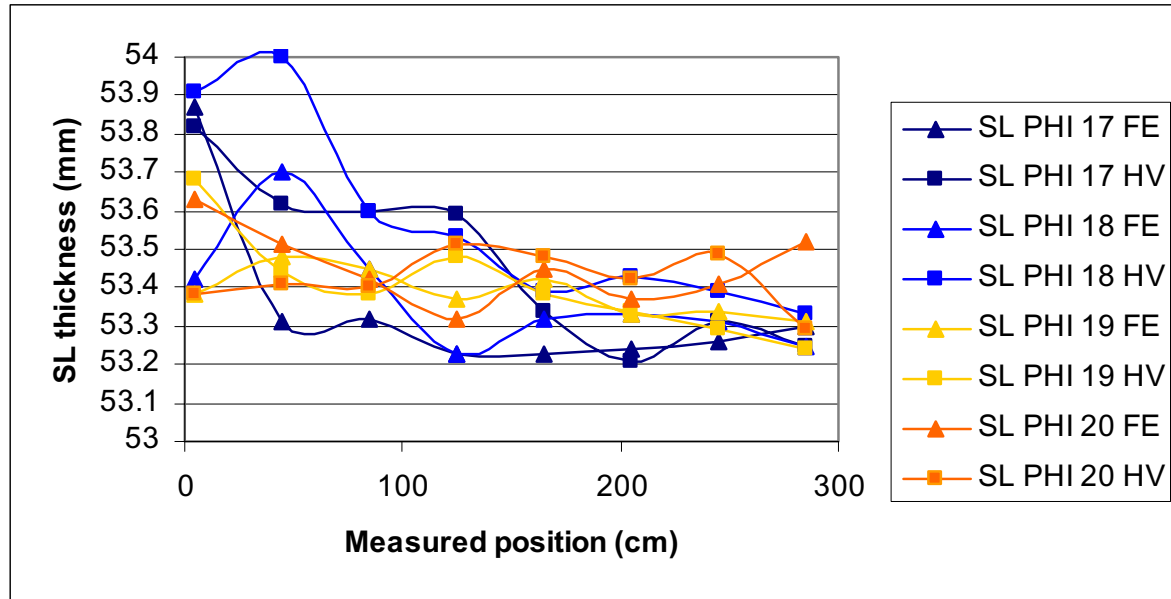
Production line upgrades

Upgrades

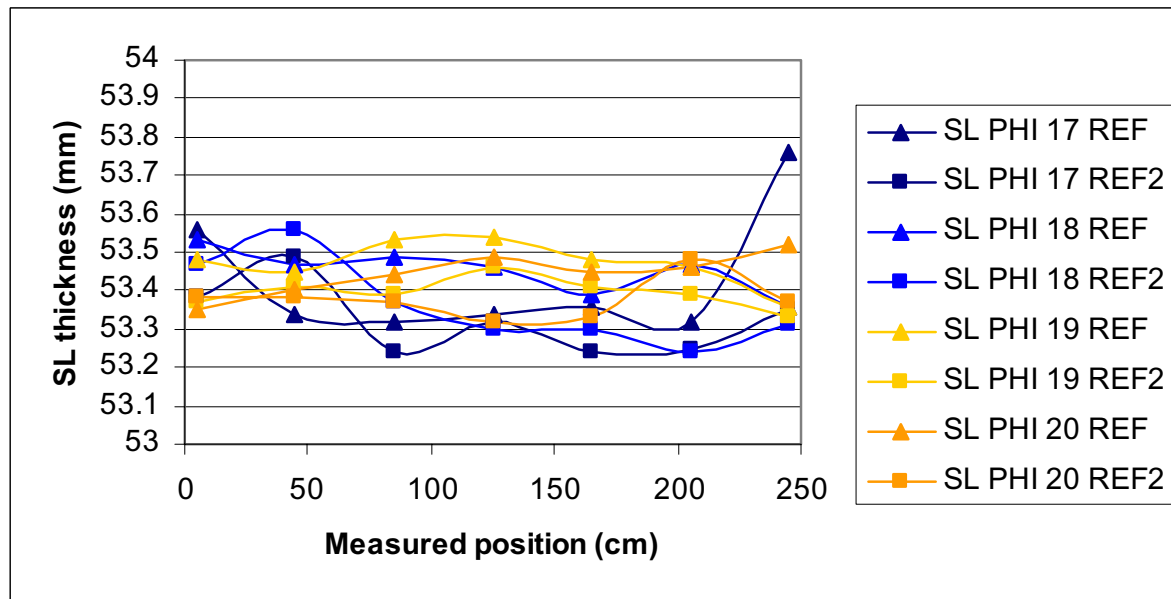
- Ibeam tools (press I-beam ends, used from SL th 08, phi 19)
- New references (used from SL th 09 , phi 21)
- Weights (increased weights)
- Table # 4 (under construction)

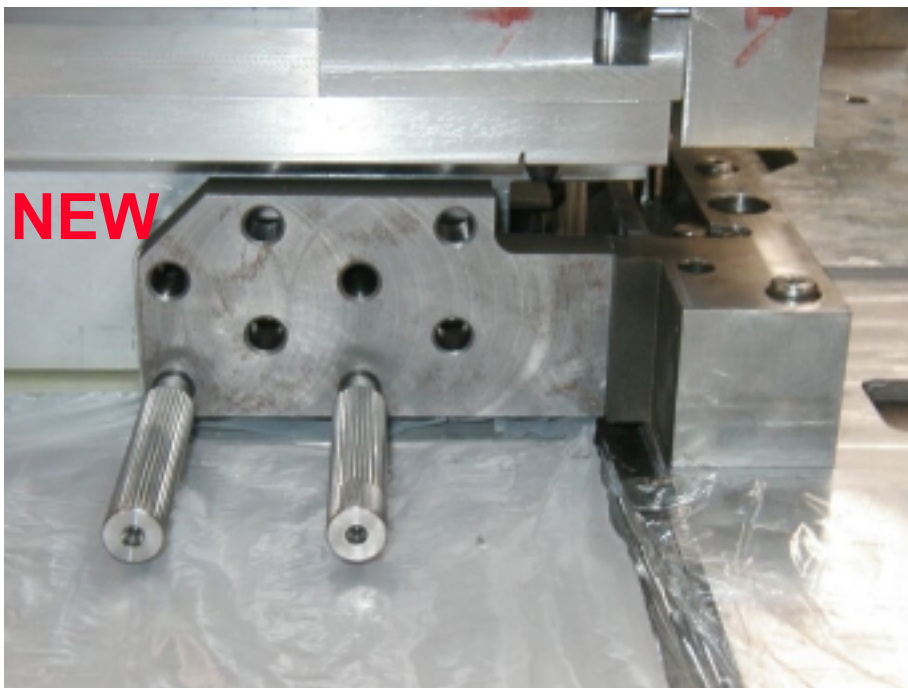
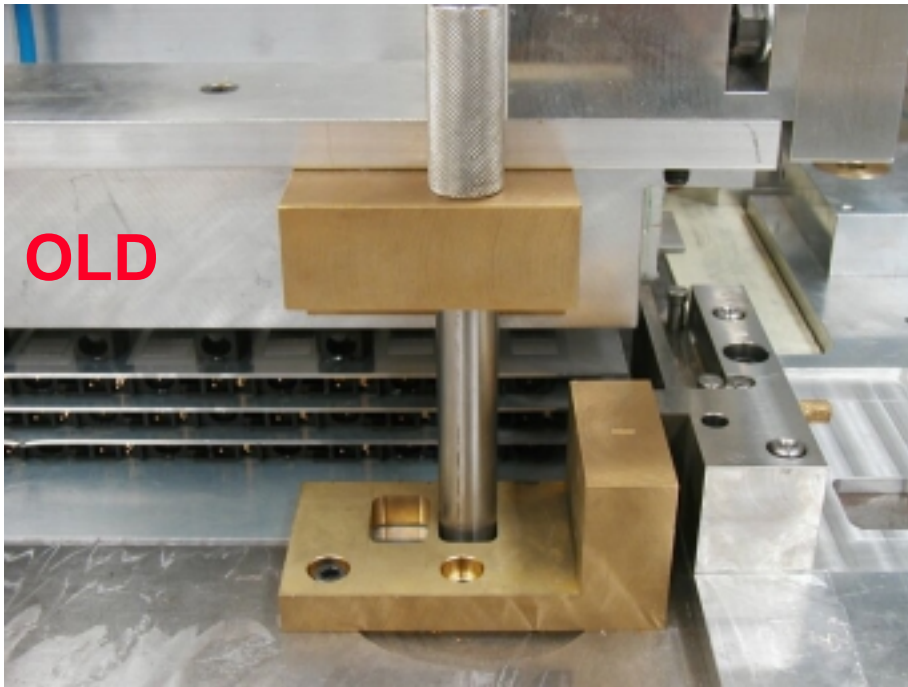


Before upgrade

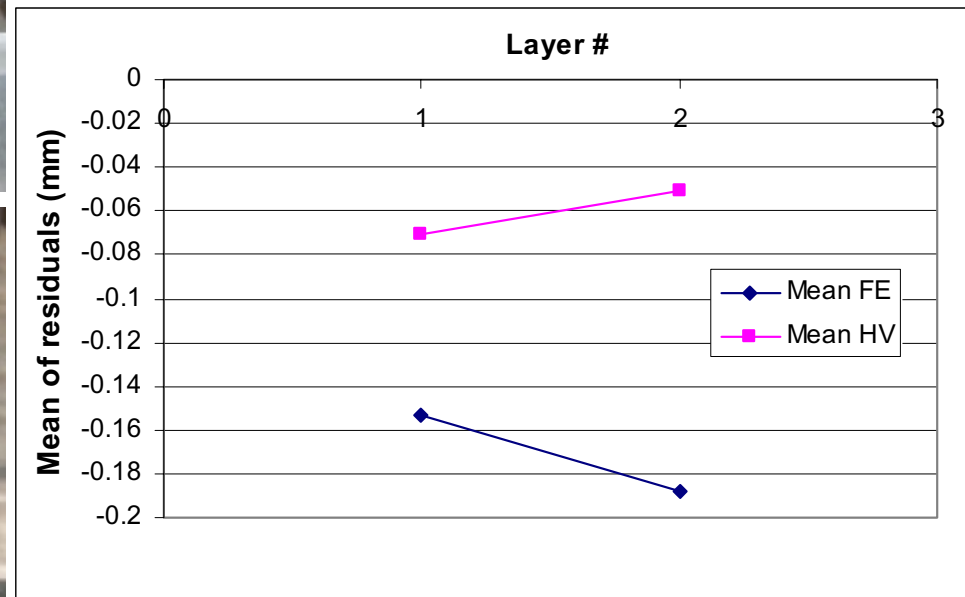


After upgrade





SL theta 09 built with new references





Conclusions

- **Production rate of SL at ~ 70 % in the last month due to upgrades**
- **27 SL built at LNL are OK with OVP test @ 100 mbar is it enough to work with absolute pressure ?**
- **Upgraded I-beam tools and references improved SL quality**