

LIU BWS. Mechanics

Dmitry Gudkov, William Andreatza
BE-BI-ML



Outline

- Installation status
- Kapton cables issue
- Discussion

Installation status

- PSB:
 - Scanners installation – done
 - PMT-Scintillators installation – done
 - Cables, patch boxes, patch panels – done
- PS:
 - Scanners installation – done
 - PMT-Scintillators installation – done
 - Cables, patch boxes, patch panels (ECR for PMTs is underway)
- SPS:
 - Supports and tanks - done
 - Scanners installation (2/4 installed)
 - PMT-Scintillators installation
 - Cables, patch boxes, patch panels

Some scanners will be replaced after the Kapton cables problem is solved.

Kapton cables issue

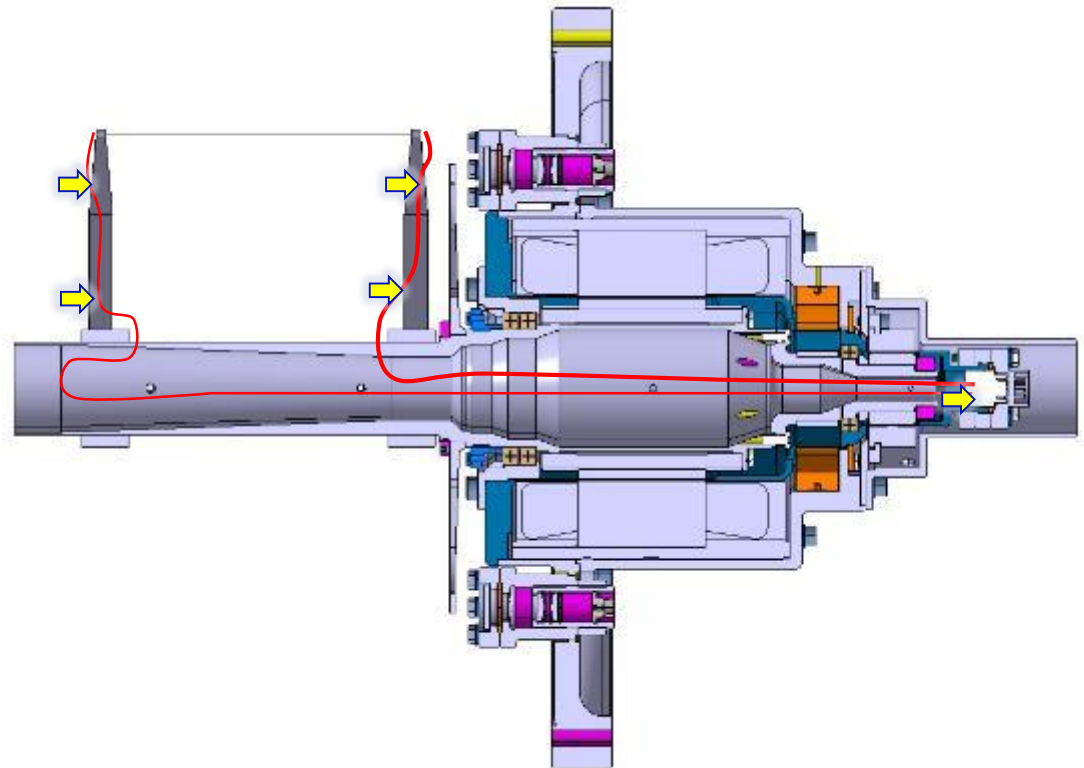
- We have identified all locations where insulation damage is possible
- The cables used in series scanners are not suitable for dynamic applications

3 cables (wrapped, for use in motion) have been ordered from 2 suppliers:

1. **KAP-BAND-L-AWG28 and KAP-BAND-L-AWG24 (Vacom)**
2. **301-KAPM-075 (Allectra)**

But they aren't delivered yet.

- These cables will be tested on one of our lab scanners
- The problematic locations will be protected by a Kapton sleeves (approved by TE-VSC)



Kapton cables issue

Reference	Configuration	External diam.	Conductor diam.	Insulation Thickness
KAP-BAND-L-AWG28	7x0.127	0.74	0.381	0.1795
KAP-BAND-L-AWG24	19x0.127	0.99	0.61	0.19
301-KAPM-075	19x0.15	0.95	0.75	0.1



Thank you!