

DL Factory Technical Meeting (Kick-Off)

Team :

Alan Muir

Philip Heath

Mike Lowe

Dan Salisbury

Dave Sim

Sotiris Vlachos

Carlos Chavez

Ged Bell

Anyssa Navrer-Agasson

Agenda

Personnel safety

Machine Protection

Tension Control System

Winding Head

Latching Mechanism

Tension Measurements (Laser & DWA)

Calibration system for Layer winding (recipe automation and camera)

Safety

- Personnel safety
 - Much improved from the original design, light curtain, SLS (safety limited speed) etc.
 - Need to consider what else is needed following safety review.
- Machine Protection
 - much improved from original. Jog controls disabled, safe zones introduced, command line filtering and protection.

Controls

- Tension Control System
 - Has to be in spec for the success of the project.
 - The better the machine performs - less time spent manually re-tensioning.
 - Need to test wires straight after they are wound to see how the machines are performing - is good tension being lost after moving the APA?
 - Consider moving the load cell amplifier to the winding head
- Latching Mechanism (does it need improvements?)
- Winding Head
 - Scheduled maintenance - TPM and PM
 - Improvements? Pulley and roller materials. Spring housing materials. Better machined sprockets.
 - Alternative lubricants - particularly for the spring housing, grease vs oil.

Measurements & Winding recipes

- Tension Measurements (Laser & DWA)
 - DWA developments, schedule
 - Aiming to reduce the use of Laser system in the future
- Calibration system for Layer winding
 - recipe automation
 - Camera and PLC integration