

dRICH build-in tools

General slow-control & interlock for temperature, power, cooling, pressure
cooling air reservoir (pressurized tank) to ensure heat removal in case of black-out

Annealing slow control & interlock on temperature, power

Radiators: slow control for humidity, pressure & temperature

Alignment mirror support system with piezo-motor control

Fibers ? LED/pulsed laser for basic tests (raw timing, working channels, stability)

Cosmic rays monitor ? Before installation

dRICH build-in calibration

ePIC stream: main data stream

dRICH stream: sub-detector tag in data stream

Calibration: assumed done offline on large statistics

Monitor: assumed done online on available data-stream

Threshold scan calibration based on dark counts

Synchronization calibration of PDU clocks

Dark count calibration & monitor based on on-board shutter

Time calibration calibration & monitor based on dRICH vs ePIC time
under study: ToT or slew-rate correction for after-pulses & stability

Optical parameters (refractive index & transparency)
calibration & monitor based on a control sample (e.g. electrons)

Alignment calibration & monitor based on selected kinematics