

Radiation tolerance of EPDM O-rings used at CERN: recent results

Wednesday 2 March 2022 13:45 (15 minutes)

Synthetic EPDM elastomers are used in vacuum seals throughout CERN, including Beam Intercepting Devices, and seal-lifetime may be severely limited by radiation exposure. Different varieties of EPDM O-rings are available on the market, and recent experiments carried out by R2M at CERN show that there is considerable variation in their radiation tolerance. The results of mechanical and structural investigations will be presented.

Presenter: FERRARI, Matteo (CERN)

Session Classification: Research and Development