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C1Or2A-08: A new European Standard for the protection of helium cryostats against excessive pressure

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As compared to cryogenic storage vessels, helium cryostats include active components such as superconducting devices, heaters, pumps and control valves, which strongly influence the risk of excessive pressure. The European Standard "Helium cryostats –protection against excessive pressure" is therefore being developed by the working group CEN/TC 268/WG6, dealing with specific helium technology applications.
The new European Standard will be applicable to all helium cryostats, including e.g. superconducting magnet cryostats and cryostats for superconducting radio-frequency cavities, to coldboxes of helium refrigerators and liquefiers, to ultra-low temperature refrigerator systems using 3He and 3He/4He mixtures as well as to helium distribution systems. It covers typical accidental scenarios in order to harmonise the risk assessment and common practice for the dimensioning and the design of pressure relieving systems.
We report on the general structure and conceptual improvements of the new Standard, as well as on the present work status.

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