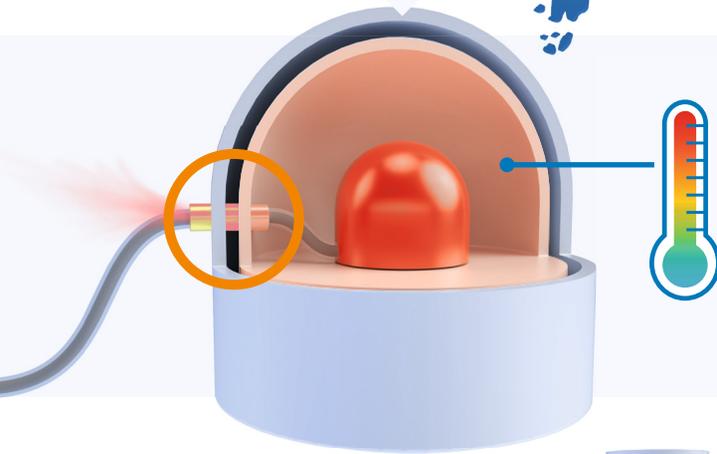


Helping prevent another Fukushima: some technical solutions are already available.

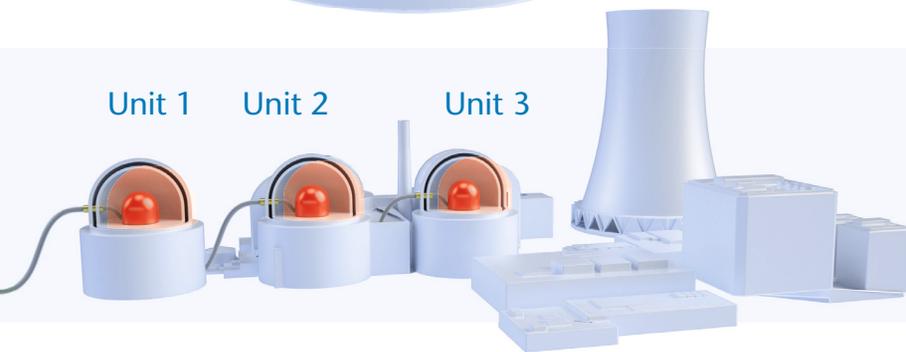
On March 11, 2011,
the **Great East Japan Earthquake** hit at a
magnitude of 9.0



The damaging effects of the earthquake and following tsunami caused a severe accident at the Fukushima nuclear power station.



The plant's polymer-sealed hatches and electrical penetrations assemblies (EPAs) were problematic in this dire scenario. Not designed to withstand the extreme temperature and pressure that occurred at the site, they were a leak point for hydrogen which led to explosions – worsening the situation.



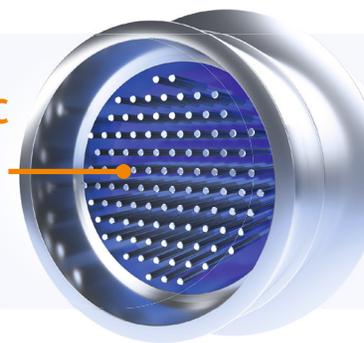
Per analysis, temperatures in all units reached destructive levels **over 500°C**

IAEA Report summary:

IAEA TECDOC-1818 is a recent report issued by the International Atomic Energy Agency (IAEA) that examined the capabilities of equipment to withstand severe accident scenarios. Part of the findings included the statement that inorganic materials, such as glass and ceramics, are a superior choice to withstand severe accident conditions in comparison to organic materials, such as low-grade polymers.

SCHOTT has produced the Eternaloc® EPA with a containment seal that **does not degrade** over time because it is made of **inorganic specialty glass and metal**. This enables them to withstand severe accident conditions like those at Fukushima, even decades after their installation.

Inorganic specialty glass



Today, **over 12,000 SCHOTT EPAs** are installed in more than 50 power plants and nuclear submarines worldwide. They have performed **maintenance-free since the early 1960s**.