

CONSTRUCTION DETAILS

BEHIND THE CONSTRUCTION FENCE

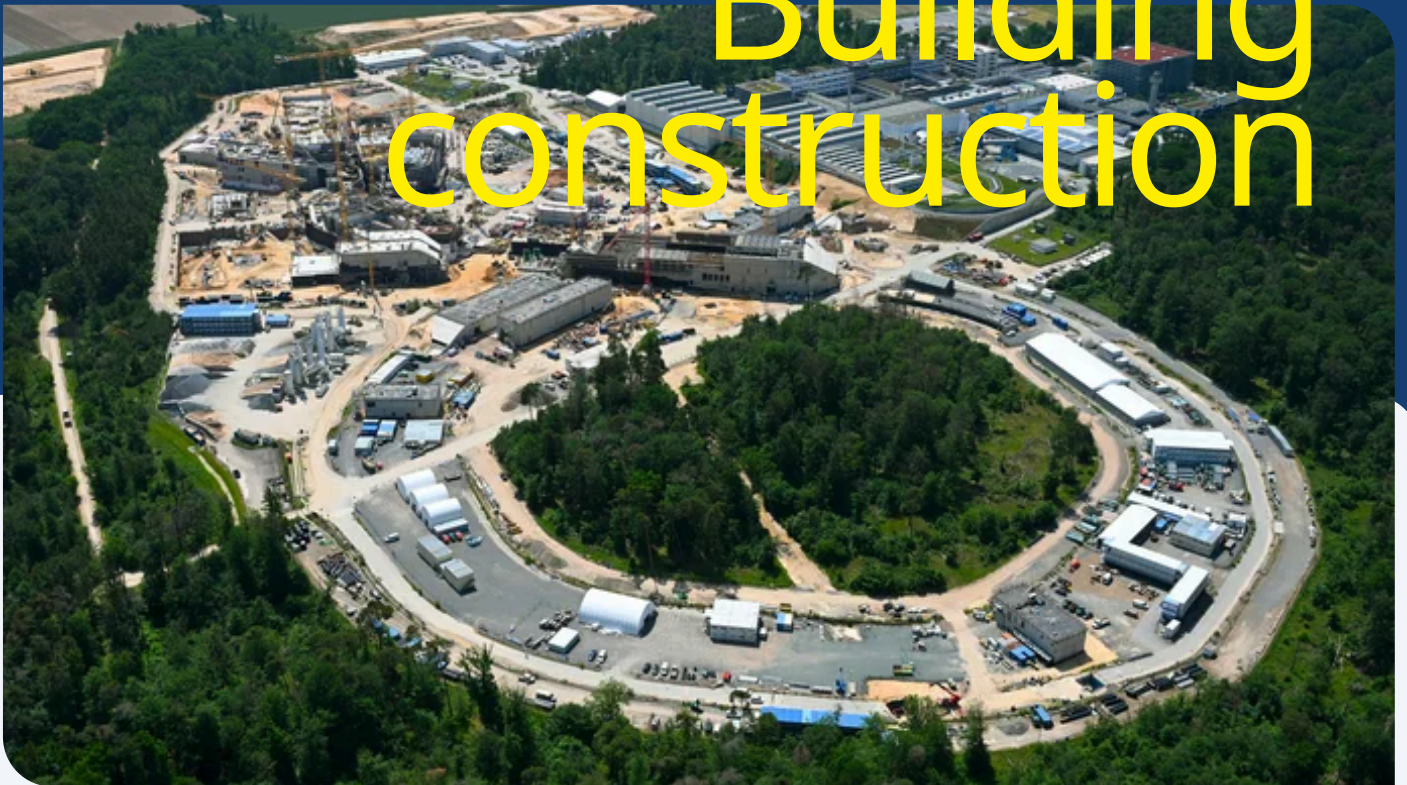
INNOVATION

VIDEO

FAIR: An unique building project

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Building construction



When the FAIR accelerator centre in Darmstadt is completed, it will be one of the largest research projects in the world. PORR is also innovative, having used a special type of concrete.

Every construction project is unique. But some are more unique than others. And even though this is not actually possible, it does apply to the ring-shaped, 1.1km-long accelerator tunnel for the FAIR particle accelerator in Darmstadt. 340,000m³ of reinforced concrete and 40,000 tonnes of reinforcing steel have to be moved

here. Numerous trades and teams have to be at the right stage of construction at the right time and work together perfectly. And then we also have to find innovative solutions. For example, we used a special, self-compacting concrete that can fill even the smallest cavities.

FAIR: A look behind the building fences

Hand in Hand

In the FAIR project, which is connected to the existing facility at the GSI Helmholtz Centre for Heavy Ion Research, we are constructing the accelerator tunnel as well as the building sections above it, including the junction building and underground transfer hall, and the adjoining main supply building. From the transfer hall, the ion beam will be routed into the accelerator ring after commissioning. As

part of the consortium, our special civil engineering department created the basis for the accelerator tunnel in advance by improving the subsoil conditions. Our teams from construction engineering, pde structural engineering, and building materials technology will continue to work together closely. And complete this more than unique project.