

Managing SMR Life Cycles

A gap analysis tool combined with experience to help you effectively manage your SMR life cycle for risk and operational optimization

This discussion considers best practices for risk management of SMR's while subsequently optimizing unit operation. Becht has consolidated years of design, construction, process, metallurgical and FFS experience into an assessment tool which enables a holistic view of an SMR through a pragmatic and industry proven lens. The assessment considers design and construction factors, operational practices, and effective inspection methodology. It provides a concise understanding of existing risks, through identification of gaps between the client's SMR management and industry leading practices. Appropriate risk mitigation activities are recommended.

Becht engineers have used this approach to conduct whole-of-life studies of SMR's in seven ammonia plants. Outcomes include sustainable production increase, failure avoidance, and optimization of RBI programs.

Discussion will include:

- Benefit of using a multi-functional lifecycle approach
- Balancing equipment life and production throughput
- Application of bow-tie risk control methodology to SMR's
- Integration with the RBI program
- Case studies from previous assessments