INTRODUCTION TO MODULARISATION

October 2025

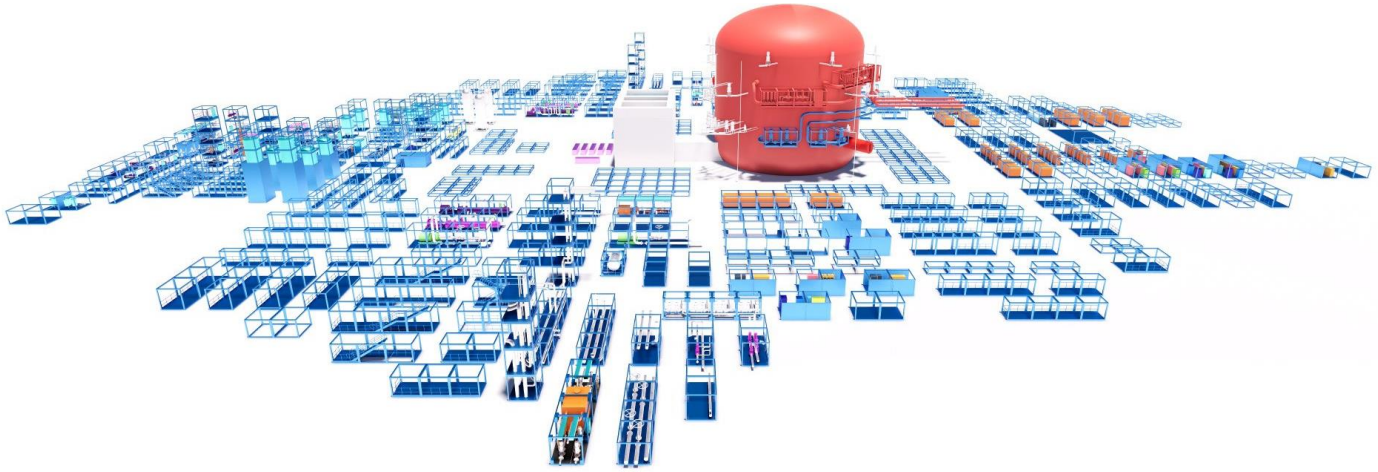
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WE ARE DELIVERING A FULLY MODULARISED, FACTORY-BUILT POWER STATION THAT IS ASSEMBLED ONSITE, IN OUR SITE FACTORY









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OUR APPROACH TO MODULARISATION IS DRIVEN BY THE NEED TO PROVIDE BUILD CERTAINTY, WHICH IS BASED ON 6 KEY PRINCIPLES



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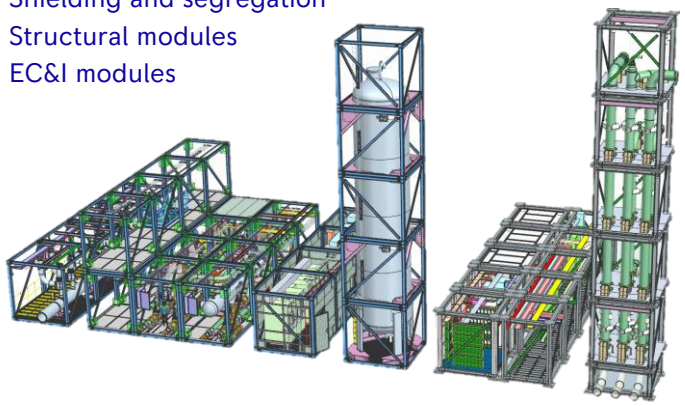
OUR SMR TAKES ADVANTAGE OF FACTORY PRODUCTION SYSTEMS THAT REMOVE TRADITIONAL CONSTRUCTION RISK

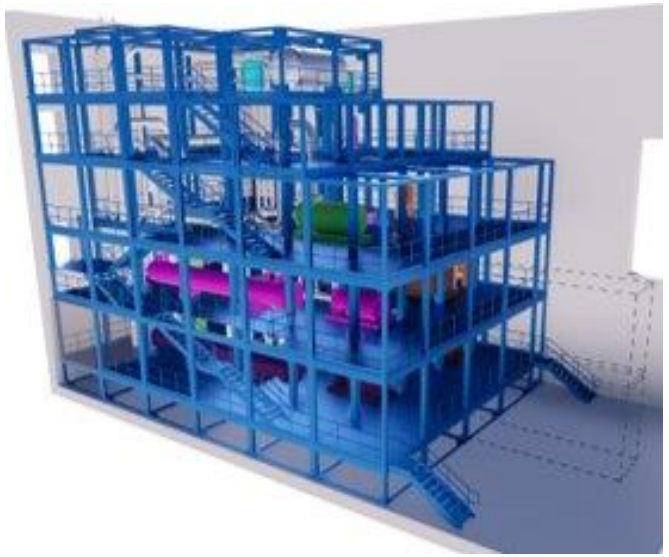
The entire Rolls-Royce SMR has been designed as a modular power station from the outset to truly take advantage of the benefits that modularisation has been proven to offer in other construction sectors, such as oil and gas.

Modules are designed in our digital environment allowing us to rapidly make changes as we translate these into clusters and eventually entire buildings. This is enabling us to continually optimise the design and reduce risk for production, assembly and operations.

Standard Modules:

Vertical and horizontal MEP modules
Tank modules
Personnel access
Pipe cable and utility routing
Shielding and segregation
Structural modules
EC&I modules







Modules
(assembled components)

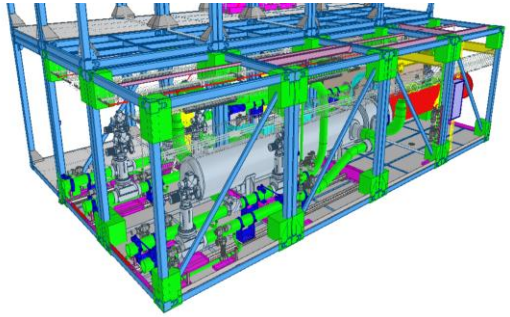
Clusters
(assembled modules)

Blocks and Buildings
(Power Station)

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WE MAXIMISE THE BENEFITS OF DESIGN FOR MANUFACTURE BY CONTINUOUSLY DE-RISKING OUR SOLUTION THROUGH DEMONSTRATION

A key component of the Rolls-Royce SMR delivery model is for us to be able to deploy right first time. To accomplish this, and to allow us to continually optimise our design throughout the development process, we continually conduct module demonstrator programmes.



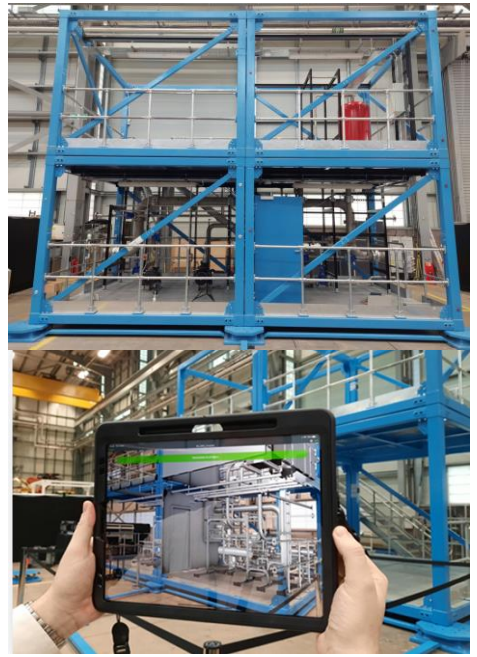
- Digital model development



- Demonstration of system installation, jointing and inspection
- Inclusion of secondary supports and systems



- Retaining Wall Civil Kit of Parts demonstrator (Laing O'Rourke)



- Use of virtual /augmented reality to aid installation

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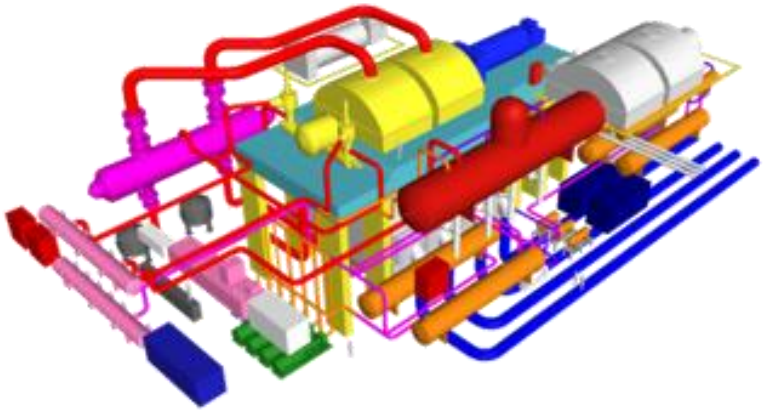
THE ROLLS-ROYCE SMR STANDARD 'KIT OF PARTS' IS ASSEMBLED AND TESTED IN FACTORIES AT MODULE LEVEL PRIOR TO SITE DELIVERY

ROLLS ROYCE SMR

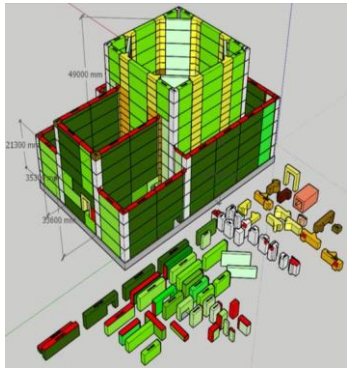
REACTOR ISLAND

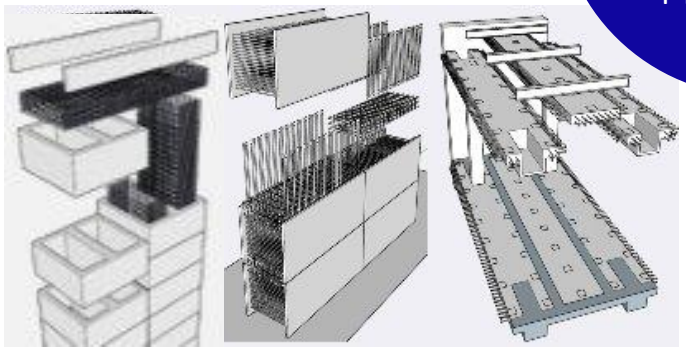


TURBINE ISLAND

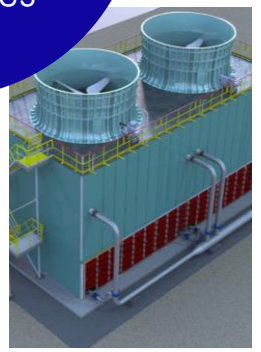


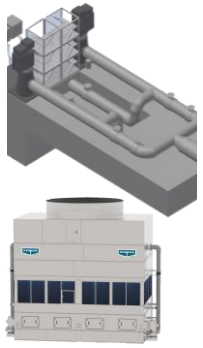
Integrated Design, Procurement, Quality and Procedures

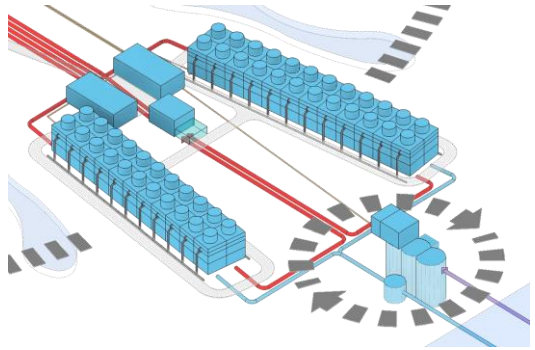




CIVILS MODULES







COOLING WATER ISLAND

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ROLLS-ROYCE SMR FACTORIES WILL DELIVER MULTIPLE POWERPLANTS AS A FACTORY FABRICATED PRODUCT, NOT A ONE-OFF MEGAPROJECT

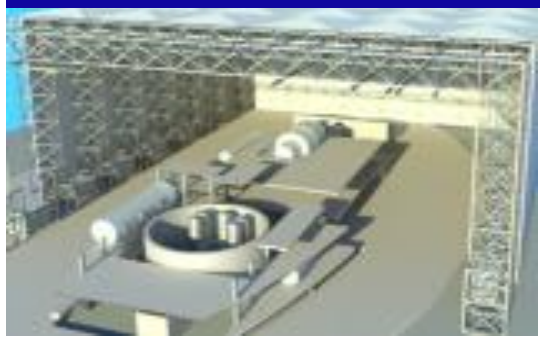
MODULE AND COMPONENT FACTORIES – EXTENSIVE SUPPLY CHAIN







SITE ASSEMBLY



Modularisation drives down cost and improves safety

- **Improves** reliability
- **Improves** safety (factory vs site)
- **Improves** economies of scale
- **Reduces** build time
- **Creates** stable long-term jobs
- **Provides** schedule certainty

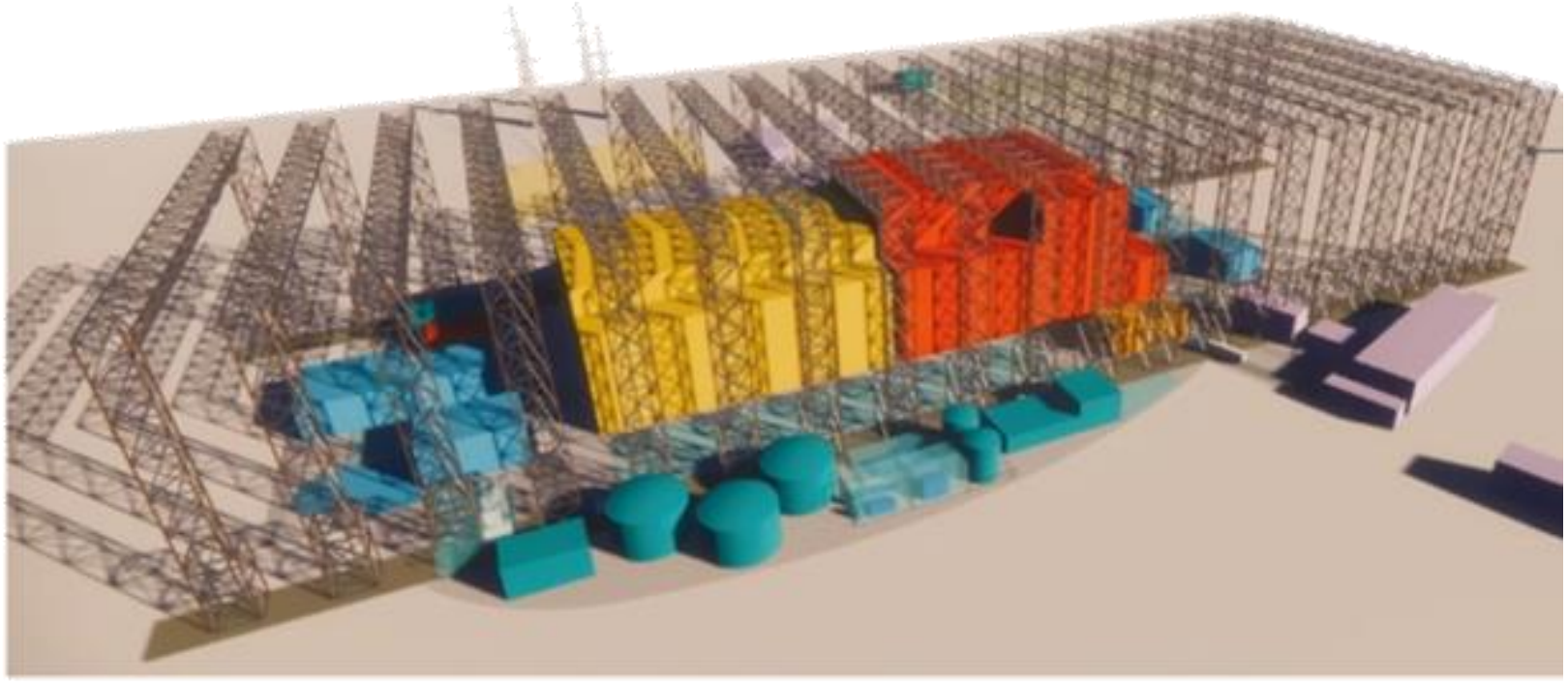
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OUR SITE FACTORY PROVIDES SCHEDULE CERTAINTY WHILST MINIMISING OUR IMPACT ON LOCAL COMMUNITIES AND THE ENVIRONMENT

Rolls-Royce SMR site activity comprises roughly 30% of the total programme cost and is assembly rather than construction-based.

Upon arriving at a site, we deploy our reusable site factory, which:

- Delivers build certainty on a baseline plan with shorter schedule and lower cost
- Removes the impact of weather on our project and avoids a potential extension of programme of ~18 to 24 months
- Enables work to be moved to factories - average of 500 people on site not 5000+
- Minimises our impact on the local environment and communities



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