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Parametric Design: Making the complex simple.

Link to visual abstract

The application of parametric thinking has enabled Rolls-Royce SMR to design the latest Small Modular Reactor to encompass modularity throughout its evolution from the first principles of its bold architectural vision through to the detail of how the smallest elements are put together.

Parametric modelling has given the power of great design thinking back to the designers to be able to deal with immense complexity in a coherent and coordinated way. This innovative toolset enables true three-dimensional design modelling to happen in real time while taking onboard an immeasurable number of variables. This innovative way of thinking has opened fresh new areas of computational design that can adapt to many environments ranging from shell roof structures to earthworks, to functional optimisation, to modular construction, to cost, and to schedule control. All fundamental in a production line of multiple SMR units that will benefit from design optimisation.

Parametric thinking has been fundamental to the production of an efficient new form of energy production for our future energy security in the form of Rolls-Royce SMR.

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Confirm that the work is original and has not been published anywhere else

YES

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