

# Joint industry projects

Industry challenge, shared solution, maximum impact

Joint industry projects allow companies to tackle common industry challenges in collaboration with the Nuclear AMRC and other manufacturing companies.

Joint industry projects bring together a number of companies which are facing a shared technology challenge – for example, understanding the machinability of exotic alloys for fusion reactor applications, or developing the code case for a new welding process.

This joint approach allows you to leverage your R&D investment, and draw on the expertise and knowhow of the Nuclear AMRC and partner organisations. Most joint projects will draw on early-stage research completed by the Nuclear AMRC with funding from the High Value Manufacturing Catapult.

Joint industry projects are delivered by the Nuclear AMRC for a small consortium of companies, with results shared exclusively between the participants. They are suitable for companies of all sizes, at any tier of the supply chain.

You don't have to be a member of the Nuclear AMRC to take part. Joint industry projects can also let you work towards solving shared problems in a faster and more flexible way than traditional collaborative R&D projects which depend on raising external funding.

#### **Benefits**

Joint industry projects allow you to work on challenges which are too complex or costly to be handled by one organisation, or which require specific knowledge or equipment which can be difficult to source by yourself.

#### A joint industry project can let you:

- Work collaboratively with industry peers to solve common, cross-sector challenges
- De-risk and leverage your R&D investment by sharing costs and resources
- Share and develop knowledge with like-minded companies
- Demonstrate value for money by having access to the results of a larger project
- Maintain confidentiality
- Direct a major part of an industry-focused research programme
- Develop new insight and knowledge to advance your business





#### Who is involved?

Projects typically involve four to six collaborators, although this can vary depending on the scope of the challenge.

## **Timescales**

Usually a joint industry project will take between 12 and 24 months to complete. The project length will be agreed by all partners, with costs paid annually.

# Technology areas

Joint industry projects can be used across the breadth of the Nuclear AMRC's capabilities for manufacturing innovation.

These technology areas include:

- Welding and joining
- Powder metallurgy
- Cladding
- Advanced cooling
- Machining dynamics
- Robotic machining
- Artificial intelligence & machine learning
- Factory simulation
- Inspection planning and optimisation

# **Getting started**

Challenges can be identified by many routes. We constantly engage with companies at all levels of the nuclear supply chain to identify shared challenges, and welcome proposals from individual companies. Other projects may result from early-stage R&D projects funded by the High Value Manufacturing Catapult.

After our technical teams propose potential solutions, we arrange a workshop meeting for all interested companies to refine and agree the challenges.

We will then agree a scope of work for a joint industry project to meet the needs of the participating companies.

## Find out more

For more information about joint industry projects, please contact Helen Arthur:

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# **Process**



1

Initial research completed by Nuclear AMRC



2

Challenge identified



3

Workshop with interested parties



4

Scope of work agreed



Collaboration formed



Collaboration agreement signed



7

Company investment received by Nuclear AMRC



8

**Project initiation** 



9

Project delivery and governance



10

Project close and knowledge sharing