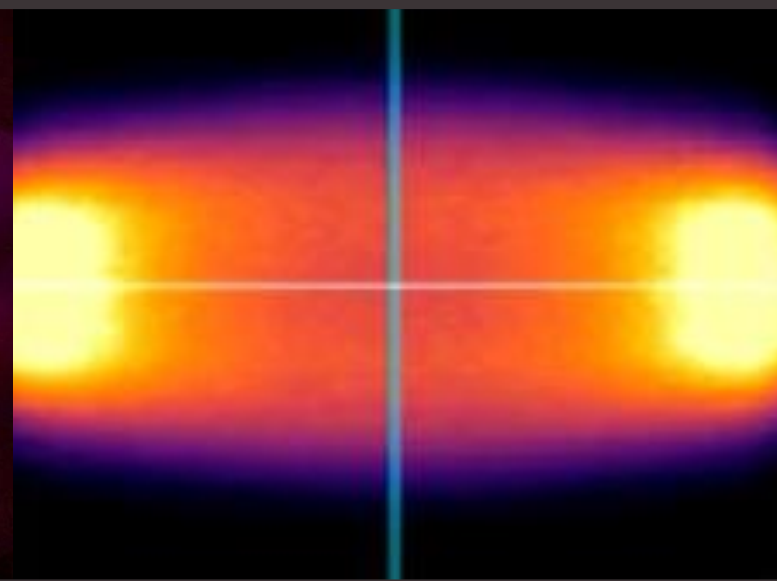
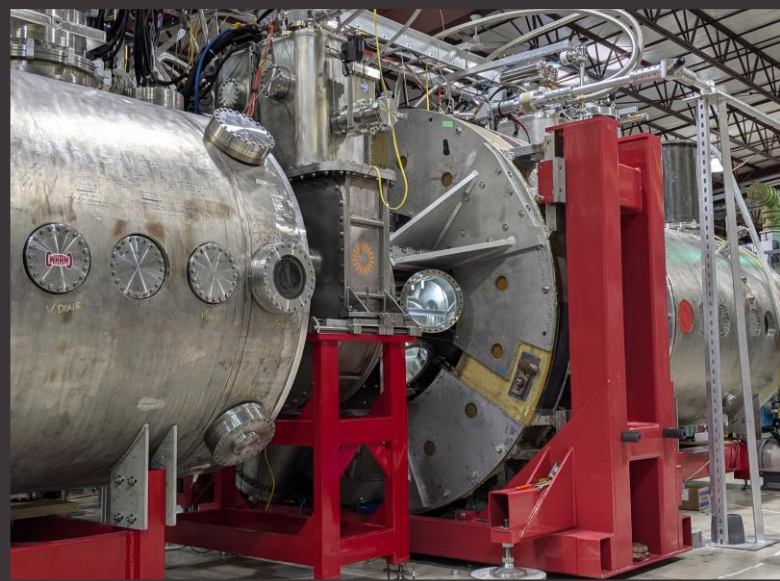




Making Fusion Real™



Realta is making fusion real



Real hardware:
Active fusion experiment

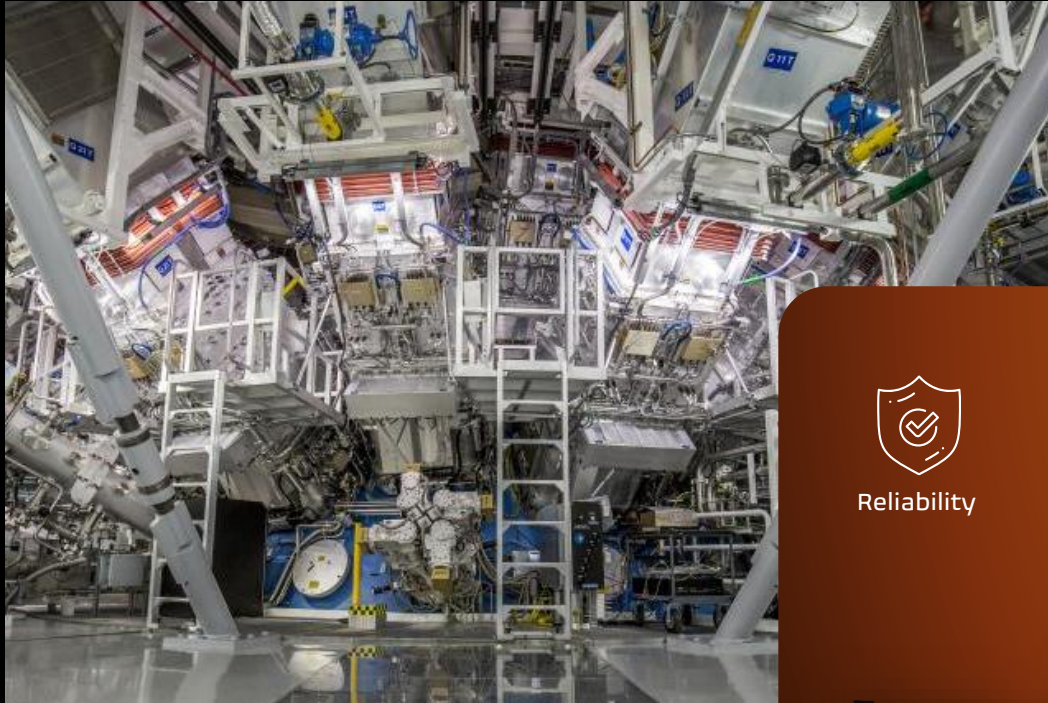


Real plasma:
Hotter than the center of the sun



Real data:
Matching theory with performance

First we make it work, **then we make it cheap**



NIF achieves fusion ignition

DECEMBER 2022

Commercially viable fusion

Mid 2030s



Reliability



Availability

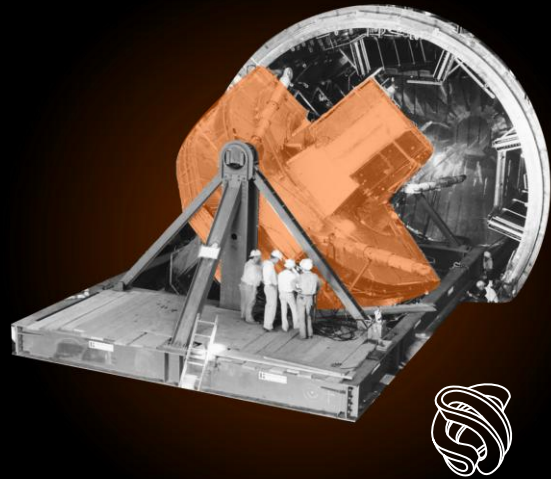


Maintainability



Inspectability

The magnetic mirror, a concept whose time has finally come



Mirror Fusion Test Facility at
Lawrence Livermore National Lab
(~ 1985)



1985

Nascent superconductor
industry

Plasma stabilization issues
required complex magnet
design

Very limited, expensive
computer simulations

Lack of commercial-grade
plasma heating solutions

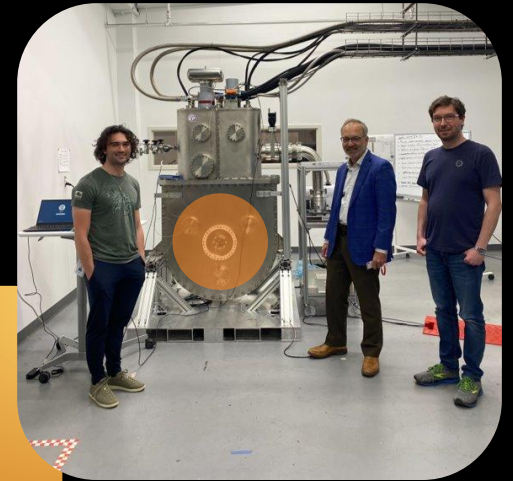
Today

Multiple HTS magnet suppliers,
robust fusion ecosystem

Axisymmetric magnetic mirror
stability demonstrated

HPC capable of simulating trillions
of particle interactions

Commercial plasma heating
available, RF NNBI demonstrated



WHAM HTS magnets at
Commonwealth Fusion Systems
(2023)



Kyoto Fusionneering gyrotron
system (2023)

Isotopes of Hydrogen
are trapped and heated



Magnetic “mirrors” cause particles to reflect between their fields

HTS Magnets

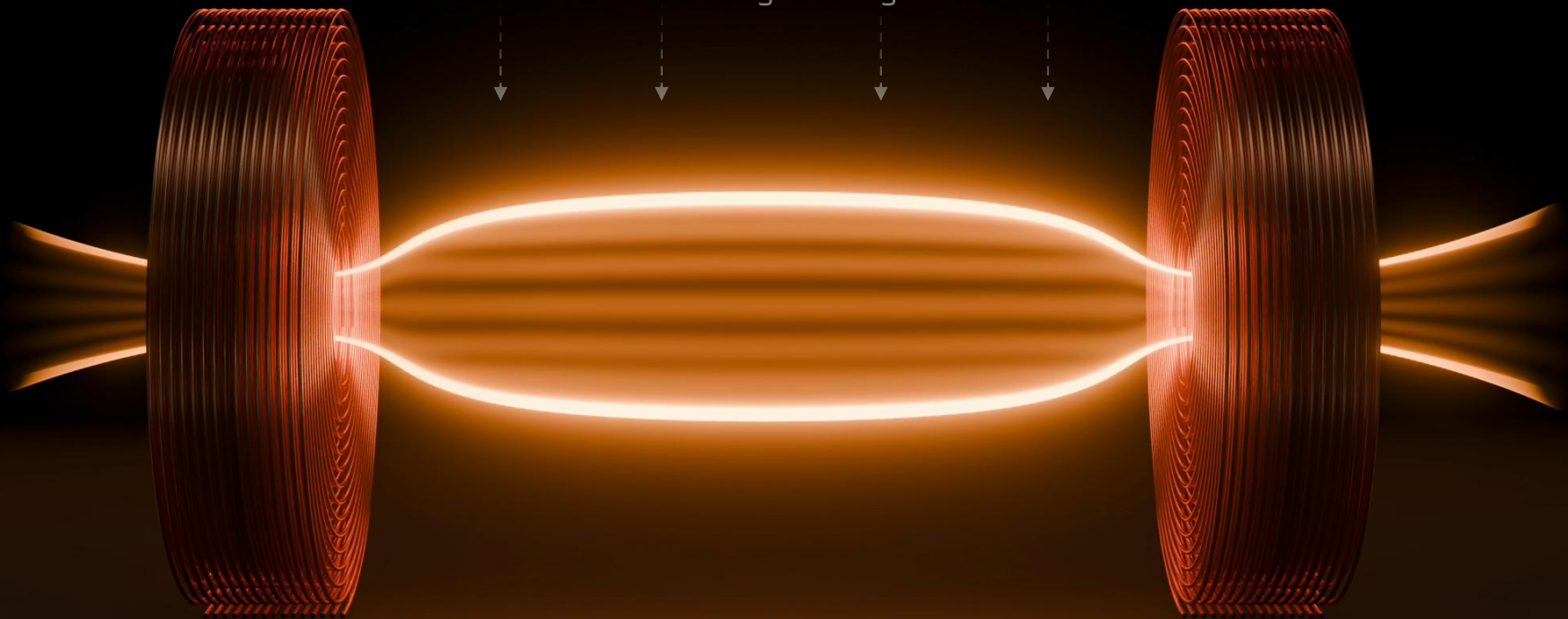
Create a simple mirror effect



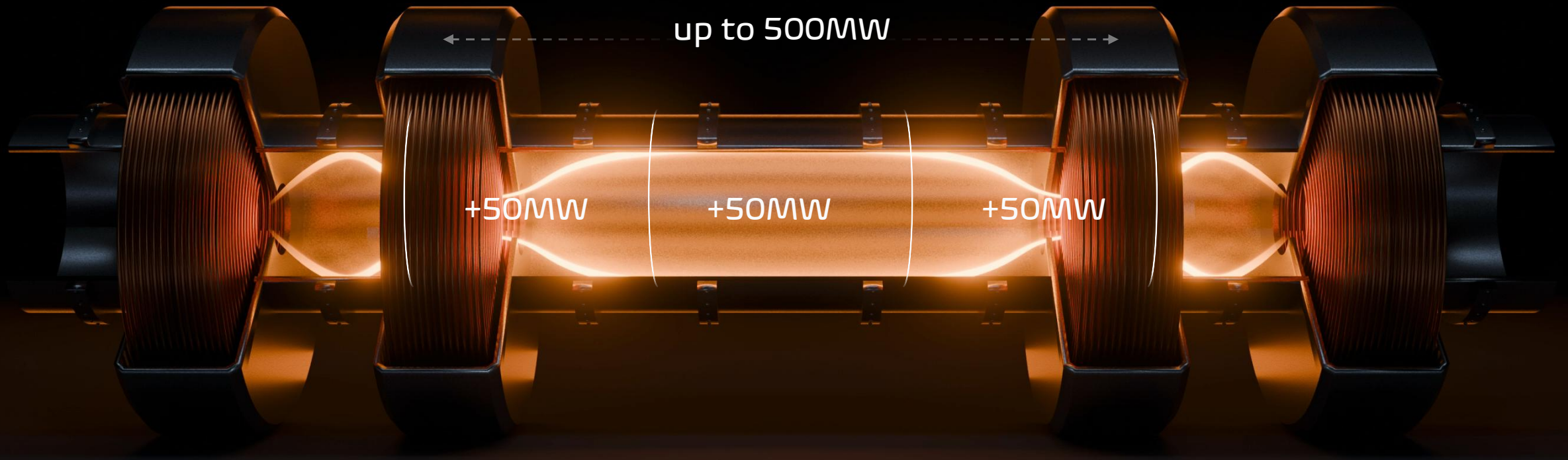
Radically simple geometry

Tandem mirror for energy
generation

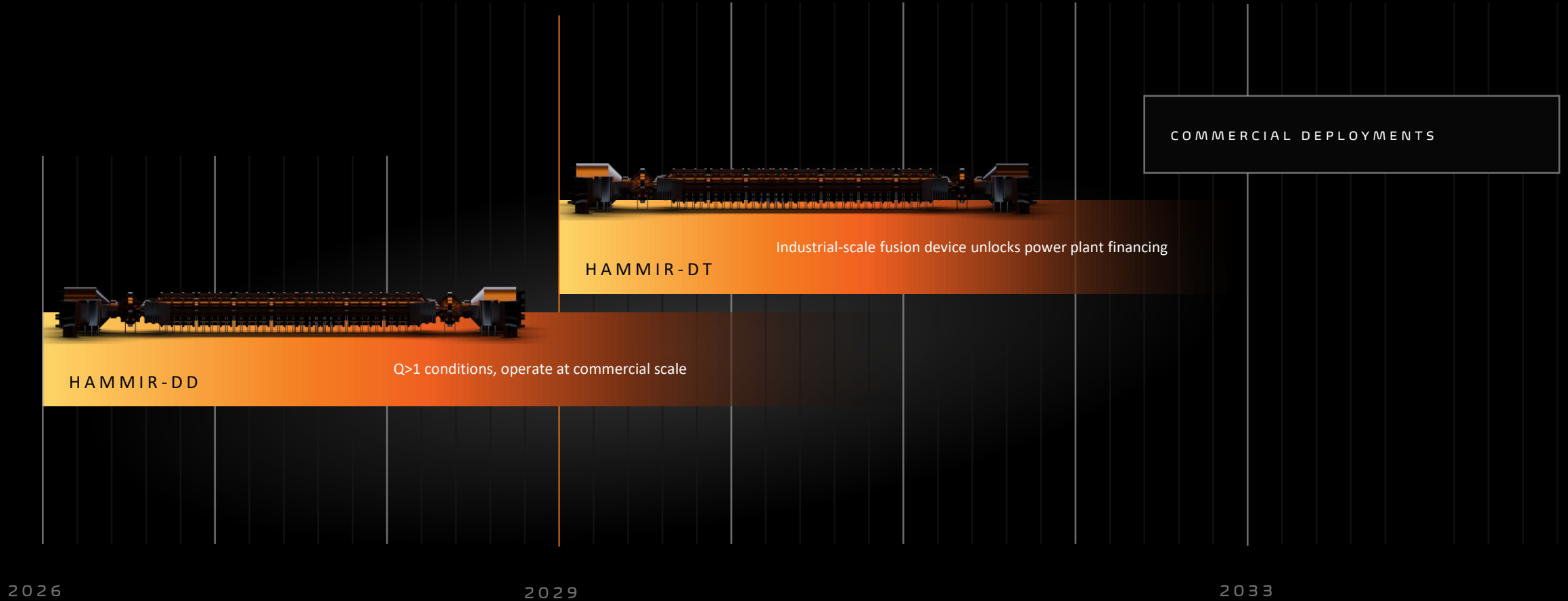
Low field MRI-grade magnets



Linear scaling by adding central cell modules



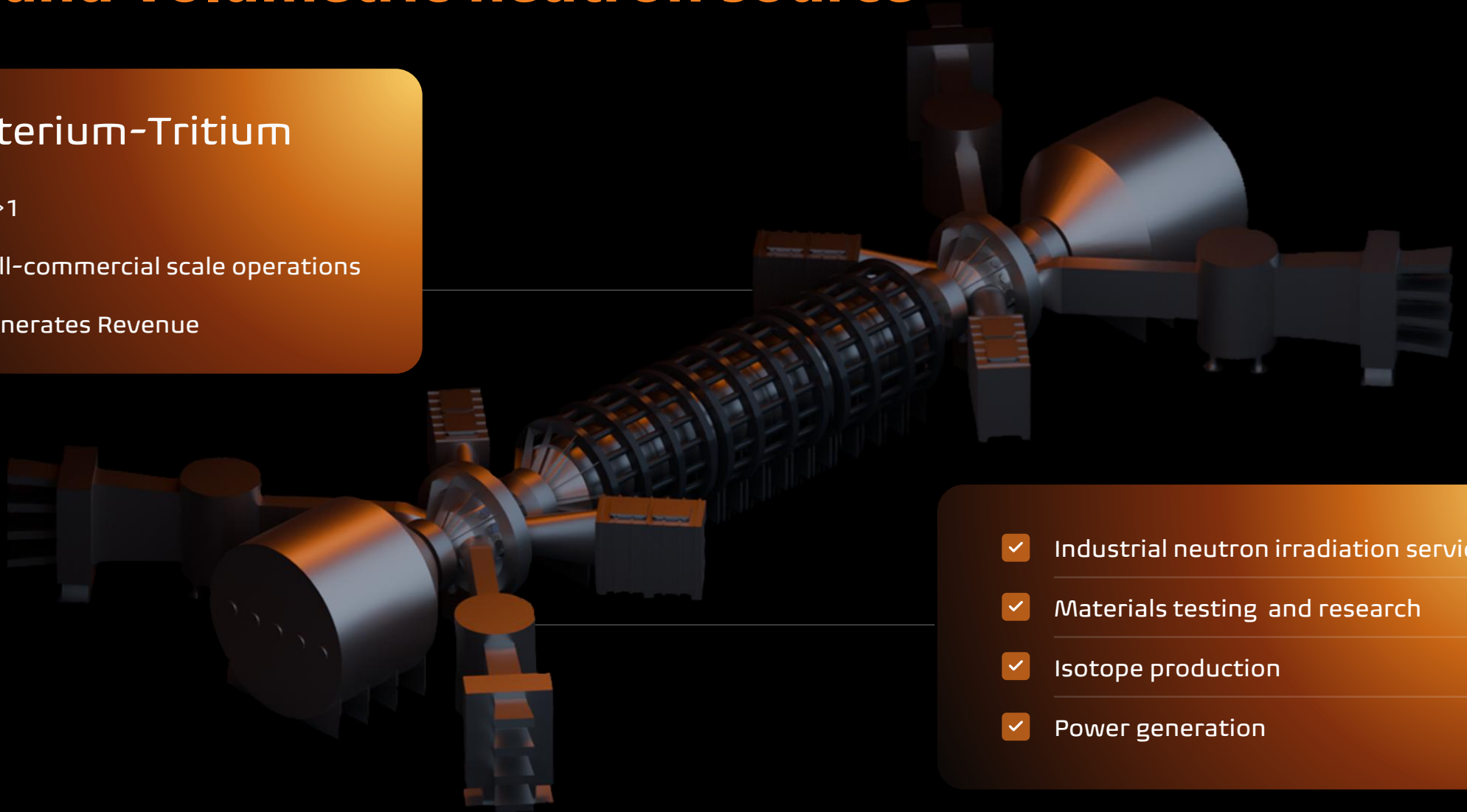
We get further, faster, **with less**



Hammir-DT: Realta's first-of-a-kind fusion power plant **and volumetric neutron source**

Deuterium-Tritium

- ✓ $Q > 1$
- ✓ Full-commercial scale operations
- ✓ Generates Revenue



- ✓ Industrial neutron irradiation services
- ✓ Materials testing and research
- ✓ Isotope production
- ✓ Power generation



Making Fusion Real™

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