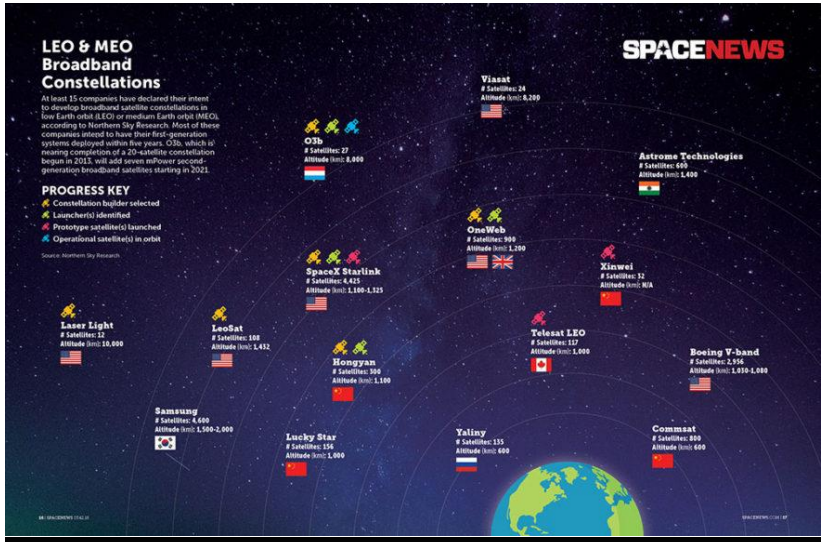
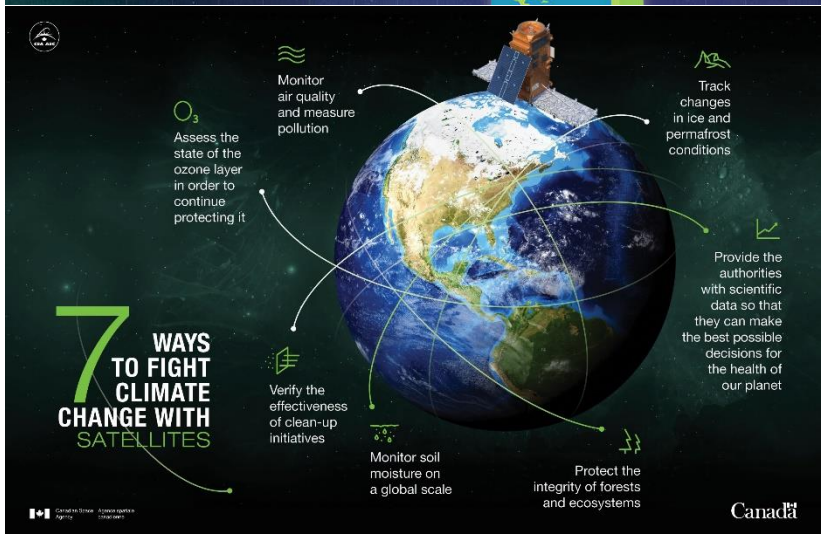
RFA

ROCKET FACTORY AUGSBURG

Space Innovation Forum Kiruna, 11/03/2020

THE VISION



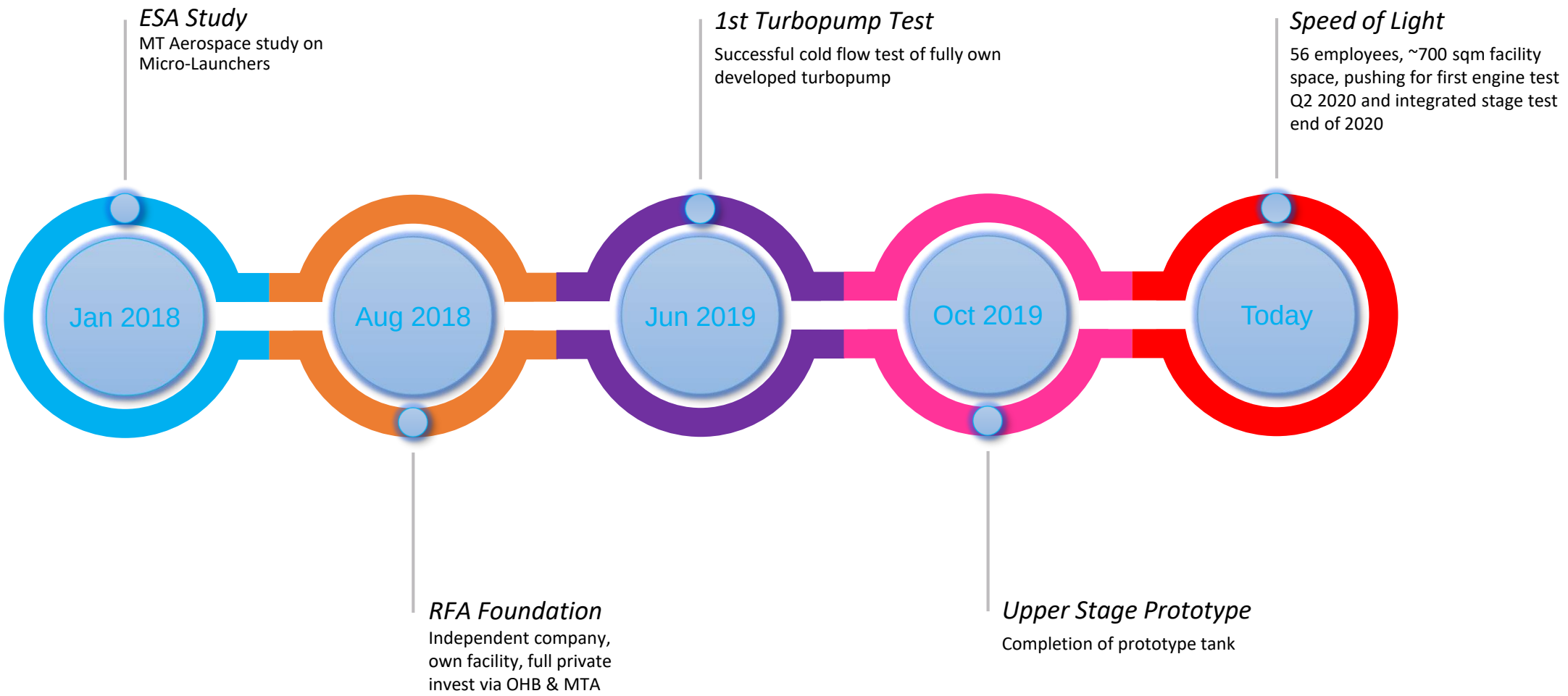


- Why are we here?
- Space is changing!
- Small Satellites will enable Use Cases
  - to stay connected
  - to secure our planet and
  - to explore the universe
  - to learn & innovate
- Need for Frequent, Low Cost Access to Space

OPENING
FAIR AND AFFORDABLE ACCESS TO SPACE REMOVING BOUNDARIES LIMITING HUMAN EVOLUTION

RFA
ROCKET FACTORY AUGSBURG

HISTORY


Jan 2018
ESA Study
MT Aerospace study on Micro-Launchers
Aug 2018
RFA Foundation
Independent company, own facility, full private invest via OHB & MTA
Jun 2019
1st Turbopump Test
Successful cold flow test of fully own developed turbopump
Oct 2019
Upper Stage Prototype
Completion of prototype tank
Today
Speed of Light
56 employees, ~700 sqm facility space, pushing for first engine test Q2 2020 and integrated stage test end of 2020

EXPERIENCED MANAGEMENT TEAM

Jean-Jacques Dordain
Board Chairman

Hans Steininger
CEO MT Aerospace

Marco Fuchs
CEO OHB

Dr. Wolfgang Koschel
External Advisor

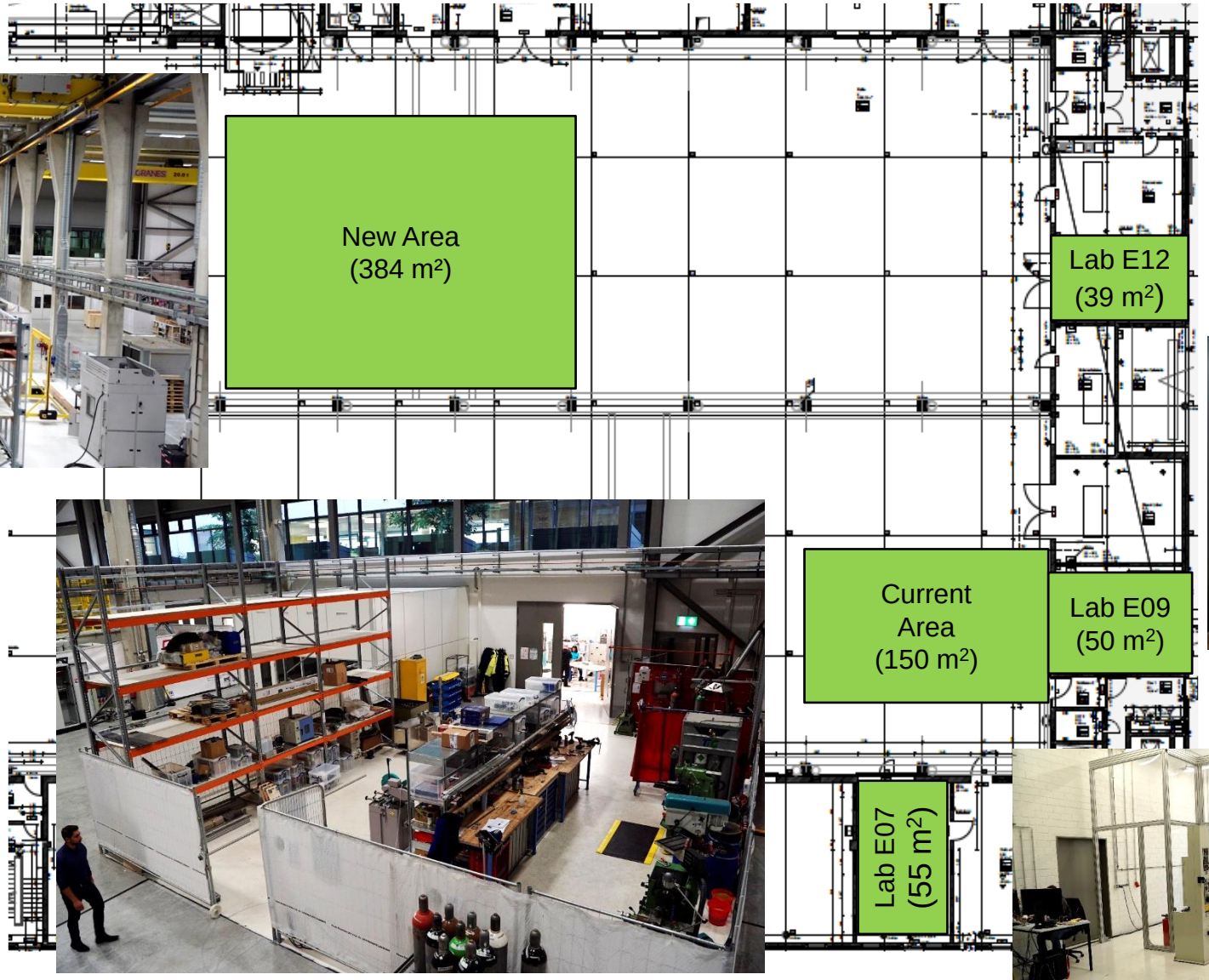
Ulrich Scheib
CEO

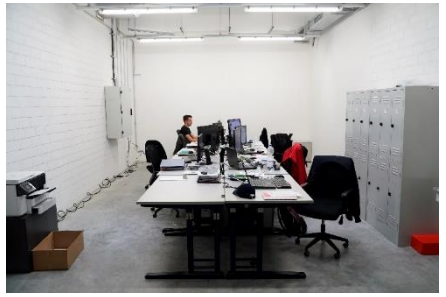
Stefan Brieschenk
COO

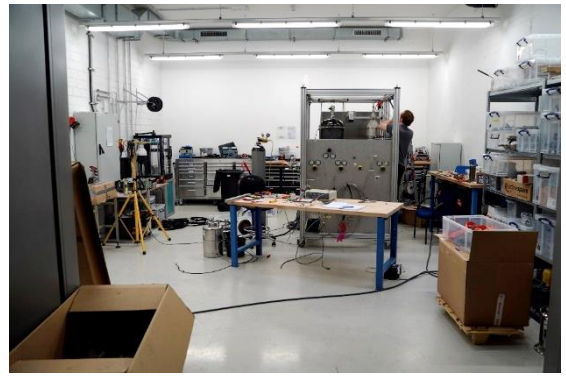
Jörn Spurmann
CCO

Alain Pajonk
Launch Site Manager

FACILITIES & WORKSHOP IN AUGSBURG







KEY SUCCESS FACTORS AND DIFFERENTIATORS FROM COMPETITION

- Experienced core team

„team has many years of experience in launcher industry“

- Strongest industry link

„best of both worlds: start-up + heavy industry“

- High performance stage combustion engine

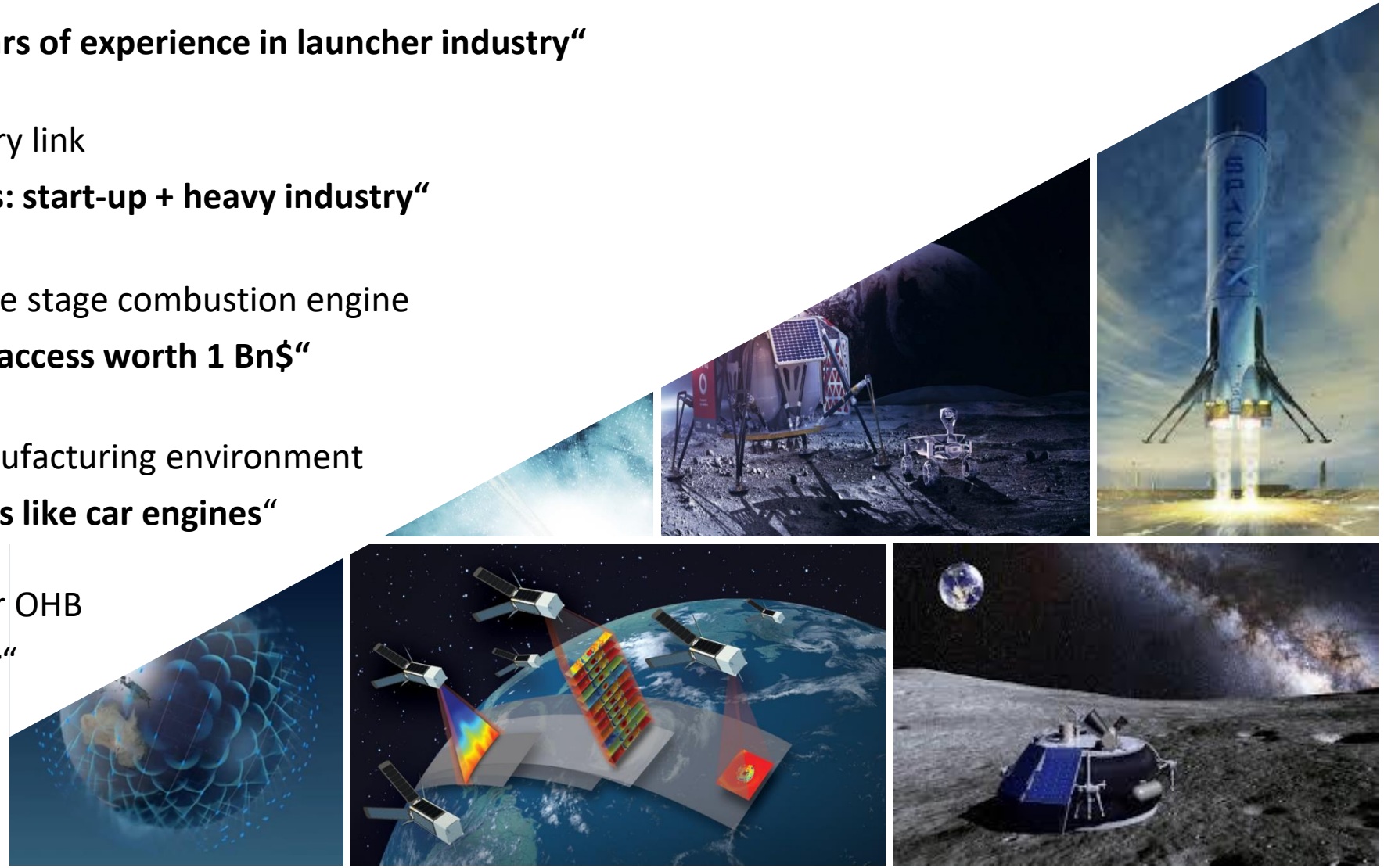
„unique technology access worth 1 Bn$“

- Automotive manufacturing environment

„**build rocket engines like car engines**“

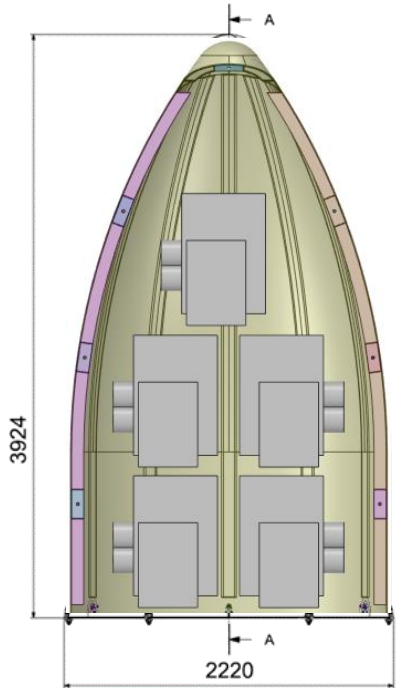
- Anchor customer OHB

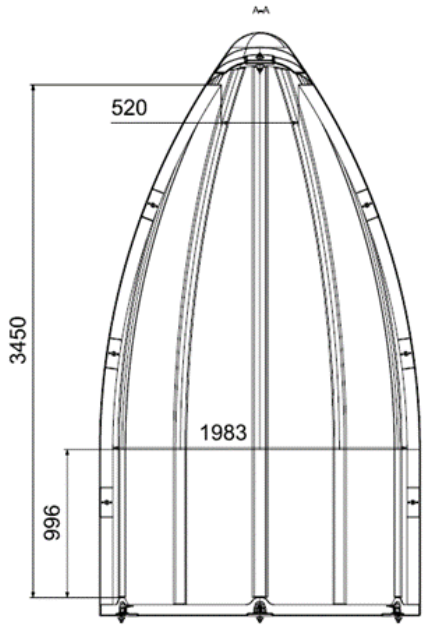
„**5 launches per year**“



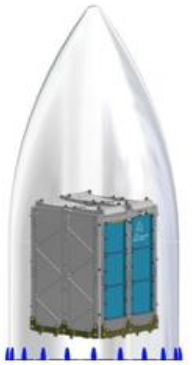

Green Propellant Engine
• Heritage design
• Flight proven
Kick-Stage
• Mission flexibility
• Low-cost design
Second Stage Tank
• Common tank design
• Inexpensive metallic construction
Apogee Engine
• Proven technology
• Green propellant
Interstage
• Automotive-grade composites
• Pneumatic separation systems
Engine
• Simple gas-generator design
• Automotive manufacturing network
Turbopump
• Design for additive manufacturing
• Proven design

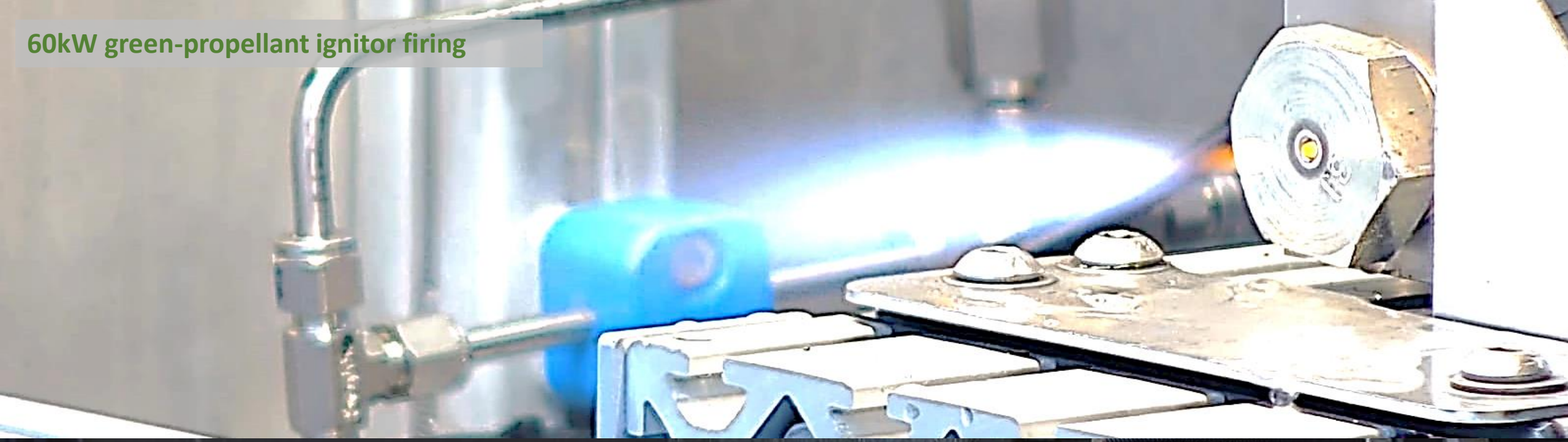
LAUNCH SERVICE OFFER





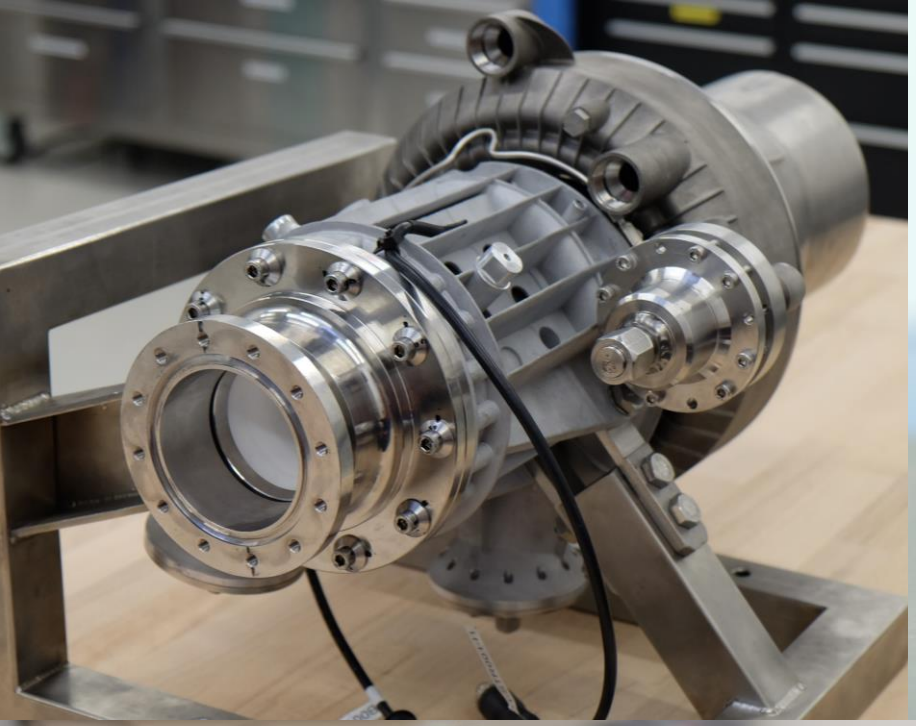
- Dedicated, clustered and ride-share launches
- Huge fairing (D = 2.2 m x H = 3.9 m)
- Kick-stage allowing for
  - High injection accuracy
  - Mission flexibility

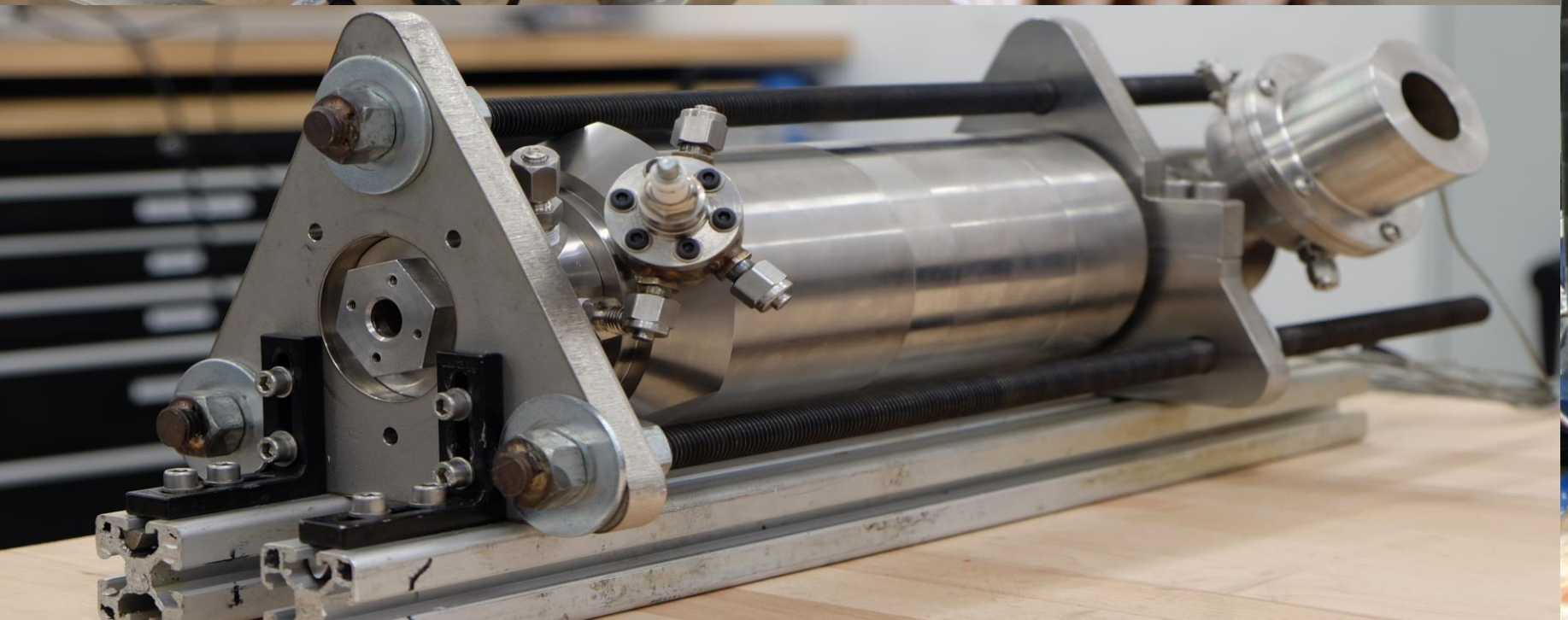
	Dedicated Launch	Dedicated Cluster	Main & Secondary	Main Cluster & Secondary	Rideshare
Customer Allocation Main Customer Secondary Customer					

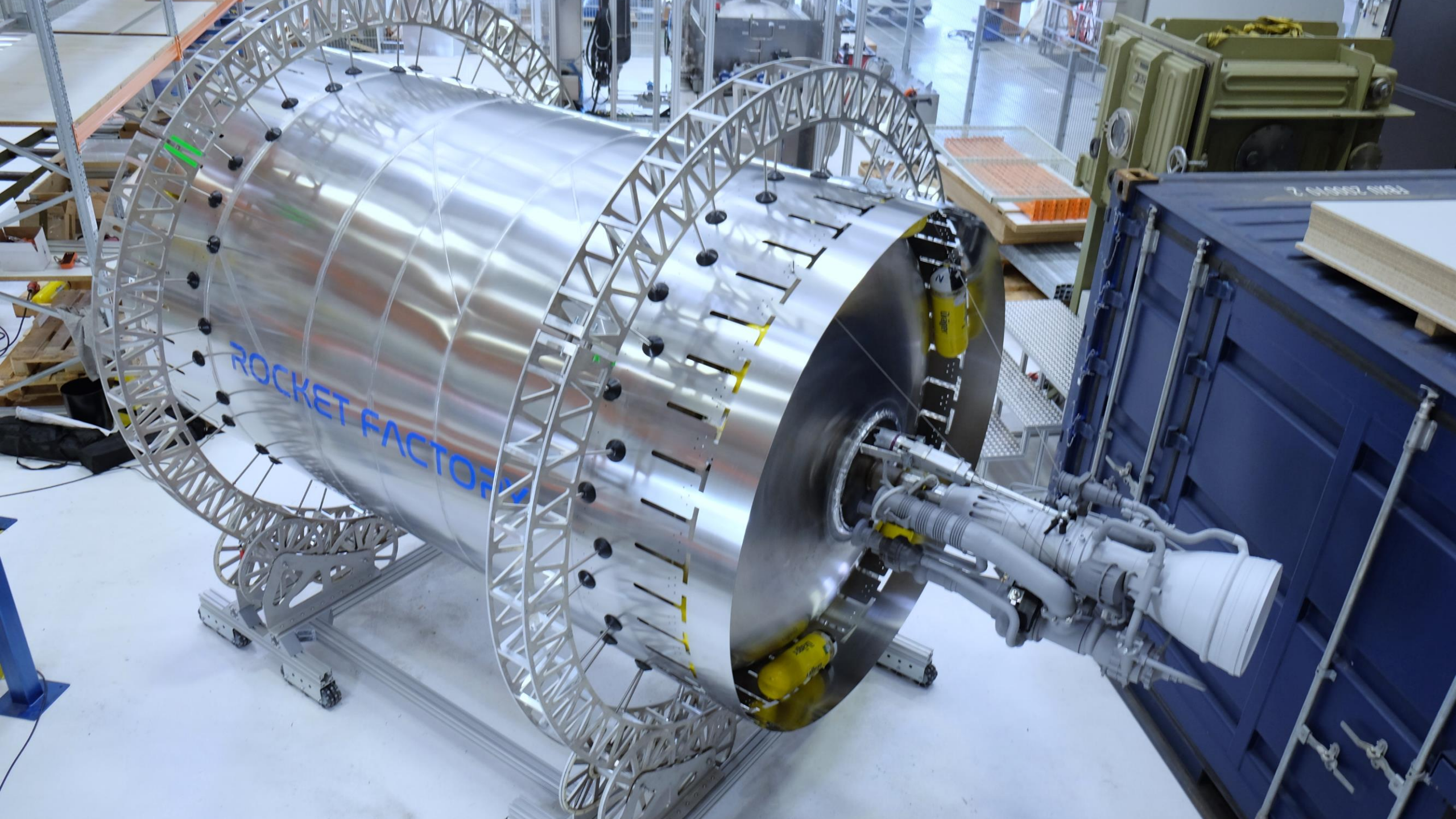


60kW green-propellant ignitor firing

10MW gas generator firing

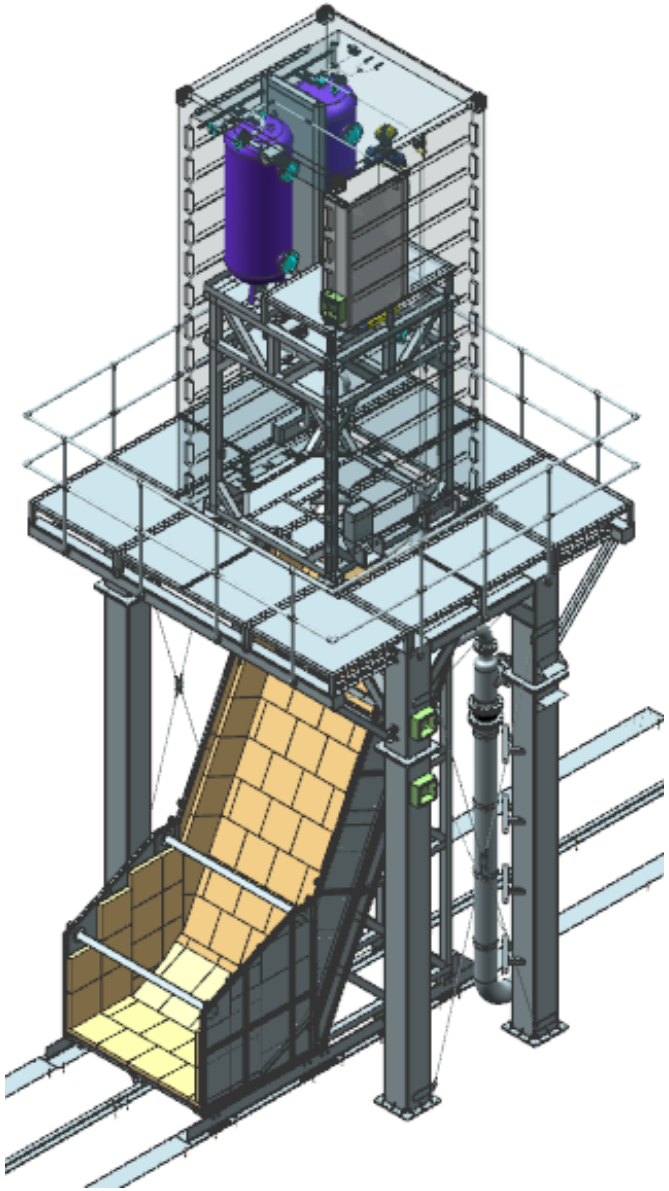





ROCKET FACTORY

ENGINE TEST STAND

© Rocket Lab, screenshot from published video



- Container-based, mobile design
- Low-cost test stand in manufacturing

LAUNCH SITE

- On-going evaluation of potential launch sites
  - Several european spaceports under consideration
  - Discussions initiated and launch operation survey already performed

THANK YOU!

LAUNCH WITH US!