

Large Space Structures GmbH

About this organisation

LSS was founded in 2012 by experts of the Technical University of Munich with more than 25 years of experience in space applications. LSS is developing large space structures with focus on deployable and reconfigurable antenna reflectors with aperture diameters ranging between 0.5 to 30m and applicable frequencies up to Ka-band.

Our competencies in lightweighting include research and development as well as provision of: - Deployable Antenna Reflectors with aperture diameters from 0.5m to 30m - Large Deployable Shaped Antenna Reflectors - Mechanically Reconfigurable Antenna Reflectors - FlexRS® - Flexible Reflecting Surface Technologies - Design, Analysis & Optimization - Manufacturing, Assembly & Testing

Hauptstr. 1e
85386 Eching
Bavaria
Germany
www.largespace.de



Organisation type

Small or medium-sized enterprise

Sector



Employees

10 up to 49

Turnover

Up to €2m

Funding

n/a



Year	Revenue	Profit	Employees	Turnover
2012	0.5	0.1	10	0.5
2013	1.0	0.2	15	1.0
2014	1.5	0.3	20	1.5
2015	2.0	0.4	25	2.0
2016	2.5	0.5	30	2.5
2017	3.0	0.6	35	3.0
2018	3.5	0.7	40	3.5
2019	4.0	0.8	45	4.0
2020	4.5	0.9	49	4.5

Main areas covered

Large Deployable Antenna Reflectors, Reconfigurable Antenna Reflectors, Shaped Antenna Reflectors, FlexRS® Flexible Reflecting Surface, Engineering & Test Services

Infrastructure

CAE Tools, Manufacturing Workshop, Assembly & Integration Facility, 3D-Printer

Certifications

Keywords

Deployable Reflectors, Reconfigurable Reflectors, FlexRS® Flexible Reflecting Surface, CFRP, Structural Design, Analysis & Test

Memberships

Large Space Structures GmbH

Overview of lightweighting expertise			
	Research	Development	Manufacturing & Supply
Offer			
Products Parts and components, Semi-finished parts, Systems and end products, Materials	✓	✓	✓
Services & consulting Consulting, Testing and trials, Engineering, Prototyping, Validation, Simulation	✓	✓	✓
Field of technology			
Design & layout Lightweight manufacturing, Lightweight design, Hybrid structures, Lightweight construction concepts, Lightweight material construction	✓	✓	✓
Functional integration Actuator technology, Sensor technology, Material functionalisation	✓	✓	✓
Measuring and testing technology Component and part analysis, System analysis, Materials analysis, Destructive analysis, Non-destructive analysis	✓	✓	✓
Modelling and simulation Optimisation, Structural mechanics, Materials		✓	✓
<i>Plant construction & automation</i>			
<i>Recycling technologies</i>			

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Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
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Manufacturing process

Additive manufacturing

3D printing

✓

✓

Coating (surface engineering)

Fibre composite technology

Manual lamination

✓

✓

✓

Forming

Joining

Material property alteration

Primary forming

Processing and separating

Textile technology

Material

Biogenic materials

Cellular materials (foam materials)

Composites

Aramid fibre composites, Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Laminates, Particulate composites

✓

✓

✓

Fibres

Aramid fibres, Glass fibres, Carbon fibres

✓

✓

Functional materials

Metals

Plastics

Structural ceramics

(Technical) textiles

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