

L A T E R A L

NAVAL ARCHITECTS

02

STRUCTURAL ENGINEERING

Lateral specialises in the design of structures in steel, aluminium and composite.

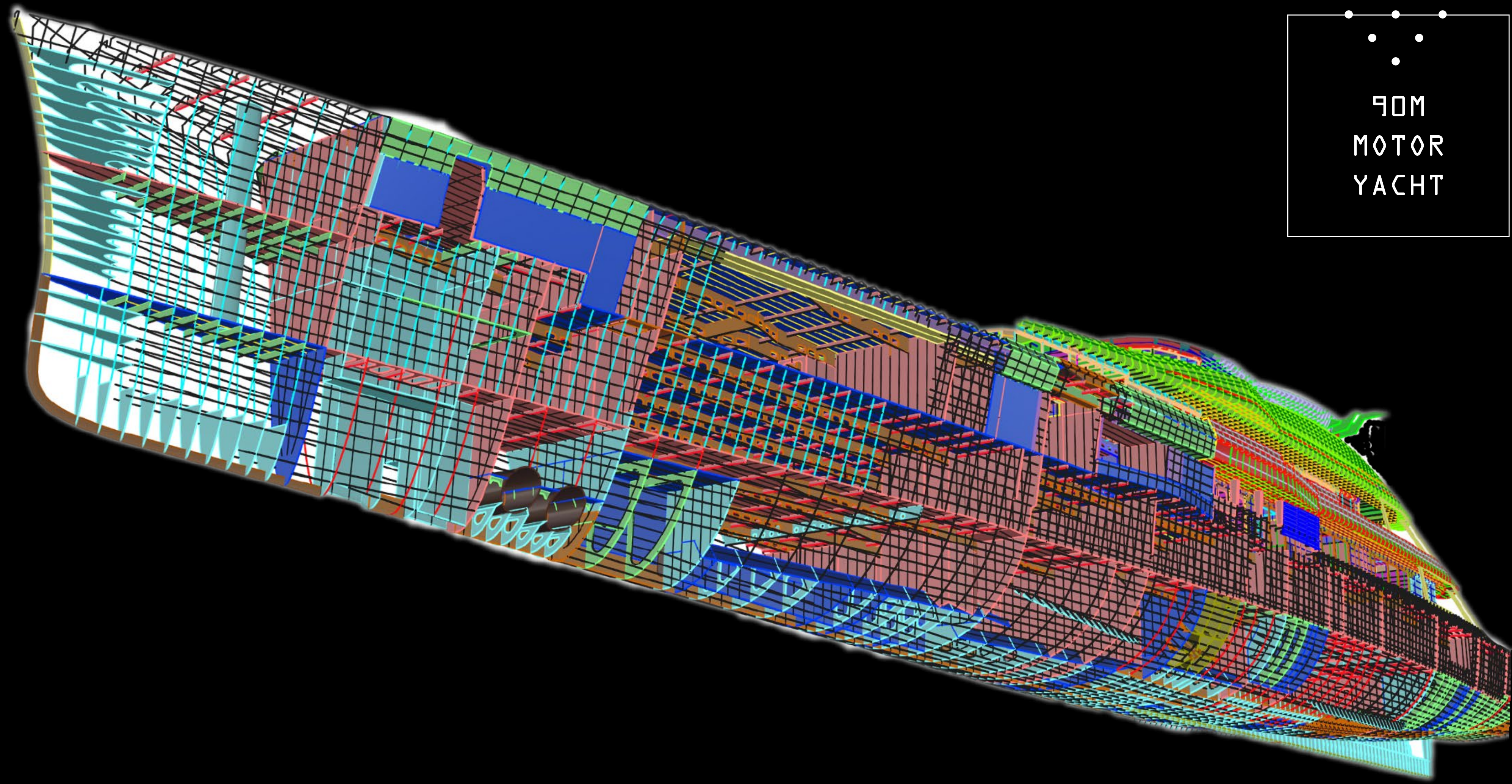
With over 30 years' experience in developing structural designs for yachts and specialised vessels, our team utilises its extensive knowledge base to deliver practical and pragmatic designs that are fit for purpose, efficient to build and with excellent attention to detail.



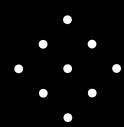
Lateral's **structural design** services include

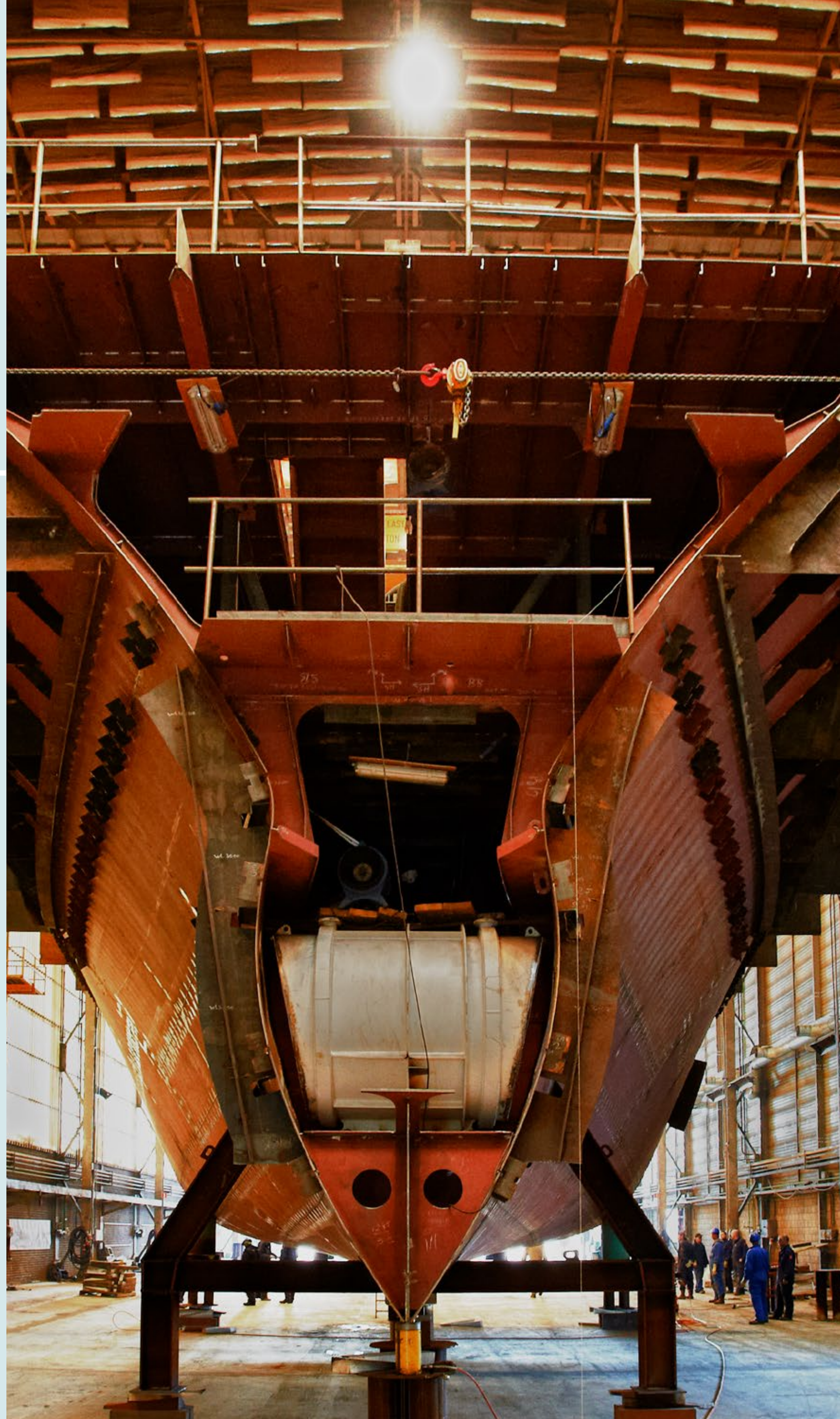
- Concept and feasibility studies
- Advice on material specifications
- Design to Class and management of Class approval
- First principles calculations
- Load prediction
- Finite Element Analysis
- Local and global structural optimisation
- 3D solid and surface modelling
- Mould and plant design
- Laminate schedules
- Production design drawings
- Weight engineering and control
- Engineering audits, consultancy and troubleshooting
- Design to small craft codes
- Refit and repair
- On-site build and engineering support





90M
MOTOR
YACHT





Our **structural design** experience ranges

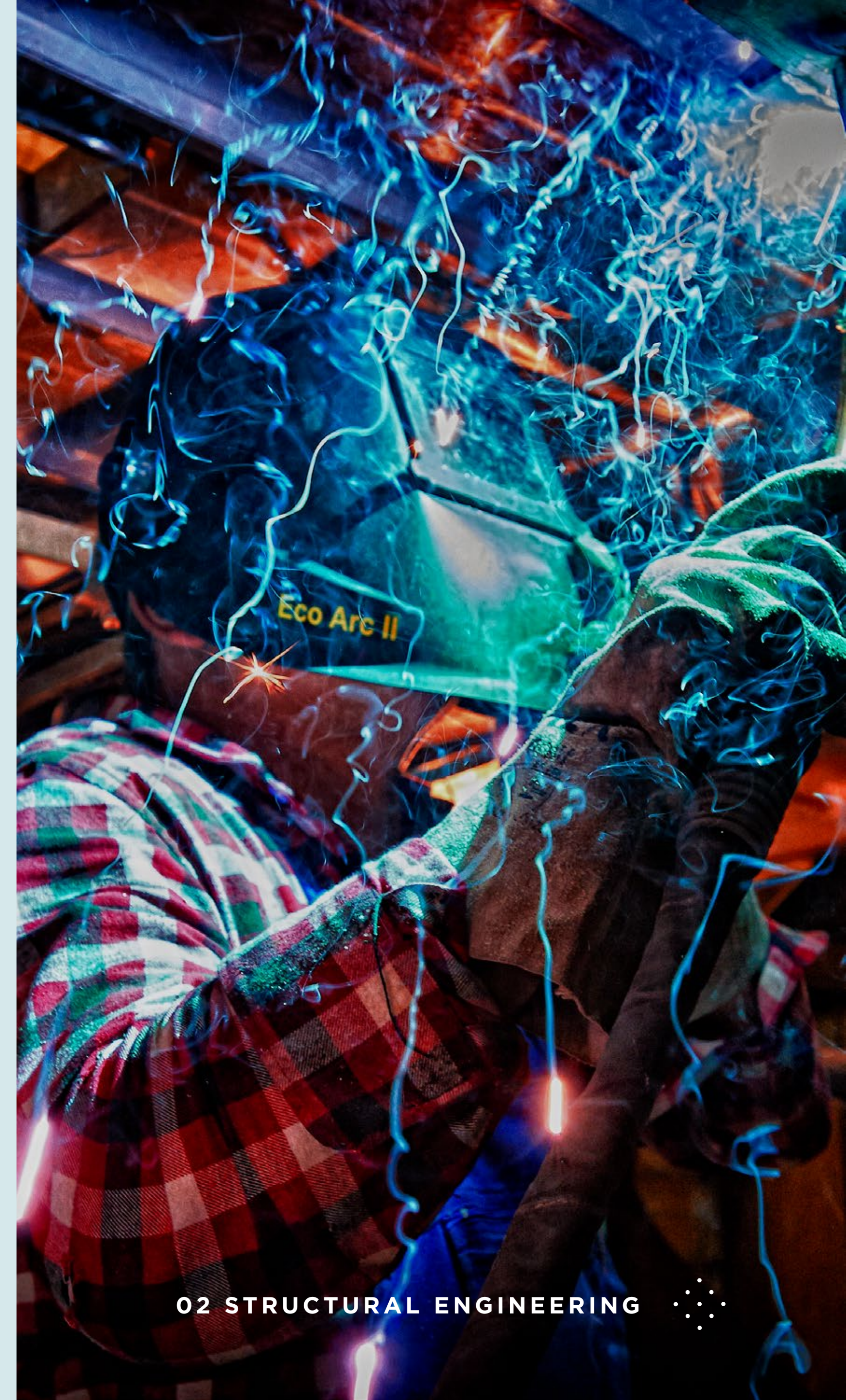
from small composite production designs to large steel and aluminium sail and motor yachts that are dominated by complex global loads. Married with our knowledge in the design of high-speed commercial and naval craft we are leaders in the field of lightweight and robust aluminium structures.



Having worked with all the major **classification societies**

Lateral brings significant depth of knowledge and ability to gain full Class approvals in the most efficient and effective manner.

With each Class society having its own nuances Lateral has the insight required to engage Class in educated debate at the appropriate junctions to ensure design is not encumbered with redundant, heavy and expensive features.



With many naval architecture offices and smaller shipyards choosing to subcontract structural design services, we often find ourselves **providing specialist structural engineering** to a wide ranging client base, often including our competitors in other disciplines. For larger shipyards we can offer a pool of

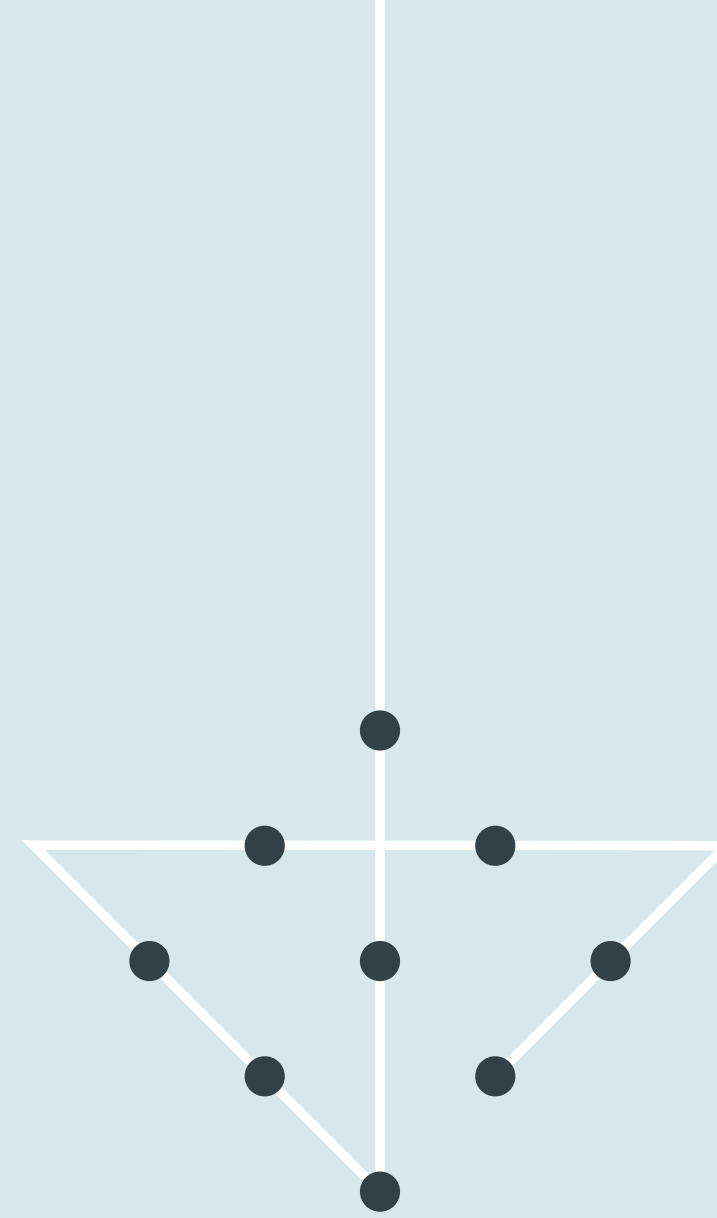
- **flexible resource**
available to work in-yard,
as demand requires.



Whether engaged as a
**single source structural
designer** or acting
to reinforce

a client's existing team Lateral provides a skilled,
flexible and scalable service enabling our clients
to confidently bid, execute and deliver the most
challenging and complex projects.





Ask new questions

WWW.LATERAL.ENGINEERING