nurol TEKNOLOJİ



PRODUCT RANGE

STRUCTURAL COMPOSITES

Structural Composite

Solutions for Platforms

LIGHTWEIGHT · DURABLE · PLATFORM-INTEGRATED

Nurol Teknoloji designs and manufactures lightweight, durable and high-performance composite components for land, naval and air platform manufacturers. Parts are engineered to the platform: geometry, load case, environmental envelope and interface details are agreed with the OEM before tooling.

Depending on part geometry and load case, a composite part typically saves 30 to 50 per cent of the weight of its steel equivalent. Where the platform requires it, ballistic protection is integrated into the structure itself, so that a single part carries load, closes the envelope and protects at once.

Delivered to platform builders in four fields:

- Land platforms — armored vehicle hoods, hatches, stowage boxes, mast systems and armor-integrated housings
- Naval platforms — superstructure and interior panels, add-on armor integration, compliant interior structures
- Air platforms — cabin interior and galley sandwich panels, equipment enclosures, lightweight armored seats
- Civil and industrial — structural sandwich panels and composite parts for transport, energy and consumer applications

PRODUCTION CAPACITY

7,500 m²/yr

structural composite parts

PRESS PARK

7,000 t

three presses: 7,000 / 2,000 / 1,500 t

AUTOCLAVE CURING

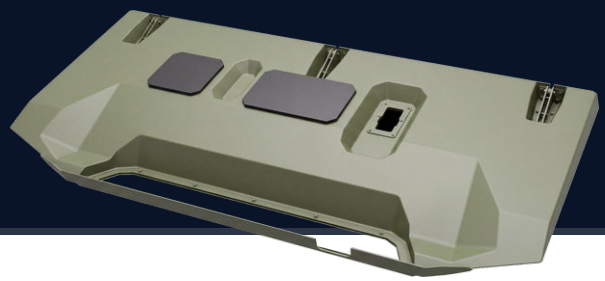
20 bar

for prepreg systems

Exterior Composite

Structures

HIGH QUALITY · DEPENDABLE · HI-TECH



External body parts that close and protect the platform envelope while taking weight out of the structure. Panels are moulded to the platform's own surface geometry, so a composite part replaces a steel assembly without changing the line of the vehicle.

Surfaces are finished for continuous outdoor service and hinge, latch and sealing interfaces are built into the part rather than added afterwards.

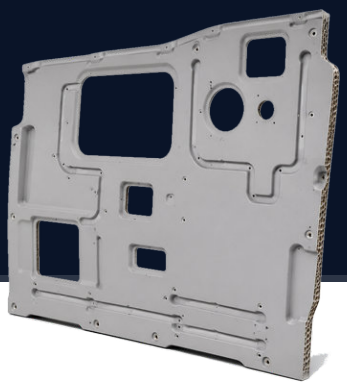
- Hoods
- Access panels
- Stowage boxes
- Equipment enclosures

CONSTRUCTION

Typically glass or carbon epoxy laminates in sandwich construction, with UV and corrosion resistant gel-coat or PU finish.

Interior Composite
Structures

HIGH QUALITY · DEPENDABLE · HI-TECH



Interior structures that carry equipment and crew stations at low weight, shaped to the cabin and produced to the platform's interior material requirements. Cut-outs, cable routes and mounting points are laminated into the part, which keeps the assembly count and the installation time down.

Where the interior is also a protected volume, the spall liner is integrated into the same panel instead of being fitted as a separate layer.

Naval and air interiors are produced to the fire, smoke and toxicity requirements that apply to the platform, and parts are tested against those requirements before delivery.

- Consoles
- Interior panels
- Maintenance hatches
- Equipment boxes
- Enclosures

CONSTRUCTION

Typically phenolic or fire-rated laminates with honeycomb or foam core sandwich panels, with spall-liner integration where required.

INTERIOR QUALIFICATION

Fire, smoke and toxicity performance to the requirement set by the platform: naval interior structures and aircraft cabin interiors.

Structural Elements
and Subsystems

HIGH QUALITY · DEPENDABLE · HI-TECH



Load-bearing elements produced to tight tolerance, with bonded metallic interfaces where the element meets the platform, and complete subsystems in which the composite housing, the equipment it carries and the ballistic protection are delivered as one tested unit.

Composite structural elements

- Mast tubes
- Load-bearing profiles
- Platform-specific structures

Fibre orientation is set to the load case, so stiffness is placed where the structure needs it. Typically carbon epoxy tubes and profiles with bonded metallic interfaces and dimensionally verified tolerances.

Composite subsystems

- Periscope armor
- Sensor housings
- Optical system housings
- Integrated assemblies

Ceramic-composite armor is integrated into the structural housing and the assembly is delivered tested and ready to bolt onto the platform.

nurol TEKNOLOJİ

“Discover the Power of Protection”

GÖLBAŞI
CERAMIC CENTER OF EXCELLENCE

Oğulbey Mah. 3060 Cad.
No: 5 06830 Gölbaşı,
Ankara / Türkiye

T: +90 (312) 615 55 11
T: +90 (312) 615 55 34

KAHRAMANKAZAN
COMPOSITE CENTER OF EXCELLENCE

İmrendi Mah. İmrendi Küme Evler
No: 424 06980 Kahramankazan,
Ankara / Türkiye

T: +90 (312) 814 37 10
F: +90 (312) 814 37 07

NUROL TECHNOLOGY
USA

848 Brickell Avenue
Suite 310 Miami, Florida
33131. USA

T: +1 786 7212051

NUROL TECHNOLOGY
GERMANY GMBH

Am Zirkus 2, in 10117
Berlin, Germany

info@nurolteknoloji.com
pazarlama@nurolteknoloji.com
www.nurolteknoloji.com

AS9100D CERTIFIED ISO 9001 · ISO 27001 · ISO 45001 · ISO 17025 · NATO AQAP 2110 · ISO 9001 · ISO 14001 · ISO 50001 · CERTIFIED EN 9100D