Robtrusion
CURVED COMPOSITE PROFILES

TOP HAT STIFFENERS

STRUCTURAL REINFORCEMENTS FOR EFFICIENT BOAT PRODUCTION

www.robtrusion.com

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CURVED COMPOSITE PROFILES

¿WHAT IS ROBTRUSION?

Robtrusion is a company specialized in the design and manufacturing of structural stiffeners made of fiberglass. Thanks to our advanced technology, we offer high-quality profiles with excellent mechanical properties, ready to be easily integrated into all types of structures. Our solutions enhance structural performance while reducing weight and manufacturing time in every project.

Trust Robtrusion to strengthen your structures.

AEMAC
ASOCIACIÓN ESPAÑOLA DE MATERIALES COMPUESTOS

anen
asociación nacional de empresas náuticas

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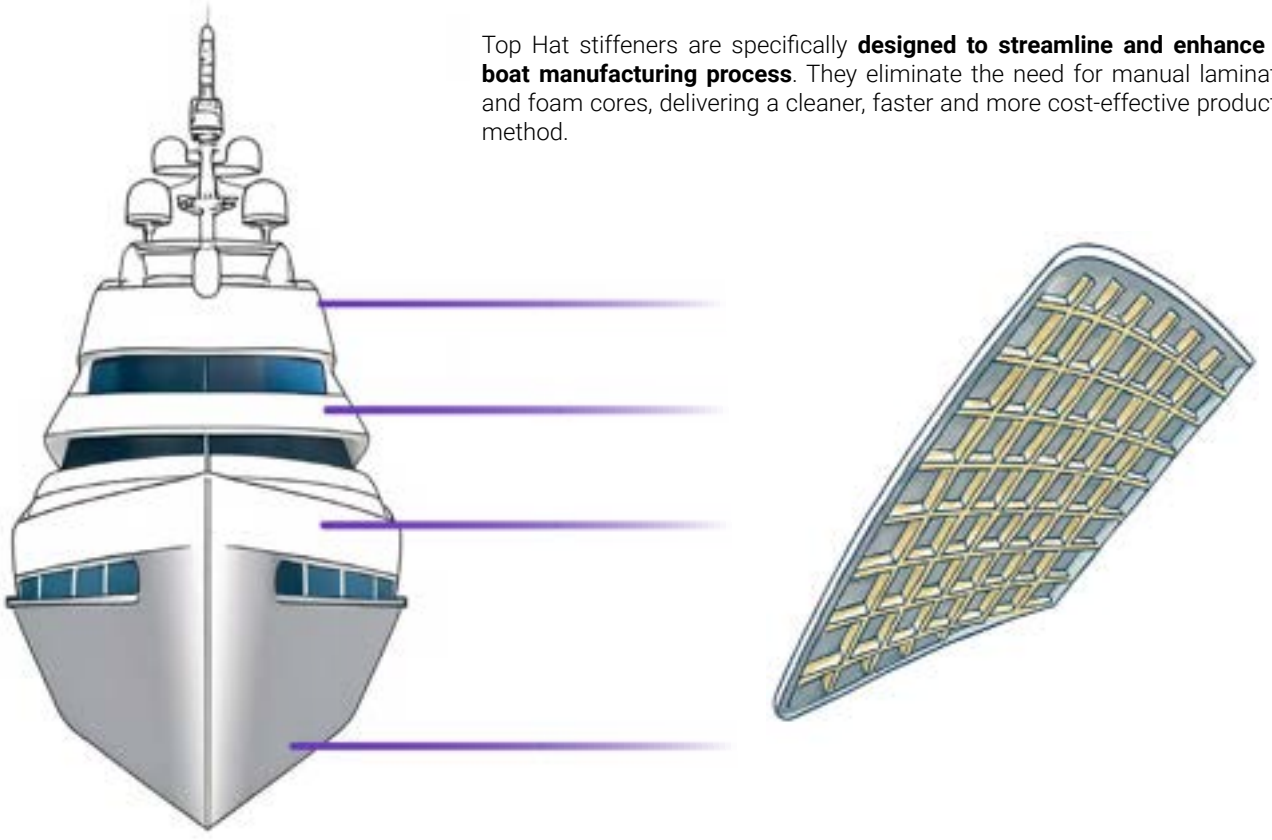
BOOST PRODUCTION EFFICIENCY WITH TAILOR-MADE STIFFENERS

Top Hat stiffeners are specifically **designed to streamline and enhance the boat manufacturing process**. They eliminate the need for manual laminating and foam cores, delivering a cleaner, faster and more cost-effective production method.



Installation up to **80% faster**

Significant production **cost savings**

Structural weight up to **70% lighter**

Prefabricated in a range of **sizes**

Certified product in **2025**

RECOGNIZED FOR EXCELLENCE IN MARINE COMPOSITE SOLUTIONS

The solution developed in collaboration with the European Fibre4Yards consortium has been honored with the prestigious JEC Innovation Award, the highest international recognition in the composites sector.

This award validates the innovative approach, industrial feasibility, and technological impact of fiberglass stiffeners specifically designed for marine applications. This award-winning technology combines structural efficiency, easy integration into advanced production processes, and a clear commitment to the sustainability of the maritime industry.

FIBRE4YARDS
SHIPYARD FOR THE FUTURE

JEC WORLD
INNOVATION
AWARDS
WINNER
2025

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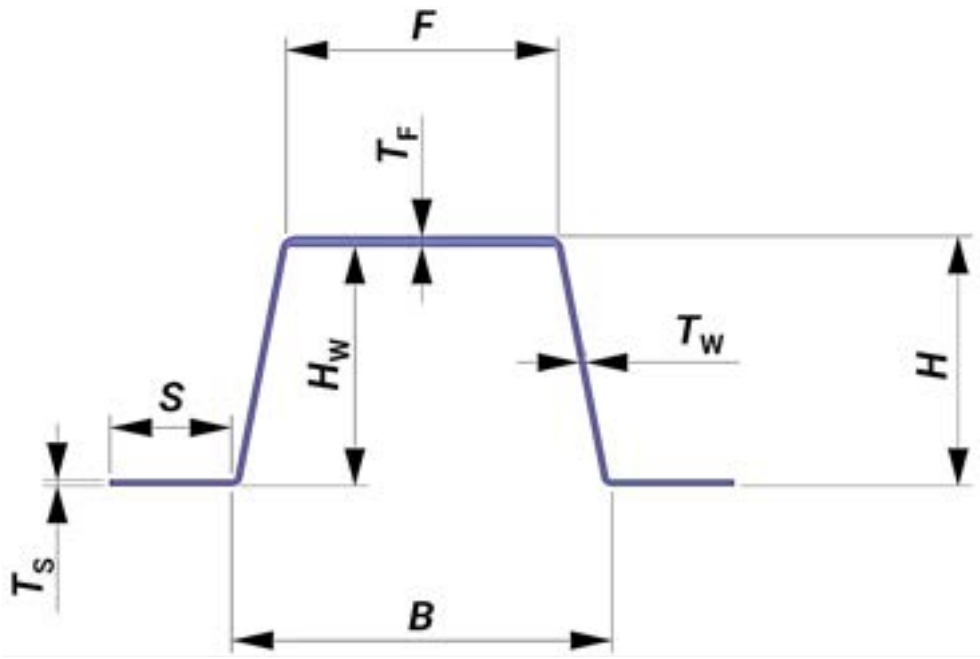
DIFFERENT SIZES TAILORED TO THE SPECIFIC REQUIREMENTS OF EACH PROJECT

Robtrusion offers a versatile range of profiles designed to integrate precisely and efficiently into all types of maritime structures.

Our fiberglass profiles have been specifically developed for marine applications, with a design focused on delivering optimal structural performance, low weight, and high strength. Available in different lengths to suit each project's requirements and certified by Bureau Veritas, they ensure quality, safety, and compliance with naval industry standards. All information is organized to facilitate easy selection and application in naval engineering and boatbuilding projects.

Profile reference	Dimensions							
	H mm	*F* mm	*B* mm	*S* mm	T_s mm	H_w mm	T_w mm	T_f mm
ROB 50	50	50	67	45	1,88	46,7	1,88	3,3
ROB 75	75	75	100,4	52,5	1,88	71,4	1,88	3,6
ROB 100	100	100	134	60	2,8	95,1	2,8	4,9
ROB 125	125	125	167,4	67,5	2,8	119,8	2,8	5,2
ROB 150	150	150	200,9	75	3,7	143,5	3,7	6,5
ROB 175	175	175	234,3	82,5	3,7	168,1	3,7	6,9

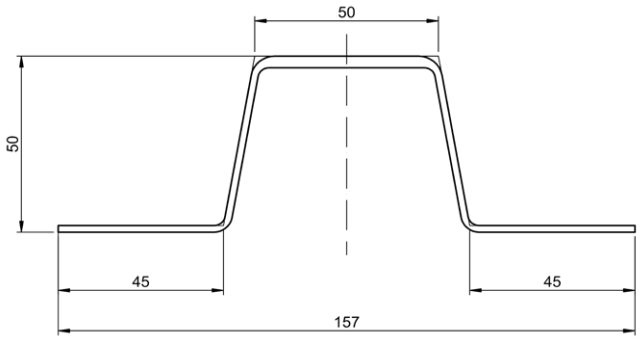


ROB 50

Section Properties				
d_{na}	$E{\cdot}I_{na}$	SM_f (flange)	SM_W (web)	SM_S (adhesive joint)
27,8 mm	4,96E+09 N·mm²	7,7 cm³	10,0 cm³	9,3 cm³

Mechanical Properties		
Flange	Web	Adhesive joint
E = 29,13 GPa	E = 19,23 GPa	E = 19,23 GPa
σ_t= 378 MPa	τ= 125 MPa	
σ_c= 349 MPa		

Linear weight: 1,05 kg/m

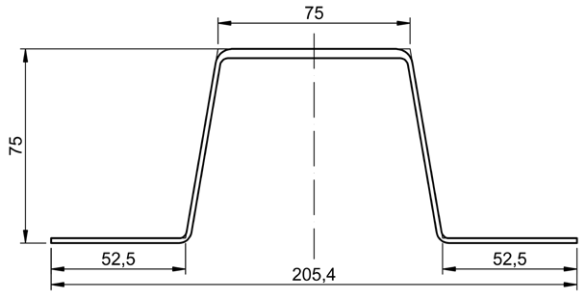


ROB 75

Section Properties				
d_{na}	$E{\cdot}I_{na}$	SM_f (flange)	SM_W (web)	SM_S (adhesive joint)
45,8 mm	1,60E+10 N·mm²	18,8 cm³	19,0 cm³	18,2 cm³

Mechanical Properties		
Flange	Web	Adhesive joint
E = 29,13 GPa	E = 19,23 GPa	E = 19,23 GPa
σ_t= 378 MPa	τ= 125 MPa	
σ_c= 349 MPa		

Linear weight: 1,56 kg/m

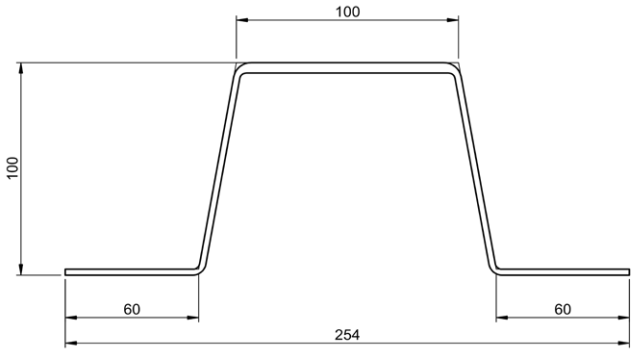


ROB 100

Section Properties				
d_{na}	$E{\cdot}I_{na}$	SM_f (flange)	SM_W (web)	SM_S (adhesive joint)
61,5 mm	5,05E+10 N·mm²	45,1 cm³	44,8 cm³	42,7 cm³

Mechanical Properties		
Flange	Web	Adhesive joint
E = 29,13 GPa	E = 19,23 GPa	E = 19,23 GPa
σ_t= 378 MPa	τ= 125 MPa	
σ_C= 349 MPa		

Linear weight: 2,82 kg/m

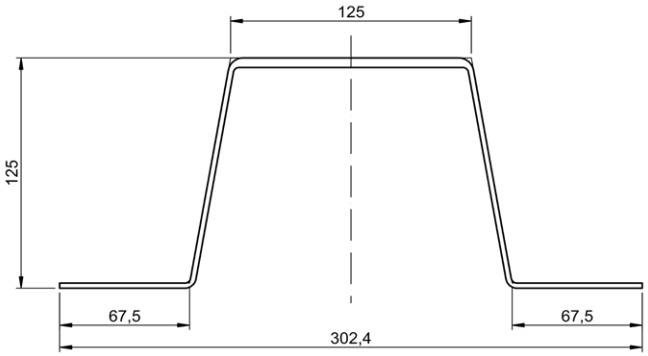


ROB 125

Section Properties				
d_{na}	$E{\cdot}I_{na}$	SM_f (flange)	SM_W (web)	SM_S (adhesive joint)
79,9 mm	9,78E+10N·mm²	74,4 cm³	66,0 cm³	63,6 cm³

Mechanical Properties		
Flange	Web	Adhesive joint
E = 29,13 GPa	E = 19,23 GPa	E = 19,23 GPa
σ_t= 378 MPa	τ= 125 MPa	
σ_C= 349 MPa		

Linear weight: 3,61 kg/m

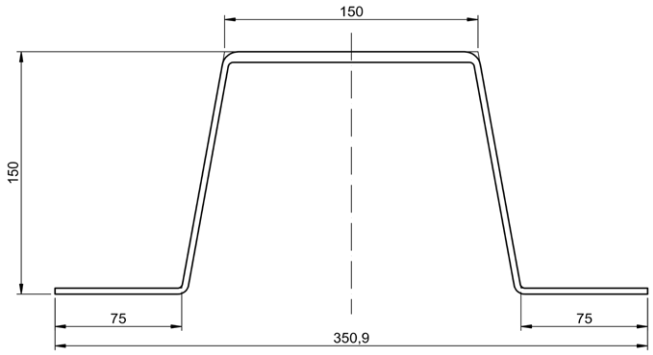


ROB 150

Section Properties				
d_{na}	$E{\cdot}I_{na}$	SM_f (flange)	SM_W (web)	SM_S (adhesive joint)
95,8 mm	2,10E+11 N·mm²	133,3 cm³	118,5 cm³	114,1 cm³

Mechanical Properties		
Flange	Web	Adhesive joint
E = 29,13 GPa	E = 19,23 GPa	E = 19,23 GPa
σ_t= 378 MPa	τ= 125 MPa	
σ_c= 349 MPa		

Linear weight: 5,48 kg/m

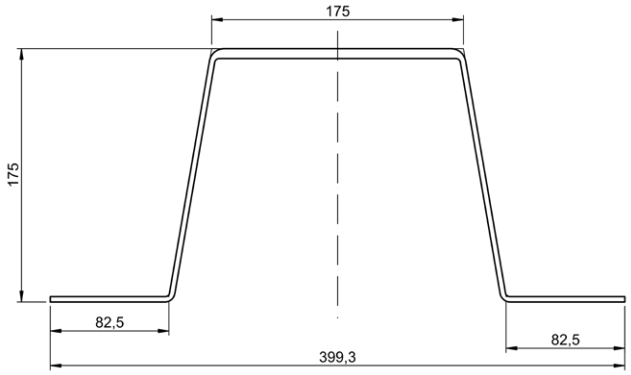


ROB 175

Section Properties				
d_{na}	$E{\cdot}I_{na}$	SM_f (flange)	SM_W (web)	SM_S (adhesive joint)
114,7 mm	3,36E+11 N·mm²	191,0 cm³	156,9 cm³	152,2 cm³

Mechanical Properties		
Flange	Web	Adhesive joint
E = 29,13 GPa	E = 19,23 GPa	E = 19,23 GPa
σ_t= 378 MPa	τ= 125 MPa	
σ_c= 349 MPa		

Linear weight: 6,56 kg/m



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