www.jun-eng.kr



GO THROUGH THE CURRENT, SPREAD

Revival of The 3D Printing Industry 3DPROCEAN Is With You.



# **PROCEAN**

#### **3DPROCEAN**

It means that it is possible to perform all tasks for modeling and 3D printing in various fields like a wide ocean.

#### **Process Automation Model Ship That Combines 3D Printing** And Shipbuilding Design Technology

It protects the core original technology of domestic shipbuilders and realizes zero technology leakage by safely producing ship models.

By securing cost competitiveness of shipyards and shortening delivery times, great synergy is expected when competing for orders with peers.

It is a key item that will be an opportunity for the domestic shipbuilding industry to leap forward in technological competitiveness.



#### **About Company**







Ministerial Award



beginnen Aur	i Ge	rti
A second second	환경경영시스명인증세 준엔지니어링 주식회/	¥
- figures	NA 2 12:000 00000-000 900 00-90 9000 000-7 ISO 14001:2015	
Revenued Confidence	1000 200 01 0100 010 010 00000 1. 85409 0000 010 010 0044000 000 040 040 1.0420 000 040 040 1.05.020 000 00	
d Großtenne Righten	1993 - Sare ang ang 2012 - Sare ang ang 2012 - Sare ang ang 2013 - Sare ang ang 2013 - Sare ang ang 2013 - Sare ang ang	:
	@ # 8885a	2893



# **About 3D Printing**

3D printing refers to printing three-dimensional figures rather than printing flat characters or pictures using a printer. 3D technology, which prints real objects in a three-dimensional space like printing paper, has endless uses that can be used as examples of 3D printing in most fields of manufacturing products.

#### >> Features of Ship Model



#### >> Field of Application



#### >> Manufacturing Process



**30% reduction in production cost** through process improvement and automation process and professional modeling

Existing manual work takes 60 to 90 days  $\rightarrow$  50% reduction in 30~45 days of our company

By printing shapes using eco-friendly materials Product production tailored to the international trend

Existing manual 21 processes → Our company's automation Simplified process with 7 processes

Existing process is a design document and risk of technology leakage  $\rightarrow$  Obtain drawing information through security server and network



#### Print

Hull batch output, deck and detailed printing of various equipment



**Inspection and** Delivery Final inspection and delivery

**Post-Processing** Sanding and fumigation work

04



#### **Ship Model With Beam Projector**

- >>> When a beam projector is mounted on the ship model of a cargo ship, it is used in internal conference rooms, domestic and overseas exhibitions, company lobby, and related company meetings. Maximizes the effect of public relations with a model of a ship built directly by the company by transmitting a corporate promotional video.
- >>> Shipowners / Shipbuilders, Shipyard, Shipping Companies, Shipbuilding / Offshore plant equipment companies are expected to increase their business efficiency by enhancing their corporate image and emphasizing visual elements.





Ship Type	Scale	Size (mm)	Total Weight (Kg)	Material	Production Period
Cargo Ship	125:1	2010x300x500	22	PLA / RESIN	70 days

# **Description** LNG Cutway Ship

- >> Part of the exterior of the LNG ship is cut and reproduced in detail so that the internal structure can be understood.
- >> A ship that has a special structure to transport LNG (Liquefied Natural Gas) in a liquid state distance mass transportation by ship.
- >> It can be used as a teaching aid and can be exhibited in exhibitions and museums.





Ship Type	Scale	Size (mm)	Total Weight (Kg)	Material	Production Period
LNG Ship	200:1	2010x354x520	45	PLA / RESIN	80 days

without a phase change from the production site to the consumer site, and is capable of long-



### **>** Tug Boat



Ship Type	Tug Boat	
Scale	35:1	
A ship to tow another ship, also known as tug or tug boat, and is a multipurpose work ship used in port construction		
Size(mm)	600x158x260	
Weight(Kg)	1.8	
Material	PLA / RESIN	
Period	25 days	

5







#### > Cleanup Vessel







Ship Type	Cleanup Vessel	
Scale	40:1	
Ships operated by the state and local governments to clean ports for the purpose of safe entry and departure of ships		
Cize(mm)	750,200,200	

5120(11111)	750x229x500
Weight(Kg)	4.1
Material	PLA / RESIN
Period	25 days



# > Fishing Boat





# $\geq$ Cruise Ship





3DPROCEAN Go Through The Current, Spread 08 1 09

Ship Type



Scale	35:1	
Vessels used for fishing and other fishing activities (transport of catches and test, survey, and instruction, etc.)		
Size(mm)	700x121x282	
Weight(Kg)	2.1	
Material	PLA / RESIN	
Period	30 days	

Fishing Boat





Ship Type	Cruise Ship
Scale	55:1

>> Ships carrying people for tourism and operating on the water for sightseeing and other recreation

Size(mm)	800x172x260
Weight(Kg)	4.0
Material	PLA / RESIN
Period	35 days





#### > Bulk Carrier



Ship Type	Bulk Carrier	
Scale	230:1	
A cargo-only ship that can load unpacked cargo. Coal-only lines, ore-only lines, cement- only lines, and grain-only lines		
Size(mm)	1008x176x260	
Weight(Kg)	4.4	
Material	PLA / RESIN	
Period	35 days	







# > Barge







Ship Type	Barge	
Scale	70:1	
Ships without a power system that transports cargo over a relatively short distance, such as inside a port or an estuary		

Size(mm)	972x295x187
Weight(Kg)	3.8
Material	PLA / RESIN
Period	30 days



#### > Fisheries Science Research Vessel





# > Cargo Ship









Ship Type	Fisheries Science Research Vessel
Scale	77:1
National Fisheries Research Institute's Inquiry No. 22 Ship to support domestic fishery development policy by in charge of fishery resource research in Korea's EEZ	
Size(mm)	918x176x338
Weight(Kg)	5.6
Material	PLA / RESIN
Period	35 days





Ship Type	Cargo Ship
Scale	250:1

>> Transport cargo and can be divided into general cargo ships, special cargo ships, and exclusive cargo ships

Size(mm)	1005x150x223
Weight(Kg)	3.9
Material	PLA / RESIN
Period	35 days





#### Leading Shipbuilding Offshore Plant JUN ENGINEERING



#### **HEAD OFFICE**

Knowledge Industry Center, 22, Manggyeongnamgil 44beon-gil, Jinju-si, Gyeongsangnam-do, Republic of Korea

**BRANCH OFFICE** #605, Chosun Marine Hi-Tech Town, 16, Technosaneop-ro 55beon-gil, Nam-gu, Ulsan, Republic of Korea

TEL 055–761–0634/0635 FAX 0504–473–0607 Email juneng0214@naver.com





- Q

3d.procean



smartstore.naver.com/juneng0214



pjog blog.naver.com/juneng0605

**COMDO** 

준엔지니어링

- Q

jun engineering