


MEGATUGS

SALVAGE & TOWAGE

Fast response & professional assistance 24/7



MEGATUGS is a Piraeus based maritime company established in 1978. It has been widely recognized as one of the specialized professional towage and salvage companies in the marine industry. Throughout the years, **MEGATUGS** has successfully diversified its services to achieve the full range of services in emergency response, routine operational matters and emerging projects. This allows the company to undertake a job and operate with minimal to no external partner involvement. **MEGATUGS** constantly raise its standards and challenge its people in order to become better. **MEGATUGS** has been widely recognized for being committed to its work and clients.

• Harbour Towing - ONLY QUALITY SERVICE COUNTS

Since its establishment, **MEGATUGS** has managed to play a significant role in providing harbour towing services, contributing to the prompt operation of the harbour activities in and around Greek Ports and helping to improve its customers' commercial efficiency. **MEGATUGS** operates one of the largest (in terms of number as well as in terms of Bollard Pull) and most modern fleets of tugboats in Greece. **MEGATUGS** believe that the key to success though is our people, who are passionate and committed to their roles. Round-the-clock fully integrated office operation department, tug crew readiness, efficient ship handling, precise maneuvering and safe positioning require well trained and properly motivated shore-based & seagoing personnel. Coordinating its operations through cooperation and close liaison with port authorities, mooring men and harbour pilots, **MEGATUGS** is the ship's port partner who provides professional tug assistance at the highest level

of quality and commercial efficiency.

• Ocean Towing - SAFE DELIVERY TO DESTINATION PLACE

MEGATUGS is one of the few Greek companies offering Ocean Towing services.

Our operations stand out for their high quality and professionalism due to the great experience of our Salvage Masters and crew which also indicates the reliability and efficiency of our services.

Our ocean tugs are highly maintained and fully equipped with all towing and emergency equipment in accordance with the international standards and requirements of recognized marine survey organizations, classification societies and marine insurers.

Over the last years, our ocean tugs have safely and successfully carried out ocean tows of jack up barges, pipe and cable laying barges, transport barges, dipper dredgers, floating docks, VLCC's, damaged vessels, military vessels, concrete caissons etc.

We believe that flexibility in supporting marine services is critical in meeting our clients' advanced needs.

• Salvage Operations - SAFETY AT SEA ON 24 HOURS A DAY, 365 DAYS A YEAR

Our work approach stands on two pillars: Fast response and professionalism. We will be the first to respond and the best at our job, minimizing costs in human life and property, while at the same time minimizing potential effects to the environment.

Whenever immediate salvage assistance is needed, any time of the day or

night, **MEGATUGS** is on call. With its expertise, the highly qualified and dedicated salvage team and the highly maintained and fully equipped fleet, a rapid and efficient provision of service is guaranteed. The salvage and pollution prevention inventory (with specialized salvage equipment either onboard our tugs or in our salvage warehouse) includes high capacity offloading salvage pumps, submersible pumps, electrical generators, welding, cutting, fire fighting and diving equipment, diesel driven hydraulic power pack units, oil containment booms, floating skimmer oil collectors, oil absorbent booms and pads etc.

• Wreck removal - WRECK REMOVAL

Shipwrecked vessels are often hazardous towards the environment, other vessels and human life. By providing fast and high-quality wreck removal services, we can safely handle common, and more importantly, uncommon wreck situations. We can secure wrecks and move them to safe anchorage places or shipyards, for repairs or disposal. The procedure we use in our operations is to consider first of all the condition of the vessel, the cargo and any available equipment in order to create the suitable for that specific case methodology. Then our crew that consists of experienced salvage masters, divers, naval architects, surveyors and environmental specialists work together and employ with the best possible way all the available technological advantages. In this way we manage to achieve those removals even in challenging and extreme environments.

• Pollution Control - POLLUTION PREVENTION, CONTAINMENT AND CLEAN-UP

In recent years, most maritime companies are becoming more and more sensi-

tive about protecting and preserving the environment, and hence they endeavor to eliminate the environmental hazards that can be caused by a maritime accident.

Our company has the necessary expertise, trained personnel and specialized equipment for effective marine pollution control. To further assist the recovery process, one tanker vessel has also been added to our fleet, making the procedure of decontamination and recovery of pollutants easier and more effective.

MEGATUGS has effectively performed all kinds of marine pollution control operations including:

- Pumping out/ De-oiling of bunker and cargo tanks
- Transferring oil residues to a recycling centre
- Cleaning the sea surface with oil skimmers
- Deploying floating oil booms
- Spraying of dispersing agents
- Removing of hazardous materials from onboard vessels.

• Offshore Support - PROFESSIONAL MARINE SERVICES TO THE OFFSHORE INDUSTRY

MEGATUGS's primary task is to meet its clients' growing needs for deep-water development and support of offshore petroleum exploration. The company has the experience and the personnel for successful anchor handling and off shore support services to the offshore industry.

MEGATUGS operates on a 24-hour basis, 365 days a year. It maintains an Operation Office manned round-the-clock and, along with routine operational matters, is ready to respond to any emergency matter. The highly trained and experienced personnel is dedicated and committed to their job on a 24-hour stand-by basis and ready to offer every possible professional assistance.

The fleet consists of various types of tugs, fully equipped with modern towage, salvage, antipollution and fire-fighting equipment so that we are capable to meet its customers' requirements in terms of quality, power, reliability safety and efficiency.

With stations in two focal points in Greece, we are able to rapidly respond to any emergency, along with performing routine operations, in the areas of The Mediterranean, the Black and the Red Sea. Our Operation Office is manned around-the-clock, 24-hours per day, 365 days a year, ensuring reliable, effective and efficient port operations. We are ready to handle any salvage request with an immediate response guarantee.

Megatugs has the ability to cope with incidents in national and international waters as well as the changes in market trends. This is achieved through the expansion of our fleet and the replacement of our vessels with new, combined with the exploitation of new technology and our experienced personnel.



Salvage and Towage is among the most demanding shipping jobs in the world and one would expect that tugs should be the most innovative and ecological friendly vessels. However this is not always the case because the fleet is in many cases old and only few renewals are in the agenda. One of the exceptions of that rule is MEGATUGS . We had the opportunity to make an interview with Mr. Anastasios Michalaros Manager Director of the Company. The interview has as follows:

NAFS: *What are the major technical challenges that faces the salvage and towage industry? What developments do you see in the salvage and towage industry?*

A.M: One of the major technical challenges the towing industry faces is the ageing fleet of the tugs. 2017 is coming and there are still companies in Greece who are providing their port services with the majority of tugs being built back in 1950 - 1960. We believe as a company that the Greek ministry of merchant marine has to issue new regulations with new standards - having in mind the renewal of the fleet - for the tug industry in order for the company to be capable and get the permission to undertake a port project with safety.

Another technical challenge is that the majority of tug fleet in Greece have only one propeller. These tugs should disappear from the market immediately. In all major ports globally there are tugs with two propellers, ASD, or voit snider systems. This is very important because ships that approach the Greek ports are really big. For example some containerships that arrive at the port of Piraeus are more than 360 meters long. They must approach any port with safety. So, you can understand that a tug with one propeller cannot face this situation with safety. Just imagine that suddenly the one and only engine stops. What are you going to do with such a long and big vessel? Another serious problem is the regulations about the bollard pull capacity and not the horsepower of the tug. When time goes by and you do not have a proper engine maintenance maybe the horsepower is the same but the bollard pull decreases dramatically. There are tugs in the market that started with 40 tons of bollard pull and after 30 or more years the bollard pull is 10 tonnes. So again safety is the

main problem, so the regulation must change for the sake of providing services having in mind that safety comes first.

The Firefighting is also a very important issue. All tug companies are checked by the Greek Ministry of merchant marine, in order to be capable to fulfil a port project. If my company passes the test and obtain the operations licence, this licence is valid forever and there is no other test control from the State. Nobody can tell that my fleet's technical characteristics are the same after let's say 30 or more years. This Firefighting regulation does not specify the amount in m3 of water that the jets must throw per hour. You may have a licence in one of your tugs which can throw 120 m3 per hours, which is today an insufficient amount of water because with that amount of water you cannot quench any fire due to the length of the vessels as we said earlier. Global regulations clearly declare that the amount of water per hour should be between 500m3 and 2400m3. So the Greek ministry should change the regulation in order to comply with global regulation in order for the tugs to be able to provide high quality services with safety and speed. I think that among many issues that we have to face everyday those stated are the most important.

NAFS: *New horizons for development are being offered by the offshore sector. What opportunities do you find in this area?*

A.M: Perhaps it is a little bit early to discuss about offshore sector. In any case it is ahead of us. We believe that Greek companies are being looking at this sector very carefully. It is definitely something new for them and they want it for sure. Our company has worked in this field in the past using its own vessels specialised in offshore activities. Our last project was the connection between Italy and Croatia by a cable. This project had gone very well. The day that offshore activities will come to Greece will find us ready to face the challenge. Two tugs with anchor handling are already in our fleet and they can be part of the core at offshore activities around which new investments will be created. And we ready for that.

NAFS: *How Megatugs is prepared to face the emergencies?*

A.M: Last decade the results of the continuing efforts of MEGATUGS

in emergencies are very significant. Our suitable and qualified staff who are adequately trained have very good knowledge of how to react in such cases and to fulfil their obligations regarding emergency. We provide continuous and appropriate training of our personnel with drills and practical exercises to ensure that MEGATUGS's personnel are proficient in all assigned duties and to identify any safety-related deficiencies which need to be addressed. Our tugs are very well equipped and ready for an efficient and effective first response. Fleet modernisation and renewal has already begun. In this context we have already added five new tugs and our projects include our willingness to add more tugs in the near future to remain competitive. Another area which is related with the critical situation of the first responses is the area of diving. Our divers are certified by English schools for underwater services and they use equipment of the latest technology. In diving area we are certified from almost all IACS Classification Societies. The second important thing in emergencies has to do with antipollution in which Megatugs has made great investments not only in equipment but also in qualified personnel. In this context Megatugs can face any emergency in all over the world.

NAFS: *How difficult is to handle with the environmental challenges? What effect do you see new environmental regulations having in the shipping industry?*

A.M: As the shipping industry is growing so fast, the need to handle the environmental impact is very important. There are numerous environmental issues emerging on the agenda that are set to become important after 2020. Regulations regarding environmental protection are here. The point is the proper application and the compliance of the regulations. A positive step should be the review of standards and practices to assure state compliance with the environmental and anti-pollution regulations. This must be one of the absolute priorities of all states. As far as MEGATUGS is concerned we can assure that our priority is to carry out the necessary actions to face marine pollution circumstances and to advise shipowners how best to manage the problem. Fast decisions are high in our agenda and given the collaboration of shipowners and the state or the port authority the result is positive in any case.



NAFS: *What are the methods that your company uses for subsea environments? How can you achieve underwater results equivalent to dry standards?*

A.M: Underwater service is raising increased attention in recent years. As I said previously, MEGATUGS has effectively developed the underwater activity area. At first place we choose very carefully the people who will work in that field. Each new diver spends a substantial period with us just to be sure that he is the person we want for that job. Then we send all the diver either to UK or to South Africa in special schools for divers from which they receive a certification related to the specific diving job. To improve efficiency in underwater tasks we continuously train our personnel and of course we apply all the latest regulations so to eliminate the possibility of something goes wrong. Given the high tech equipment that our company uses for underwater services, the next challenge for MEGATUGS is to acquire its own decompression chamber. As you can see we implement investment policies that depend on market conditions and the specific area of operation.

NAFS: *What are you doing to remain competitive? What is the secret of your success? How are you approaching the future? How about your growth plans?*

A.M: The first thing is to offer valuable services. We are not trying to cheat the market. We are who we are and we offer what we offer and through our job we aim at closer links with our customers. We enjoy close working relationships with shipowners from all over the world. We strongly believe at the regulations for shipping industry and we are sticking on them. That means that MEGATUGS is working under a complex set of international and national regulations. We are not making discount in safety. Moreover the company is now in a process of its fleet renewal with very young tugs like the two last ones which are considered among the most contemporary in Greek market at least. Although predicting the future is a risky business, however our objective is to remain a leading Salvage and Towage firm in terms of technology and therefore in terms of safety of life, property and the environment. And we are confident about that.

PANTANASSA

PARTICULARS	
Vessel Type	Anchor Handling, Salvage Tug
IMO Number	9332561
Port of Registry	Piraeus
Year Built	2005
Classification notations	Bureau Veritas Hull Mach, Tug, Oil Recovery Ship, FIFI Capability, Unrestricted navigation
DETAILS	
Length Overall	40m
Breadth	11.8m
GRT-NRT	499/149
Depth Moulded	4.6m
Maximum draft	3.8m
Clear deck Space	150 m ²
Deck loading	5 t/m ²
Max Speed	13 kn / 7 m ³
Economical speed	10 kn / 4.2 m ³
Bollard Pull	52 t
Sewage Plant	MARPOL compliant 20 persons
Rudders	Twin
Joystick	Not fitted
CAPACITY	
Fuel Oil	368.18 m ³
Fresh Water	172.3 m ³
Foam	7.8 m ³
Detergent	9.3 m ³
MACHINERY	
Main Engines	2 x Caterpillar 3516B – 2026 BHP each
Generators	2 x Caterpillar 3306C – 311 BHP – 232 kW each
Bow Thruster	3 t
Propulsion	2 x Fixed pitch

ACCOMMODATION	
Berths	3x 1, 1x 2, 3x 4
Total	17
FIRE FIGHTING	
Class	FIFI Capability
Monitors	2 x 600m ³ /hr
Pumps	1 x 1200m ³ /hr
DECK EQUIPMENT	
Towing Winch	
Type	Double drum waterfall
Pull	50 t
Wire Capacity	1000 m x 42 mm
Anchor Handling Winch	
Type	Plimsol double drum waterfall
Pull	50 t
Brake Holding	120 t
Wire Capacity	1000 m x 42 mm
Tugger Winch	
Number & Capacity	2 x 5 t SWL
Wire Capacity	100 m x 26 mm
Other Deck Equipment	
Towing Pins	Plimsoll 100 t
Stern Roller	Plimsoll 1.45 m x 3.5 m, 150 t SWL
Shark Jaws	100 t Strong Jaw, 78 mm
Deck crane	Palfinger, PK 15500 C, 910 KG @ 12,40 m
LIFESAVING	
Liferafts	2 x 20 man
Lifejackets	39
FRC/Rescue Boat/Davit	SOLAS Semi-rigid BMD Rescue boat & KATO KS 454 RC Davit
Lifebuoys	8
SPECIALIST	
Rescue Zone	Fitted
SALVAGE/ ANTIPOLLUTION	
Oil Spill Response booms	Yes
Salvage pumps	Yes

PANTOKRATOR

PARTICULARS	
Vessel Type	Anchor Handling, Salvage Tug
IMO Number	9376880
Port of Registry	Piraeus
Year Built	2005
Classification notations	Bureau Veritas Hull Mach, Tug, Oil Recovery Ship, FIFI Capability, Unrestricted navigation
DETAILS	
Length Overall	40m
Breadth	11.8m
GRT-NRT	499/149
Depth Moulded	4.6m
Maximum draft	3.8m
Clear deck Space	150 m ²
Deck loading	5 t/m ²
Max Speed	13 kn / 7 m ³
Economical speed	10 kn / 4.2 m ³
Bollard Pull	55 t
Sewage Plant	MARPOL compliant, 20 persons
Rudders	Twin
Joystick	Not fitted
CAPACITY	
Fuel Oil	361.80 m ³
Fresh Water	172.3 m ³
Foam	7.8 m ³
Detergent	9.3 m ³
MACHINERY	
Main Engines	2 x Caterpillar 3516B – 2026 BHP each
Generators	2 x Caterpillar 3406C – 288 BHP – 215 kW each
Bow Thruster	3 t
Propulsion	2 x Fixed pitch

ACCOMMODATION	
Berths	2x 1, 2x 2, 3x 4
Total	18
FIRE FIGHTING	
Class	FIFI I
Monitors	2 x 1200m ³ /hr
Pumps	1 x 2900m ³ /hr
DECK EQUIPMENT	
Towing Winch	
Type	Double drum waterfall
Pull	50 t
Wire Capacity	1000 m x 42 mm
Anchor Handling Winch	
Type	Plimsol double drum waterfall
Pull	50 t
Brake Holding	120 t
Wire Capacity	1000 m x 42 mm
Tugger Winch	
Number & Capacity	2 x 5 t SWL
Wire Capacity	100 m x 26 mm
Other Deck Equipment	
Towing Pins	Plimsoll 100 t
Stern Roller	Plimsoll 1.45 m x 3.5 m, 150 t SWL
Shark Jaws	100 t Strong Jaw, 78 mm
Electrical Sockets	4 x 415 v x 32A
Hydraulic Crane	27S 5.7 t @ 4.0 m, 950 Kg @ 16.7 m
LIFESAVING	
Liferafts	2 x 20 man
Lifejackets	23
FRC/Rescue Boat/Davit	SOLAS Semi-rigid BMD Rescue boat & KATO KS 454 RC Davit
Lifebuoys	8
SPECIALIST	
Rescue Zone	Fitted
SALVAGE/ ANTIPOLLUTION	
Oil Spill Response booms	Yes
Salvage pumps	Yes