



NC İMALAT VE MÜHENDİSLİK A.Ş.



**"Engineering Your
Way to Success"**

“Who are we?”

NC İMALAT® formed by engineers who have extensive proven experience since 2012 presents engineering solutions of manufacturing and servicing field in the Marine and Industry, including ;

- All kind of Vessel (Oil/Chemical Tankers, Cargo Vessels, Offshore Vessels, Fishing Vessels, Fi-Fi Tugs, Luxury Boats),
- Combined Heat & Power System (Cogeneration, Trigeration Systems, Exhaust Systems, Exhaust Silencer, Exhaust Heat Exchanger, Damper, Pressure Vessel, Fuel Tanks, Fuel Automation Systems, Flue Systems Industrial Energy Efficiency Projects and Applications),
- On-site manufacturing of Marine & Energy system turn-key projects (Design, Manufacturing, Piping, Spool Works, Installation),

NC İMALAT offers a very broad range of marine & industrial related equipment and systems. Within these fields NC İMALAT's scope of work will cover from the design, equipment supply, field support and start up for new Vessels/Plant or Conversions according to specification and rules. NC İMALAT has a multi-disciplined technical staff fully experienced in shipbuilding and mechanical system design and commissioning techniques. Full use is made of computer technology including AutoCAD programs.

NC İMALAT specializes in solutions for a wide range of applications in your marine & industrial projects. We are not just only a supplier, but a partner. Quality and Customer satisfaction are our pursuit. We shall be pleased to establish mutual beneficial trade relationship with clients all over the World.

“Quality”

NC İMALAT equipment are designed and manufactured according to the installation and work in the factory and site. We ensure to provide our customers competitive price for high quality products and timely delivery. Our products have been approved by major Classification Societies in the world such as BV, RINA, ABS, NK. We have RINA approved welder and welding procedure, ISO 9001:2015 and OHSAS 18001:2007 certificates in our workshop.

We are not just only a supplier, but a partner. Quality and Customer satisfaction are our pursuit. We shall be pleased to establish mutual beneficial trade relationship with clients all over the world.



NC İMALAT
VE MÜHENDİSLİK A.Ş.

“Engineering Your Way to Success”

www.ncimalat.com / info@ncimalat.com

www.ncmarine.eu / info@ncmarine.eu



Our Services

NC İMALAT provides clients with a broad range of professional services, following the latest requirements from Classification Societies and Marine Organizations, fully considering the needs from owners and the actual conditions and technological level of shipyards.



Small Tugboat & Push Boat



Small Agent Boat Launching

Our Services Include

- Conceptual Design
- Classification Approval Design
- Production Design
- Updating and Conversion Design
- BMWS (Ballast Water Management System) Retrofitting / EGCS Installation
- 3D laser scanning and modelling for retrofitting
- Site Technical Support for Owner and Shipyard
- Business Consultants

On Site Technical Support

Technical Support before/during/after Construction or Conversion on site.

Technical and Business Consultants

- Order Consultants
- Cost Estimate
- Feasibility Study
- Yard Selection
- Site Survey during Construction

Manhole And Hatch

Manhole and hatch are kinds of watertight, weathertight, pressure-proof and quick acting covers. It is installed above the deck. The specification of cover can be customized and made of steel or aluminum as your requirements. There are two available shapes: round and square. We provide a full selection of hatch cover specifications. We can supply different types of closure system for covers such as spring, hand-wheel handle and bolt & nuts. Please contact us for more information.



Tank Manholes



Marine Steel Hatch



Water Tank Stainless Steel Manholes



Water Tank Steel Manholes



Marine Steel Spring Hatch



Hard Work on Marine Steel Hatch

Steel Door

Steel doors are kinds of watertight, weathertight. The specification of doors can be customized and made of steel or aluminum as your requirements. We provide a full selection of door specifications. We can supply different types of closure system for covers such as handle, hand-wheel handle and etc. We can offer replacement parts for most marine doors, no matter the original manufacturer. All of the products we supply and produce are fully certified to meet international industry standards, such as MED, Lloyds, DNV, USCG and BV certification. Please Contact us for more information.



Steel Door with Stainless Steel Plate Inside



Steel Door with Glass



Steel Door with Glass and Stainless Steel Plate Inside



Steel Door with Glass



Watertight Steel Door



Watertight Steel Door

Marine Ladder

Aluminum or steel ladders are produced for ships of all types and sizes. Mechanical properties such as ladders, lifting capacity, bending under load are tested according to these standards. Stair types include fixed platform ladders, broadside ladders and scaffold ladders.

Fixed platform ladders are attached to a fixed point. These ladder types can be used with different angles, single or multi-stage, to work between different levels.

Built-in ladders help passengers and crew land and load safely. It can be used as single or multi-stage.

Bridge stairs are used on ship decks to provide transportation from or to the ship. Bridge stairs are mainly used by the ship crew.



Aluminum Accommodation Ladder



Grating Ladder



Vertical Ladder



Gangway Ladder



Bulwark Ladder



Gangway Ladder



Ventilation Louvres

Our marine louvers are made-to-measure according to each application's openings and product dimensions. They have a low pressure loss. Louvers are made of marine grade steel and aluminum. Our marine louvers are extremely suitable when stylish outlook is required.

We manufacture various technical louver solutions for ventilation in buildings, industry and ships. Technical louvers are designed and manufactured according to the customer's requirements. There are powerful solutions for separating snow and water at different surface speeds and air volumes. Our louver systems are highly adaptable. They are available in various configurations, materials, finishes and coatings to meet the requirements of almost any project.

Our technical louver solutions can be used to complete entire facades or to be made into different supply air holes and chambers. Louvers are also manufactured for curved surfaces and cylindrical assemblies. Please contact us for more information.



Painted Steel Ventilation Air Outlet Construction



Pneumatic Moveable Blade Louvres



Air Gooseneck Ventilator



Galvanised Ventilation Air Louvre



Galvanised Mushroom Ventilator



Galvanised Mushroom Ventilator



Mooring Equipment

Various types of mooring equipment produced and delivered by NC İMALAT. Chocks, warping rollers, double bollards, quick release hook and fairleads all belong to this range of products. Depending on your needs, we offer a wide range of standard mooring equipment and can be delivered in a short period of time, shot blasted and with one coat of shop primer. We provide almost all of the requested types of mooring equipment for every type of ship and port. Custom-made is available. The products have been approved by Classification Societies such as ABS, NK, DNV, BV, RINA etc. and are widely used in yacht, passenger cargo vessels, offshore engine ship, offshore FPSO, FSO and boards etc.

Our products provide high international prestige of full specification, best quality and prompt delivery time.



Stainless Steel Bollards



Stainless Steel Mooring Chocks



Marine Fairlead



Rope Drum



Smit Bracket



Steel Bollard for Port



NC İMALAT has a team and equipment capable of responding and applying all kinds of technical needs in repair and maintenance works of ship equipment. The expert staff in the maritime sector can solve the problems experienced with their experience and knowledge. It can get the most efficient results with its high quality understanding.

We can repair NC İMALAT ship deck equipment, ship ventilation equipment, port equipment. The products we maintain can provide classification guarantees.



Repair - Maintenance - Service



Repair - Maintenance - Service



Repair - Maintenance - Service



Repair - Maintenance - Service



Repair - Maintenance - Service



Repair - Maintenance - Service



Cogeneration is the production of energy together in the form of both electricity and heat from the same system. This togetherness has more economic outcome than the production of both forms of energy on their own. A gas turbine that generates electricity only or diesel engine can convert 30-40% of the energy it uses into electricity. If this system is used in the form of cogeneration, most of the heat energy to be expelled from the system can be converted into usable energy and the total energy input can be evaluated between 70-90%. This technique is called combined heat-power systems, or cogeneration.

Cogeneration system products are manufactured and assembled, including specially manufactured containers, exhaust systems, exhaust silencers, exhaust heat exchanger, dampers, flue system, sound isolation panels and all piping.



Container



Container



3 Way Damper



Flue System



Exhaust System



Sound Isolation Panel

Exhaust Gas Heat Exchanger

An exhaust gas heat exchanger uses the waste heat from combined heat and power units (CHP), usually to generate hot water or to heat thermal oil.

Typical fuel gases or liquid fuels for engines include natural gas, biogas, sewage gas, other special gases, diesel or vegetable oils. The choice of materials for exhaust gas channels, tubes and tube sheets depends on the fuel used and the application.

Additional equipment for exhaust gas heat exchangers includes exhaust gas bypass systems, insulation, heat recovery units with engine waste heat recovery and safety devices as required.



Exhaust Gas Heat Exchanger



Exhaust Gas Heat Exchanger



Exhaust Gas Heat Exchanger



Exhaust Gas Heat Exchanger



Shell and Tube Heat Exchanger



Marine Exhaust Shell and Tube Heat Exchanger

Exhaust Silencer

Silencers for industrial & marine engines are available as a standard version for selected engines and are also designed to customer specifications. Depending on the engine's exhaust noise as well as the required target noise levels and the available pressure drop, silencers are engineered on a customer-specific basis. Besides reducing the exhaust noise, the available space for the silencer(s) is optimized so that extremely compact solutions are possible.

We analyze, design, and manufacture industrial silencers, connectors, insulation blankets, emission control products and exhaust accessories. NC İMALAT combines engineering expertise with a collaborative customer focus. You can trust our solutions to keep your company compliant in providing a safer, cleaner and quieter environment. We can make design and produce exhaust solutions for all kind of dry & wet systems with best quality and prompt delivery time.



Marine Exhaust Silencer & Delivery



Steel Exhaust Silencer (Painted)



Exhaust Water Mixer (Duplex Stainless Steel)



Steel Exhaust Silencer



Stainless Steel Exhaust Silencer (Insulated)



Steel Exhaust Silencer

Exhaust Line Design (Sample Report)

We have a gas engine "1200 ekW@1500 rpm" in a cogeneration power plant. This report shows the pressure drop calculation in total exhaust line because of the silencer effect through HAD Analysis. There are necessary inputs to make an accurate analysis such as boundary conditions, exhaust design and dimensions. We applied according to our experiences here in this sample work.

Boundary Conditions of Analysis

We show the typical dimensions of exhaust line in Figure 1. In Figure 2, it shows the exhaust flow velocity distribution through HAD Analysis. Our boundary conditions are shown in Table 1 here below. Main principle is to modelling the all system items physically true and run analysis with true conditions.

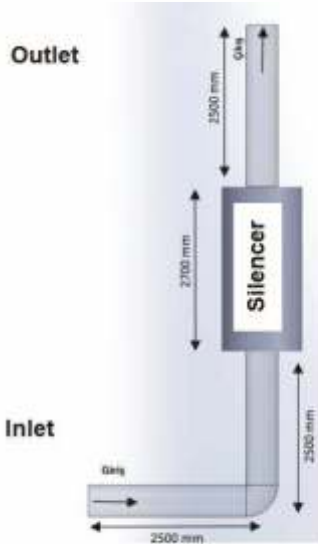


Figure 1 : Silencer Dimensions

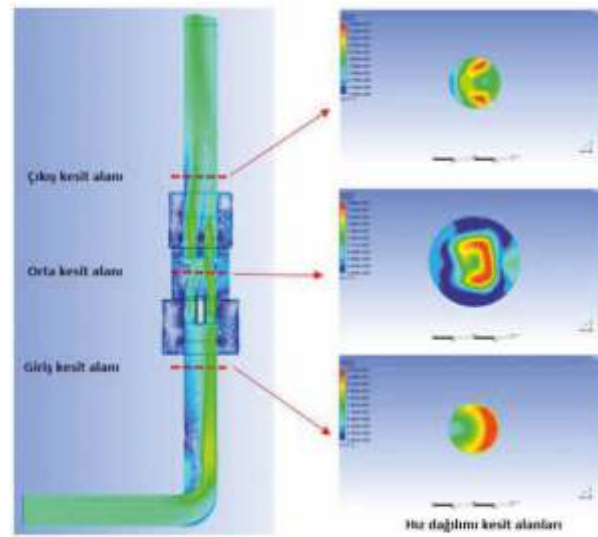


Figure 2 : HAD Analyse Velocity Distribution

Table 1 : Boundary Conditions

Exhaust Flow	6534 kg/h
Exhaust Temperature	414 °C
Exhaust Density	0.4975 kg/m ³
Exhaust outlet pressure	0 Pa

Result

In accordance with our boundary conditions, we run the HAD Analysis to calculate pressure drop on the line. For this system we have found 3.25 mbar pressure drop because of the silencer and we ensure our backpressure limit 5.0 mbar. Result is that this kind of silencer and pipe line is suitable in this system. We checked and confirmed. Although HAD Analysis or any iterative methods can give good solutions and result for our projects, we need to test and see the result in operational area in real time conditions.



Fuel tanks used in diesel generator applications are classified as daily tanks and main fuel tanks depending on generator fuel consumption and capacity. Fuel tanks are available in a wide range of versions, from prismatic or cylindrical, above-ground or underground, single-walled or double-walled, horizontal or vertical versions, to suit specific application.

Underground Fuel Tank / surface as the fuel tank is divided into two groups and performed according to standard calculations determined by the volume of fluid in the body and wall thicknesses.

Made tightness tests of the fuel tank is provided and maintained by making Hydrostatic testing is a copy of the report sent to the customers.

Our company makes installations of fuel automation systems which provide automatic fuel refilling of diesel generators in between the main tank and daily tank based on the projects. Fuel levels can be monitored via scada system (4-20 mA, 0-10 V) that we provide for our clients. Level indicators can install in the fuel tanks when the fuel is required to be monitored.



Prismatic Fuel Tank



Cylindrical Fuel Tank



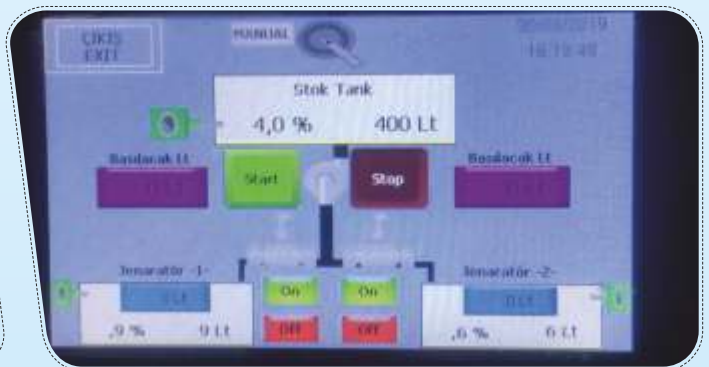
Main Fuel Tank



Daily Fuel Tank



Daily Fuel Tank



Fuel Automation System



Pressure vessel and tank fabrication is a specialized service that relatively few metal fabricators are capable of providing. NC İMALAT can take projects from concept through design and installation for customers that rely on pressure vessels to operate safely and deliver consistent performance.

We offer turnkey manufacturing capabilities that include pressure vessel and tank fabrication, and the mechanisms associated with these complex assets. The company offers pressure vessels made of a variety of materials, including multiple grades of carbon steel, duplex stainless steel and a number of grades of stainless steel. We work with a variety of customers ranging from those in the oil and gas industry to water treatment facilities to industrial customers who use pressurized chemicals or other liquids in their processes.

The products have been approved by Classification Societies such as ABS, NK, DNV, BV, RINA, TUV etc.



Pressurized Hot Water Tank (Painted)



Pressurized Hot Water Tank



Pressurized Hot Water Tank (Painted)



Stainless Steel Tank Farm Manufacture



Thermal Oil Tank



We manufacture our steel structures in-house and erect those structures on-site with our own team of skilled personnel. We work in the construction of steel buildings, providing a full range of services which include: Estimations and Quotations, Production of fabrication drawings, Supply and fabrication of detailed steel members and On site erection and modifications. Our group of specialized estimators is dedicated to bidding for upcoming projects and looking for new business opportunities, while our structural steel detailers use the most modern programs available for preparing shop drawings that comply with our clients' requirements and specifications.



Tunnel Elevator Steel Foundation



Steel Bended Tunnel Mould Manufacturing



Bended NPI Beam



Stainless Steel Tank Inside Equipments



Demineralised Water Tank Anchorage



Pipe Spool Works

NC İMALAT is at the forefront of specialist welding techniques. We have developed a number of welding procedures that meet the strict compliance of Classification Societies and International codes/standards for piping and structural. The fabricated pipe spools are made to a stringent work schedule and are delivered on time to the highest quality standards. Our engineering team and highly skilled work force are well experienced in undertaking pipe fabrication works.

We provide engineering, procurement, fabrication of power, process, OEM piping systems to power, oil & gas, chemical industries with a global vision to be the “best in class”. The strengths of the company are: focus on safety, excellence in services, world class quality, on time delivery.



Pipe Spools



Pipe Spools

Pipe Support

We manufacture high-quality engineered pipe supports, pipe hangers, pipe shoes, pipe expansion joints and more. We design and manufacture an extensive product line supporting the chemical, petroleum, LNG, power, solar, geothermal, wastewater industries and marine industry. Our field service specializes in survey and inspection, adjustment, refurbishment, installation and maintenance and on-site project supervision. In addition, we manufacture and supply other complementary products like strainers, anchor bolts and miscellaneous piping specialty products. We supply our products all over the world.



Tank Pipe Support (Painted)



Galvanised Tank Pipe Support

Mechanical Erection

Manufacturing and erection of equipment, steel structure, storage tank, industrial piping system are performed by NC İMALAT according to ISO, ASME, API, EN, CE standards.

Site erection of main process equipment; steam and gas turbines, heat recovery steam generators, compressors, generators, pumps, tanks, auxiliary boilers, boilers, stacks, heat exchangers, modular units, cooling towers' all electrical system and erection.

Manufacturing and site erection of process piping, pipe racks, pipe and equipment supports.

Site erection of storage tanks and other field erected equipment. Spool fabrication and site erection of all type of industrial and marine piping systems such as process piping, energy plants and ships (tug boat, chemical tanker, bulker).



Exhaust Installation



Piping works



Water Tank Welding



Piping Works



- Anadolu Shipyard (Tuzla)
- Annama Co. (Iraq)
- Akdeniz Shipyard (Adana)
- Aksoy Shipyard (Gelibolu / Çanakkale)
- Apeks Agriculture (İstanbul)
- Ares Shipyard (Antalya)
- Arena Shipping (İstanbul)
- ATY Shipping (İstanbul)
- AVA Yacht (Antalya)
- BasiiaContracting (Jordan)
- Başaran Ship Repair (Tuzla)
- Betumar Industrial (Tuzla)
- Bimak Makina (İstanbul)
- Borusan Makina ve Güç Sistemleri (İstanbul)
- Brolik Shipping (Tuzla)
- Çeksan Shipyard (Tuzla)
- Çelik Trans Shipyard (Tuzla)
- Çeri Engineering (İstanbul)
- Dentur Shipping (İstanbul)
- Desan Shipyard (İstanbul)
- Ema Industry (Kocaeli)
- Enka Pazarlama İhracat İthalat A.Ş. (İstanbul)
- Enpower Engineering (İstanbul)
- Gemak Shipyard (İstanbul)
- Ge-Ta Shipyard (İstanbul)
- Hatsan Shipyard (Yalova)
- Her Çelik Shipyard (Yalova)
- Hidrodinamik Shipyard (İstanbul)
- HN Makine (İzmir)
- İçdaş Shipyard (Çanakkale)
- İltekno Makina (İstanbul)
- Kıyı Emniyet Genel Müdürlüğü (İstanbul)
- Kocatepe Shipyard (Yalova)
- Kuzeystar Shipyard (Tuzla)
- Hidrodinamik Shipyard (Tuzla)
- Mavi Deniz Çevre Ltd. (Tuzla)
- Mengi-Yay Shipyard (Tuzla)
- Mersin International Port (Mersin)
- Milper Pervane Teknolojileri A.Ş. (İstanbul)
- Modül Çelik Construction (Kocaeli)
- Navtek Engineering (İstanbul)
- Nur İstanbul Shipyard (Tuzla)
- Özata Shipyard (Yalova)
- Tag Marine Industry (Istanbul)
- Tersan Shipyard (Yalova)
- Toztek Engineering (İstanbul)
- Torgem Shipyard (Tuzla)
- TSP Total Solutions Provider (İstanbul)
- Renesco Enerji Sanayi ve Ticaret (İstanbul)
- Regbar Engineering (İstanbul)
- Sakura Marine Industry (Tuzla)
- Sanmar Shipping (İstanbul)
- Sedef Shipyard (Tuzla)
- Sefine Shipyard (Yalova)
- Selah Shipyard (Tuzla)
- Shipyard Shipping (Tuzla)
- Vesmec Makina (Tuzla)
- Wartsila (İstanbul)
- Yacht Marine (Tuzla)
- Yanmar Turkey (Arenka Ltd.) (Tuzla)
- Yapaş Chain (Ankara)
- 4A Makina (Tuzla)
- Türbosan (Kocaeli)
- Zet Marine (Tuzla)

**“Engineering Your
Way to Success”**

So, what does NC İMALAT actually do?

With experience and strong technical expertise, we as NC İMALAT spend our time planning and designing a wide range of client projects. For the most part, however, we work closely with clients on-site to maintain an effective service delivery and to ensure the end-product is of the highest quality.



**NC İMALAT
VE MÜHENDİSLİK A.Ş.**

NC İmalat ve Mühendislik A.Ş.

Şekerpınar Mah.
Marmara Geri Dönüşümcüler San. Sit.
Çiğdem Sk. No:10/B Çayırova/KOCAELİ
Tel:+90 262 658 15 97

www.ncimalat.com / info@ncimalat.com

www.ncmarine.eu - info@ncmarine.eu

