

INNOVATION AND TECHNOLOGY FOR WATER PURIFICATION

INNOVATE TO MAXIMISE QUALITY

GAZEBO'S SUCCESS **IS FOUNDED** ON INNOVATION

Gazebo S.p.A. designs, manufactures and installs state-of-the-art prefabricated Reinforced Concrete Tanks and high performance technological systems, with dedicated assistance and problem solving:

- Industrial Wastewater Treatment Systems
 Sewage Treatment Systems for Homes and Businesses
 Rainwater Treatment Systems
- Water Pressure Booster and Lifting Units
 Rainwater Recovery Systems
 Firefighting Systems

Gazebo's corporate philosophy has never changed: 'innovate to maximise quality'. Its highly qualified technicians, in-house research and development and an exclusive collaboration with the R&D department of BASF Master Builder Solutions have enabled Gazebo to fulfil the promise of its corporate philosophy.

The Gazebo production site is very large, covering an area of 50,000 square metres, of which 5,000 are under cover. Gazebo operates throughout the Italian market and beyond, especially in France, Slovenia and Croatia.

With its vast experience, unblemished compliance with regulations and standards, and passion for solving complex problems, Gazebo is an outstanding partner for both Public and Private Companies in Manufacturing, Infrastructure, Agriculture, Residential Construction and Tourist Facilities. Gazebo, your partner for success.





A STORY OF CONTINUOUS INVESTMENT AND GROWTH

Gazebo S.p.A. was established **in 1963**. Since its earliest days in the precast concrete sector, it has proved to be a dynamic, lively company, always ready to take on the demands and needs of the market.

In the 1960s, the company mainly made ring tanks, ovoid pipes, flues, fencing sheets, etc.

In the early seventies, in response to the new fashion for environmental awareness, the company took an interest in wastewater treatment systems in the widest sense, and initiated research into the purification process and the options for using precast reinforced concrete. Its first wastewater treatment project was designed for a small urban community in the Municipality of Rimini, followed by an experimental wastewater treatment plant for a pig farm (commissioned by the Province of Forli), with excellent purification results.

Since 1974, working together with researchers at the University of Padua's Faculty of Environmental Engineering, Gazebo has built numerous wastewater treatment plants for pig farms in Emilia Romagna.

In the early 1980s the company started making prismatic tanks in reinforced vibrated concrete, and in 1987 Gazebo

was the first Italian prefabricator to use a new hydraulic tilting formwork for making tanks with 10 - 35 cubic metre net volumes.

In the early 2000s, production was expanded to tanks with net volumes of 10 - 50 cubic metres.

In 2010 Gazebo set up an in-house research and development laboratory to run tests on their concrete, complete with an automatic press, vibrating table, thermostatic tank, maturity meter and digital scales.

Gazebo's technicians, supported by third party industry technologists, started experimenting with a mixdesign of Self Compacting Concrete (SCC).

After about a year of in-house testing and verification, the new SCC Gazebo System technology is finally being used in its prefab products.

The SCC Gazebo System yields compact and uniform concrete which guarantees a perfect fluid seal while also reduces curing times without the need for steam.

In **2013**, in collaboration with BASF Construction Chemicals Italia S.p.A. (Treviso) and Prof. Luigi Coppola at the University of Bergamo's Faculty of Engineering, Department of Design and Technology in Dalmine (BG), Gazebo initiated an innovative research and development programme to develop a structural concrete with very high strength. **In 2014**, FRC, Fiber Reinforced Concrete was developed in collaboration with the R&D department of BASF Master Builder Solutions.

This state-of-the-art concrete has enabled Gazebo to manufacture monobloc tanks with highly innovative features.

The FRC Gazebo System was born.

The result is tanks with excellent ductility, greater durability, more resistance to flexing, and a lower risk of pollution - all of which adds up to greater peace of mind.

Another Gazebo success!

In 2015, after an initial design phase, Gazebo started making prefabricated reinforced concrete tanks with internal reinforcements in improved adhesion B450C steel, with reinforcement cover thickness increased to 40 mm, as required by Italian Ministerial Decree 14.01.2008.

This greatly increases the durability of prefabricated structures.

In the same year, Gazebo designed and built its first large-size prefabricated reinforced concrete tank. A new prefabricated reinforced concrete tank conforming with the requirements of Italian Ministerial Decree 14.01.2008, with external dimensions of 250x1017x250 cm and a capacity of 53,000 litres. The collaboration between GAZEBO S.p.A. and BASF's R&D laboratory, Master Builders Solutions, has continued, and **2016** saw the completion of research into the production of water-repellent concrete with superior performance:

- Waterproof concrete with very low water absorption;
- High-strength concrete (Rck > 600 kg/cmq);
- Concrete with increased chemical resistance for installation in aggressive environments.

This extraordinary result was achieved by dosing the concrete mix with appropriate amounts of very fine nano-silica, so as to minimise the capillary porosity between the particles of cement.

Gazebo S.p.A. was thus able to obtain waterrepellency certification for its concrete.

2018 marks the beginning of a period of technological and commercial success for Gazebo S.p.A. Innovative large Reinforced Concrete Tanks and large wastewater treatment systems for the Italian Army, Airforce and Postal Service, ACEA, A2A, Football Club Internazionale Milano, Orogel, Vitroplant Italia and Buzzi Unicem.

Large, high-performance systems constructed with record-breaking installation times: 7/14 days. All thanks to accurate industrial planning, amazingly flexible production and the fact that preassembly is done in the factory. The data make it clear that Gazebo's leadership position is **now** uncontested.

INNOVATION AND RESEARCH ARE PART OF OUR DNA

Our research and development over the past 20 years has enabled Gazebo to offer the market, in successive stages, two unique and innovative methods of manufacturing prefabricated tanks, both of which are extremely efficient: the SCC Gazebo System and the FRC Gazebo System.



The SCC Gazebo System is Gazebo's innovative system for making prefabricated monobloc tanks with SCC (Self Compacting Concrete) through a unique process.

In its innovative plant, Gazebo uses a self-balancing formwork for the production of the tanks, and also accelerates the curing period without the need for steam.

The result is an extremely solid, strong structure, which is aesthetically more pleasing and offers a perfect fluid seal, even in above-ground installations.

In other words: more durable, safer, worry-free installations.



The FRC Gazebo System is the most advanced system for producing prefabricated monobloc tanks. Research into this Fiber Reinforced Concrete system was conducted in collaboration with BASF's Master Builder Solutions R&D department.

Gazebo and BASF have together created monobloc tanks with numerous advantages:

- Increased durability
- > Increased ductility
- > Increased tensile and flexural strength
- > Increased chemical resistance in aggressive environments
- Complete absence of micro-cracks
- Absolute impermeability
- > Increased fire resistance
- Reduced environmental pollution.





GAZEBO Bog

LARGE DIMENSIONS FOR LARGE BENEFITS

Gazebo S.p.A. also designs and manufactures Large-Size prefabricated reinforced concrete tanks, conforming to Italian Ministerial Decree 17.01.2018, with external measurements of 250x 1017xh252 cm and a capacity of 53,000 litres.

This type of tank has major advantages:

- Lower implementation costs
- Lower installation costs
- > Lower costs for the plumbing connections.

Our large-size tanks are made with the innovative FRC Gazebo System or SCC Gazebo System.

The prefabricated reinforced concrete tanks ensure a total absence of fluid leaks and hence soil pollution, and are used for storing fluid and solids, including:

- drinking water,
- white and rain water,
- > domestic and industrial waste water,
- > sewage,
- powders of any kind,
- > seeds, feed, brine, etc.
- > water storage for firefighting systems (with underground or above-ground tanks).

Big tanks mean big savings. With Gazebo Quality. Quality certified to regulatory standards.





A LEADING PRODUCER OF PLANT AND TECHNOLOGIES

Gazebo S.p.A. is an Italian leading producer of wastewater treatment systems and technologies. Since the early '70s, Gazebo has built thousands of plants:

- Industrial Wastewater Treatment Systems
- Sewage Treatment Systems for Homes and Businesses
- Rainwater Treatment Systems

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- Water Pressure Booster and Lifting Units
- **Rainwater Recovery Systems**
- Pre-assembled fixed Firefighting Systems

A wide range of specialised solutions for the specific technical and economic needs of different customers, in compliance with current regulations. A large number of plants built for leading companies both public and private, reflecting the high quality of the Gazebo offering.

Details and finishes of excellence

Excellent details and finishes complete the Gazebo installations. For example, the tank fittings (PVC or stainless steel sleeves) are installed using structural epoxy resin, and finished with silicone sealant rather than with simple cement mortar. This provides a greater guarantee of the tightness of the fitting. The result: no problems, neither at installation nor over the long term.



SPECIALISED SOLUTIONS FOR PUBLIC AND PRIVATE COMPANIES



- > PUBLIC ORGANISATIONS
- > LARGE CONSTRUCTION COMPANIES

- > PORTS AND INFRASTRUCTURE
- > HOSPITALS AND NURSING HOMES
- > PUBLIC BUILDINGS
- > RESTAURANTS
- > TOURIST FACILITIES
- > HOTELS
- > AGRI-FOOD INDUSTRY
- > MECHANICAL ENGINEERING COMPANIES AND STEELWORKS











SPECIALISED SOLUTIONS FOR PUBLIC AND PRIVATE COMPANIES



> CHEMICAL AND PHARMACEUTICAL COMPANIES

- > GARAGES, SERVICE STATIONS AND CAR WASHES
- > PAPER INDUSTRY
- > MARBLE INDUSTRY
- > LIVESTOCK INDUSTRY
- > FISHERIES
- > RESIDENTIAL CONSTRUCTION
- > AGRICULTURAL COMPANIES
- > SUPERMARKETS
- > SCRAP METAL RECOVERY
- > INDUSTRIAL LAUNDRIES









QUALIFIED TECHNICIANS AND INNOVATIVE TECHNOLOGIES

Gazebo has an innovative production facility with self-balancing formwork which produces extremely solid, strong tanks with perfect watertightness, also for above-ground installations.

To date, it is the only Italian company to use four self-balancing formworks for the production of reinforced concrete tanks.

Our factory does all the customisation and special machining to customer specifications, to guarantee Gazebo quality even in the non-standard range.

Our workshop welds are certified pursuant to UNI EN ISO 9606-1:2017.

This is what makes Gazebo S.p.A. so unique. And our clients know it. And appreciate our quality.

Immediate availability, also for custom projects.

With its extraordinarily flexible production, Gazebo is able to deliver its tanks in just seven days, even for large batches.

Fast Installation.

Installing even the most complex Gazebo systems takes just 2 to 7 days, thanks to our amazingly flexible production and organisation, and the large amount of preassembly work completed in the factory.

WELDS CERTIFIED TO UNI EN ISO 9606-1:2017





FREE DESIGN **AND ONGOING** ASSISTANCE

Gazebo assists Designers, Plant Designers and Building Contractors with completely free-of-charge preliminary and executive system design. The technical documentation required for filing the structural seismic report for the prefabricated systems is included in the scope of supply. We also provide technical support, fast project preparation, on-site inspections, technical assistance up to installation and guaranteed fast delivery.

Gazebo's Continuous Assistance also offers:

Plant commissioning,
 Document filing for the long term,
 Spare parts always available.

Gazebo stands for top-quality service.

Gazebo technicians are an advantage for the client.

Gazebo's qualified technicians guarantee the best solutions from both a technical/functional and economic point of view.

Gazebo's technicians are always available for assistance by phone or directly on site.

BIM design

Gazebo has long adopted a BIM approach to system design. This best supports designers, contractors and client companies in detailed project planning, fosters collaboration between all stakeholders, and enables process integration and sustainability.









GAZEBO IS QUALITY GERTIEIED

Consistent quality at the highest level, with a minimal environmental impact and total respect for occupational health and safety. This is the value of Gazebo's Certifications. An overall value that Gazebo shares with its customers in every individual project. A guarantee of absolute quality and constant respect: Gazebo is unique. Just like the client.

ISO 9001 CERTIFICATION

Gazebo's constant focus on Research and Development in its mission to combine high productivity with the highest quality has yielded excellent results, as attested by its UNI EN ISO 9001:2015 certification.

ISO 1400 CERTIFICATION

Gazebo's focus on the environment is part of the company's DNA. And its UNI EN ISO 14001:2015 certification, obtained for the compliance of its Environmental Management System with the requirements of the standard, testifies to the fact.

CAM - MINIMUM ENVIRONMENTAL CRITERIA

Gazebo reduces its environmental impact and promotes sustainable production, thus supporting the circular economy, by applying Minimum Environmental Criteria. The company's certification to UNI/PdR 88:2020 demonstrates this commitment.

ISO 45001 CERTIFICATION

Guaranteeing occupational health and safety is one of the cornerstones of Gazebo's corporate philosophy. Gazebo has implemented an Occupational Health and Safety Management System certified to UNI EN ISO 45001:2018.

CERTIFIED SERIES PRODUCTION

Design based on stringent technical specifications, careful production management and constant quality control, have enabled Gazebo to obtain, from the Central Technical Service of the Italian Higher Council of Public Works, certification for 'CERTIFIED SERIES PRODUCTION' for the products 'prefabricated monobloc tanks and roofing sheets made of reinforced concrete'.

SOA CERTIFICATION

Gazebo is qualified as a Public Works contractor with SOA Category OS22 certification Water potabilisation and purification plants Classification IV-bis = € 3.500.000,00.



UNI MEMBER

In order to actively participate in the democratic drawing up of the industry's technical standards, and to enable discussions with stakeholders so as to develop innovations based on concrete needs, Gazebo S.p.A. became a UNI Member in 2014

GAZEBO AFFORDABLE QUALITY



We are very conscious of the motto 'he who spends best, spends least', which reflects the low true cost and savings offered by Gazebo quality, even over the short term.

THE AFFORDABLE QUALITY OF GAZEBO TANKS

- Indestructible latest generation tanks made with self compacting and fiber reinforced concrete
- > Exclusive technologies:
- SCC Gazebo System
- FRC Gazebo System
- > Unique performance on the marketplace
- > Compressive strength C50/60 (Rck \geq 600 kg/cm²)
- > Totally impermeable and water-repellent tanks
- Complete absence of micro-cracks
- Outstanding chemical resistance in aggressive environments
- > Always in stock
- > 10 Year Warranty

THE AFFORDABLE QUALITY OF GAZEBO SYSTEMS

- > Higher efficiency
- > Increased purification yield
- > Ease of management
- > Very low maintenance
- > Minimal footprint optimises the usage of your space
- > Modularity. Easily expandable for tomorrow's business
- > Made with indestructible tanks, the only ones of their kind
- > Reliable and durable components
- > Welds certified to UNI EN ISO 9606-1:2017
- Fast installation in just 2-7 days

ZERO extraordinary maintenance costs

Reduced running costs



THOSE WHO HAVE CHOSEN GAZEBO'S AFFORDABLE QUALITY

Gazebo has always designed and built its systems in full compliance with standards and regulations, offering certified quality at attractive cost for the customer.

This is why it has always collaborated with major private companies and large water and energy groups.



Water and Energy Authorities and Companies

Cremona (CR)

UMBRIADUE

MULTISERVIZI

ACQUEDOTTO

DEL FIORA

Grosseto (GR)

Terni (TR)

MARCHE

Pesaro (PU)

CORDAR

Biella (BI)

τοτο

COSTRUZIONI

GENERALI

Chieti (CH)

A2A Brescia (BS)

ACEA Roma (RM) HERA

Bologna (BO)

IREN Reggio Emilia (RE)

TEA ENERGIA Mantova (MN)

PADANIA ACQUE TERNA Roma (RM) SAIPEM San Donato Milanese (MI)

> ACQUE Empoli (FI) GAIA

Lucca (LU) UMBRA ACQUE Perugia (PG) CIIP Ascoli Piceno (AP) CERVINO

VALTOURNENCHE Aosta (AO) **FERROVIE NORD**

MILANO AUTOSERVIZI Milano (MI)

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Major Construction Companies

TINERA Tortona (AL)

GRUPPO I.C.M. Vicenza (VI) C.M.C.

COLOMBO COSTRUZIONI Ravenna (RA) Lecco (LC)

CIMOLAI Porcia (PN) ASTALDI

Roma (RM) **TECHBAU** Castelletto sopra

Ticino (NO)

BETONCABLO Gruppo CASTIGLIONI Busto Arsizio (VA)

IMPRESA PERCASSI

Bergamo (BG)



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Large Manufacturers

FINCANTIERI Trieste (TS)

WÄRTSILÄ ITALIA San Dorligo della Valle (TS)

BUZZI UNICEM

Casale Monferrato (AL) ALFAGOMMA

Castellato (TE)

TRAFILSPEC Castelmarte (CO) NESPAK Massa Lombarda (RA)

GELSON Lainate (MI)

DULEVO

ITT ITALIA

Lainate (MI)

CULLIGAN

ITALIANA

Agri-Food Industries

OROGEL Cesena (FC)

GRANAROLO Bologna (BO)

PARMALAT Collecchio (PR)

VALCOLATTE

Pontenure (PC)

di Modena (MO)

INALCA

Castelvetro

CAMST Villanova di Castenaso (BO)

Cesena (FC)

BARILLA

Parma (PR)

SANIFRUTTA

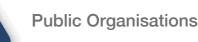
Costigliol e Saluzzo (CN)

FUMAIOLO Verghereto (FC)

Major Sports Clubs

S.S.C. NAPOLI Napoli (NA)

F.C. INTERNAZIONALE MILANO Milano (MI)



ESERCITO ITALIANO

INTERNATIONAL
Fontanellato (PR)

Granarolo dell'Emilia (BO)

PIRELLI Milano (MI)

TECHNOGYM Cesena (FC)

SAINT GOBAIN ITALIA Milano (MI)

FERRETTI GROUP Forlì (FC)

SELLE SMP Casalserugo (PD)

PROMINENT ITALIANA Lavis (TN)

IMPERIA YACHT SERVICE Imperia (IM)

I.C.A. – Industria **Chimica Adriatica** Civitanova Marche (MC)

AVIO AERO Rivalta di Torino (TO)

Gruppo AMADORI

UNIGRA' Conselice (RA)

CONBIO Coriano (RN)

MEC3 San Clemente (RN)

ILIP Valsamoggia (BO)

VITROPLANT Cesena (FC)

PROSCIUTTIFICIO SAN FRANCESCO

Castelnuovo Rangone (MO)

SALUMIFICIO SANDRI Montescudo (PI)

PODERI DAL NESPOLI Nespoli (FC)

POSTE ITALIANE **AERONAUTICA MILITARE ITALIANA**



LET'S MAKE THE FUTURE GREEN

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For Gazebo, saving the planet is not a last-minute fad.

In fact, it took its first steps towards environmental awareness in 2011, with the start-up of the production of eco-sustainable, self compacting and fiber reinforced concrete for the production of prefabricated reinforced concrete monobloc tanks, thanks to the innovative SCC Gazebo System and FRC Gazebo System technologies. These technologies did away with the need for oil-fired steam production boilers (formerly used for curing concrete) and electro-vibration systems for homogenising the concrete mixture inside the formwork. This resulted in a significant decrease in environmental pollution (lower use of fuel) and noise pollution (reduced noise due to vibration).

This was followed by other important steps along the path of declared responsibility towards the environment, people and the planet's resources:

- construction of smoke and dust abatement and filtration plants;
- construction of a plant for the treatment and reuse of water from the production process;
- > use of products with a low environmental impact (e.g. vegetable-based release agent oil, solvent-free products, etc.);
- installation of a 200 kW photovoltaic system for the renewable production of electricity, which reduces consumption as well as the CO₂ emissions produced by the use of fossil fuels;
- Ighting systems equipped with LED lamps in the offices, the various industrial halls (approximately 5,000 square metres under cover) and outdoor areas, resulting in a considerable reduction in electricity consumption and a significant reduction in pollution;
- inverter-type electronic control systems to eliminate power peaks and hence reduce power consumption.

Today, Gazebo's philosophy and industrial organisation are also recognised by ISO 14001:2015 certification of its in-house environmental management system and UNI/PdR 88:2020 certification for its implementation of Minimum Environmental Criteria. Green Gazebo. One big step towards a better future.









INNOVATION AND TECHNOLOGY FOR WATER PURIFICATION

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