Positive Going - Advanced Technologies for Effective Solutions

Company Profile

A COMPANY CERTIFIED BY DNV

Positive Going is an Engineering Company founded in Italy in 2002 and based in La Spezia, in an industrial area close to important Defense and Industrial compartments, such as Leonardo Sistemi Difesa, MBDA and CMRE, Fincantieri, Intermarine and other civilian and military Shipyards.

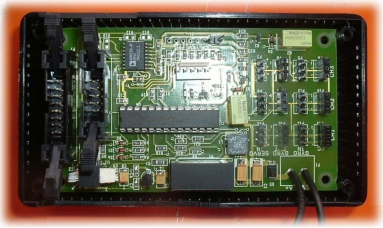
> *Positive Going has been created* ***by a small group of dynamic and skilled Engineers and Technicians****, sharing their own design capabilities and previous experiences in the field of* ***Electronic Systems and Products for Underwater & Industrial application.***

The propulsive idea of the founders was and still is today providing the Customer with a up-to-date and adequate engineering service, i.e. to design and produce in small-series those special components, sub-systems or systems to fulfill Customer's requirements inside his wider project.

In this perspective Positive Going has been always designing new equipment strictly tailored on Customer' Specifications, being available to deliver the full design property, inclusive of Intellectual Property (IP) rights.

Throughout the years, however, Positive Going has also created a significant products range, free from IP' obligations, that can be proposed to existing or new Customers in addition to the pure "design capability" the company was born for.

Among Positive Going products we mention Underwater/Marine Electronics, Acoustic Measurements, Electronics for Industrial Automation, Autonomous Vehicles Remote Control, Real-Time Data Acquisition Systems.




The Value Proposition

Positive Going company, according to a business-model oriented to keep the overheads low and remain highly competitive on the market, is small although capable to offer all essential technical services demanded by sophisticated Customers, such as Navies, Shipyards or big Defense Industries, both public and private.

The **ESSENTIAL SERVICES POSITIVE GOING IS STRUCTURED TO GRANT**, are, in short:

- ✓ **DESIGN AND DEVELOPMENT SKILLS IN ELECTRONICS/ACOUSTICS/AUTOMATION/ROBOTICS/MEASUREMENT AT SEA**
- ✓ **SMALL SERIES PRODUCTION IN DEDICATED SECTIONS OF THE COMPANY**
- ✓ **IN-HOUSE PCB TREATMENT (PAINTING/COATING) AND SUB-ASSEMBLY CABLING & MOUNTING**
- ✓ **TESTING AREA IN A DEDICATED SECTION OF THE COMPANY**
- ✓ **ESD (ELECTRO-STATIC DISCHARGE) AREA INSIDE THE COMPANY**
- ✓ **STORAGE OF MATERIALS, COMPONENTS & SUB-ASSEMBLIES IN A COMPUTERIZED STOREHOUSE**
- ✓ **TECHNICAL DOCUMENTATION (INTERNAL FOR DESIGN AND PRODUCTION AND TECHNICAL MANUALS FOR THE CUSTOMER)**
- ✓ **LOGISTIC SUPPORT (SPARE PARTS/OBSOLESCENCE COVERAGE)**
- ✓ **QUALITY CONTROL ACCORDING TO ISO-9001 STANDARD CERTIFIED BY DET NORSKE VERITAS (DNV)**

Positive Going Staff, today, is more than confident to be capable to continue satisfying his existing Customers but also to gain new ones, thanks to his challenging spirit, hyper-active attitude, and the above Value Proposition.

A friendly welcome is ensured to whom will be visiting Positive Going new premises in Via Terralba 17, in La Spezia**, in the North-West side of Italy, to personally **meet the Staff and verify Positive Going Scientific and Technical Capabilities.

A resume of the technical Skills and past Experiences of Positive Going can be done by listing those main "jobs done" for reputed and well-known Customers, as we report here below.

> *This implies our **capability to perform, for each Customer and Job, all the necessary activities** to successfully pass from the very initial stage to the final delivery, the **process that we proudly call "Positive Going"**, that is the name of the Company and our **Inspiring Motto**.*

Our concept of Positive Going is then a Step-by-Step process including:

- ✓**Careful Analysis of Customer's Requirements**
- ✓**Initial "brain storming", involving all necessary competences: Physics, Electronics, Mechanical, Software Development, System Engineering**
- ✓**Architecture definition, selection of most suitable technologies and team composition (internal/external/mix of resources)**
- ✓**Design, including work-flow definition, project planning and documentation (for both design and production)**
- ✓**Prototype/sub-assembly/product manufacturing, done in-house due to the limited quantities**
- **Test of Devices, usually executed in-house with the Customer presence**

List of main Customers and Jobs executed throughout recent years

Customer	Jobs (Activity/Product)
WHITEHEAD ALENIA SISTEMI SUBACQUEI (WASS)	Tools and Systems to support the production Test and Measuring Systems Study of Prototypes Design & Production of MIL standard HW/SW equipment Automatic System for Batteries Management
ITALIAN NAVY (LABORATORIES/CSSN)	Special Equipment for Firing Powders Certification Re-Engineering of obsolescent PCB/Sub-systems Systems for Process Automation
LEONARDO SISTEMI DIFESA (FORMERLY OTO MELARA)	Design, production and testing of on-board electronics for unmanned vehicles (land and aerial) Integration of sensors and systems for robot remote control
CALZONI	Electronics for Illumination management/LED signaling Electronics for Radio Controls
CENTER FOR MARITIME RESEARCH AND EXPERIMENTATION	Management Systems for UUV (Unmanned Underwater Vehicles) Tele-monitoring Devices GPS Positioning Systems
INSIS S.P.A.	Control Software for high-accuracy static and dynamic positioners Programming and management of IEEE-488 Interfaces
ELSEL	Advanced Systems for Acoustic Measurement Tools and Systems to support the production
TELESUB LANTERNA (TECNOLOGIE SUBACQUEE)	Special Audio-Video Communication Systems (on-screen-display boards for underwater imaging, SSB communication systems, helium unscrambler)
GM (SISTEMI AVANZATI PER SICUREZZA E MOBILITÀ)	Tele-monitoring System for trucks fleet management to enhance safety/security and pollution control.
CNR (CENTRO NAZIONALE RICERCHE)	Software for GPS Data Acquisition

A description of the technical capabilities that Positive Going can offer to its Customers in terms of **Service & Products to be delivered to the Client** includes:

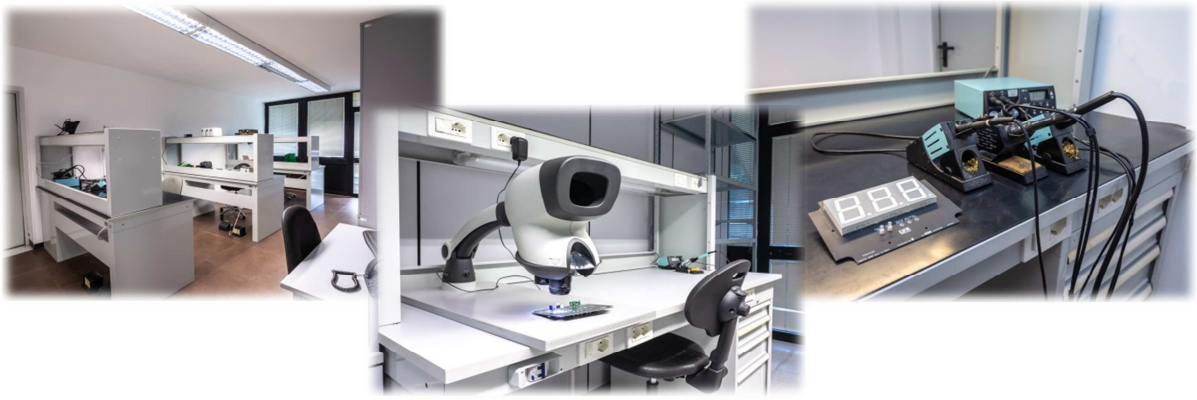
- ✓ **Study of acoustic phenomena and definition-development of measurement techniques**
- ✓ **Analysis and implementation of measuring systems for application at sea (acoustic noise measurement, port traffic control, target position measurement, etc)**
- ✓ **Underwater Acoustic systems, to implement specific measurement at sea for a variety of scopes**
- ✓ **Real-time Data Acquisition Systems and Process Control**
- ✓ **Industrial Automation systems (not-standard)**
- ✓ **Electronics for Autonomous Vehicles remote control**

The technical knowledge, in detail, to implement the above capabilities come from **Specific Design and Production Skills**, listed here below:

- ✓ **Electronic Boards Design (PCB), up to eight layers, SMD or traditional components**
- ✓ **Electronic Technologies:**
  - **Microcontrollers, System on Chip and DSP**
  - **Ethernet connectivity -TCP/IP, USB, RS232/422/485**
  - **Operating Systems: Windows and Linux (desktop and embedded)**
  - **Development environments: Microsoft, National Instruments, Microchip, Analog Devices, Cypress**
  - **Application Software in C/C++, Assembler, Visual Basic**
- ✓ **System Engineering**
- ✓ **Prototype manufacturing**
- ✓ **Small series production of PCB or sub-assembly [nr. 6-8 working places for productive staff]**
- ✓ **Testing area [nr. 4 working places for testing staff]**
- ✓ **ESD area [nr. 4 working places for operators]**

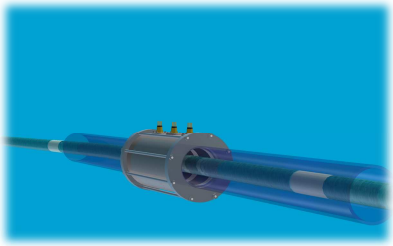
The technical capabilities in terms of personnel comes from the following **Staff Structure**:

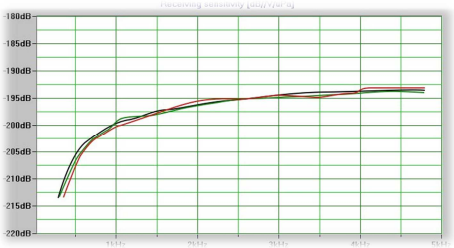
- ✓ **Engineers and Technicians (internal employers), for design, production, and documentation**
- ✓ **External consultants for special skills (mechanical design, special design, etc)**
- ✓ **Program Managers (internal employers), for program execution**
- ✓ **Administrative support (internal employers and external personnel)**



✓ **Low-Frequency Linear Array Hydrophone Calibration System**

The low-frequency acoustic calibration system supersedes the traditional techniques based on water tank or lake facilities, limited by the size of the lake and the length of the array itself. The system exploits a small sized tube-shaped equipment embedding three cylindrical piezoceramic transducers that can be submerged in a laboratory water tank and a high precision PC based data conditioning and acquisition system.





✓ **Torpedo Arming Device Test System**

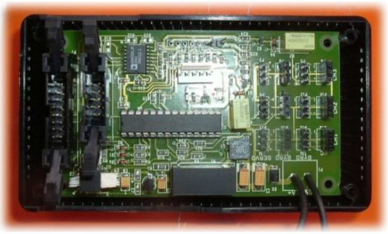
A special device to test and evaluate the status of Arming Device of Torpedoes. It has been conceived to maximize the operator safety and it also includes a measurer of the EED (Electro Explosive Devices) resistance in accordance with DEF-STAN-66-6 standard.

✓ **Light-Weight Torpedo Performance Evaluation System**

A system to evaluate the performances of Light-Weight Torpedoes: the unit is designed to download and analyze data recorded in the data acquisition system positioned in the torpedo head after a test at sea.

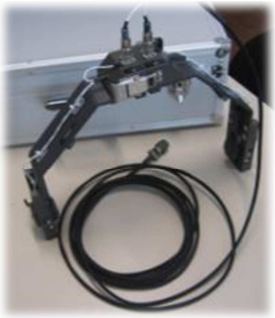
✓ **Remote Control of Autonomous Vehicles**

Electronic Devices to control different types of unmanned vehicles through micro-controller PCB, standard embedded platforms (PC-104), electronics for DC, stepper and brushless motors, telemetry via radio-modem and wireless LAN, servo-commands and R/C Radio controls, position and attitude sensors (GPS/IMU).



✓ **Telemetry Data De-Codification System**

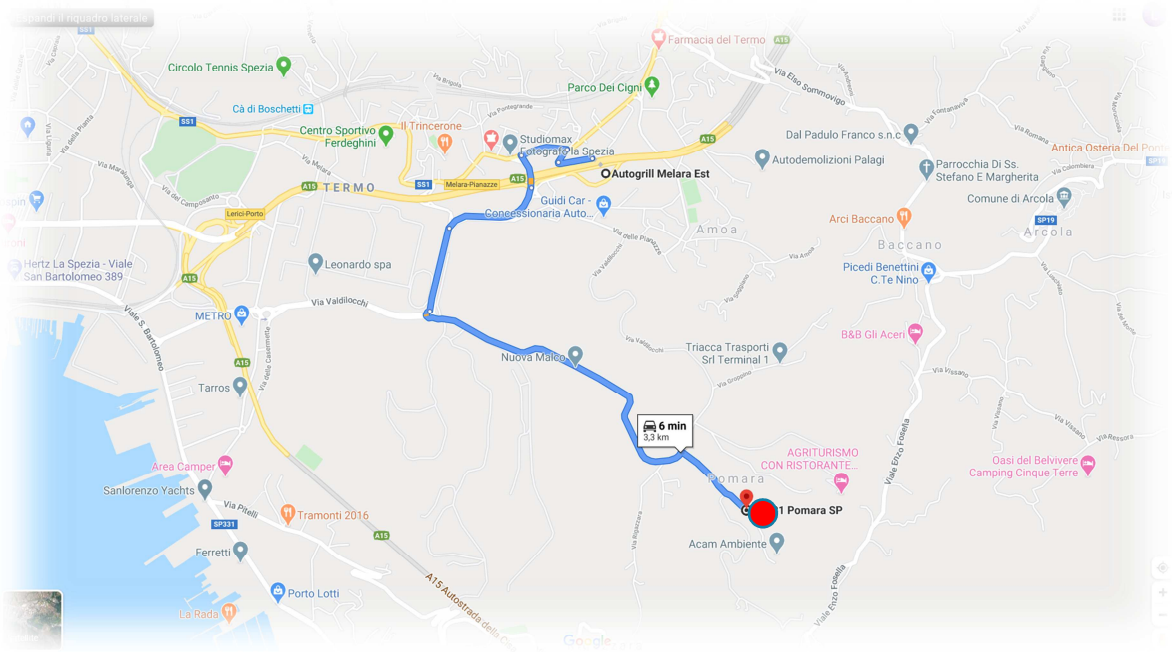
The system is designed to detect the acoustic pulses emitted by the SAT (Synchronized Acoustic Transmitter) of a Torpedo in operating configuration, and such pluses are processed to extrapolate and provide the user with the relevant telemetry information.



✓ **Underwater Acoustic Receiver**

It allows measuring underwater acoustic signals and noises in the band 0.1 kHz to 58 kHz. In more detail it allows the noise monitoring in the acoustic band 0.1 kHz ÷ 16 kHz and omni-directional pingers in the band 20 kHz ÷ 58 kHz.

✓ **REACH POSITIVE GOING PREMISES IN SIX MINUTES DRIVING FROM LA SPEZIA HIGHWAY EXIT**



✓ **CONTACT OUR OFFICES OR VISIT OUR WEB SITE**

Positive Going S.a.S.

Address: Via Terralba 17, 19021, Arcola (SP), Italy

Website: www.positivegoing.it

Email: info@positivegoing.it

PEC: positivegoing@pec.it

Telephone: +39-0187-509550

Skype: positivegoing