

Management and founders.



Riccardo Gianni
*President and
Co-Founder*

Riccardo Gianni is Co-Founder and President of Officina Stellare S.p.A. In addition, he has been Managing Director at Auriga S.r.l. since 1983, President of the Remo Bianco Foundation since 2001, Director of Virgilio Holding S.p.A., and CEO at Prodotti Gianni S.r.l. since 2015. Riccardo graduated in 1986 with a degree in Physics from the University of Milan and pursued later on a post graduate course in Marketing Management at SDA Bocconi in 1987.



Giovanni Dal Lago
*CEO and
Co-Founder*

Giovanni Dal Lago is Co-Founder, Vice President, and CEO of Officina Stellare S.p.A. Previously, he collaborated with leading national and international astronomy magazines. From 1998 to 2002, he was Deputy Editor at Coelum Astronomia; in 2002 he co-founded the magazine "Le Stelle" and acted as Chief Editor. In 2001, he co-founded Astrotech S.r.l. where he held the position of CEO until 2009.



Gino Buccioli
*HBD and
Co-Founder*

Gino Buccioli is Co-Founder and Chief Business Development Officer at Officina Stellare S.p.A. After working in the telco sector at Telecom Italia, he acted as Commercial Manager of the Triveneto area at Kilsen Italia S.p.A. until 2001, when he co-founded Astrotech S.r.l. and worked as Marketing Manager until 2009.

Officina Stellare at a glance.

Core business

Officina Stellare (OS) is an innovative SME based in Sarcedo (VI), Italy, active in the design and production of telescopes, opto-mechanical and aerospace instrumentation for Ground and Space based applications.

Sectors

New Space economy (Earth Observation, Laser Communications, Space Situational Awareness), **Scientific Research, Defense.**

Values

Officina Stellare products are known for their **highly advanced technology** and **competitiveness**. **Time-to-market**, versatility, results achieved, and the in-house control over most of the value chain make OS uniquely positioned within the reference market.

Space Factory

Officina Stellare is creating the first Italian "**Space Factory**" – in order to consolidate its position in the New Space Economy through:

- the provision of expertise and products to third companies in the field (B2G and B2B) and
- the development of instruments and commercial applications to be placed directly on the market with the OS brand (B2C).



In brief...

Officina Stellare (OS) is an innovative SME based in **Sarcedo (VI) Italy**, listed on the AIM stock market of **Borsa Italiana**, active in the design and production of telescopes, opto-mechanical and aerospace instrumentation for Ground and Space based applications.

Its unique position in the reference market is due to its specialistic in-house expertise and advanced skillset for the development, implementation and commissioning of complex opto-mechanical engineering projects in the aerospace field for scientific, research or defense-related purposes. From specifications drafting to final acceptance tests, OS guarantees maximum efficiency of the supply chain and high risk management facilities.

Offices and manufacturing: 1000 mq + 3000 mq (300 mq for clean rooms)
Observatories: 1 dome 5.5 m, 1 dome 2.3 m
Employees: ≈60

Thanks to the high quality of its products, Officina Stellare has grown rapidly in recent years, generating its revenues in the following sectors:

Scientific Research



1

Earth Observation



2

Aerospace



3

Laser Communication



4

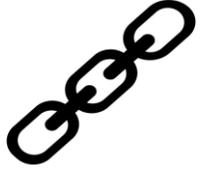
SSA/SST and Defence



5

A strong value proposition.

Value Chain Supervision



OS is capable of managing almost entirely all stages of the project and manufacturing in-house.

Time-To-Market



OS is currently one of the few players in the Space Economy sector.

Quality and Competitive Prices



OS invests in R&D to change the paradigm of telescopes production.

Design



OS products have not only set a new level of technical performance, but are immediately recognizable thanks to the care and attention given to their design.



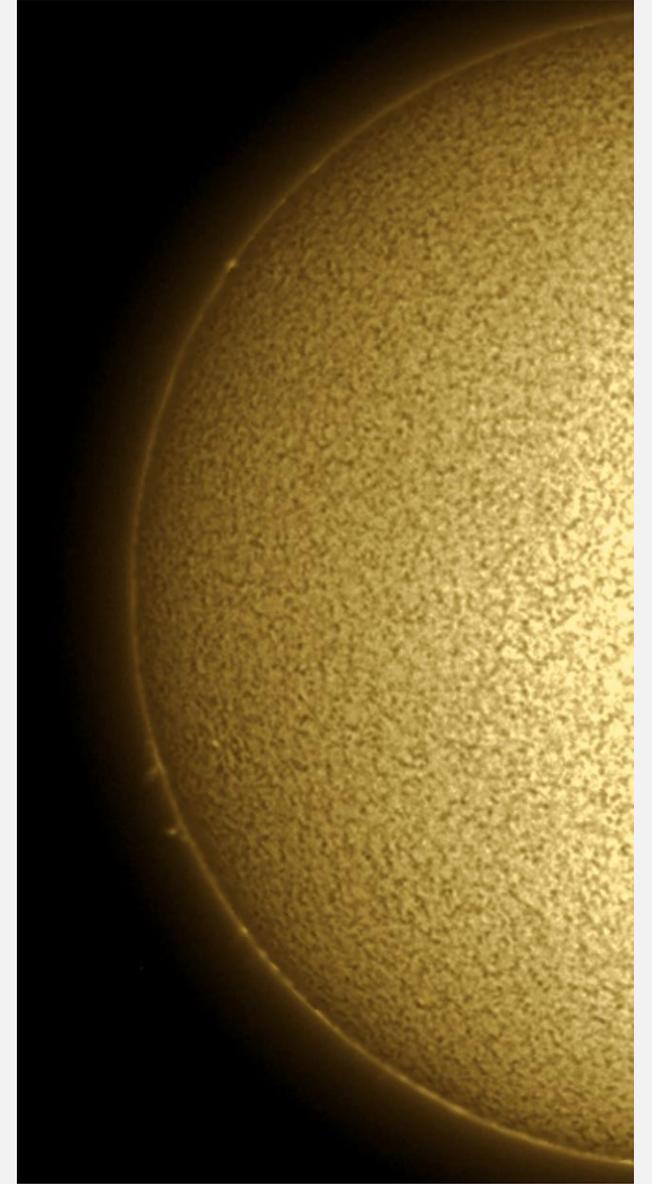
Our world. Your space.



Black Hole jet. Officina Stellare telescope



Merging galaxies. Officina Stellare telescope



The Sun. Officina Stellare telescope

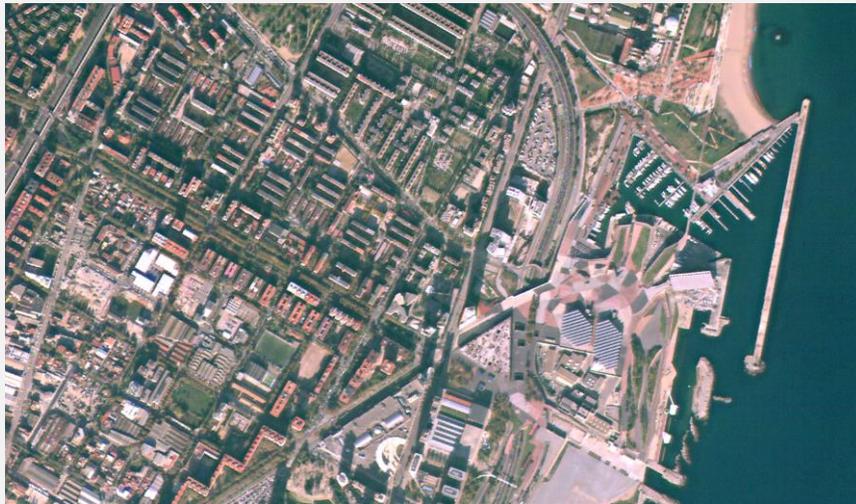
Our world. Your space.



Satellites Constellation



Officina Stellare Orbiting Space Telescopes

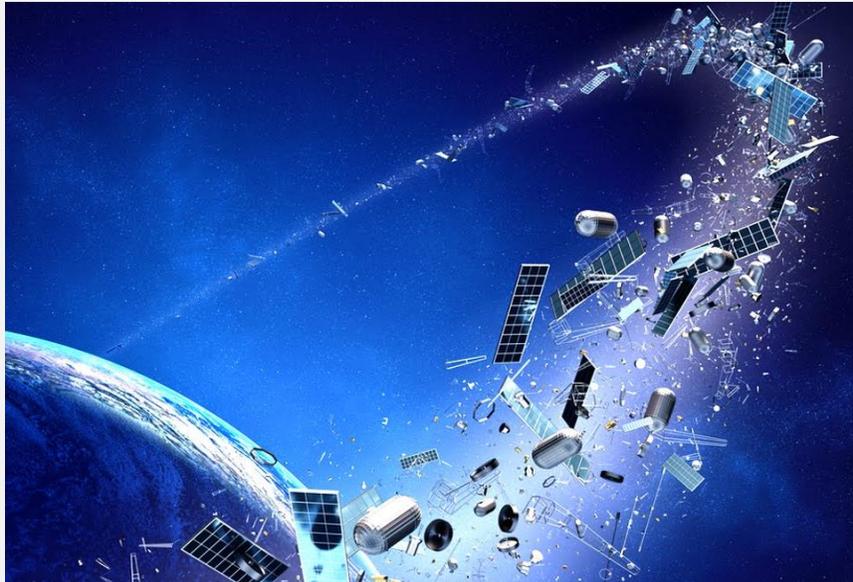


Barcellona, high resolution (Officina Stellare Space Telescope)



Officina Stellare Space Telescope integration phase

Our world. Your space.



Space Debris (artistic rendition)



Officina Stellare Tracking System for space and satellite debris

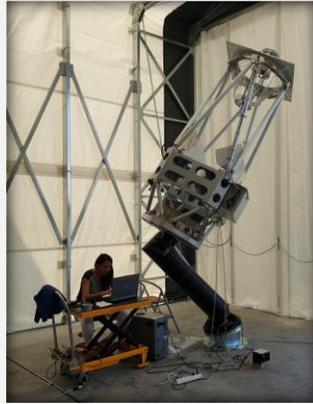


Officina Stellare telescope used for scientific research in high atmosphere



Laser Communication

Special project. Innovative solutions.





Applications.

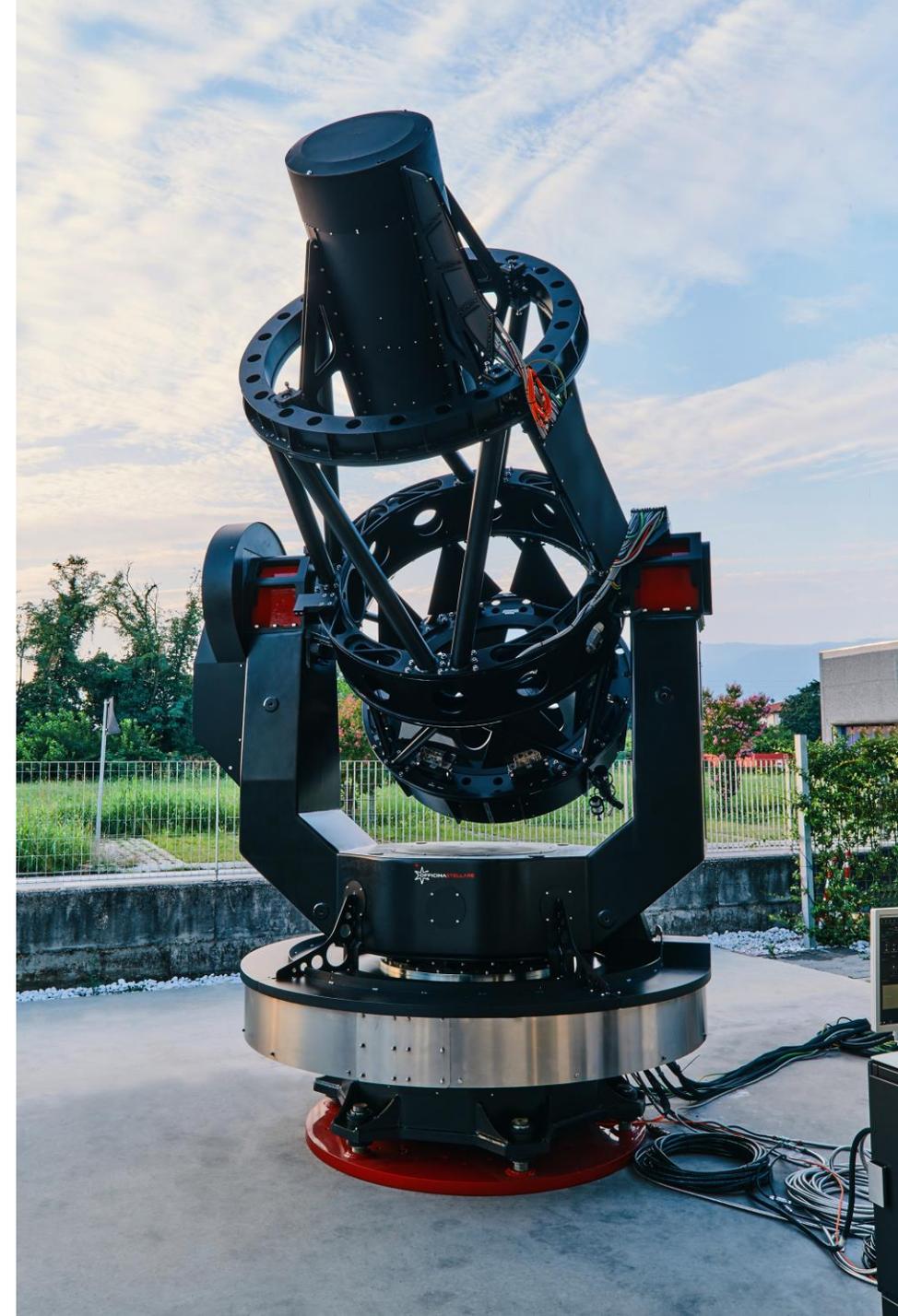
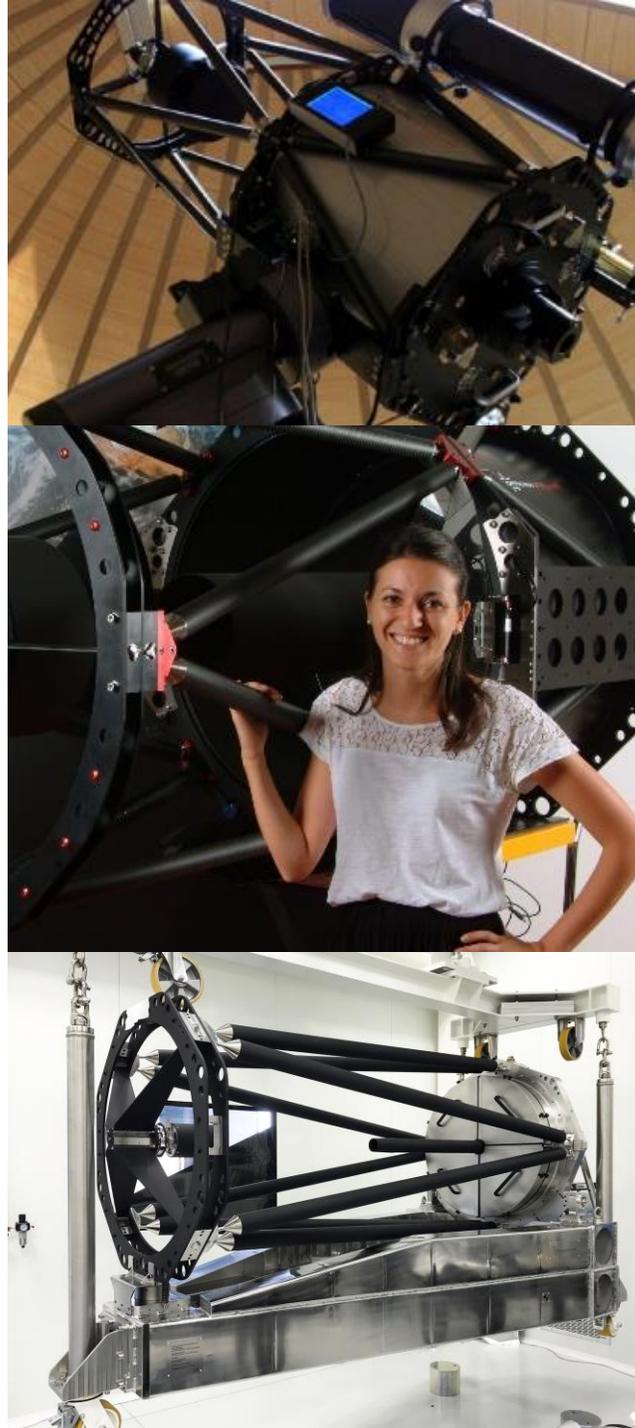


Earth based applications: **Astronomy and Research.**

*Wide range of optical systems for
astronomy applications.*

*20 cm to 120 cm diameter “off
the shelf”, ready to ship, versatile
solutions.*

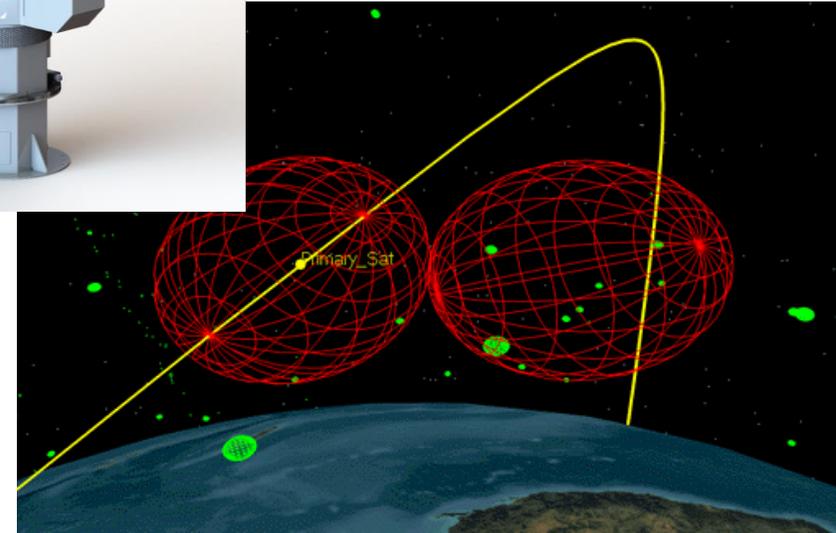
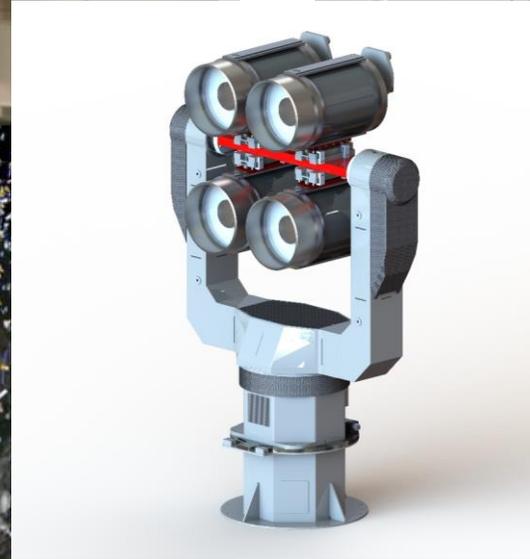
*Custom design and
manufacturing capability.*



Earth based applications: **SSA and SST.**

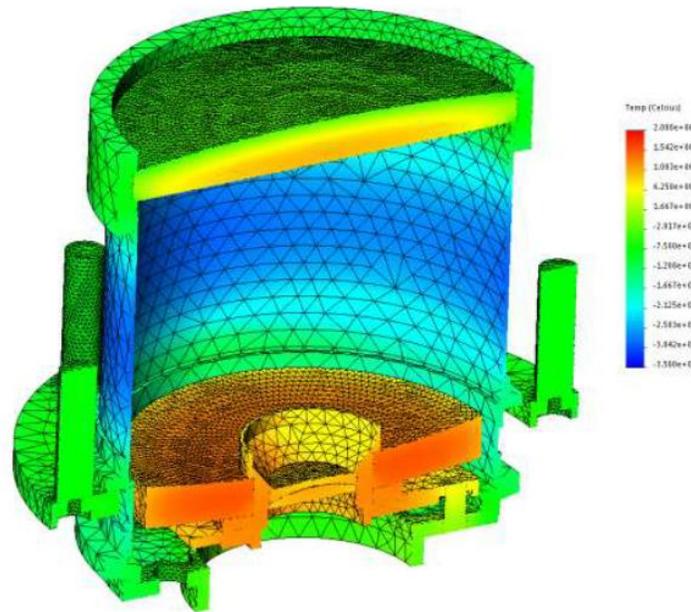
Development and production of low distortion, large diameter, fast f/ratio optical systems and tracking platform for:

- ✓ *SSA/SST (Space Situational Awareness and Tracking);*
- ✓ *Space Debris tracking applications;*



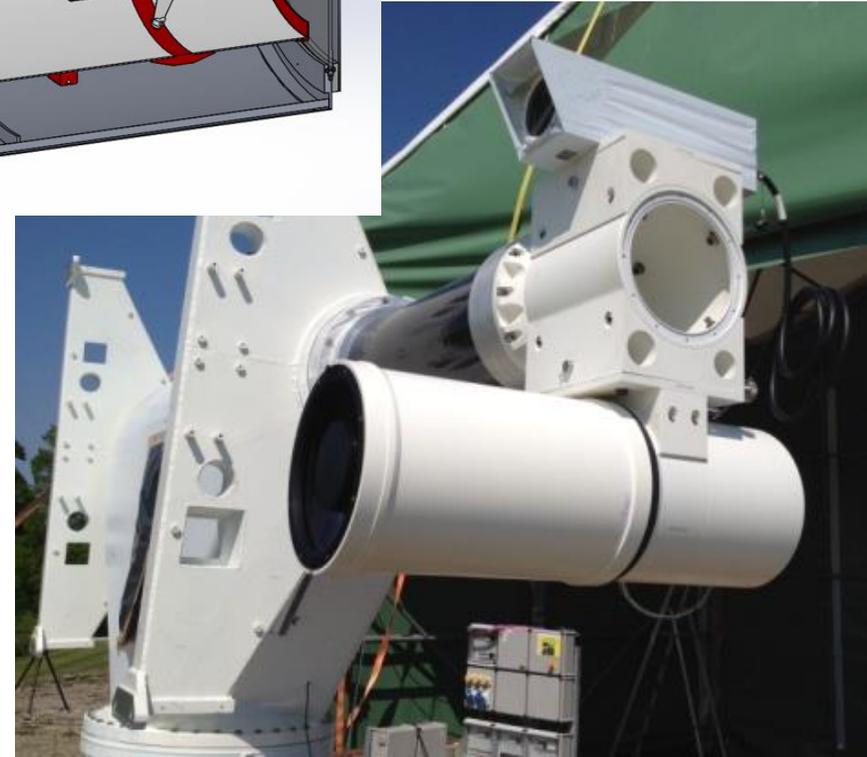
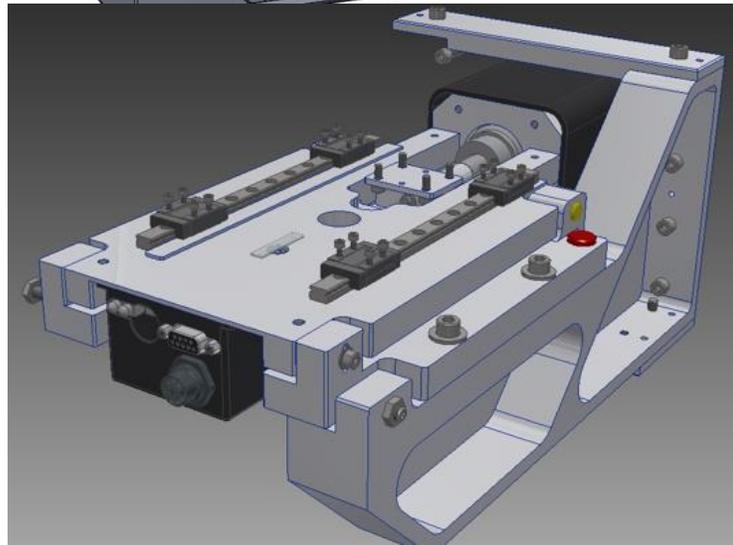
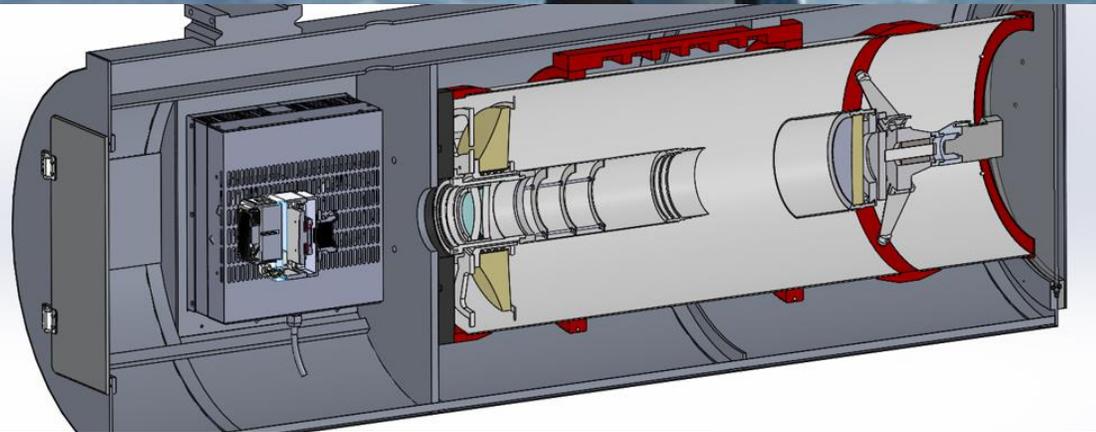
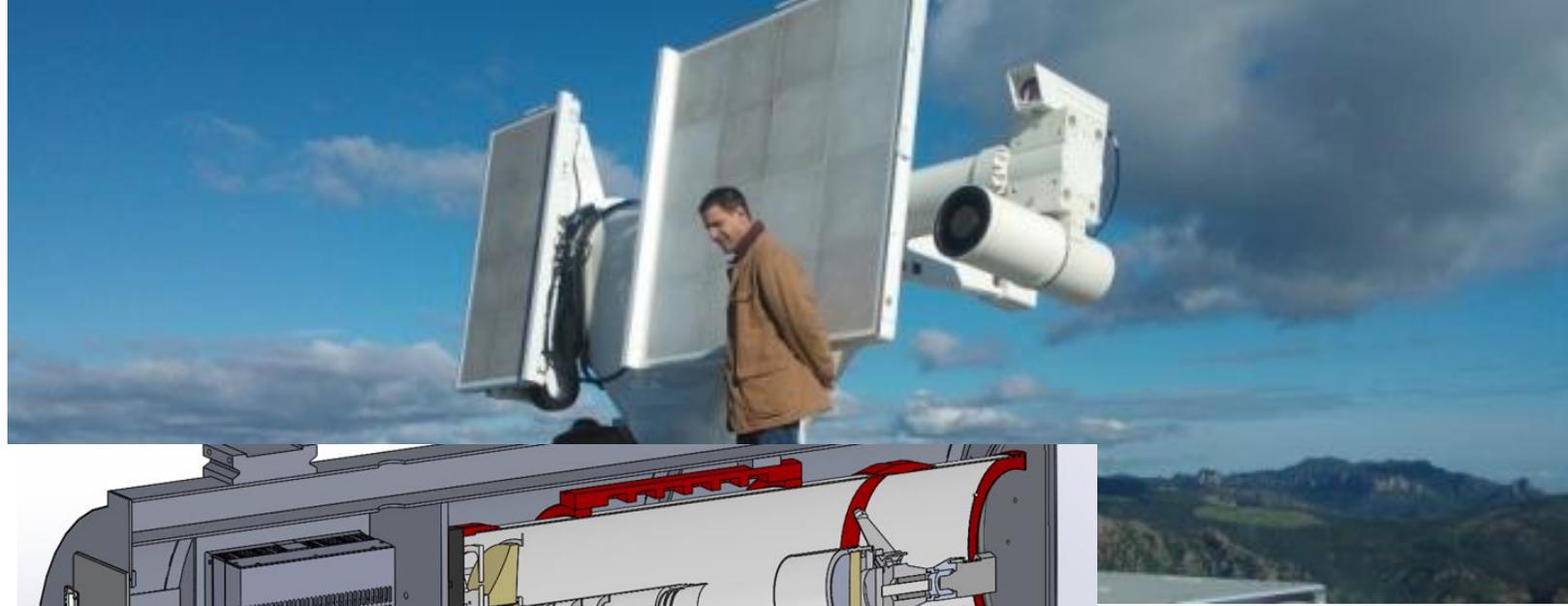
Earth based applications: **Thermal critical.**

Development and production of special optical systems for applications in thermally critical environments.

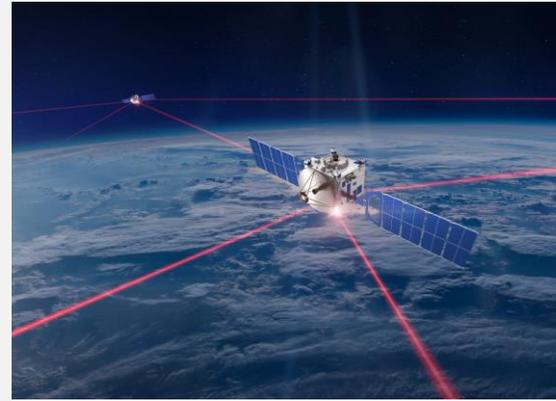


Earth based applications:
Ruggedized optical systems.

Custom development and manufacturing of hi reliability, ruggedized and/or sealed defense optical systems for hi speed slewing weapons range and video tracking applications.

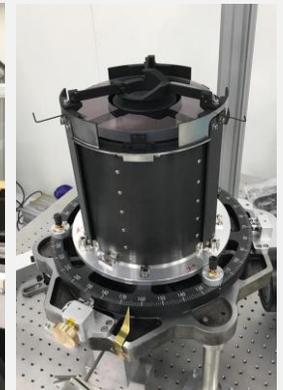
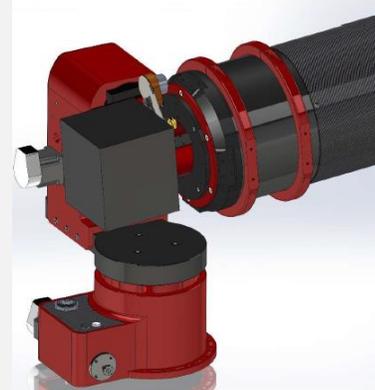


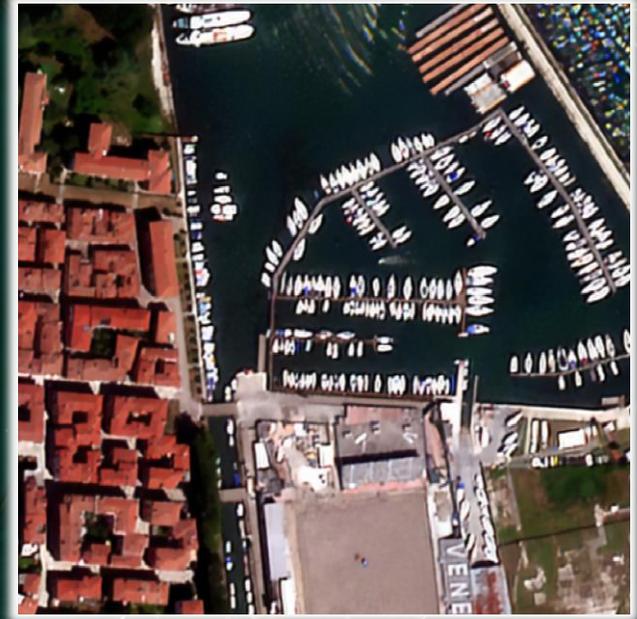
Space based applications: Earth Observation and Laser Communication/Ranging.



Officina Stellare offers a full-in-house TRL-9 expertise level on low cost, high performance, high replicability and reliability design space telescopes for Earth surface imaging. Success achieved also through the “space qualification” of some new materials we obtained that enabled the access to new cost effectiveness solutions and opportunities. In short, Officina Stellare offers full Prime Contractor capabilities for Electro-Optical Space Payloads (telescope and focal plane instrumentation).

Officina Stellare is also a leading player in the market of multi-role, multi-mission Optical Ground Station or laser communication, Quantum Key Distribution and laser ranging applications.





Venice, Officina Stellare space telescopes multispectral constellation
Less than 1 meter ground resolution

Officina Stellare and the New Space Economy scenario.

The term «*New Space Economy*» refers to those opportunities that will arise in the future thanks to a growing accessibility to Space and its data, infrastructure and technologies.

The "Space democratization" will foster a new market segment open to a diversified pool of potential customers.

Space will no longer be the place in which the big institutional players achieve niche or research related success, but it will become a place in which applications will be made possible to the benefit of everyone's daily life.

Officina Stellare's focus for this young market include:

Earth Observation (EO)

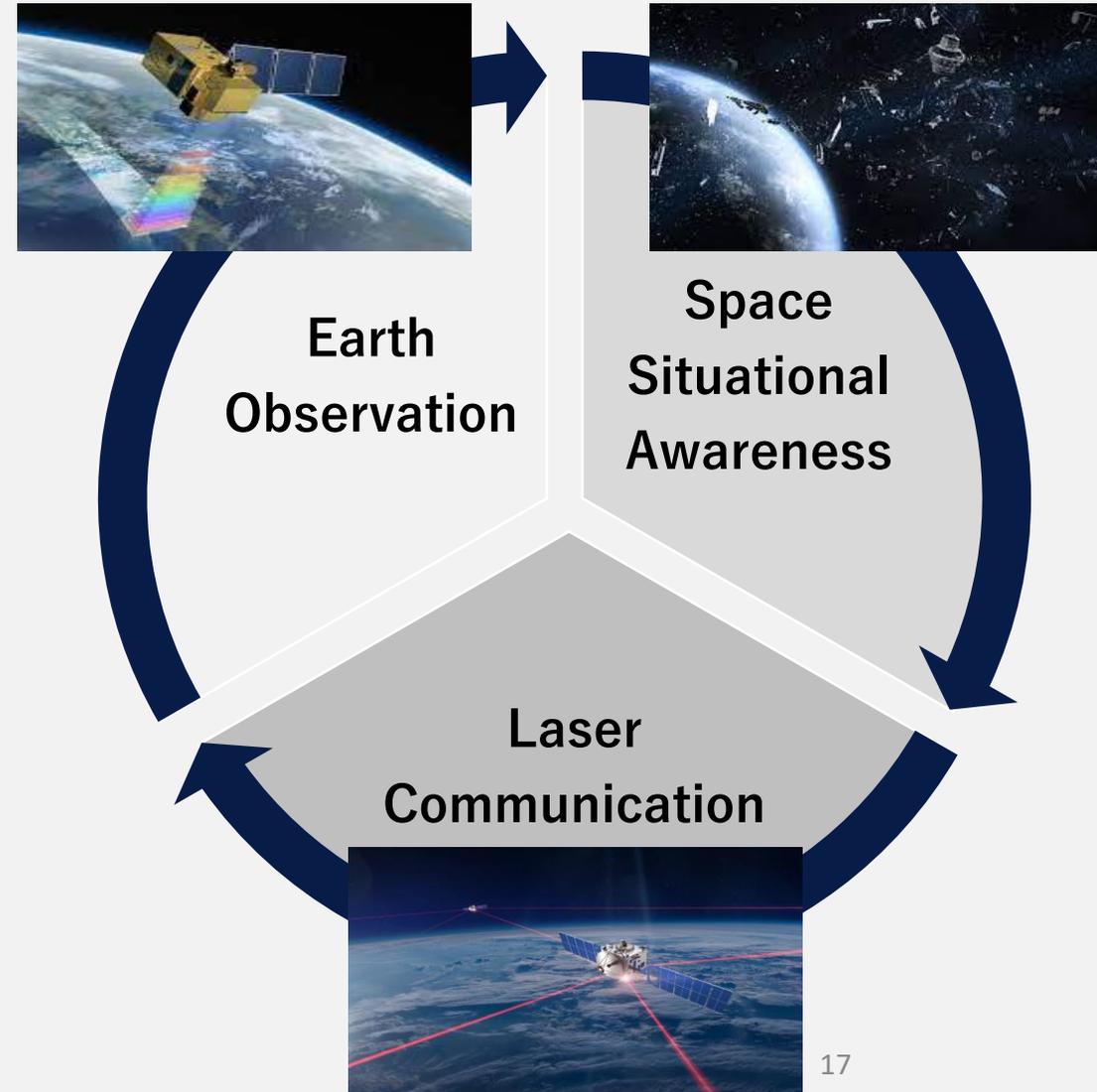
Thousands of launches planned in the future years.

Laser Communication (LC)

The future will require higher data transmission capacity, thus pushing the need for Laser Communication from/to Space.

Space Situational Awareness (SSA)

The increase in the number of orbiting satellites will require more effort in the SSA to enhance safety.



The US Branch: Officina Stellare Corp, Virginia. Supporting the US business.

Print Data

CERTIFICATE N° 1 For 1,500 Shares
Issued to [Officina Stellare SpA] on _____, _____, _____
Dated _____, 2020

Common Stock
1,500 Shares

Received Certificate No. _____
For _____ Shares

From whom transferred _____

Dated _____, _____, _____
NO. ORIGINAL CERTIFICATE NO. OF ORIGINAL SHARES NO. OF SHARES TRANSFERRED

Please scroll mouse over to select text box Works best with Acrobat 7

1 ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE SHARES 1,500

OFFICINA STELLARE CORP.
AUTHORIZED TO ISSUE 1,500 SHARES OF COMMON STOCK OF NO PAR VALUE

This Certifies That [Officina Stellare SpA] is hereby issued 1,500 (One Thousand Five Hundred) fully paid and non-assessable Shares of the Stock of the above named Corporation transferable only on the books of the Corporation by the holder hereof in person or by duly authorized Attorney upon surrender of this Certificate properly endorsed.

In Witness Whereof, the said Corporation has caused this Certificate to be signed by its duly authorized officers and its Corporate Seal to be hereunto affixed this _____ day of _____, A.D., 2020

Gino Bucciol, President
Gino Bucciol, Secretary

© The Delaware Company Security Features: See Back For Details

CERTIFICATE OF INCORPORATION
OF
OFFICINA STELLARE CORP.

I, the undersigned, in order to form a corporation from the purposes hereinafter stated, under and pursuant to the provisions of the General Corporation Law of the State of Delaware, do hereby certify as follows:

FIRST: The name of the corporation is:
OFFICINA STELLARE CORP.

SECOND: The registered office of the corporation and place of business in the State of Delaware is to be located at 614 N. Dupont Hwy., Ste. 210, in the City of Dover, DE 19901 County of Kent. The name of the registered agent at that address is Corporate Service Bureau Inc.

THIRD: The nature of the business, and the objects and purposes proposed to be transacted, promoted, and carried on, are to do any and all things therein mentioned, as fully and to the same extent as natural persons might or could do, and in any part of the world, viz:
To do any lawful act or thing for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares which the corporation is authorized to issue is 1500 Common shares, no par value.

FIFTH: The name and address of the incorporator is as follows:
Linda Diurton
283 Washington Avenue
Albany, New York 12206

SIXTH: The powers of the incorporator are to terminate upon the filing of the Certificate of Incorporation, and the name(s) and mailing address(es) of the person(s) who is (are) to serve as Director(s) until the first annual meeting of stockholders or until their successors are elected and qualify is (are) as follows:
Gino Bucciol
Via del Perer Civico 5
San Dona di Piave, (Venezia)

State of Delaware
Secretary of State
Division of Corporations
Incorporated 03/13/2018 10:20:20
FILED 03/13/2018 10:20:20
18 303495477 - 18/number 302538

Commonwealth of Virginia



STATE CORPORATION COMMISSION
Richmond, December 10, 2020

This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

OFFICINA STELLARE CORP.
a corporation organized under the laws of Delaware and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.



STATE CORPORATION COMMISSION
Attest:

Interim Clerk of the Commission

The New Aquisitions. Fundamental building blocks for Company Growth.

55%

DYNAMIC
ADAPTIVE OPTICS
TECHNOLOGIES **OPTICS**

Dynamic Optics

Technologies and manufacturing capabilities for Adaptive Optics (deformable mirrors and lenses, fast tip-tilt and fast steering mirrors) and related control loops (wavefront sensor and actuators). Essential subsystems for laser comm and imaging optical system.

50,5%

Think**K**QUANTUM**|**

Think Quantum

Technologies, manufacturing capabilities and registered patents for both Ground and Space-based Quantum Key Distribution devices, random number generators and integrated photonics subsystems. Essential subsystems for laser comm infrastructure and cybersecurity world.

Laser Comm Focus: OS is the selected OGS supplier for all the ESA institutional programs for the development of the future Laser Comm continental infrastructure.

European Space Agency

 **telecom**
artes 4.0 programme

SAGA - Satellite Advanced Global Architecture

Telecommunications & Integrated Applications (TIA)

HIGH THROUGHPUT OPTICAL NETWORK (HYDRON)

The most business-oriented part of ESA

EAGLE-1: Secure communication via quantum cryptography

The New Space Factory.



The New Space Factory.



OS aims to create the first Italian "Space Factory" - a plan focused on the development of aerospace technologies to consolidate its position in the New Space Economy. This includes the increase of our capabilities and supply of products to companies (B2G and B2B) and development of goods and commercial applications to be placed directly on the market under the OS' (B2C) brand.

Over the next five years, our goal is to continue deepening our positioning on the market to become a leading player in the development of opto-mechanical systems for applications related to the New Space Economy. In order to achieve that goal OS will mainly focus on competitive applications through the industrialization of the production process and specifically through:

- increased production capacity
- improved efficiency of internal development and production processes
- a shorter and more flexible "time to market"
- improved product and process know-how
- targeted communication and marketing strategies

Our headquarters are located in Sarcedo (VI), Italy, where OS carries out most of its operations. The site is equipped with a photovoltaic system that makes OS independent in terms of energy requirements and two large-diameter astronomical domes for on sky testing.



The New Space Factory.

In-house opto-mechanical design capabilities. Custom design of complex opto-mechanical systems.

Optical Design (Zemax, OpticStudio, Code V, ecc.).

Mechanical Design (ANSYS, Solidworks, ecc.).

Simulations (Thermal, Straylight, ecc.). System Engineering.

In-house optical manufacturing capabilities.

Custom manufacturing of complex opto-mechanical systems.

Glass shaping and CNC light weighting, Grinding, Prepolishing, deterministic CNC hi quality Polishing and Figuring of spherical and aspherical surfaces for mirrors and lenses up to 1.5 meter diameter. Coating vacuum chamber.

(DOPA SGM 1500, Optotech MPC 501 & MPC 1501, DMG Mori 125).

In-house optical and mechanical metrological capabilities.

Interferometric and Shack/Hartmann test based measurements (PhaseCam, DynaFiz, TriOptics, PuntinoPro, ecc.).

Hi-precision null lenses, CGH, reference spheres and flat mirrors, alignment telescopes, CMM machine.

Spectrophotometer (190-3200 nm).

In-house Assembly, Integration and Verification capabilities.

Precision stabilized optical benches.

Launch simulator (400 Kg max payload, 30 KN peak sine, 30 KN rms random, 90 G).

TVAC chamber (7000x1000 mm, -75/+150 °C, 1z10e-6 mBar).

Large, fully equipped, Clean Rooms (down to ISO5).

OptoCentric 3D.





Clients, projects, awards.



Clients.

Scientific Research



中国科学院
CHINESE ACADEMY OF SCIENCES



Georgia Institute
of Technology

Aerospace and Earth Observation (EO)



ThalesAlenia
Space
A Thales / Finmeccanica Company



Defense



Photo-Sonics
International Ltd
Leaders in specialised instrumentation products

Laser Communication (LC)



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Space Situational Awareness (SSA)



Officina Stellare has a remarkable portfolio of clients, thanks to consolidated relationships with some of the world's leading companies (both corporate and governmental) in the research, aerospace and defense sectors. It is also part of some of the most important development projects that relate to the fundamental technologies of the future *New Space Economy* market.

Some Customers are intentionally not mentioned, due to strict confidentiality agreements

Awards and recognitions.



Marc Newson
Industrial
designer

Bono Vox
Frontman U2

Sir. Jony Ive
Chief Design
Officer
Apple Inc.



On November 23, 2013, a charity auction was held in New York City organized by (RED), a nonprofit organization that aims to raise money and awareness to end HIV/AIDS.

One of OS' telescopes was selected for its unique design by Sir Jony Ive (Chief Design Officer at Apple Inc.) and Marc Newson (one of the most influential industrial designers in the world) to be auctioned.

The OS telescope selected was sold for \$ 130.000 with an auction base of 20.000 (+550%).

ENVIRONMENTAL



Officina Stellare is equipped with a **photovoltaic system** able to guarantee almost total energy self-sufficiency.



Officina Stellare strives to use sustainable **packaging materials** to ship its products, preferring, where possible, highly recyclable materials.



Officina Stellare believes in the philosophy that a healthy working environment guarantees a stress-free and more productive space. The factory is equipped with a **kitchen** and a **gym** that can be enjoyed by everyone during work breaks.

SOCIAL



Officina Stellare sponsors **Masters** at different Universities like “Sapienza” University in Rome and University “Ca’ Foscari” in Venice. It also sponsors the **Lorenzoni Award** (University of Padua) on an annual basis.



Officina Stellare sponsors recreational and educational activities (Ex. Lego League) regularly meeting **children in schools in neighboring municipalities**.



Officina Stellare supports a Diversity Management strategy, believing in the diversified workforce, open to changes and opportunities.



Officina Stellare operates in a in a sector (New space Economy) with a **high social impact**, such as SMART agriculture, prevention and management of environmental disasters, management of humanitarian crises.

GOVERNANCE



Officina Stellare protects minorities (company’s statute guarantees a 10% list vote for appointment of one Director of the Board and one member of the board of statutory auditors).



Officina Stellare has nominated a woman as a member of the Board of Directors (gender ratio).

Certifications.

- ✓ ISO EN 9001:2015 (November 2016)
- ✓ ISO EN 27100:2017 (August 2019)
- ✓ ISO EN 9100:2016 (in progress)

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証証書 ◆ CERTIFICADO ◆ CERTIFICAT



ATTESTATO DI COMPETENZA

Con il presente si attesta che

GIOVANNI DAL LAGO

ha frequentato e superato l'esame finale del corso

La norma ASD-STAN prEN 9100:2016 per la qualità nell'industria aerospaziale

Docente: Alberto Gallotti
Località: Sesto San Giovanni
Data: 12/12/2016
Durata: 8 ore

Al partecipanti è stata consegnata una copia della dispensa utilizzata durante il corso

N° Att.: RC910010008327
Luogo: Casalecchio di Reno (BO)
Data: 05 gennaio 2017



Daniele Mazzei
Responsabile del Corso

TUV Italia srl • Gruppo TÜV SÜD • Via Carducci 125, Pal. 23 • 20099 Sesto San Giovanni (MI) • Italia •



Certificato
Certificata n. 56257

Si certifica che il sistema di gestione della sicurezza delle informazioni di
We hereby certify that the information security management system operated by

OFFICINA STELLARE S.p.A.
Via Della Tecnica, 87/89 36030 SARCEDO (VI)

Unità operativa
Operative unit

Via Della Tecnica, 87/89 36030 SARCEDO (VI)

È conforme alla norma
It is in compliance with the standard

UNI CEI EN ISO/IEC 27001:2017

Per le seguenti attività
For the following activities

EA: 33

Dichiarazione di Applicabilità: SOA OS V.0 DEL 14/01/2019

Progettazione e produzione di strumentazione ottico – meccanica di precisione, sviluppo di soluzioni software e hardware per applicazione in ambito di ricerca, difesa e aerospazio

L'uso e la validità del presente certificato sono soggetti al rispetto del regolamento per la certificazione dei sistemi di gestione delle aziende.
The use and the validity of the certificate shall satisfy the requirements of the rules for the certification of companies management systems.

Prima emissione First Issue	Emissione corrente Current Issue	Scadenza Expiring date
01 Agosto 2019	01 Agosto 2019	31 Luglio 2022

L'Amministratore Delegato
The Chief Executive Officer
Dr. **Pietro Biondo**

CSQA Certificazioni Srl – via S. Costanzo 74 36016 Thiene (VI)
www.csqa.it



2002 N° 0336 0101 N° 0005 013 N° 0015
004 N° 0010 005 N° 0000 075 N° 0100
006 N° 0048 004 N° 0011 0064 N° 0100

Membro degli Accordi di Intesa
Accreditamento IAF, IAF e IAC
Signatory of EA, IAF and IAC Mutual
Recognition Agreements

La validità del presente certificato è subordinata a sorveglianza periodica annuale e al rispetto corretto del sistema di gestione con periodicità triennale.
The validity of this certificate depends on yearly surveillance and on a full review of Management System every three years.



www.cisq.com

CISQ è la Federazione Italiana di Organismi di Certificazione dei Sistemi di Gestione Aziendale.
CISQ is the Italian Federation of management system certification bodies.

CERTIFICATO



Reg. Numero	18407-A	Valido da	2019-10-29
Primo rilascio	2019-11-30	Ultima modifica	2019-10-29
Scadenza	2019-11-29	Settore IAF	19

**Certificato del Sistema di Gestione per la Qualità
ISO 9001:2015**

Si dichiara che il sistema di gestione per la Qualità dell'Organizzazione:
OFFICINA STELLARE S.p.A.
è conforme alla norma UNI EN ISO 9001:2015 per i seguenti prodotti/servizi:
Progettazione e produzione di strumentazione ottico-meccanica di precisione.

Chief Operating Officer
Giampiero Belcredi



Il mantenimento della certificazione è soggetto a sorveglianza annuale e subordinato al rispetto dei requisiti contrattuali di Kiwa Cermet Italia.
Il presente certificato è costituito da 1 pagina.
La data di rilascio di questo certificato corrisponde alla data di primo rilascio da parte di Intro Accreditato

OFFICINA STELLARE S.p.A.
Sede Legale
- Via della Tecnica, 87/89 36030 Sarcedo (VI) Italia

Sedi Oggetto di Certificazione
- Via della Tecnica, 87/89 36030 Sarcedo (VI) Italia
- Via Maestri del Lavoro, 20 45030 Santa Maria Maddalena Occhiobello (RO) Italia




ISO 9001:2015

Dealers.



IPO Day! June, 26th 2019 Milano Stock Exchange.





CONTACTS AND ADDRESS

Officina Stellare S.p.A. - Via della Tecnica 87/89 - 36030 Sarcedo (VI) – ITALY

Tel. + 39 0445 370540 - Fax +39 0445 1922009

info@officinastellare.com **www.officinastellare.com**