

......

on the road to electrify the future

www.nestech.it



ABOUT US PRODUCTS

Explore ESTECH world

O3 TECHNOLOGIES **O4** APPLICATIONS



Shaping The Future

Nestech is a Business Unit of Carbonveneta – Nestech – PLD Collettori srl and is a partner in the manufacturing of **laser cut single laminations and complete stator and rotor core stacks with NON-STANDARD geometries** for electric motors and generators.

Roberto Movio Sales

 \bigcirc

8

Dino Pesavento Administration

Technical - Sales

Luciano Pesavento

Purchasing Quality - Production PLD COLLETTORI

Merci / Goods

CARBONVENETA TECNOLOGIA NEI COMPOSITI Uffici / Offices

← Merci / Goods

NESTECH

Uffici / Offices Merci / Goods





2.000 sqm production area

300 tons/year sheet metal processed

NESTECH

0,1÷2 mm thickness range





we off fer our customers high quality pro-

our customers high quality products, flexible and fast services, thanks to the experience of our human resources and the high technical level of the equipment.

we HAVE

extensive knowledge and specific expertise in the electromechanical sector, we provide fast prototypes or small series as well as large batches.



Our services

01 MANUFACTURING

- \bigcirc \bigcirc \bigcirc \bigcirc \checkmark
- Laser cutting of single laminations Manufacturing of rotor / stator core stacks Prototypes development Special items with NON-STANDARD geometries
- Small series

O2 CO-OPERATION & SUPPORT

 \bigcirc \bigcirc

Supporto to Maintenance and Service companies Co-operation with R&D







Support to R&D and engineering **during the developing** stage of new products.

We are equipped with the technology and materials necessary for the construction of innovative products, especially oriented to **Powertrain**, but also to other applications in the E-Mobility sector.







S **RODUC** 02









LAMINATIONS LASER CUT

Single laminations laser cut with last generation fiber machines, with low power and high accuracy and repeatability.

Wide range of raw materials available, non-oriented electrical steel (DIN EN 10106) from grade M210-35A until M1000-100A and for high frequency applications (DIN EN 10303) from NO10 until NO35, with different types of coating.

Fast manufacturing times, as investments in cutting tools are not needed.





RODUCTS 02











RODUCTS 02









ROTOR STACKS

Rotor stacks of different sizes, assembled and turned or grinded to ensure tight tolerances.

Stacks can be welded, glued or riveted, complete with aluminum or copper bars soldered to end plates.

Thanks to specialized partners, we can offer die-casted aluminum rotor stacks, even single pieces or small batches.





RODUCTS 02









Cores for several applications, such as stirrers or transformers, complete with pressing plates, tie rods, machining or surface treatments upon request.

On request complete with winding and impregnation.



Technologies for maximum quality

Laser cutting

Latest generation fiber laser cutting **system**, 2 KW power, accuracy +/- 0.025 mm, 3000x1500 mm working table. Laser beam extremely thin and concentrated, in order to produce precision and accurate laminations. Ideal for prototyping, small series, special applications and service.

Stacking

Single laminations are stacked with special tooling, which is designed by our Technical Office with 3D software and manufactured specifically for each project, in order to guarantee the highest quality. Pressing is done by means of tie rods and springs or hydraulic presses, depending on the size and quantity.

Welding

 $\mathbf{3}$

We are equipped with **TIG and MIG welding** for stator or rotor stacks. We can perform **soldering** or brazing of aluminum or copper bars with end plates for rotor stacks.

(2)

extreme accuracy precision

Windings

Thanks to the cooperation with specialized partners, we can supply **stators or single** poles complete with windings.

CNC Turning and Machining

Turning is performed on request on the assembled stator and rotor stacks, in order to guarantee tight tolerances. Maximum diameter up to 2000 mm.

CNC machining on assembled stacks.

Bonding

4

We use **BACKLACK technology** for bonding the stacks. Single laminations are cut from electrical steel pre-insulated with epoxy resin which, with a temperature of about 200 ° C, polymerizes allowing the laminations to be bonded together.

5

6



WINDINGS



ECHNOLOGIES

н 03







We offer a wide range of **windings** for stator stacks mainly made by hand, especially for prototypes and non-standard motors.



APPLICATIONS 04



Maintenance - Service



Industrial Automation

Aerospace and defence

Renewable energies

Oil & Gas

Traction & lifting

Racing



APPLICATIONS 04

AC – DC motors

Permanent magnet motors

Linear motors

Stirrer and special magnetic cores

Traction motors for e-mobility

Hydro and wind generators

Drives







Quality SETTLED AND CERTIFIED

The Company is UNI EN ISO 9001:2015 certified.

A careful selection of suppliers, regular maintenance of machinery and meticulous and scheduled online checks allow us to reach the highest quality standards, satisfying the requests of the most demanding customers.

We are equipped with **Coordinate Measuring Machines**, 2D scanning for single laminations and 3D with mecha**nical probe** for the stator/rotor stacks, to always ensure a top quality level and certify the parts that are delivered.

The products comply with **ROHS and REACH Directives**.



2D SCANNING



Sustainability ESG POLICY: environmental, social, governance

The core of our company mission is based on a deep commitment to sustainability, which actually drives to our **plan dedicated to promoting eco-sustainable practices.** As manufacturers of parts for electric motors, we fully understand the essential role we play in building a more sustainable and green future.

Our commitment to sustainability is based on three fundamental pillars: environment, society and governance.

We are committed to reducing the environmental impact of our business through the adoption of **cutting-edge technologies** and **eco-sustainable practices**. In parallel, we actively collaborate with local communities, promoting **social projects** and ensuring an **ethical and inclusive working environment**, so that our economic growth is associated with the values of social and environmental responsibility.



The change for the future is green: our sustainable commitment





• www.nestech.it

Via Cavallara, 18 36040 Valdastico (VI) - ITALY

Tel. +39 0445 745097 info@nestech.it



