SPAL AUTOMOTIVE

50 years

COMPANY PROFILE

+ Expertise
+ Innovation

SPAL AUTOMOTIVE

- Consumption

+ Reliability

- Emissions

COMPANY OVERVIEW

ESTABLISHED IN 1959

500 EMPLOYEES GLOBALLY

PRODUCTION CAPACITY:
~ 3.500.000 UNITS/YEAR

R&D ENGINEERING / DESIGN
TESTING /QUALITY CONTROL & ASSURANCE

SPAL AUTOMOTIVE is a world leader in the design and manufacture of high quality electric fans and blowers for all types of vehicles and equipments.

Founded in Italy in 1959, we initially specialized in plastic mould design and production. We have been designing, producing and marketing for over 30 years high-performance axial fans and centrifugal blowers for cars, buses, off-road vehicles, construction machineries, agricultural tractors, trucks, powersports and industrial equipments.

The SPAL production facility in Correggio - Italy, currently covers a total production area of 50,000m², accommodates over 500 employees and houses the engineering, research & development, and manufacturing departments. We have six automated production lines, which have capability to produce over 3 million fans and blowers annually.

We hold TS16949 certification and ISO 9001 certification. They specify the quality system requirements for design, development, production and when relevant, installation and servicing. In addition SPAL Environmental Management System is certified to UNI EN ISO14001:2004, and also meets the European Directive 2000/53/EC on end-of-life vehicles (ELV).

Our goal is to build high quality products for the market. We achieve it by continuing focusing on research & development and by supervising all areas of manufacturing process.

Core Business:

Brush and Brushless
Axial Fans and Centrifugal Blowers
12V and 24V

SPAL IN THE WORLD

SPAL ITALY (Correggio - Italy) Headquarter: Design, R&D and Production
SPAL USA (Des Moines - Iowa) North America Distribution Facility
SPAL Automotive CHINA (Shanghai -China) China Distribution Facility
SPAL Automotive UK (Worcester- GB) GB Distribution Facility
SPAL Automotive do Brazil (Sao Paulo - Brazil) Brazil Distribution Facility
SPAL RUS (Sankt-Petersburg - Russia) Russia Distribution Facility
PEE AAR Automotive Technologies (Delhi - India) India Distribution Facility

We supervise directly France and German markets with dedicated Spal people

FULLY INTEGRATED ORGANIZATION:

From the raw material to the moulding of plastic components; from the copper wire to the fabrication of the electric motor; from the complete assembly to the end of line test of the finished production part: **all steps of the manufacturing process are carried out in our facilities in Correggio**.

This high level of vertical integration allows us to control the quality of every single step of the manufacturing process and achieve the well known “SPAL quality standard”, which for half a century has distinguished SPAL products in the marketplace.

A highly-qualified team of engineers aided by the latest software tools and advanced rapid prototyping equipment ensure a seamless execution of our project; from customer’s requirements to production.

WE MANAGE THE ELEMENTS

We have always set ourselves the highest standards.
We are convinced that quality, innovation and service are, and always will be, the main cornerstones of our history and culture. On these cornerstones, SPAL has built up its credibility over the years, presenting itself as the ideal partner for designing, manufacturing and marketing ventilation solutions for oil/engine cooling and HVAC systems for all means of transport and mobile equipment. Our products are designed and manufactured to meet the widest market's request and the most demanding environmental conditions.

The SPAL Strengths

TECHNICAL KNOWLEDGE

All competencies required to develop the following highly technological functions are in-house:

- Fluid-dynamics
- Thermodynamics
- Electronics
- Electro-magnetic
- Mechanical

IN-HOUSE TESTING AND VALIDATION EQUIPMENT

- Climatic chambers
- Static moisture climatic chambers
- Thermal shock chamber
- Oven & hot test chambers
- Water & salt spray chamber
- Vibration test benches (controlled ambient temperature)
- Vibration test bench in climatic chamber
- Airflow test chambers
- Anechoic chamber with spectrum analyzer
- Endurance test facility (capacity of approx. 500 fans/blowers)
- Motor torque test bench
- 3D tester
- Laser sintered prototype machine
- EMC: test equipment, weight impact test equipment, drop test equipment
- Harness / connector mechanical resistance test equipment

FULLY INTEGRATED PROCESSES

The whole manufacturing process required by the fan function is “integrated” in the SPAL plant:

- Rapid prototyping machine
- Chemical Department validation and design of plastic materials
- Tool shop
- Moulding (Blade, Shroud)
- Motor design and production
- PCB In-house Production: to support Brushless Motors and Automotive Accessories Products
- Electronics (SMD Lead free)
- Automated assembly process

Pressure field on the blade

Rapid prototyping machine

Hot test chamber

Airflow test chamber

Climatic chambers

Axial product line

HIGH PERFORMANCE PRODUCTS

AXIAL MOTOR FANS 12V. - 24V. d.c.

IP68 PROTECTION

LONG LIFE & VERY LONG LIFE

LOW NOISE & VERY LOW NOISE

HIGH EFFICIENCY

FAN DIAMETERS FROM 96 mm TO 385 mm

AIRFLOWS UP TO 4.000 m3/h

96	115	130	140	155	167	182	190	225	255	280	305	330	340	350	385 mm
4	4.5	5.2	5.5	6	6.5	7.3	7.5	9	10	11	12	13	13.5	14	15 inch

OUR PRODUCTS "Premium" Products Positioning

The premium features of axial fans and blowers are sealed motors against water and dust ingress (degree of protection IP 68), low noise Level and outstanding efficiency. Spal motors provide longer life, superior performance and lower cost over time when compared to standard versions.

BRUSHLESS AXIAL FANS RANGE 12V-24V d.c.

140	190	305	385	405 mm
5.5	7.5	12	15	16 inch

IP68 & IP6K9K PROTECTION

VERY LONG LIFE (OVER 30.000 hrs)

LOW NOISE & VIBRATION

HIGH EFFICIENCY

FAN DIAMETERS FROM 140 mm TO 405 mm

AIRFLOWS UP TO 5.000 m^3/h

CENTRIFUGAL BLOWERS 12V. - 24V. d.c.

IP68 PROTECTION

LONG LIFE & VERY LONG LIFE

LOW NOISE & VERY LOW NOISE

HIGH EFFICIENCY

AIRFLOWS UP TO 1.200 m3/h

single and double impeller fans

We provide customers with an extensive range of high performance DC & EC axial fans and blowers.
Besides standard solutions, SPAL Automotive, for special requirements, can provide custom designed shrouds and fans.

CENTRIFUGAL BRUSHLESS BLOWERS 12V-24V d.c.

IP68 & IP6K9K PROTECTION

VERY LONG LIFE
(OVER 30.000 hrs)

LOW NOISE & VIBRATION

HIGH EFFICIENCY

AIRFLOWS UP TO 3.000 m^3/h

TYPE 019-BBL301-95
24V

TYPE 020-BBL303-95
24V

APPLICATIONS

battery cooling

hvac

powertrain

cooling

hybrid

technology

on-board

electronics

cooling

OUR CLIENTS ARE OUR BEST REFERENCE.
WE WORK WITH THE BEST ORIGINAL EQUIPMENT MANUFACTURERS

Car
O.E.M.
System Integrators

Commercial Industrial Vehicles
HVAC
Radiator Cooling
(Engine/Oil)

Bus
HVAC
Engine Cooling

Powersports & Gardening
O.E.M.
System Integrators

Off Highway
HVAC
Heat Exchanger Cooling
(Engine/Oil)

Cooling Systems
O.E.M.

Refrigeration Systems
O.E.M.

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