



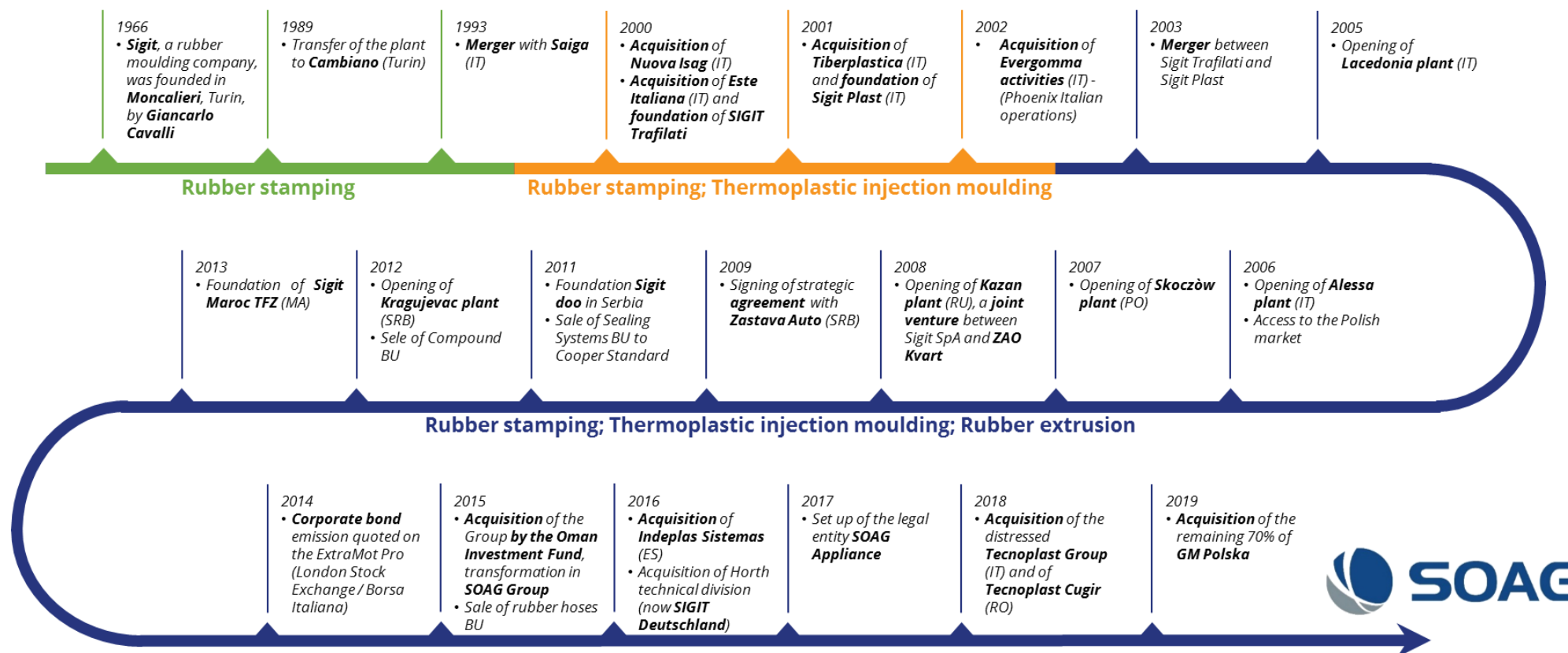
*SIGIT & OPENPLAST: the first Italian platform for industry 4.0  
designed for plastic and rubber world*

S.Giardino – Chief of R&D department

S. Digiovanni – Digital transformation Manager

## SOAG GROUP HISTORY

Founded as rubber components producer in 1966, SOAG expanded its footprint in the EMEA region becoming a key player in the Automotive industry



## SOAG GROUP IN NUMBERS

Successful key metrics



€153 M  
revenues



1,545 employees total



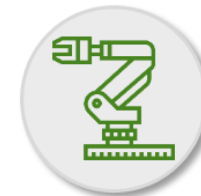
10 countries



50 years of experience



+450 new moulds per year



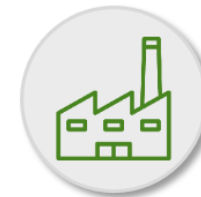
310 injection  
moulding machines



2 divisions



1 Innovation  
Square Center



14 production facilities

## GEOGRAPHIC FOOTPRINT

The Group operates in the EMEA region through its 14 production plants located close to our customers facilities.

### Headquarters and tech/sales offices

The operational headquarter is based in **Switzerland**, through SOAG Europe SA.

Offices in **Italy** and **Germany**.

From Q3/2019 ISC will host the Group's **R&D** and **E&D operations**, the **Qualification Laboratories**, the **OpenPlast Foundation** headquarter, and some small companies or **start ups** able to offer an added-value to Group's innovations.

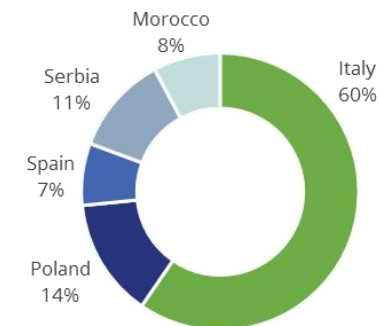


### Production plants

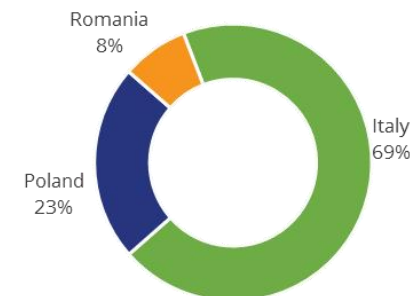
SOAG international growth followed the de-localization of OEMs towards Eastern Europe and best-cost countries, as result of the strategy "going local-for-locals."



Automotive revenues geographic breakdown FY18E



Appliance revenues geographic breakdown FY18E

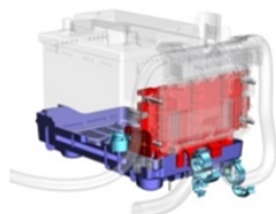


## SOAG GROUP OVERVIEW

SOAG engages in all stages of the production process, offering an integrated product-service: the Group core business focuses on the industrialization phases, including quality control and testing processes, while its involvement in design and engineering of moulds depends on client requirements

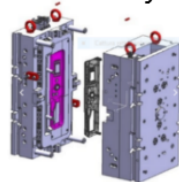
### 1. CO-ENGINEERING AND DESIGN

An expert team of engineers fully **co-designs new products and specifications** together with OEMs.



### 2. MOULDS DESIGN

**Moulds for new products requirements are designed by SOAG**, that alternatively **coordinates their design**. **Moulds are then purchased** from an external supplier. 12% of total tooling needed is carried out internally.



### 3. TESTING AND PROTOTYPING

Newly developed products are tested in the **SOAG tryout centers** before being transferred to production sites.



### 4. INDUSTRIAL DEVELOPMENT

**SOAG fully carries out the product industrialization**, which consist of manufacturing and assembly of components.



### 5. PRODUCTION

**SOAG produces** for customers in 14 different plants in EMEA.



#### TECHNOLOGIES

- Thermoplastic injection moulding
- Rubber moulding
- Aluminum die-casting

## INNOVATIVE AND RESEARCH PROJECTS

The Group is investing in several research and innovative projects. The new Innovation Square Center (ISC) in Turin, Italy, will be the new house for the Group's technological innovation.

To achieve the new challenges, SOAG decided to launch the **Innovation Square Center (ISC)**, the new Group's Tech Center. Operative from the last quarter of 2019



### ISC features:

- Smart building for smart working
- Industry 4.0 tech center
- R&D and E&D group departments
- Technologically advanced laboratories
- Start ups and co-working spaces
- Group tech competence center for automation, robotics and collaborative robotics



**C.R.AB. Composites Research Abruzzo**, in partnership with Sigit S.p.A., FCA Italy, Università dell'Aquila and Delta Automation. Innovative research for the use of recyclable composites for large production vehicles.



**DPET®-M Injection moulding of DPET in partnership SOAG Europe and OCTAL.** Research applied study for DPET raw materials in EMEA market.



**OpenPlast – The Italian Platform for Industry 4.0** designed for the plastics and rubber world



SOAG launched the first “Industry 4.0” project in 2014, connecting over than 150 presses in all his European plants.

## GOALS

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- **Production data collection**
- **Factory event monitoring**
- **Machine downtime monitoring**
- **Facilitate production declaration**
- **Production report digitalization**

## LIMITS

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- **Factory digital divide**
- **Proprietary and closed solution**
- **Focus on technological aspect vs organizational and functional aspect**
- **Underestimate training period**

Starting from this experience and in light of these limits, we have decided to involved several technology partners in order to create the first Italian platform designed for the plastic and rubber sector



*The Italian Platform for Industry 4.0 designed  
for the plastics and rubber world*





## SECTORIAL

The first platform designed and built specifically for the rubber-plastic sector



## MODULAR & SCALABLE

App activation, even in different moments, makes it possible to adapt to every type of reality, requirement and company dimension



## SMART INTEGRATION

Connectivity is guaranteed with all types of machinery and software already present in the plant



## OPEN

The first platform developed with open-source technology



## OPEN COMMUNITY

The community of users, producers and developers immediately guarantees the updating and evolution of the platform



## MULTI - DEVICE

The solution is user-friendly and accessible from any device (PC, tablet, monitor, smartwatch, etc.)

1.

SHOP-FLOOR

PRESSES



FEEDING SYSTEM



COOLING SYSTEM



POST-PROCESS  
SYSTEM



2.

CONNECTIVITY

OPENPLASTREADY



OPEN PLAST  
READY

OPEN-LINK



PROTOCOL SUPPORTED

- Euromap 63/77
- OPC-UA
- Siemens
- TCP/IP
- etc

3.

OPEN PLATFORM



FEAUTURES

- Database "in memory"
- Cloud and or on-primers

4.

CONSOLE / APPs



OPEN CONSOLE

APPs



PLANNING



QUALITY



MAINTENANCE



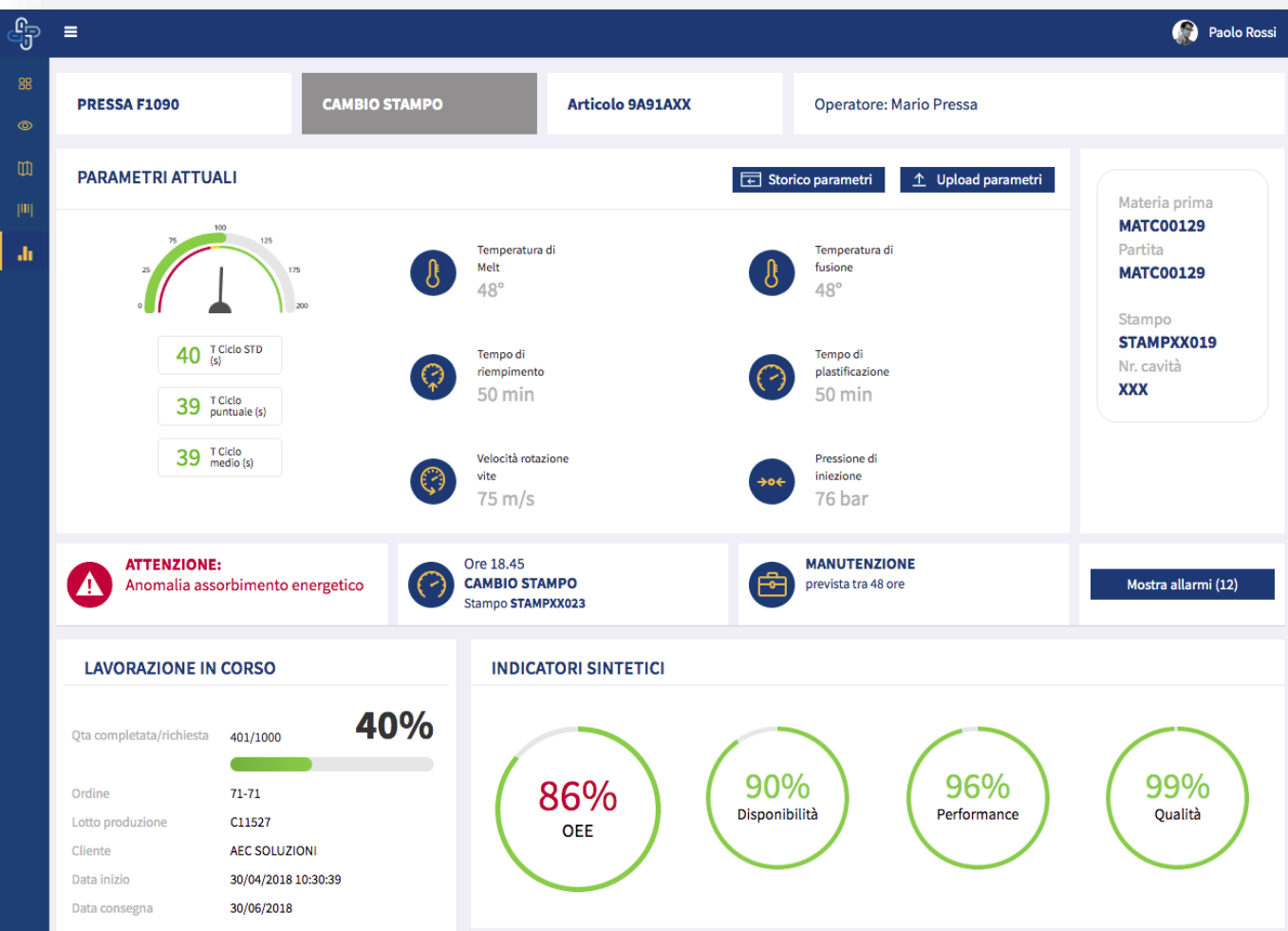
ERP CONNECTOR



ENERGY MANAGEMENT



LOGISTIC



- ✓ Integration of data from different sources on interactive interfaces and dashboards on multi device
- ✓ User friendly and customizable
- ✓ Real-time monitoring of production
- ✓ Management of machine production plans, OEE work progress, detailed drill down and summary reports
- ✓ Alert: notifications, alarms or critical situations on multi device



## PLANNING

Optimal production planning and real-time management of machines, equipment and resources



## QUALITY

Control and analysis of quality parameters by article, operation and resource



## ERP CONNECTOR

Fast, smooth and stress-free bi-directional connection with ERP



## LOGISTICS

Logistics management, ideal as ERP for small companies



## ENERGY MANAGEMENT

Analysis and optimization of energy consumption with monitoring of performance indicators



## MAINTENANCE

Programming of maintenance interventions and detection of fault causes and anomalies

We would like to increase and expand our project, **we are looking for other Partners.**

- Plastic processing companies eager to experiment with new paradigms;
- Machinery and equipment construction companies in the plastic and rubber industry;
- ICT companies for the development of applications to enrich the platform.

If you want to go fast, go alone.  
If you want to go far, go together.

*African proverb*



Join Us

## Promoters



## Certified partner



## Project co-financed by



# CONTACTS



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