

A person in a dark suit and tie is pointing their right index finger towards a circular digital graphic. The graphic consists of concentric circles and segments, resembling a stylized 'R' or a data visualization. The background is blurred, focusing on the hand and the digital element.

ROLD

**Innovation in real-time:
a living example of
Digital Manufacturing**

Roldappliance

Roldlighting

Roldindustrial



ROLD

Roldsmartfab
Roldsmartpower

Roldelettrotecnica
Roldlighting

Roldshanghai
Roldli-fi

Company Profile

- Italian Family Business
- Established **1963**
- **3** Companies **3** Business Units
- **4** Plants
- More than **230** employees

Roldappliance

Roldlighting

Roldindustrial



ROLD

Roldlighting

Roldappliance

Roldindustrial



Roldappliance

Roldlighting

Roldindustrial



ROLD

ROLD

Rocchitelli Onofrio Loro Dolores

A Family Company



Rold appliance

Rold lighting

Rold industrial

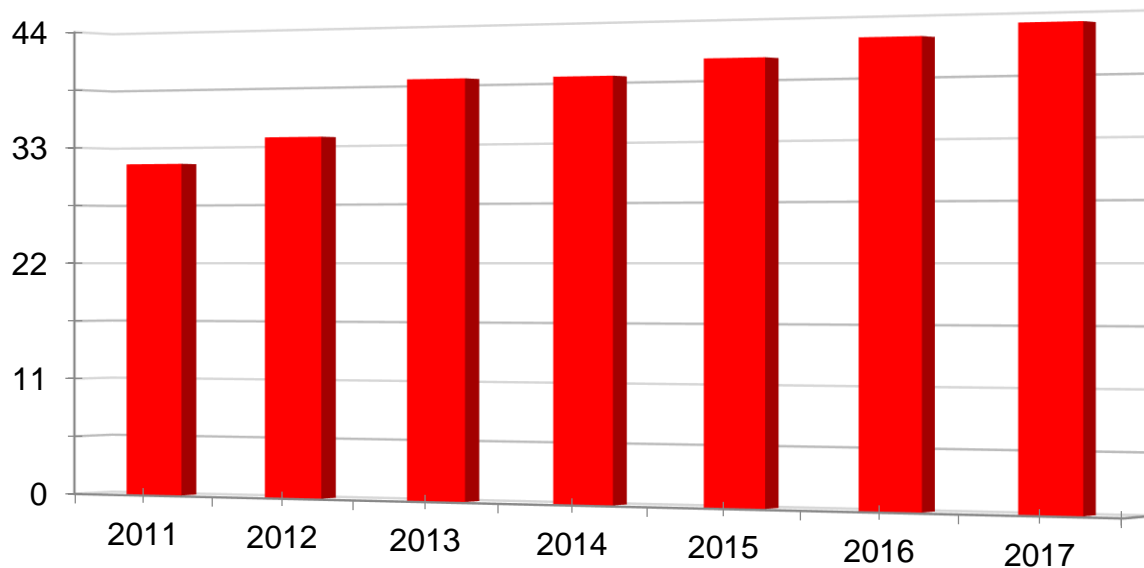


ROLD



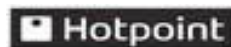
Turnover

Total turnover 2017: > **43 M €**
Over the last 5 years, **Rold has reached its best business performances** in more than fifty years of company history



Turnover Growth





Rold appliance

Rold lighting

Rold industrial



ROLD



Plants

Roldappliance

Roldlighting

Roldindustrial



ROLD



Roldappliance

Roldlighting

Roldindustrial



ROLD



Values

People

Passion

Courage

Responsibility

Performance

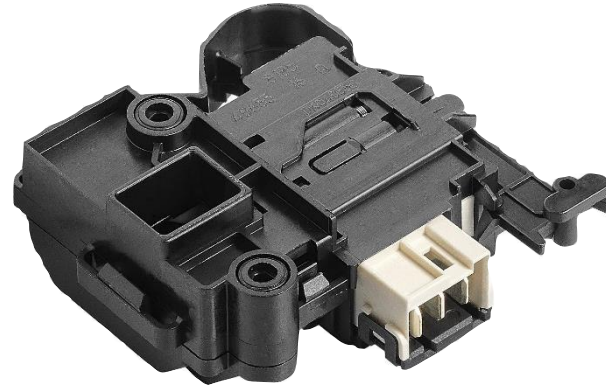
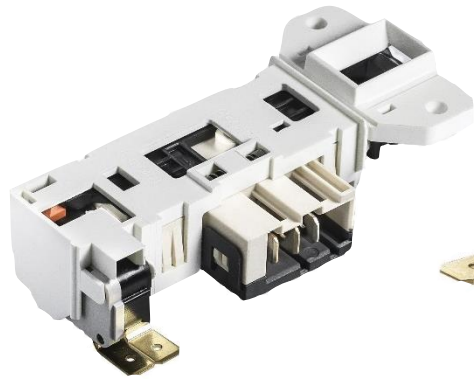
Roldappliance

Roldlighting

Roldindustrial



ROLD



- Doorlocks
- Rotary Switches, Encoders
- Switches & Micro Switches
- Push button units
- Smart Sensors
- Electrical and Electronic control systems
- IoT integration





Roldappliance

- Washing Machines
- Dryers
- Dishwashers
- Home & Professional Cooking
- Food Preservation





Roldlighting

- LED – based, high efficiency Lamps
- Designed and assembled in Italy
- Industrial, Retail, Public spaces, Sport centers
- IoT integration

Roldappliance

Roldlighting

Roldindustrial



ROLD



Roldsmartpower

- Innovative modular platform based on PLC technology
- Connect, Measure and Manage
- IoT for Energy Management

Roldappliance

Roldlighting

Roldindustrial



ROLD



Li-Fi Technology

- **Connecting through light**
- **Based on VLC (Visible Light Communication) technology**
- **Use of common LED lamps to send data**
- **Whole range of specific applications**





Investments

In the past 3 years in R&D,
Technology and Digital Manufacturing

6M €

Rold appliance

Rold lighting

Rold industrial



ROLD

ROLD

Roldresearch

componenti



Fondazione
Politecnico
di Milano

- **SME Network**
- **University Foundation**
- **Multidisciplinary**
 - **Mechanical**
 - **Electronics**
 - **Materials**
 - **Design**

Roldappliance

Roldlighting

Roldindustrial



ROLD



POLITECNICO
MILANO 1863



POLITECNICO
DI TORINO



SANTA CHIARA | LAB
Università di Siena 1240



LOMONOSOV MOSCOW
STATE UNIVERSITY



University Collaborations

- **Politecnico di Milano**
- **Politecnico di Torino**
- **Santa Chiara Lab University of Siena**
- **Lomonosov Moscow State University**
- **Bauman Moscow State Technical University**

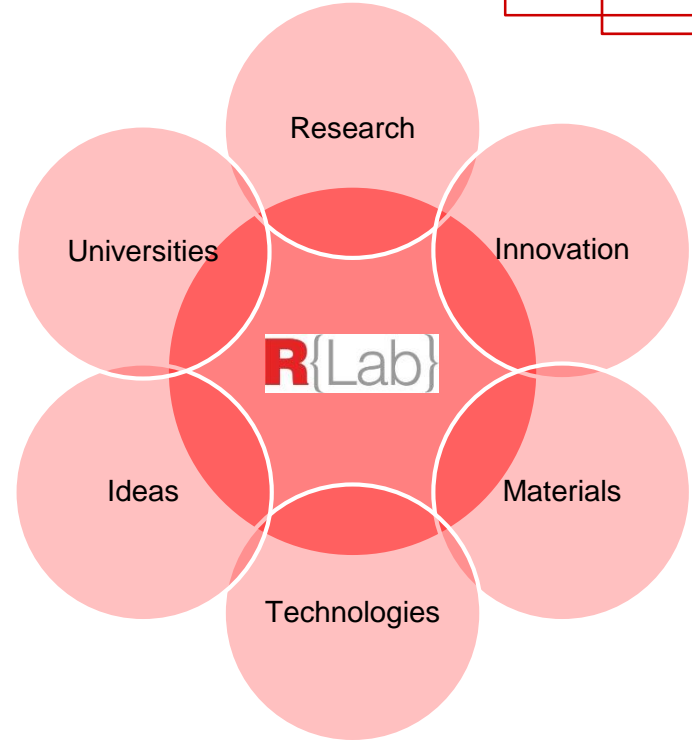
Roldappliance

Roldlighting

Roldindustrial



ROLD



Rold appliance

Rold lighting

Rold industrial



ROLD



R{Lab}

Advanced
Mechatronics

HMI
Applications
& Devices

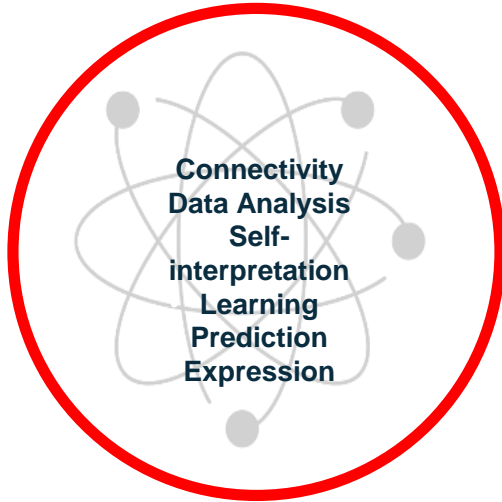
VR / AR
Applications

Advanced
Materials

Knowledge
Sharing

R{Lab}

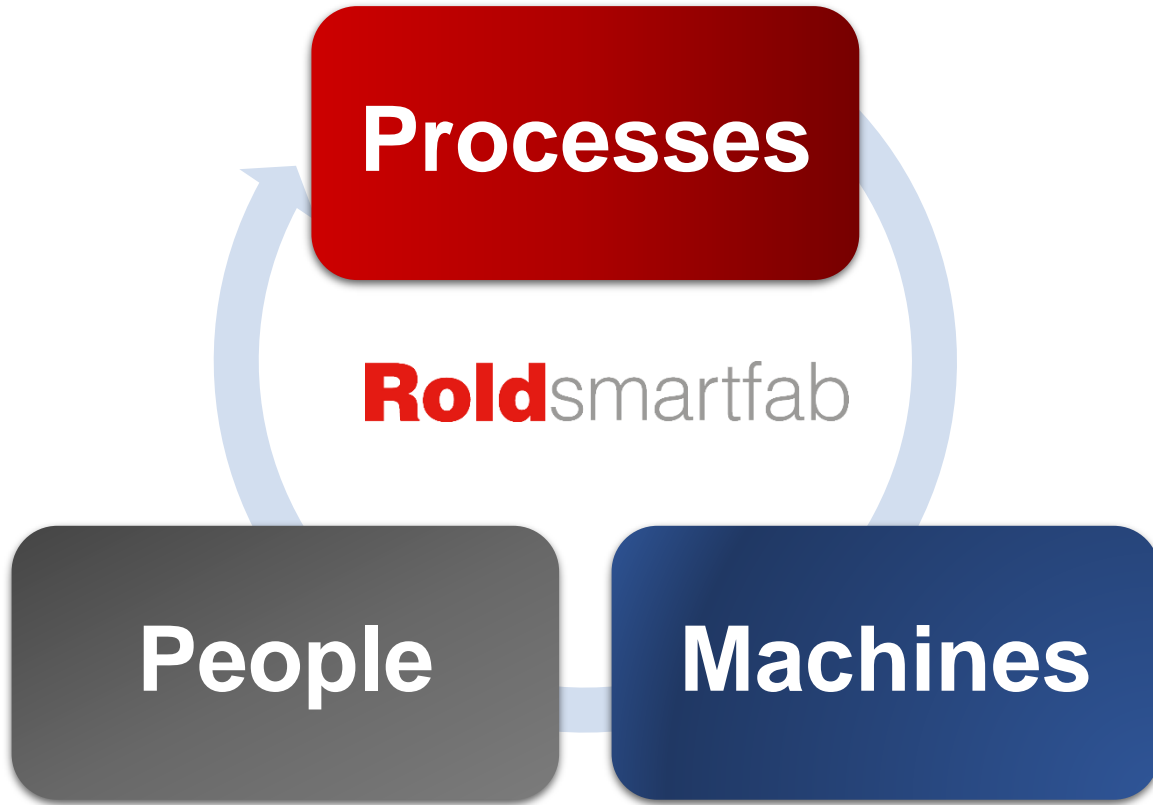


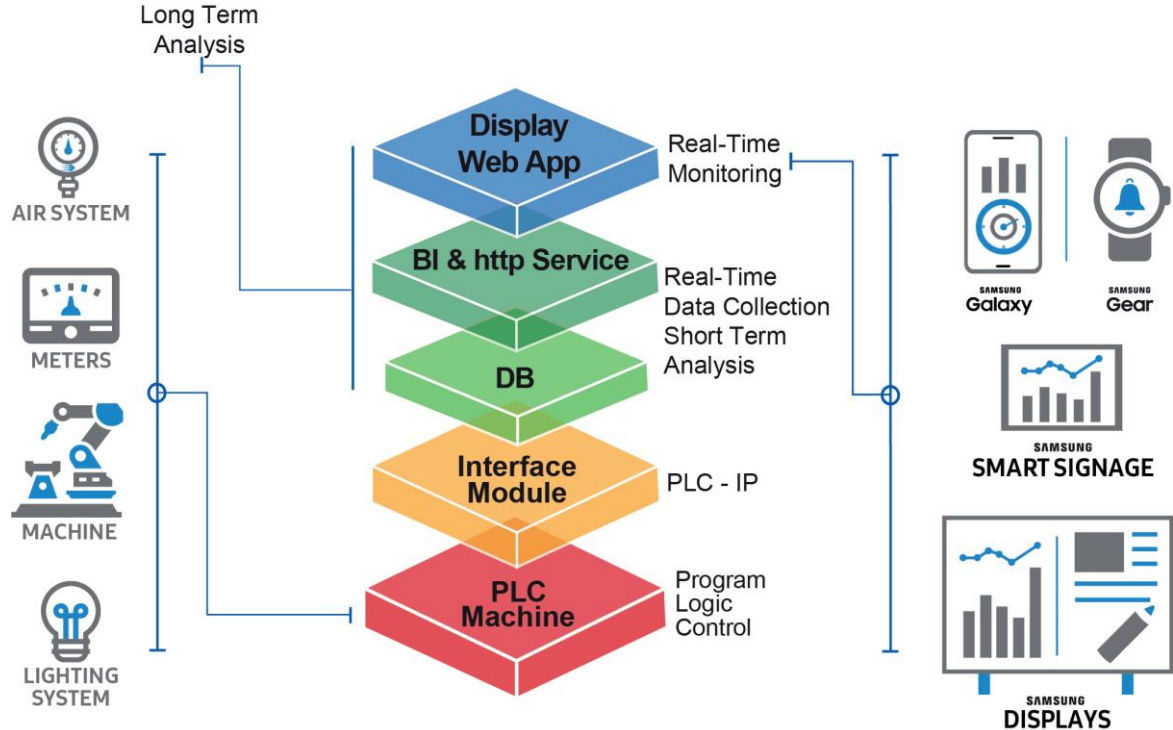


- **Sensor, Actuators**
- **Human Machine Interface**
- **Connectivity**
- **Smart Software**
- **Battery & Power**

Digital Manufacturing







Roldsmartfab

- Digital Manufacturing Platform
- Monitoring
 - Machines | Sensors | Energy | Air
- Real-Time Data and Alerts
- Data on touch-screen displays
- Mobile & wearable devices

- OEE
- Big Data Analytics
- Preventive Maintenance
- Chatbot





Rold



Roldsmartfab

Roldappliance

Roldlighting

Roldindustrial



ROLD



Roldsmartfab

Roldappliance

Roldlighting

Roldindustrial



ROLd



Roldsmartfab

Roldappliance

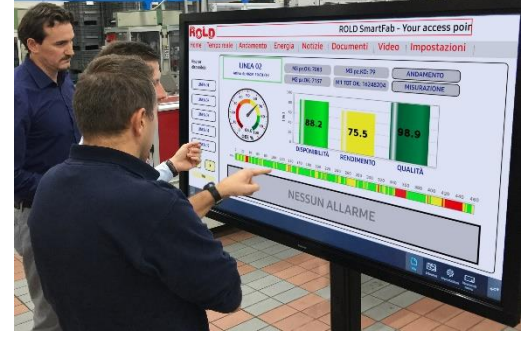
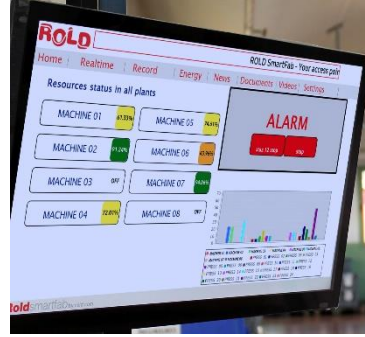
Roldlighting

Roldindustrial



ROLD





All the data and factory alerts in real-time and ready-to-use

Real-Time Notification to the Operator



Timely Problem Solving



Instant Feedback to the Manager





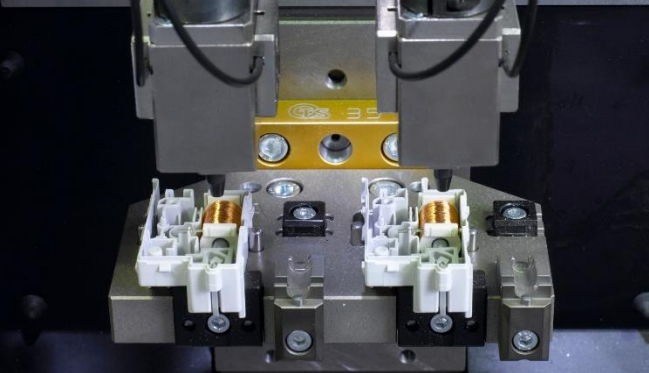
Results

Cerro Manufacturing Plant

+ 1,12% Availability
+ 6,14% Performance
+ 7,05% OEE

Comparison 10 mo. 2017 vs 2016





Results

Doorlock Assembly Line

+ 9,6% OEE
+ 282.000 pcs. Production Increase

Comparison 9 mo. 2017 vs 2016





Results

Moulding Machines

+ 4% OEE
+ 4,8% Availability

Comparison 9 mo. 2017 vs 2016

Innovative Products = Innovative Company

Increased Productivity = Increased Turnover

Innovative Plant = Talents Attractiveness

Tangible Innovation = Reputation



Thank you

Rold appliance

Rold lighting

Rold industrial



Rold