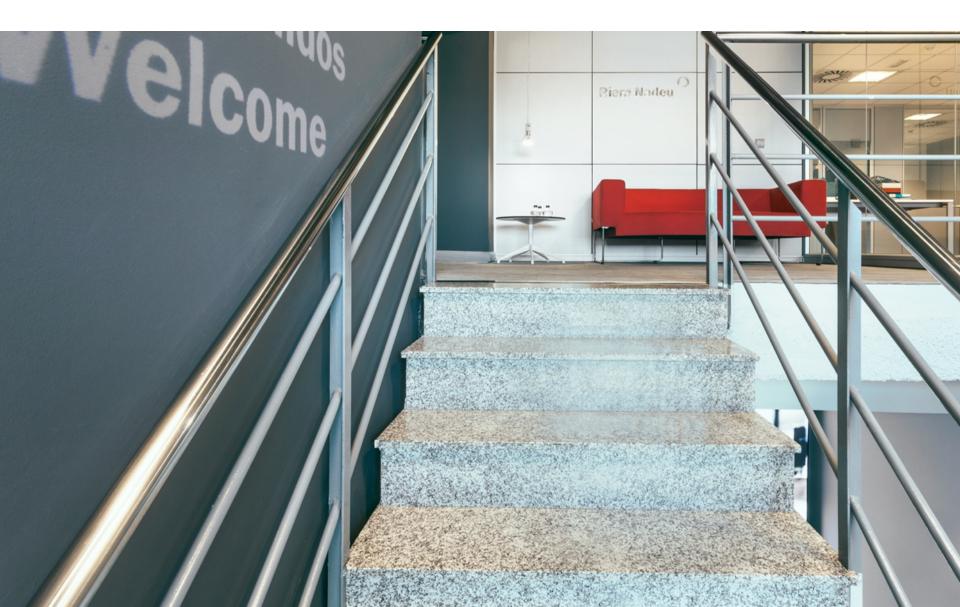




- _3 generations achieving a dream.
- _Based in Barcelona.
- _Worldwide presence with 2.000+ installations.





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Leader in the most demanding industries

- _Filtering batch centrifuges for Chemical process.
- _Horizontal and vertical designs.
- _Automatic and manual discharge.





Leader in the most demanding industries

- _Decanting batch centrifuges for Biotech or Pharma process.
- _Sterilization In Place design.
- _Automatic and manual discharge.





- _Supercentrifuges.
- _High speed decanting tubular rotor design.





- _Continuous filtering centrifuges.
- _High throughput process.





_RINA Flash Dryers.

_Atomization or wet solid drying.





_RINA Spray Dryers.

_Open circuit or close loop ATEX design.





_RINA Jet Mills.

_Fine and homogeneous particle size distribution.





To customers and projects.

- _Several references within the most important leaders of the industry.
- _Highest satisfaction of our partners.































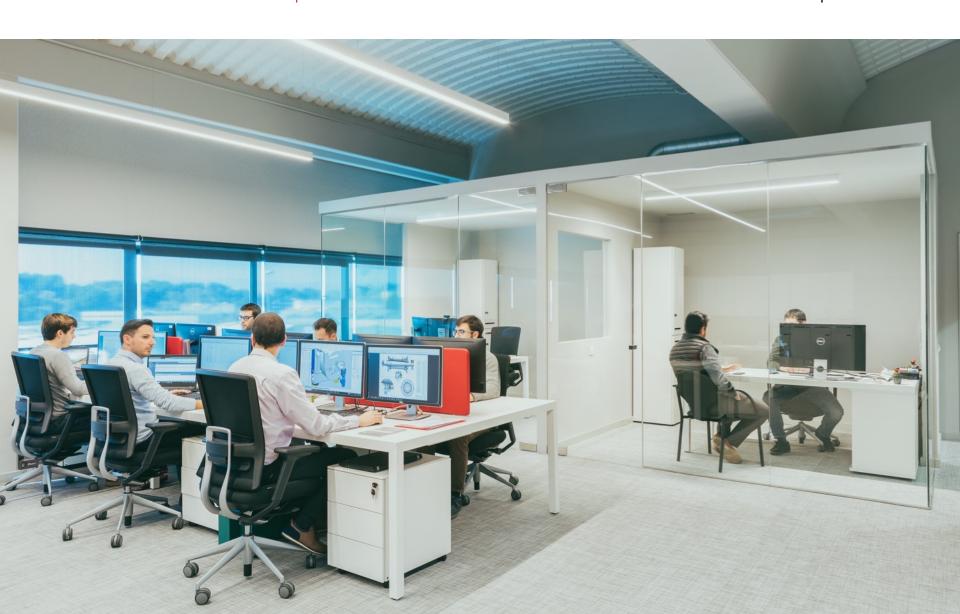












- _RINA Services for commissioning, start-up and training.
- _RINA Services for technical support and process optimization.
- _RINA Services for spare parts, maintenance and urgent assistance











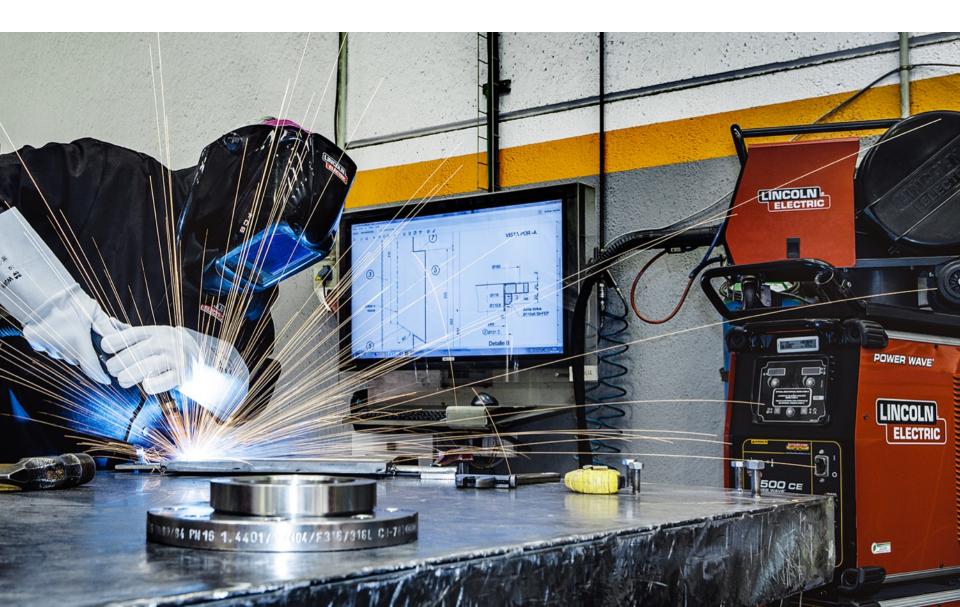
_Manufacture and assembling are 100% done at our Barcelona facilities. _All processes in the project are 100% digitally controlled.



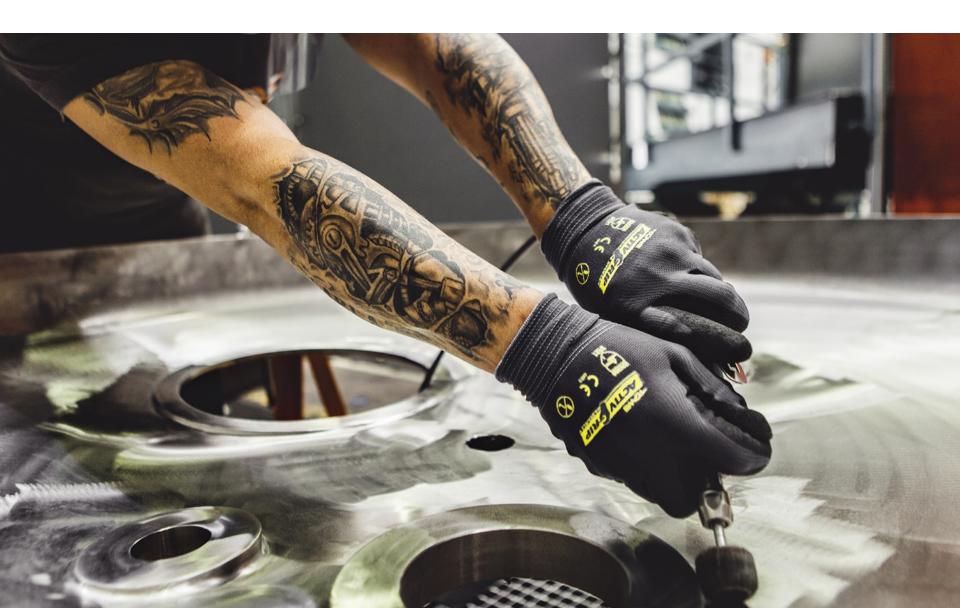


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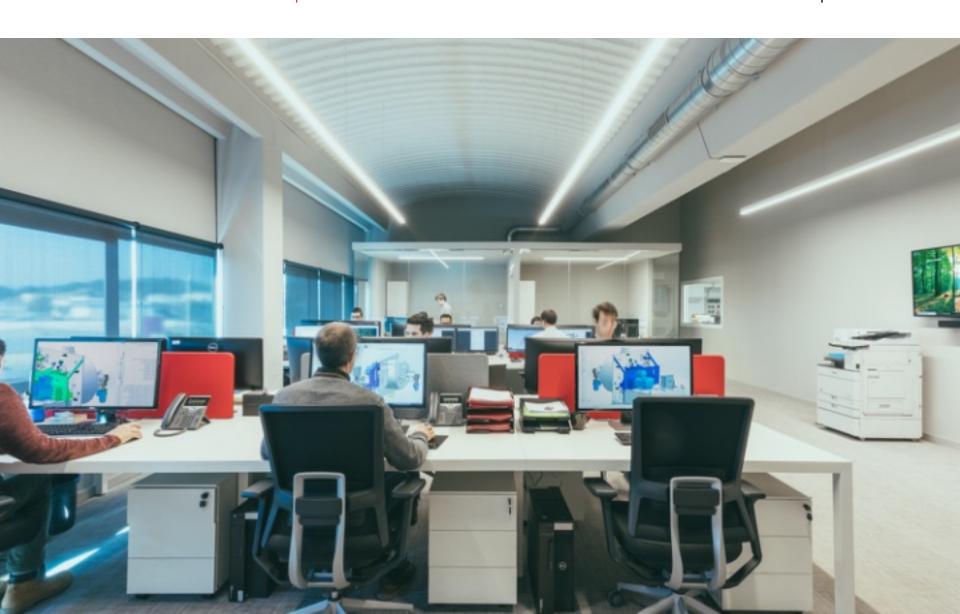
_Manufacture and assembling 100% done at our Barcelona facilities. _Tailor made automation solutions.













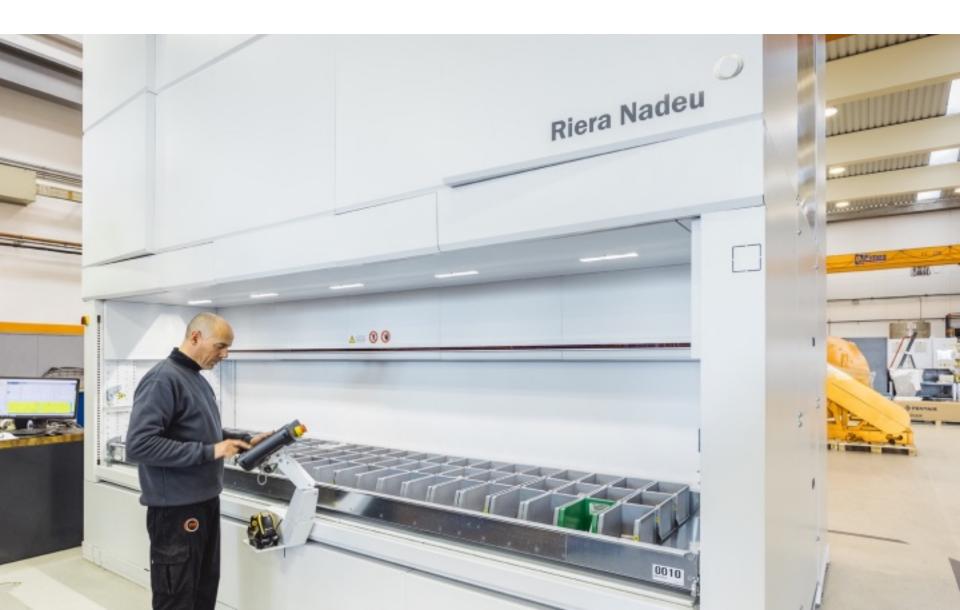






_Efficient spare parts and service management to secure the perfomance of your plant.











Biotech

Fine Chemical & Pharma



Differentiation & exclusivity

- _Ethic commitment to our ecosystem: people, ecology and energy.
- _External audits and Quality system ISO 9001.
- _Lean Manufacturing.



Europe Marking Explosive atmosphere Certification Conformité Européenne 2006/42/EC Machines Directive 2014/35/UE LVD Low Voltage Directive)

International Electrotechnical Commission System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres (IEC) International Electrotechnical Commission

Standards

IEC Classification IEC 60079

Classification

IEC/ATEX Equipment Protection Level (EPL) ATEX directive (ATEX 2014/34/EU)

Protection levels

IPxx (IEC 60079)

Ingress Protection Codes

Protection levels

IP Rating



Good practices

US / Canada

Approval

Underwriters Laboratories

2014/30/UE EMC

(Electromagnetic

Compatibility)

Underwriters Laboratories of Canada

Russia



Approval

Euro-Asian Council for Standardization, Metrology and Certification (EASC) (NEC/CEC)

National Electrical Code/Canadian **Electrical Code**

ANSI/NFPA 70 NEC Article 505





NEMA Enclosure Types)

Based on CE standards or other request



| | PRODUCT MAP | | | | | | | | |
|---|-----------------------------------|-------------------------------------|-----------------------|-----------------------|--------|-----------------------------|---------------------------|---------|--------------------------------------|
| | Centrifuge Se | | | + | Drying | ļ. | + | Milling | |
| | Suspension | | | Liquid/Liquid mixture | | Solution/Suspension | Wet solid | | Dry powder |
| | Batch filtering | Batch decanting | Continuous filtering | Continuous decanting | | Continuous atomization feed | Continuous conveying feed | | Continuous injection |
| | RINA 200F Vertical Manual | RINA 200D Vertical Manual F/D | RINA 500F Vertical | RINA SRP S | | RINA Flash Dryer | RINA Flash Dryer | | RINA Jet Mill Vertical Manual F/D |
| | RINA 300F Vertical Automatic | RINA 300D Vertical Automatic F/D | | | | RINA Spray Dryer | | | |
| | RINA 700F Horizontal Automatic | RINA SRP C Manual | | | | | | | |
| | | RINA SRP AD Automatic | | | | | | | |
| | Wet Solid + Liquid | | | 2 separated liquids | | Dry Powder | | | Powder <10µm |
| Biotech design Life science industry | 0 | Ø | | | | 0 | | | |
| Pharma design Fine chemical industry Food industry | 0 | Ø | Ø | Ø | | Ø | 0 | | 0 |
| Food grade design Agrochemical industry | | | | | | 0 | 0 | | ⊘ |
| Chemical design Bulk chemical Mining industry Oil & Gas Upcycling | 0 | | 0 | ⊘ | | | Ø | | 0 |



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