

# SPIRAJOULE®

## ELECTRICALLY HEATED SCREW CONVEYOR



The Spirajoule® technology is an exclusive and patented process for thermal treatment. It is designed with a worm screw conveyor electrically heated by a low voltage current. The technology is a simple and economical process with the accurate and efficient operation offering the heat treatment up to 750°C for a variety of bulk products.



### SIMPLE

A unique combination of most fundamental and well-established inventions: the hollow shaft screw conveyor and a resistance heating.

### INDUSTRIALLY PROVEN

Technology established since over 20 years and successfully proven in many industrial applications worldwide in various fields of applications from Food to Waste management going through Feed, Cosmetics and Chemicals.

### FLEXIBLE

Equipment allowing precise and flexible change of operating conditions within any range from 50 to 750 degree Celsius.

### ACCURATE AND RELIABLE

Electrically-powered, precisely controlled and monitored process that ensures continuous, stable and independent conditions of treatment.

### POWERED BY ELECTRICITY

Fossil-free technology

18

Patents

35

Years of  
experience

150

Operating units

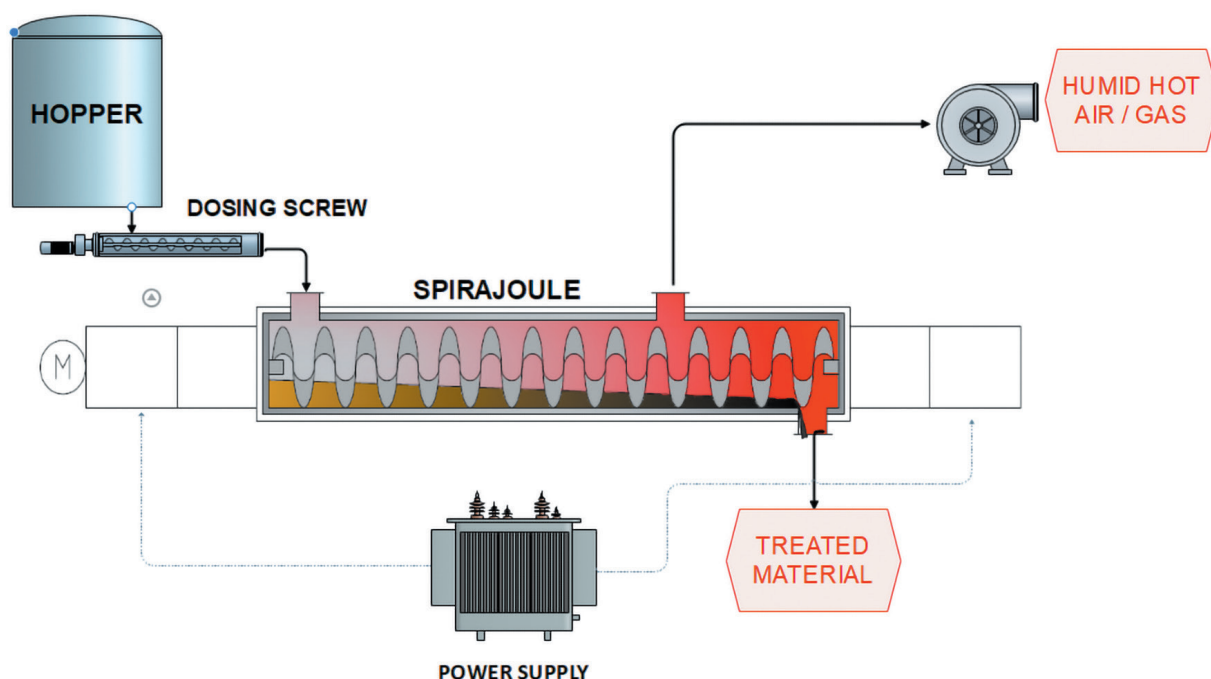


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# INDUSTRIAL AND PROVEN TECHNOLOGY



**Simple** = Easy to use technology

**Performance** = Energy efficiency by kilo of treated feedstock

**Innovative** = Dozens of possible applications through this electrified screw conveyor

**Robust** = Strong manufacturing with high quality material that are lasting for years

**Adaptable** = Any kind of non-ferrous and dry material could be treated in this system

**Joule** = Joule effect, name of the thermal reaction happening when electricity is travelling through a conductive material

**Optimized** = A heating management optimized by 30 years of return of experience

**Useful** = Continuous concept, capable of running 24/7

**Low Maintenance** = Low rotation speeds imply low stress on mechanical parts

**Electrical** = Fossil-free technology

## DECLINATIONS IN VARIOUS APPLICATIONS



### SPJ-UNIT SERIES

Heating  
Low temperature drying  
Thermization  
Enzymatic deactivation  
Bitterness removal  
Calcination



### SPJ-FOOD PROCESSING SERIES

Pasteurisation  
Steam sterilization  
Toasting  
Roasting



### SPJ-HIGH TEMPERATURE SERIES

Chemical reaction  
Carbonisation  
Torrefaction  
Pyrolysis



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