DRYING

EFFICIENCY, QUALITY AND ENERGY SAVINGS

To give you the most efficient drying solution, our engineers and technicians intervene throughout the implementation of your process. We guarantee efficient, quality equipment with optimized energy consumption.

FIELDS OF APPLICATION

- Environment and recycling
- Fuels
- Minerals, fertiliser, mineralogical chemistry (sand, gravel, crystalline products...)
- Food, pharmacy, fine chemistry (foodstuffs...)
- Metals

ANALYSIS OF YOUR NEEDS AND SPECIFICITIES

To choose the optimum drying equipment, Lessine takes numerous factors into account:

- the **characteristics of the fed materials**: humidity content, homogeneity, size and distribution of the particles, sensitivity to temperature, porosity, etc.
- the **quantity of the materials** to treat
- the **nature of the products**: toxic, explosive or with risk of oxidation
- the desired **characteristics of the end product**: quality, size and shape.

A TECHNIQUE FOR EACH NEED

DRYING METHOD	PARTICLE SIZE		
	Fine	Medium	Coarse
DIRECT	Dryer-pulveriser		
	Flash dryer		
		Rotating dryer	
INDIRECT			
	Turbulent dryer		

LESSINE
TAILORED BULK TECHNOLOGIES

LESSINE BENEFITS

TAILOR-MADE SOLUTIONS:

- **ACCORDING TO THE SPECIFICITIES OF YOUR PROJECT: TECHNOLOGY, DIMENSIONS, INVESTMENT, COST, CONSTRUCTION...**
- **ACCORDING TO ON YOUR NEED: TRANSPORT, AUTOMATION, INSTALLATION, COMMISSIONING, SPARE PARTS...**
- **FROM THE CONCEPTION STAGE > R&D, DEVELOPMENT, TEST AND FEASIBILITY.**

A DRYING METHOD FOR EACH TYPE OF END PRODUCT

ROTATING DRYER

co-current or counter current drying

In a rotating drum, in direct mode, the product is dried by injecting a flow of hot air, co-current or counter current with the product. All while drying, it follows the rotation movement of the dryer tube and the internal elevators strike the product and make it advance gradually to the exit. In indirect mode, the surface of the drum becomes the heat exchange surface for the evaporation.

TURBULENT DRYING

Homogenous drying in a regulated atmosphere

Thanks to the great turbulence created by the rotor, the product is disintegrated and propelled against the hot walls of the dryer. The final result presents a dry powder with a particle size from 200 to 300 µ. Drying is carried out by batch and indirectly at a high or low temperature.

FLASH DRYER

Instant drying of the material

The material is dispersed in a blast of hot air that leads it to a drying duct at great speed. This system combines the turbulent effect and drying, for the instant drying of wet powders. The particles move quickly and dry in a few seconds.

DRYER-PULVERISER

A mix of procedures for a fine, dry product

This system allows the milling and drying in hot air of wet and/or adhesive products in a single procedure. Fixed and mobile pins produce a fineness of mill down to 90 microns.