FEECO INTERNATIONAL

FEECO.com/thermal-processing

THERMAL PROCESSING EQUIPMENT

An overview on the equipment options for **drying, cooling, and high temperature processing** of bulk solids

ROTARY DRYERS & COOLERS

KEY ADVANTAGES

Reliability, Robust build, Tolerance to feedstock variance, High capacity

For drying and cooling of bulk solids

DIRECT DRYERS

SIZE Drum Diameters **36" - 15'** | **CAPACITY** **1 TPH - 200+ TPH**
AIRFLOW Co-current (Parallel) or Counter Current

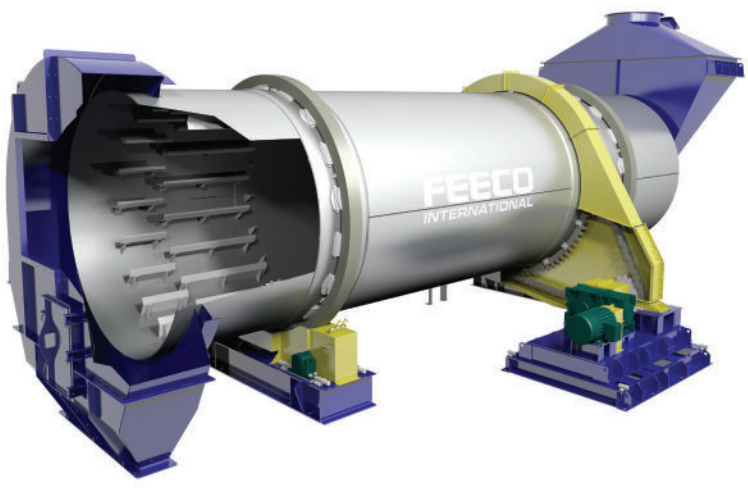
WORKS BY

Tumbling solids in a rotating drum in the presence of a process gas. Flights pick up and drop material through the air stream to maximize heat transfer efficiency.

TYPICAL APPLICATIONS

Fertilizers & Soil Amendments
Ores and Concentrates
Gypsum | Limestone | Sand
Potash | Animal Feed
Biomass | Salts & Sugars
Animal Bedding from Manure
Aggregates

DIRECT COOLERS



SIZE Drum Diameters **36" - 15'** | **CAPACITY** **1 TPH - 200+ TPH**
AIRFLOW Counter Current

WORKS BY

Tumbling solids in a rotating drum in the presence of a chilled or ambient air. As with direct dryers, flights are utilized to increase heat transfer.

TYPICAL APPLICATIONS

Fertilizers & Soil Amendments
Ores & Concentrates
Gypsum | Limestone | Sand
Potash | Animal Feed
Biomass | Salts & Sugars
Aggregates

INDIRECT OPTIONS: Both rotary dryers and coolers are also available in an indirect configuration to provide a setting that avoids entrainment of the material in the air stream and can be used to create an inert processing environment.

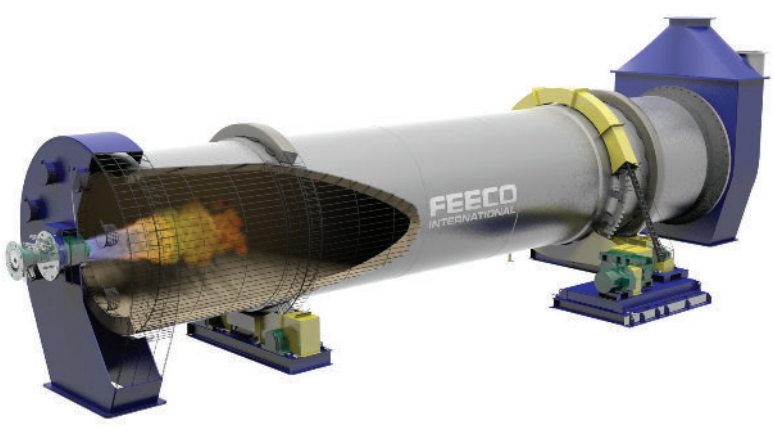
ROTARY KILNS

KEY ADVANTAGES

Highly engineered and capable of carrying out a variety of objectives.

For high temperature processing of bulk solids to carry out a **chemical reaction** or **physical change** in the material

DIRECT-FIRED KILNS



SIZE Up to 15' Diameter x 100'+ | **CAPACITY** **1 TPH - 200+ TPH**
AIRFLOW Co-current (Parallel) or Counter Current

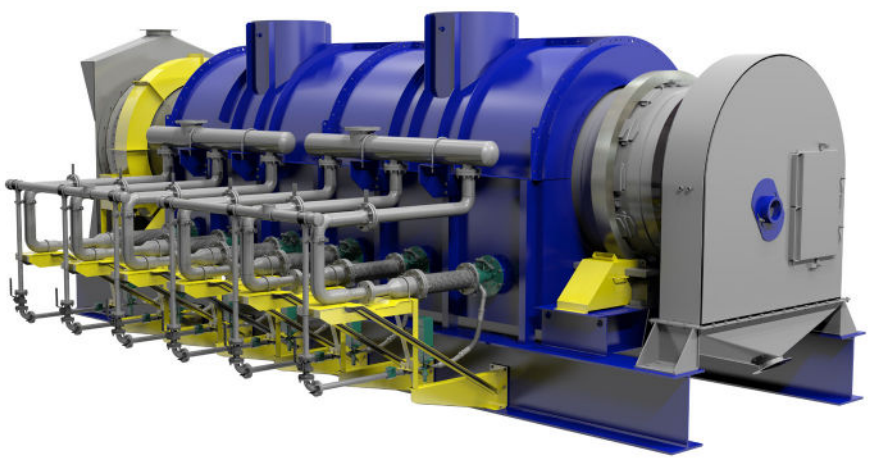
WORKS BY

Tumbling solids in a rotating drum in the presence of a high temperature process gas.

TYPICAL APPLICATIONS

Activated Carbon | Alumina
Electronic Waste | Catalysts
Pigments | Precious Metals
Proppants | Phosphate Ore
Specialty Ceramics
Waste Materials

INDIRECT-FIRED KILNS (AKA CALCINERS)



SIZE Up to 15' Diameter x 75'+ Heated Length
CAPACITY **200 LB/HR - 20 TPH** | **AIRFLOW** Cross Flow

WORKS BY

Tumbling solids in a rotating drum, which is sealed off and externally heated, creating an inert environment and mitigating the risk of entrainment of fines in the process gas. Material is heated by contact with the shell of the drum.

TYPICAL APPLICATIONS

Activated Carbon | Alumina
Electronic Waste | Catalysts
Pigments | Precious Metals
Proppants | Phosphate Ore
Specialty Ceramics
Waste Materials

THERMAL PROCESSING SOLUTIONS

FEECO is a globally recognized provider of custom thermal processing equipment and process solutions. We offer custom equipment, including everything mentioned here, as well as process and product development services. We also offer a unique feasibility testing lab - The Innovation Center, where thermal processes can be tested at both batch and pilot scale to gather process data and develop a recipe for process scale-up.

*For more information, contact us today at **FEECO.com/contact***