

# **BRADLEY BROADFIELD PROCESS**

THE GLOBAL STANDARD FOR SUPER SINGLEPHOSPHATE (SSP) MANUFACTURE & OTHER ACIDULATION PROCESSES

IT

Developed from experience in SSP manufacture for over 100 years, the flexible and reliable design of the Bradley Broadfield Process can produce SSP economically from all known phosphate rock sources. The combination of long experience and constantly updated technology is unique, and guarantees high quality product, year after year which is why Bradley is the preferred supplier for installations the world over.

### ACIDULATION PROCESSING

In reacting phosphate rock, limestone or other minerals with phosphoric or sulfuric acids, the Broadfield Process Unit can tolerate significant changes in feed and product specifications to produce fertilizers, enriched animal feeds and acid salts to meet your product specifications.

- THE BRADLEY BROADFIELD PROCESS HAS BEEN USED SUCCESSFULLY TO MAKE:
  - □ SINGLE SUPERPHOSPHATE (SSP)
  - □ TRIPLE SUPERPHOSPHATE (TSP)
  - DOUBLE SUPERPHOSPHATE
  - □ DICALCIUM PHOSPHATE (DCP)
  - □ DIAMONIUM PHOSPHATE (DAP)
  - □ PARTIALLY ACIDULATED PHOSPHATE
  - □ MONOCALCIUM PHOSPHATE (MCP)
  - □ SYNTHETIC GYPSUM
  - □ IRON SULFATE
  - □ OTHER ACIDIC SALTS



### www.bradleypulverizer.com

# BRADLEY BROADFIELD PROCESS SINGLE SOURCE SUPPLY OF COMPLETE PROCESS LINES

#### ELIMINATES INTERFACE PROBLEMS & PROJECT DELAYS

## **BROADFIELD DEN DESIGN FEATURES**

#### MILLING:

- Mineral rock is ground to desired fineness in a Bradley Airswept Mill
- Automated feed rate and ratio of acid to feed rates under PLC control

#### **REACTION SYSTEM:**

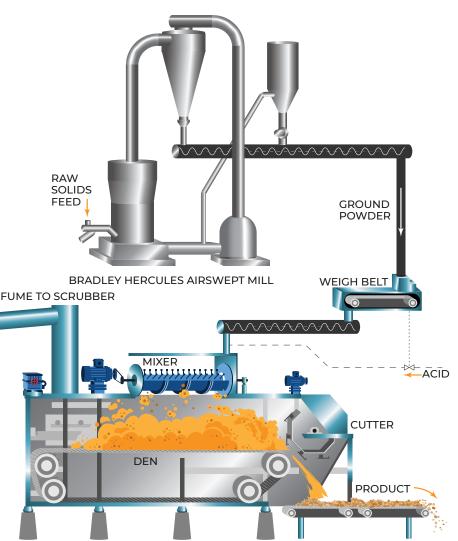
- Specialty mixers promote intimate contact between reactants
- □ Continuous moving den holds the slurry under suction until it forms a cake
- □ Rotary cutter shaves product off the cake from the slow moving den

#### SCRUBBER SYSTEM:

 Void scrubbers eliminate reaction gases such as hydrogen fluoride and capture particulates to minimize environmental pollution

#### CURING & STORAGE:

 Belt conveyor moves material downstream to stockpile for curing



## **BROADFIELD PROCESS UNIT CAPACITY**

#### DEPENDING ON THE DESIRED APPLICATION OR PLANT CAPACITY FOR YOUR ACIDULATION PROCESS, BRADLEY PULVERIZER HAS THE SOLUTION:

- □ BROADFIELD DEN capacities from 10 to 100 TPH
- □ BROADFIELD BELT DEN capacities from 1 to 50 TPH



Airswept Mills | Screen Mills | Air Classifiers | Process Units Project & Design | Testing, Development & Consultancy



123 South Third Street Allentown, PA 18102

### www.bradleypulverizer.com