

SPECIFICATIONS

CONSTRUCTION

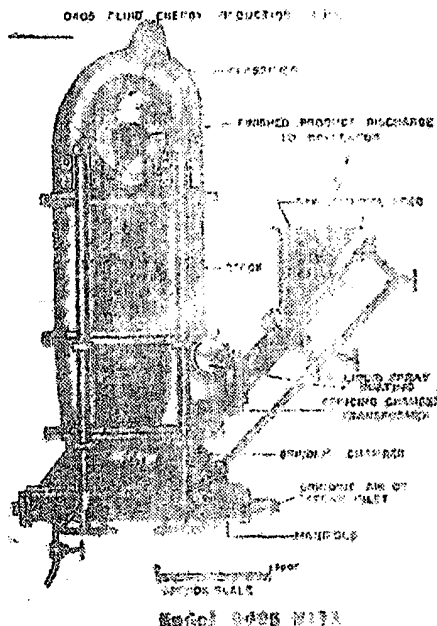
Standard Mill: The mill is constructed of special cast Nickel-Chrome Alloy Steel with the areas subject to wear hard faced with Tungsten-Carbide.

Feeder: Feed Hopper and Discharge Housing is of cast steel construction with hardened alloy Steel V-bond Worms and Gears.

Nozzles: Fluid Energy design convergent-divergent steam nozzles and abrupt flow type air nozzles are constructed of stainless steel or hardened tool steel.

Liquid Spray Attachment: Optional for coating and blending simultaneously with grinding.

Special Mills: For uses such as food and drug processing the mill and all parts coming in contact with the material are constructed of 304 or 316 stainless steel. For specialized applications the mill can be constructed of materials best suited to the product being processed.



INSTALLATION

Mill Weight: Net Weight 625- 725 Lbs.
Shipping Weight - 1000-1200 Lbs.

Height of Mill Installed:
0405 - Short Mill - 5'-3"
0405 - Long Mill - 7'-0"

Space Required: Floor Area Mill only - 2 Ft. x 3 Ft.
Minimum desirable area for Mill, Raw material bin, Feeder and Collection System - 9 Ft. x 10 Ft. Height of collectors, receiving bins and rotary valves with space for drums below approximately 17 ft.

Support: A stand is furnished for mounting the mill on the floor.

Instrumentation: Mills are equipped with pressure gauges and connections are provided for temperature control.

GENERAL OPERATING CONDITIONS

Mill Capacity: Production rates of these mills are up to 2000 lbs. per hour, depending upon the nature of the feed material, particle size specifications, and type process desired.

Feed Materials:

Size: The mill will accept most materials in sizes of 8 mesh or finer. With finer feeds there is an increase in mill production rates.

Moisture Content: The mill will simultaneously grind and dry materials with reasonably high moisture content, providing uniformity of feed can be maintained.

Blending, Mixing: The mill will simultaneously grind and mix several feed ingredients.

Coating: This mill will simultaneously grind and coat the finished product with liquids or low melting solids.

Fluid Energy Requirements:

STEAM: Pressures: 100 to 250 psig
Temperature: 550 to 950°F
Fluid Quantity: 1250-1750 Lb/hr

AIR: Pressures: 45 to 125 psig
Temperature: Room to 900°F
Fluid Quantity: 400-600 CFM at standard conditions

NOTE: Final determination of quantities and conditions will be made on the basis of control laboratory tests.

END PRODUCT SIZE CONTROL

0405 Short Mill: For maximum fineness with narrow distribution range.

Feed Attachments: Two locations provided for blending and mixing operations.

0405 Long Mill: For wide distribution range.

Feed Attachments: Three locations provided for blending and mixing operations and for double-separation classification.

Liquid Spray Attachment: For coating of particles simultaneously with grinding.

Classifier Standard: Refinements of particle fineness are achieved by means of classifier guide box and vane locations.

Classifier Double: For ultra-fine narrow range product a double separation classifier is used.

NOTE: In general, the particle fineness is controlled by varying the feed rates. The higher the feed rate for a given product the coarser the end product. The Fluid Energy equipment offers great flexibility of operating conditions thereby making it practicable to furnish an end product to meet a wide range of specifications. By varying pressures, temperatures, type and quantity of fluid or reversing the directional nozzle flow, many unusual characteristics of the end product, such as particle shape, elimination of extreme fines, narrow range coarse grind, coating of particles, blending etc. can be achieved.