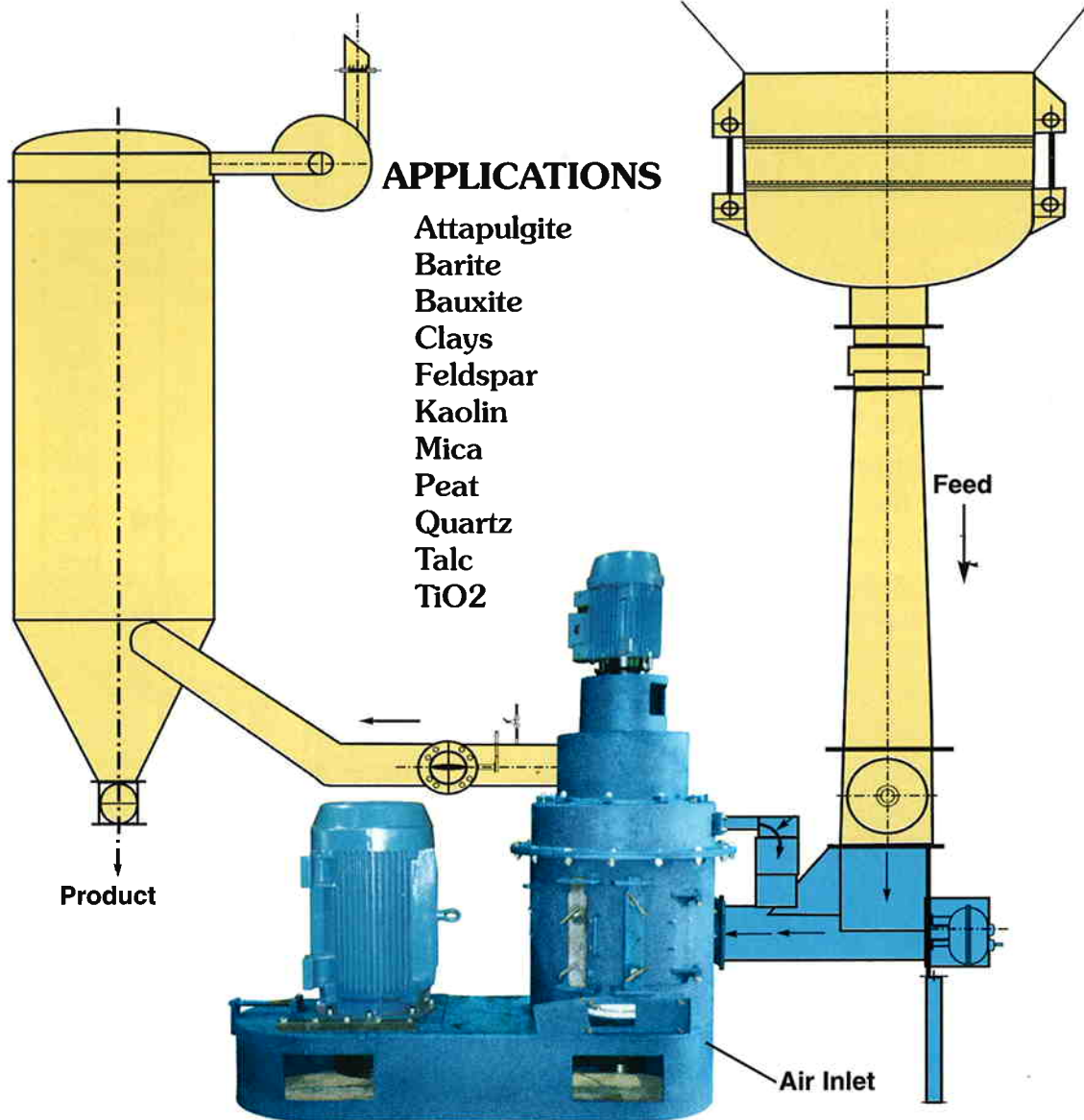


IMPEX[®]

ELLIOTT PULVERIZER/CLASSIFIER



APPLICATIONS

Attapulgate
Barite
Bauxite
Clays
Feldspar
Kaolin
Mica
Peat
Quartz
Talc
TiO₂

ELLIOTT STCM MILL

INDUSTRIAL MINERALS PROCESS EQUIPMENT CORPORATION

IMPEX CORPORATION

ENGINEERING • CONSULTANTS • MANUFACTURING • SALES

MAIN OFFICE

John T. Williamson
President

PO Box 1028
Milledgeville, GA 31061
Tel: 1-478-452-5636
Fax: 1-478-452-5636
e-mail: impex@alltel.net

TECHNICAL CENTER

Joe Iannicelli
Vice President

3963 Darien Highway
Brunswick, GA 31525
Tel: 1-912-265-2000
Fax: 1-912-265-3000
e-mail: iannicelli@aquafinecorp.com

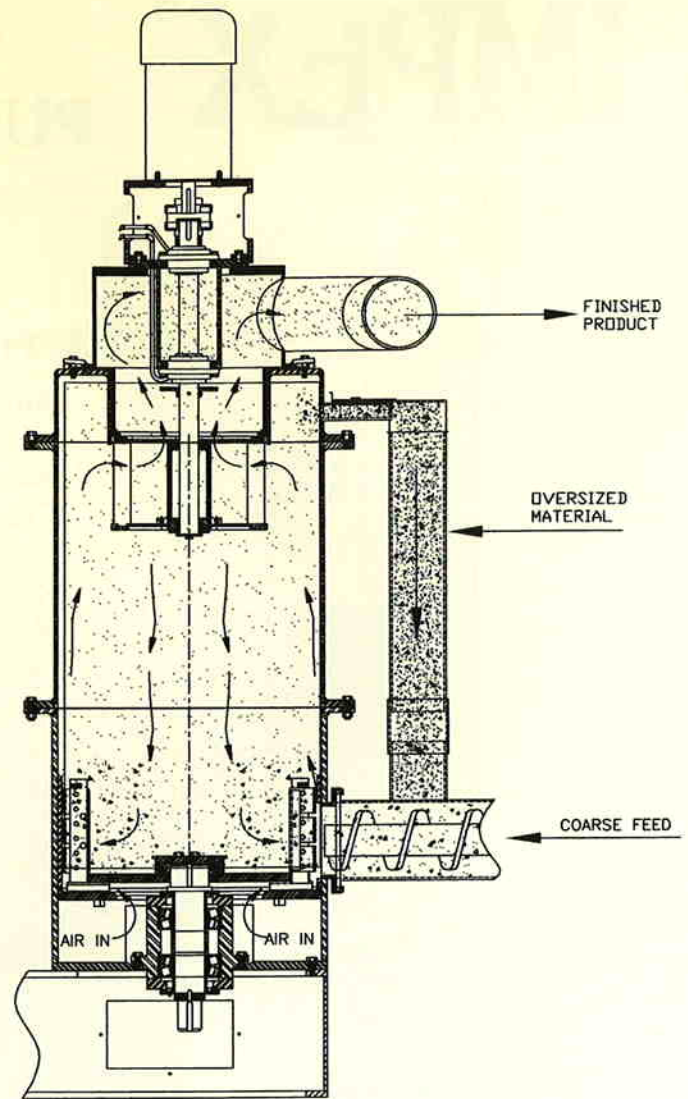
MACON OFFICE

F. Camp Bacon, Jr.
Vice President

2474 Kingsley Drive
Macon, GA 31204
Tel: 1-478-746-8554
Fax: 1-478-746-8554
e-mail: 76053.401@compuserve.com

THEORY OF OPERATION

Material to be processed is fed into the mill near the bottom of the grinding chamber by a screw conveyor that can be driven by a variable speed drive to control feed rates. An external dust collector fan pulls air controlled by the bottom dampers into the bottom and through the mill, fluidizing material to be pulverized. The material must be completely fluidized so that each individual particle can be accepted or rejected by the classifier. As material moves up into the classifier area, the oversize particles are drawn back into the center of the grinding motor or expelled through the rejector and returned to the feed screw. Discharge particle size is controlled by an independently driven variable speed turbine classifier. This allows easy adjustments for various materials and conditions.



DESIGN FEATURES OF ELLIOTT TURBINE TYPE STCM PULVERIZER/CLASSIFIER MILL

The Elliott Pulverizer/Classifier is a heavy duty, high capacity, grinding mill with an independently driven variable speed turbine classifier. It is designed for fine grinding of dry material. Particle size in the 5-10 micron range is easily controlled by changing the speed of the classifier through a variable frequency control motor. The feed material to the mill is controlled by varying the speed of the screw conveyor or by varying the feed rate to the screw conveyor. The pulverizer speed is controlled by a v-belt drive system that is usually set at a fixed speed, depending on the application.

The mill has especially been designed for high efficiency and low maintenance. The grinding blades are hardened alloy or tungsten carbide tipped. The replaceable wear liners are constructed of a hard iron alloy. The classifier housing and mill housing are constructed of A-36 steel. The replaceable classifier blades are constructed of A-360 steel. The long life Dodge bearings are easily replaced. Mill blades can easily be replaced thru a large access door on the side of the housing. The mill includes a complete oil lubricating pumping system with oil filter, flow control switch and sight gauge. The mill is equipped with one rejector which recycles oversized particles back to the feed screw. All mills are pre-tested and operated in the shop before crating and shipping.

ELLIOTT MACHINE SHOP, INC.

MACON, GEORGIA



Assembly Parts



Spare Parts



Fabricated Mill



Lubrication System



Screw Feeder



Shop Fabrication



Production Line



Field Installation



Shop Testing