## UNIVERSAL IMPACT MILLS



- PRODUCTION OF FINE POWDER AND SAND WITH POLYHEDRIC SHAPE OF PARTICLES
- FLEXIBILITY FOR VARIOUS PURPOSES WITH DIFFERENT INTERNAL COMPONENTS
- STRONG CONSTRUCTION, RELIABLE OPERATION, LONG LIFE
- EASY MAINTENANCE, ALSO WITH RELATIVELY ABRASIVE MATERIALS
- More than 1500 units supplied to over 30 countries

ING. MORANDOTTI S.P.A.

### USE

The CIMMA Universal Impact Mills are generally suitable to grind brittle dry materials of medium hardness.



Impact Mill with hot gaz system and pneumatic transport of ground product

One Universal Impact Mill is installed in the test room at CIMMA's factory for trials with the products of the clients.



## TYPICAL APPLICATIONS FOR DIFFERENT PRODUCTS

▼ LIMESTONE, MARBLE, CALCIUM CARBONATE, DOLOMITE

FINE POWDER AND SAND FOR PRODUCTION OF:

- PREMIXED DRY MORTARS
- TERRAZO TILES
- ANIMAL FEED
- □ GLASS
- GYPSUM

GRINDING BEFORE CALCINING

**▼** PLASTER

REFINING FOR PRODUCTION OF:

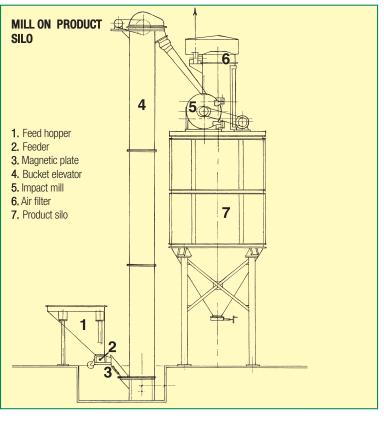
- PLASTER OF PARIS
- PLASTER FOR CERAMIC MOULDS
- SPECIAL PLASTERS
- **C**LAY

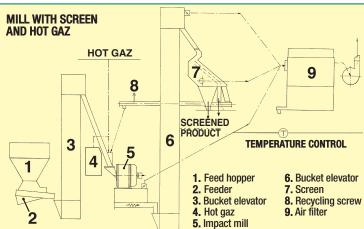
DRY GRINDING FOR PRODUCTION OF:

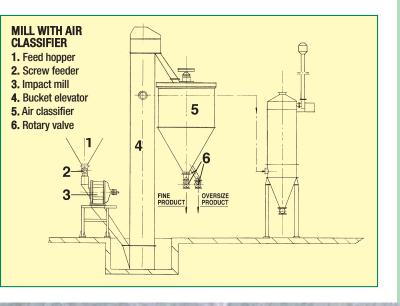
- ➡ BRICKS
- ROOF TILES
- > EXTRUDED FLOOR TILES
- PRESSED FLOOR TILES
- ▼ WASTE OF BRICKS
  - RED EARTH FOR TENNIS COURT
  - CHAMOTTE FOR CERAMIC BODIES
- KAOLIN
  - REFINING OF PELLETS OR FILTER CAKES AFTER FLOTATION AND DRYIND
- WASTE OF VARIOUS INDUSTRIAL PRODUCT, SUCH AS:
  - □ ABRASIVES
  - REFRACTORIES
  - □ GLASS
  - CERAMIC PRODUCTS FOR THE RECYCLING IN THE NEW PRODUCTION
- OTHER PRODUCTS:

  - □ HYDRATED LIME
  - CHEMICAL PRODUCTS
  - COAL
  - PETROLEUM COKE
  - > HORN AND NAILS
  - METAL ALLOYS

#### **EXAMPLE OF INSTALLATION**







### INSTALLATION

The proper engineering is essential to optimize the installation and the performance of the mills, with the due consideration of the rules and laws concerning safety and protection of environment.

The CIMMA's engineering service can suggest or supply the accessories for the:

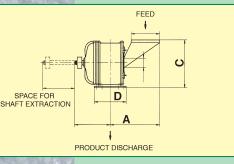
- constant and uniform feed of the mill
- transport of ground product
- granulometric classifying of the product
- drying of moist materials, specially by blowing hot gas through the mill
- magnetic protection from iron foreign bodies
- electric controls with the necessary degree of automation



### TECHNICAL DATA

#### P VERSION, WITH RIGID HAMMERS

With central feeding With top feeding	(Model)	P.II	P.III P.III/a	P.IV P.IV/a
speed	(rpm)	2000÷2400	1600÷1800	1300÷1600
required powder	(kw)	22÷37	30÷55	45÷90
max feed size	(mm)	20÷25	20÷25	25÷30
approximate capacity with medium hardness dry limestone, product 0÷3 m	nm (tonn./h)	1.5÷3	2.5÷6	6÷12
air suction requirement	(m³//h)	1000÷2000	1000÷2000	1500÷3000
weight about	(kg)	900	1700	3300



Overal dimensions							
Α	1500	1870	2150				
В	850	950	1250				
С	1085	1050	1240				
D	560	700	900				
E	790	800	1250				

#### **D VERSION, WITH SWINGING HAMMERS**

With central feeding	(Model)	D.II	D.III	D.IV
speed	(rpm)	1300÷1500	1000÷1200	800÷1000
required power	(kw)	11÷15	15÷22	22÷30
max feed size	(mm)	90÷120	120÷150	120÷150
approximate capacity with medium hardness dry limestone, product 0÷6 mm	(tonn./h)	2÷4	4÷8	8÷15
air suction requirement	(m³//h)	1000÷2000	1000÷2000	1500÷3000
weight about	(kg)	900	1700	3300
Flywheel application		no	optional	optional
	speed required power max feed size approximate capacity with medium hardness dry limestone, product 0÷6 mm air suction requirement weight about	speed (rpm) required power (kw) max feed size (mm) approximate capacity with medium hardness dry limestone, product 0÷6 mm air suction requirement (m³/h) weight about (kg)	speed (rpm) 1300÷1500 required power (kw) 11÷15 max feed size (mm) 90÷120 approximate capacity with medium hardness dry limestone, product 0÷6 mm (tonn./h) 2÷4 air suction requirement (m³/h) 1000÷2000 weight about (kg) 900	speed         (rpm)         1300÷1500         1000÷1200           required power         (kw)         11÷15         15÷22           max feed size         (mm)         90÷120         120÷150           approximate capacity with medium hardness dry limestone, product 0÷6 mm         (tonn./h)         2÷4         4÷8           air suction requirement         (m²/h)         1000÷2000         1000÷2000           weight about         (kg)         900         1700

The foregoing data and specifications are given as information only and may be subjected to alteration without notice. Only the information given in the confirmation of an order, is binding.

# CONSTRUCTION FEATURES

- Body of cast iron with hinged front cover for maintenance; the grinding chamber is fully protected with replaceable plates.
- ➡ Toothed grinding plates and hammers of manganese steel; on request hammers protected with wear resistant alloy welded on.
- Bar grate with adjustable opening or with perforated plate, easily replaceable.
- Shaft of Cr.Ni.Steel on ball and roller bearings, grease lubricated and protected with labyrinths.
- ➡ The mill can be easily transformed from model P to the corresponding model D, by replacing some parts.

THE CIMMA PRODUCTION ING. MORANDOTTI S.P.A. INCLUDES:

- **PROLL CRUSHERS**
- **⇔ BALL MILLS**
- **DIMPACT CRUSHERS**
- **⇔ HAMMER MILLS**
- **⇔** ROLLER MILLS
- **⇒ SELF VENTILATED MILLS**
- **⇒ FEEDERS**
- **⇔** BUCKET ELEVATORS

- SCREW CONVEYIORS
- **AIR SELECTORS**
- **⇔ MIXERS**
- PNEUMATIC CONVEYIORS



Costruzione Impianti e Macchine per Macinazione ed Affini 27100 Pavia (Italy) - Via Quaglino, 17

Tel. 0382 422012 - Fax 0382 526961 - cimma@cimma.it - www.cimma.it