TURBO GRINDING

Introduction

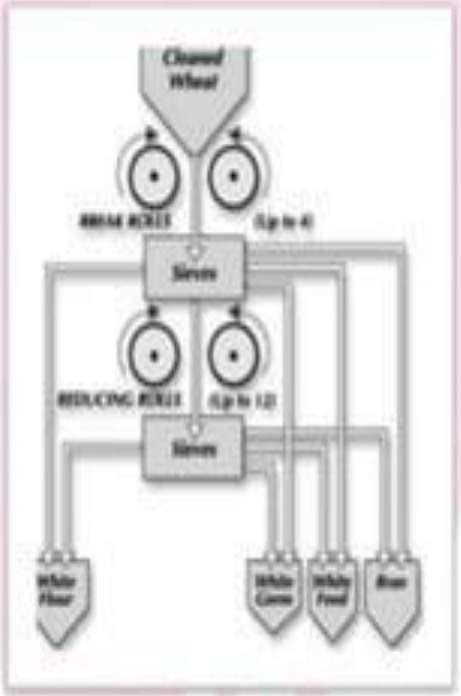
- SIZE REDUCTION
- IT'S MECHANISM IS BASED ON A COMBINATION OF SCREENLESS IMPACT CRUSHING AND A SECONDARY EFFECT.
- USE OF ROTOR TOOLS AND STATOR SEGMENTS
- AUTOGENOUS CRUSHING (PARTICLE AGAINST PARTICLE)
- WIDE VARIETY OF APPLICATIONS

Principle

- PULVERIZING MECHANISM
- PERCUSSIONS CAUSED BY HIGH SPEED REVOLUTION
- INNUMERABLE ULTRA- VIOLET VORTEXES WHICH BREAK OUT
- HIGH FREQUENCY VIBRATION AIR CAUSED BY THESE VORTEXES
- USUAL PULVERIZING MECHANISM OF SIMPLE IMPACT AND SHEARING

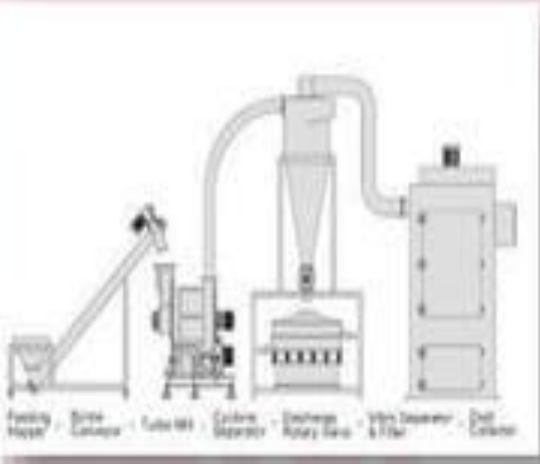
Working

- IT CONSISTS OF A CYLINDRICAL CONTAINER, A STATOR, A ROTOR AND A FRAME.
- MILL IS CHARGED WITH A SLURRY, THE MATERIAL TO BE GROUND, AND A MILLING MEDIUM
- THE ROTOR ROTATES AT SPEEDS UP TO 1,600 RPM.
- TEMPERATURE OF SLURRY IS MAINTAINED
- THE PRODUCT IS COLLECTED BY THE INLET.
- THE COMMINUTION TAKES PLACE BY IMPACT AND BY FRICTION OF THE INDIVIDUAL PARTICLES THROUGH AIR VORTEX.



Conditions of operation –

- RPM
- GAP DISTANCE
- ROTOR
- BLADE
- WIND VOLUME
- FEEDING SIZE



Advantages

- EASY ADJUSTMENT
- ULTRA-FINE POWDER
- HIGH EFFICIENCY
- LOW WEAR AND TEAR
- SIMPLE PLANT LAYOUT
- ROBUST CASING
- DIRECT DRIVE
- A WIDE RANGE OF APPLICATIONS

Features

- THEY CAN BE OPERATED AS A CRYOGENIC GRINDING SYSTEM
- MADE OF STAINLESS STEEL.
- 400 MM DIAMETER OF THE GRINDER
- STABLE PERFORMANCE
- WEAR RESIST MECHANISM
- WIDE APPLICATIONS
- EASY MAINTENANCE
- SPACE SAVING
- SELF-TRANSPORTATION
- DUST FREE STRUCTURE

Applications

THE VARIOUS KINDS OF MATERIALS USED TO BE MILLED ON A TURBO MILL ARE –

- SOFT TO MEDIUM-HARD
- BRITTLE
- TOUGH
- ELASTIC
- SMEARING
- HYGROSCOPIC
- HEAT-SENSITIVE,
- FATTY
- OILY MATERIALS

Conclusion

- It works on the mechanism of size reduction.
- It has a high power to grind the materials.
- It has a wide range of application not only in food industry but also in various industries eg – Marble or chemical industry.
- It has a particular set of operation conditions.
- Turbo milling has a large range of advantages.
- It also posses great amount of features.

THANK YOU