



QPEC Batch Ball-Rod Grinding Unit



QPEC Close-up of mill & discharge box

Application: Rod-Ball Mill Grinding Unit

Batch grinding of relatively large volumes of solids for subsequent multiple or single laboratory bench scale tests. Rod or ball charge, wet or dry basis. Ground product can be used in the produced quantity or divided into a number of smaller test portions for comparative test evaluations. Since the "batch" would be homogeneous, it would assure that data from multiple tests would be based on identically ground samples.

The batch mill handles up to a 30# charge of 2.7 specific gravity solids at 60% to 70% solids. In cases where large scale batch flotation's tests are required either due to grade of ore, quantity of concentrate required, etc., the unit is ideal for use in conjunction with the No. 7 Quinn portable batch flotation cell (Brochure Quinn-F-003). This flotation cell also handles 30-pound solids charges.

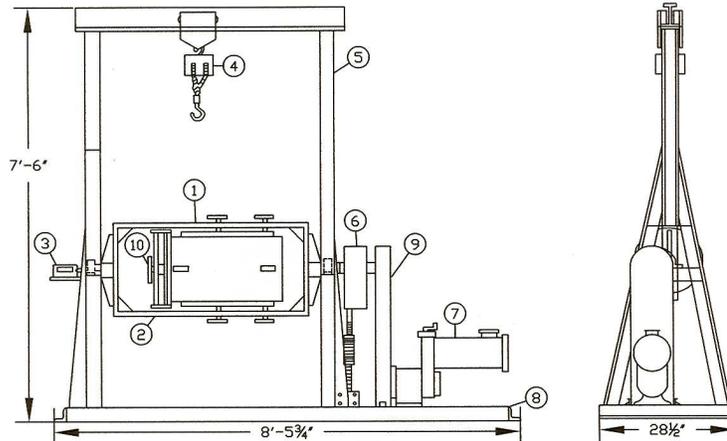
Application

Unit is ideal for use as a batch amalgamation unit for recovering gold/silver from concentrates. The vari-speed motor drive permits grinding and polishing at high speed with large-size grinding balls and the addition of mercury for amalgamation at lower speed.

Advantages

1. Self-contained unit designed with small overhead hoist to tilt mill chamber upwards for loading and downwards for discharging the mill contents.
2. Shell and heads of heavy steel construction with integral steel lifter bars.
3. Easily removable compression head cover with gasket and handwheel.
4. Operates wet or dry with rods or balls.
5. Convenient hoist with chain retainer compartment.
6. Shell designed with external flange to permit 100% content discharge to avoid contamination.
7. Vari-speed motor drive with 4 to 1 speed ratio (14.4 to 57.6 rpm) provides flexibility.
8. Visual rotation indicator conveniently located at shaft end.
9. Frame supported on heavy duty shaft - self-aligning bearing assemblies.

(Dimensions and specifications on reverse side.)



#	PARTS LIST
1	BULK MILL BODY
2	MILL FRAME
3	ROTATION COUNTER
4	CHAIN HOIST
5	MILL STAND
6	SPEED REDUCER
7	GEAR MOTOR (ADJUSTABLE SPEED)
8	PLATFORM
9	BELT GUARD
10	LID AND CLAMP ASSEMBLY

14" DIAM X 24" LONG QUINN BATCH ROD-BALL MILL GRINDING UNIT

DATA:

INSIDE DIAMETER	INSIDE LENGTH	MOTOR hp	rpm RANGE	ROD OR BALL CHARGE	SOLIDS CHARGE
14"	24"	1-1/2	14.4 TO 57.6	225# MAXIMUM	*30# MAXIMUM

* BASED ON 2.7 S.G. SOLIDS

Specifications

Drum: Heavy steel construction with integral steel lifters. Provided with exterior flange, gasket, compression head with bar assembly and handwheel device designed for easy removal.

Mill frame: Heavy welded steel construction with two mill pivot points. Handwheel locking device secures mill in horizontal position during operation.

Bearings: Mill frame is supported on steel shafts and self-aligning bearing assemblies.

Rotation counter: Digital counter attached to shaft and records number of mill revolutions during a given grinding period.

Drive train: Includes shaft mounted reducer, V-belt drive, OSHA type drive guard, and a 1-1/2 hp, 1760 rpm, 3 ph, 60 Hertz, 230/460 volt TEFC variable speed, 4 to 1 ratio motor-drive unit with handwheel speed control. Mill speed range 14.4 to 57.6 rpm. (Other electrical characteristics available.)

Overhead hoist: An overhead chain hoist and trolley arrangement is provided. Includes chain retainer.

Painting: Rustoleum primer and green enamel finish with OSHA orange moving parts.

Optional Item: Unit can be furnished with an automatic large dial time clock, 115 volt transformer and magnetic switch for 3 ph, 60 Hertz, 230/460 volt operation. All conveniently mounted on a support stand at the back of the platform.