



QPEC Grinding Module Ball Mill



QPEC Grinding Module Ball Mill with Hopper

Quinn Grinding Module complete with 70 cu ft Quinn belt ore feeder, 24" x 48" Quinn rod-ball mill and electrical panel all mounted on structural base.

Applications

For pilot plant and small commercial size grinding applications involving all types of ores and industrial products. Capacities of various units range from 100 lb/hr to an estimated 1000 pounds when grinding medium hard ore to minus 65-mesh.

Advantages

1. Permits purchase of a well designed "package - ready to operate" grinding module.
2. Ore feeder fed from front-end loader, fork lift with drum-dump belt conveyor, etc.
3. Convenient mill feed sample and discharge point provided.
4. Quinn hopper-feeder provided with variable speed DC motor drive to permit slow belt speed with large feeder opening. Entire arc of belt is live so "cleanup" not required between lots. Larger or smaller hoppers available.
5. Quinn grinding mill can be operated as a rod or ball mill or rubber-lined ceramic charged mill. Mill designed for abrasive service with replaceable liners, babbitted trunnion bearings, cut-tooth reversible bull gear and pinion, enclosed running-in-oil reducer, and variable pitch V-belt drive.
6. Mill can be operated- in open circuit or in closed circuit with a wet cyclone or spiral classifier. Refer to brochure Quinn-GM-006 for operation in closed circuit with a Quinn spiral classifier. When operated in closed circuit with a centrifugal pump and wet cyclone, we normally recommend that a small circular vibrating screen be installed to remove tramp oversize material from the pump-cyclone feed to prevent intermittent plugging of the cyclone. A 3- compartment sump and centrifugal pump are provided to properly feed the cyclone. The cyclone is mounted on an overhead bracket to permit the oversize to fall direct into mill drum feeder.

(Dimensions and specifications on reverse side.)

Advantages (continued)

- 7. Mills operated in open circuit are provided with a trommel screen to remove tramp. The undersize discharges direct to a 1" Quinn vertical sand pump.
- 8. All components are mounted on a structural module with steel grating. Equipment is rustoleum prime coated and green enamel finished.
- 9. An electrical panel is conveniently located and includes weather-tight switches and push button stations and wiring to all motors.

Specifications

Sizes: As per data.

Hopper: Fabricated of heavy steel plate with support legs and adjustable gate.

Feeder: Lagged head pulley, tail pulley, head and tail shaft anti-friction bearings, takeups, endless rubber belt riding on steel deck plate, all mounted in structural frame.

Feeder drive: Vari-speed DC motor with remote controller for 1-60-115 volt current, reducer, roller chain drive, V-belt drive, drive guard.

Rod-ball mill: (Refer to Brochure Quinn-M-001.)

Heads: Flanged and bolted - ductile iron with ground and polished trunnion bearings.

Shell: Flanged, interlocking.

Liners: Replaceable rubber-lined over steel shell plates, white iron lifters, liner bolt assemblies.

Trunnion bearings: Babbitt, ground and polished. Ductile iron bases with caps.

Feeder: Drum type.

Gears: Cut-tooth, reversible.

Guards: OSHA type gear and V-belt drive.

V-belt drive: Vari-pitch 65% to 83% critical.

Motor: TEFC 3-60-230/460 volt. Other standard characteristics available.

General: All equipment rustoleum primed, green enameled, and shipped completely assembled.

Optional items: 18" circular trash screen, bowl or horizontal sand pump. Wet cyclone with support frame. Rod-ball mill can be furnished rubber-lined for corrosion or elimination of iron contamination.

DATA							
*HOPPER							MODULE
CAPACITY	MILL SIZE		**CAPACITY		DIMENSIONS		
cu ft	Feeder	Size	Ø	L	hp	lb/hr	W X L X H
25	10"X72"	16"	16"	2	100	6'X16'X10'	
35	10"X72"	16"	32"	3	200	6'X17'X10'	
50	10"X72"	16"	48"	5	300	6'X19'X10'	
60	12"X84"	24"	32"	7-1/2	500	6-1/2'X18'X10'	
70	12"X84"	24"	48"	10	750	6-1/2'X19'X10'	
80	12"X84"	24"	64"	10	1000	6-1/2'X20-1/2'X10'	

*HOPPER CAPACITY CAN BE INCREASED OR DECREASED
 **ESTIMATED CAPACITY MEDIUM ORE TO MINUS 65-MESH