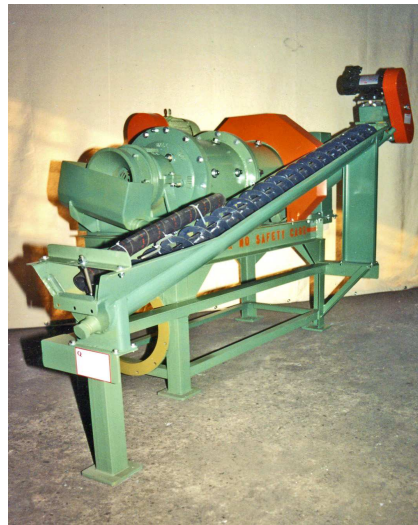


QPEC 24" Grinding Module Close Circuited  
with a 9" Spiral Classifier



QPEC 16" x 32" Rod-Ball Mill Closed  
Circuited 6" Spiral Classifier

#### 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. Units of steel construction or rubber-lined/stainless steel alloy for corrosion resistance or prevention of iron contamination.

#### 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. Quinn hopper-feeder provided with variable speed DC motor drive to permit slow belt speed with large feeder opening. Entire area of belt is live so "cleanup" not required between lots. Larger or smaller hoppers available.
4. Convenient mill feed sample and discharge point provided.
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 closed circuit with a wet cyclone or in open circuit without classification. Please refer to Brochure Quinn-M-005. When operated in closed circuit with a Quinn spiral classifier (Brochure Quinn-C-001), we provide the mill with a combination drum and scoop feeder, feed box, mill discharge launder, and supports for mill and classifier mounted as a unit. A Quinn bowl type centrifugal pump handles the classifier overflow.
7. All components are mounted on a structural module with steel grating. Equipment is rustoleum prime coated and green enamel finished.

Advantages (continued)

8. 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 frames.

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 belt assemblies.

Trunnion bearings: Babbitted, ground and polished. In ductile iron bases with caps.

Feeder: Combination drum-scoop type with feed box.

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.

Classifier:

Tank: Mild steel modified flare.

Spiral: Mild steel with flexible coupling and lifting device.

Submerged bearings: Mild steel, grease lubricated, screw connection to shaft on 6" and 9" flange connection on 12". Available ss 316.

Reducer: Running-in-oil type.

Vari-pits: V-belt drive.

Guard: OSHA type.

Corrosion resistance: Available ss 316 and other alloys and elastomer coverings.

Launders-supports: Includes necessary launders and supports

(Dimensions on next sheet.)



Mill Feed End with Drum Feeder and Feed Box with Spiral Classifier Return Launder



Mill Discharge End with Feed Launder to Spiral Classifier

*HOPPER				MODULE								
CAPACITY	MILL SIZE	CLASSIFIER		**CAPACITY		DIMENSIONS						
cu ft	Feeder Size	DIA	L	hp	SIZE	hp	lb/hr	W	X	L	X	H
25	10"X72"	16"	16"	2	6"	1/3	100	7'	X	16'	X	10'
35	10"X72"	16"	32"	3	6"	1/3	200	7'	X	17'	X	10'
50	10"X72"	16"	48"	5	6"	1/3	300	7'	X	19'	X	10'
60	12"X84"	24"	32"	7-1/2	9"	1/2	500	7'-1/2'	X	18'	X	10'
70	12"X84"	24"	49"	10	12"	3/4	750	8'	X	19'	X	10'
80	12"X84"	24"	64"	10	12"	1	1000	8"	X	20'-1/2'	X	10'

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