Ball Mill

The ball mill has many steel or porcelain balls put in a drum (cylinder) to grind the feed between balls and between the balls and drum inner wall as the drum rotates. This mill is capable of grinding lumps whose size is tens of millimeters into a product tens of microns (fine grinding) or even several microns (ultrafine grinding).

There are two types of ball mills-the wet type that grinds the feed in water or oil and the dry type that grinds the feed in dry state. The dry type is capable of drying and grinding materials whose moisture content is 20% or more.

We have delivered many ball mills, from small batch mills with a motor output of several kW to large mills with a motor output of thousands of kW.

■Otsuka tube ball mill specifications

Model	Drum size (diameter x length) mm	Charged balls t	Standard drum speed rpm	Motor kW
T-924	900×2400	2.05	38	22
T-1236	1200×3600	5.60	32	55
T-1542	1500×4200	10.50	28	95
T-1848	1800×4800	18.3	25	150
T-2448	2400×4800	35.0	21	300
T-2748	2700×4800	44.0	19	450
T-3048	3000×4800	55.2	18	560
T-3648	3600×4800	82.0	16	850
T-3954	3900×5400	109.0	15	1150
T-4254	4200×5400	127.0	14	1350
TD-1224	1200×2400	3.5	29	37
TD-1536	1500×3600	9.5	25	95
TD-1842	1800×4200	16.0	22.5	150
TD-2142	2100×4200	21.7	20.5	220
TD-2442	2400×4200	28.3	19.0	300
TD-2742	2700×4200	36.0	17.7	450
TD-3048	3000×4800	52.0	16.5	600
TD-3060	3000×6000	65.0	16.5	750

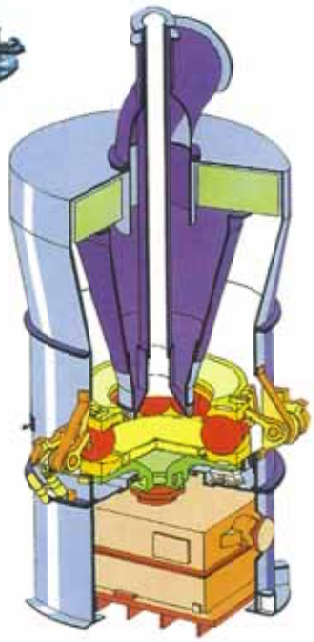
■Otsuka compartment tube mill specifications

Model	Drum size (diameter x length) mm	Number of compartments	Charged balls t	Standard drum speed rpm	Motor kW
P-930	900×3000	2	2.2	34	22
P-1242	1200×4200	2	5.8	29	55
P-1555	1500×5500	2~3	12.4	25	130
P-1855	1800×5500	2~3	19.0	22.5	190
P-2190	2100×9000	2~3	44.0	21	400
P-24120	2400×12000	2~3	80.0	19	750
P-27120	2700×12000	2~3	100.0	17.7	1100
P-30120	3000×12000	2~3	114.0	16.5	1250
P-33120	3300×12000	2~3	135.0	15.5	1600
P-36120	3600×12000	2~3	160.0	15.2	2200
P-38120	3800×12000	2~3	175.0	15.0	2600

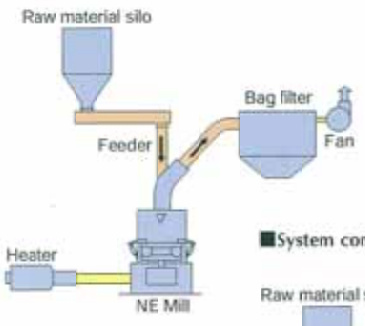
NE Mill

The NE Mill is a vertical mill manufactured under the license of Fives-Cail Babcock, Ltd. In this mill, the feed is ground between large-diameter balls and their raceway. Many mills of this type are used to dry and grind coal, oil coke, and other solid fuels.

Since the mill has no complicated mechanical parts, it requires minimum inspection and maintenance. In addition, since the grinding balls and their railways are durable and wear uniformly, the mill is capable of maintaining stable particle sizes of product and processing performance.



■Drying and grinding system



■System combining external classifier