

Wet Pan Mill Technical Parameters and Model Selection Guide

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Product Overview and Confirmed Operating Range



	Machine type:	Double-roller wet pan mill
	Model range:	1000–1600
	Published capacity:	0.5–7 t/h
	Feed size:	Below 20 mm or below 30 mm, depending on model
	Discharge-size range:	0.6–0.07 mm
	Motor power:	5–37 kW
	Roller diameter:	1,000–1,600 mm
	Roller thickness:	200–400 mm
	Discharging method:	Overflow type
	Equipment weight:	4–14.5 t



TECHNICAL NOTE: Published capacity and discharge size are equipment-reference ranges rather than guaranteed plant results. Actual performance depends on ore properties, feed grading, water addition, roller condition and downstream process requirements.

Wet Pan Mill Technical Parameters

Operating parameters for the complete 1000–1600 range. Configuration distinctions are retained exactly.

Model	Configuration	Roller Diameter mm	Roller Thickness mm	Feed Size mm	Discharge Size mm	Capacity t/h	Power kW
1600	A	1600	400	<30	0.6–0.07	4–7	37
1600	B	1600	350	<30	0.6–0.07	3–6	30
1500	A	1500	400	<30	0.6–0.07	3–5	30
1500	B	1500	350	<30	0.6–0.07	2–4	22
1500	C	1500	300	<30	0.6–0.07	2.5	18
1400	Standard	1400	250	<30	0.6–0.07	2	15
1300	Standard	1300	250	<30	0.6–0.07	1.5	11
1200	Standard	1200	200	<20	0.6–0.07	1	7.5
1100	Standard	1100	200	<20	0.6–0.07	0.8	5
1000	Standard	1000	200	<20	0.6–0.07	0.5	5

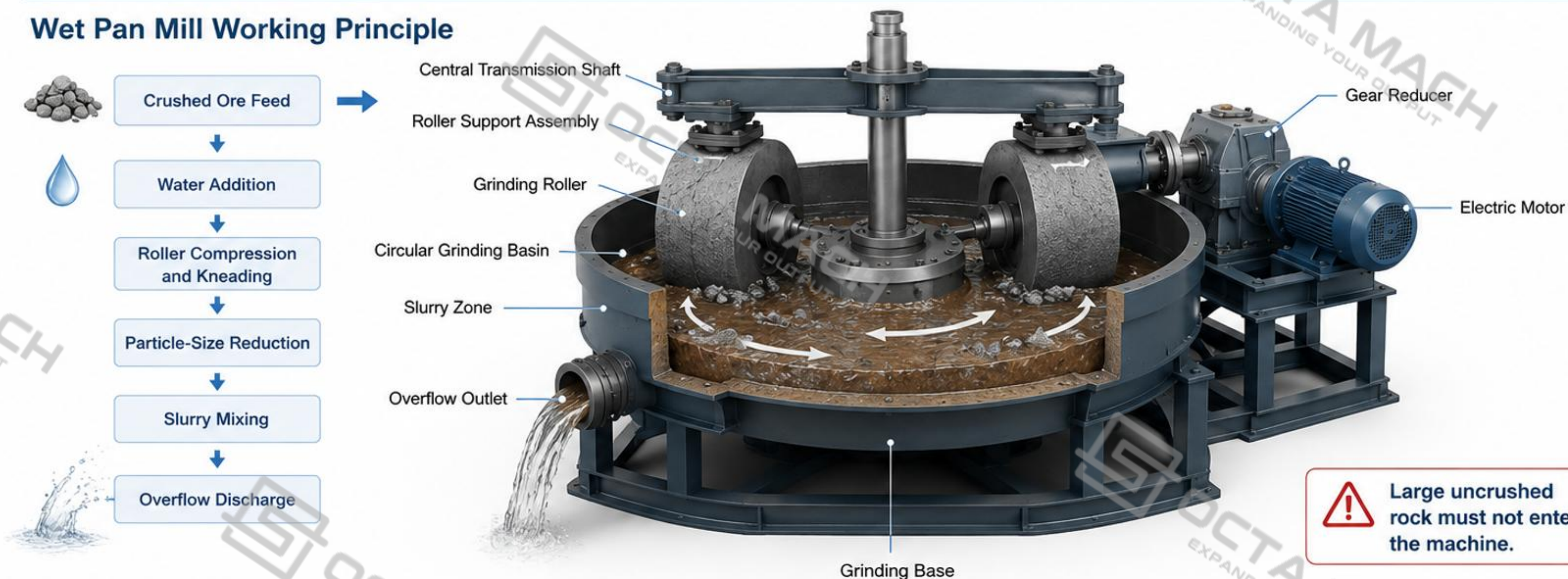


The 1500 and 1600 model names cover multiple roller-thickness and power configurations. A quotation or purchase order must identify the specific configuration rather than the diameter alone. Published capacity is a nominal equipment range and must be checked against ore properties, feed grading and water addition.

Dimensions and Weight

Model	Configuration	Grinding Base Diameter × Width mm	Overall Dimensions mm	Discharging Method	Weight t
1600	A	2100 × 500	2800 × 2800 × 2100	Overflow type	14.5
1600	B	2100 × 500	2800 × 2800 × 2100	Overflow type	14
1500	A	2050 × 450	2800 × 2800 × 2100	Overflow type	13.5
1500	B	2050 × 450	2800 × 2800 × 2100	Overflow type	12.5
1500	C	2050 × 450	2800 × 2800 × 2100	Overflow type	11.5
1400	Standard	Not stated	2700 × 2700 × 2700	Overflow type	8.5
1300	Standard	Not stated	2700 × 2700 × 2700	Overflow type	7.5
1200	Standard	Not stated	2400 × 2400 × 1600	Overflow type	4.5
1100	Standard	Not stated	2400 × 2400 × 1600	Overflow type	4.2
1000	Standard	Not stated	2400 × 2400 × 1600	Overflow type	4

Wet Pan Mill Working Principle



Wet Pan Mill Model Selection

Model cards retain the published feed, capacity and power data.



Model-Selection Inputs

- | | |
|---------------------------------|-----------------------------------|
| Ore type and mineralogy | Target discharge-size range |
| Ore hardness | Water availability |
| Ore abrasiveness | Operating hours |
| Maximum feed size | Downstream recovery process |
| Feed particle-size distribution | Site voltage and frequency |
| Required dry-solids throughput | Foundation and lifting conditions |

1200 Wet Pan Mill

Feed: <20 mm
Capacity: 1 t/h
Power: 7.5 kW
Roller thickness: 200 mm

1500 Wet Pan Mill

300 mm roller: 2.5 t/h, 18 kW
350 mm roller: 2–4 t/h, 22 kW
400 mm roller: 3–5 t/h, 30 kW

1600 Wet Pan Mill

350 mm roller: 3–6 t/h, 30 kW
400 mm roller: 4–7 t/h, 37 kW

Wet Pan Mill vs Ball Mill

Neutral comparison for process selection.

Selection factor	Wet Pan Mill	Ball Mill
Grinding method	Wet grinding only	Wet or dry, depending on design
Main grinding action	Compression, rolling, shearing and kneading	Impact and abrasion from grinding media
Typical plant scale	Small to medium grinding duties	Small to large grinding circuits
Layout	Compact circular machine	Horizontal cylindrical mill with drive system
Product-size control	Influenced by water, loading and overflow	Often combined with classifier for controlled product
Operating complexity	Simple mechanical arrangement	More complex media, liner and circuit control
Suitable process duty	Compact wet grinding and mixing	Higher-throughput or more tightly controlled grinding circuits

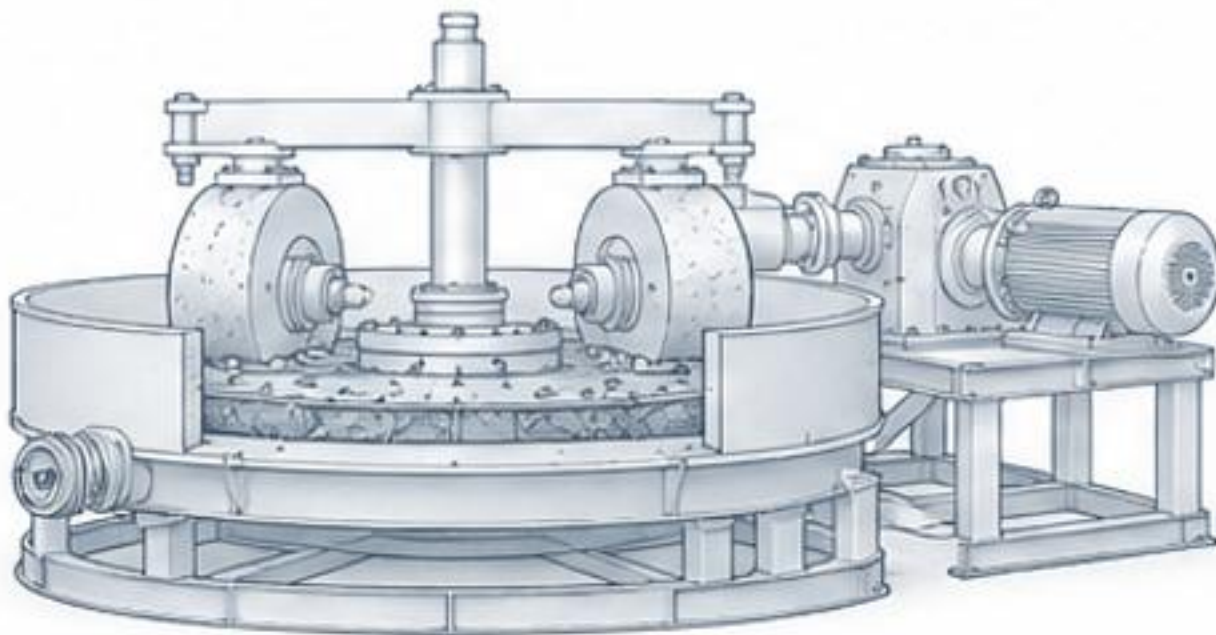
Application Boundary

A wet pan mill may replace a small ball mill in selected wet-grinding duties, but it is not a universal substitute.

Procurement, Maintenance and Inquiry Checklist

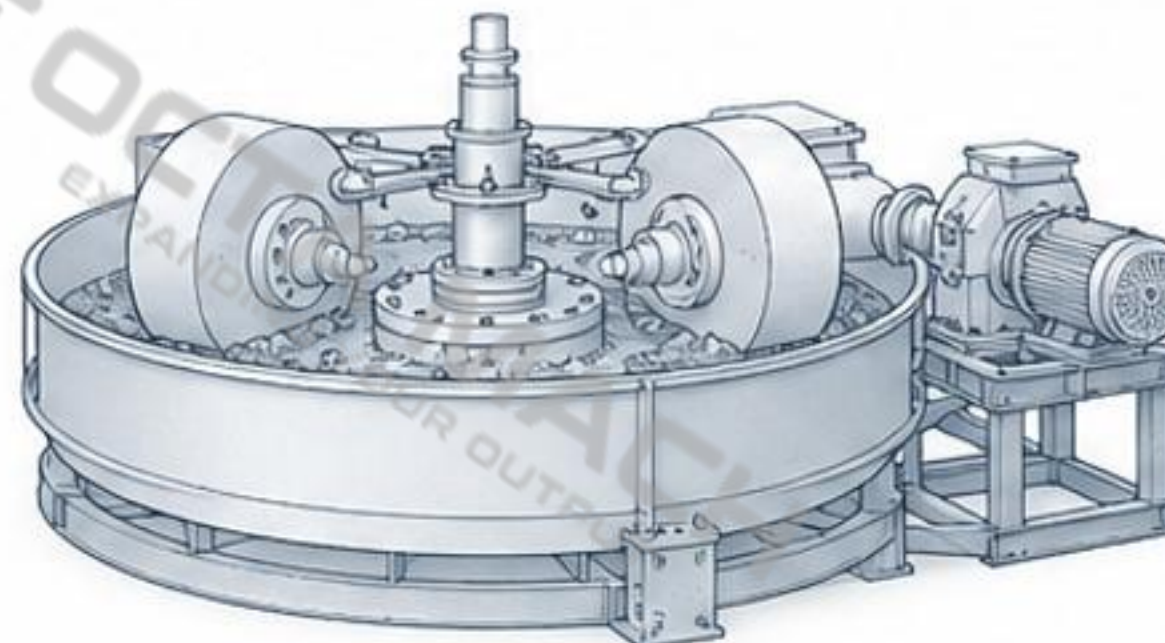
1 Price and Configuration Factors

- Model and roller diameter
- Roller thickness
- Grinding-base dimensions
- Wear-part material
- Motor voltage and frequency
- Reducer configuration
- Electrical-control scope
- Spare rollers and grinding-base parts
- Packing and transportation
- Installation and commissioning scope



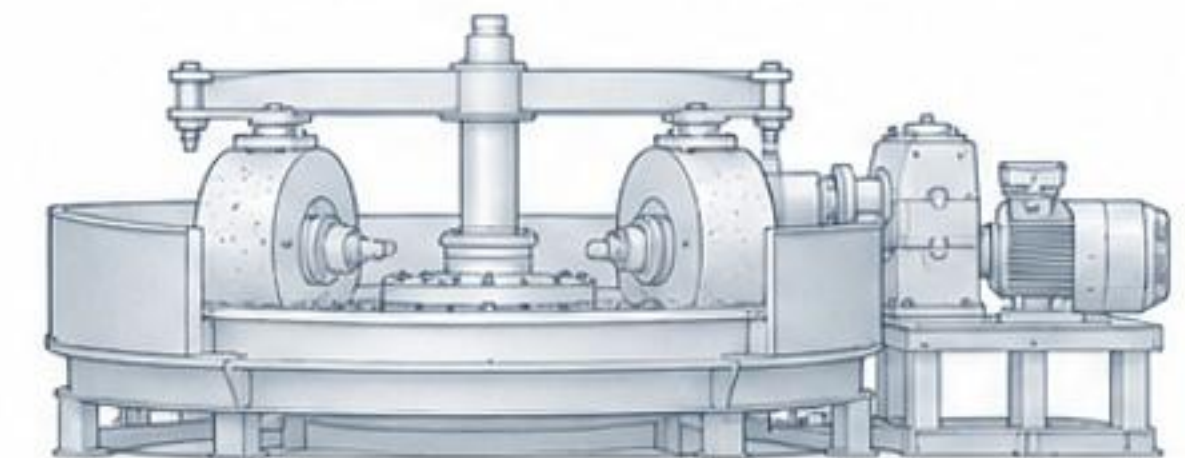
2 Maintenance Inspection Points

- Roller surface wear
- Grinding-base wear
- Bearing lubrication
- Reducer and coupling condition
- Central-shaft alignment
- Fastener tightness
- Overflow-channel blockage
- Motor current and cable condition
- Structural-frame cracks or deformation



3 Information Required for Quotation

- Ore type
- Maximum and typical feed size
- Required capacity
- Target discharge-size range
- Ore hardness and abrasiveness
- Water availability
- Operating hours
- Downstream recovery method
- Voltage and frequency
- Delivery destination
- Foundation conditions
- Required spare-parts package



FINAL TECHNICAL NOTE

The final equipment configuration must be confirmed in a model-specific technical specification before manufacturing.