

General Description

of

Two High Rolling Mill

Housings

The mill housings are made of close grained special alloy cast semi-steel, amply proportioned for heavy duty service, keyed and bolted to a substantial base, and bolted together at the top for accurate alignment. The housings are accurately machined for proper fit of the chocks and adjusting screws. The windows are large enough for easy removal of all rolls and chocks. The adjusting screw nuts are in the mill housings rather than exposed in the windows, as on competitive mills, insuring the most rigid mill construction for heavy work.

The cast pinion housings are of oil case construction permitting the helical pinions to run in an oil bath at all times.

Rolls

The mill is furnished with one (1) pair of hardened and ground alloy steel rolls having a hardness as specified. These rolls are furnished with a plain finish unless specified otherwise. Semi-mirror or high mirror finishes, depending on application, are also available.

Bearings

The rolls operate in precision cage type roller bearings for radial loads with anti-friction bearings for thrust loads to prevent lateral roll movement.

Roll Adjustment

The mill can be furnished with single outboard, double outboard, or separate screwdowndown handwheels with graduated indicies for accurate roll separation adjustment. On the larger mills with the double outboard handwheels, an interlocking device is provided for simultaneous or individual screw adjustment. The specification sheet indicates which type(s) are available.

The upper roll bearing boxes are held in position through adjustable raising rods attached to the hardened alloy steel adjusting screws. The hardened screw ends rest against hardened steel plates on top of the boxes to absorb the thrust loading.

Motorized Screwdown - Optional

For fast, coarse roll gap setting between passes, a no-load motorized screwdown can be provided on the larger mills at the additional price shown. Under no conditions can this motorized screwdown arrangement be considered suitable for making roll adjustments with stock in the mill.

A mechanical lock is provided to prevent the handwheels from rotating when using the screwdown motor, and a limit switch interlock is incorporated so that the screwdown motor will not operate if the mechanical handwheel lock is not in the "lock" position.

Entry and Exit Tables

The entry and exit stock tables are of simple design, ruggedly constructed, and keyed to the mill housings to provide proper alignment with the bottom roll. The entry table incorporates simple side guides.

Both tables are vertically adjustable and have removable hardened steel pick plates to prevent the stock from wrapping around the bottom roll. The specification sheet will indicate whether these are standard or optional features.

Mill Drive

The mill rolls are driven from the mill motor through bull gears to the pinion stand, then through either plain wabbler or universal type compensating couplings from the pinion stand to the rolls.

Mill Base

The roll housings, pinion stand, and other components are mounted on a substantial reinforced welded steel cabinet type base. The base is properly proportioned for maintaining alignment under heavy rolling loads and may be bolted to your floor without need for a special foundation.

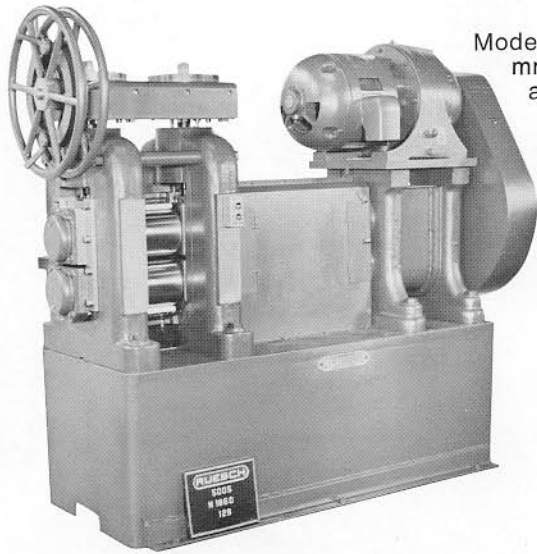
Lubrication

Mills of this type use Alemite pressure type grease fittings for lubrication. However, a one-shot central lubrication system is also available at extra cost.

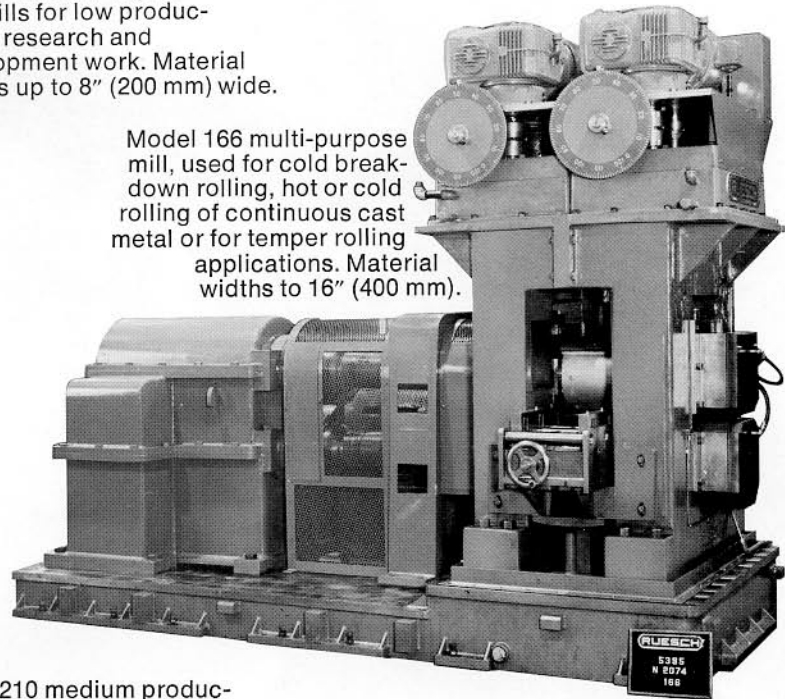
Electrics

The proposed basic drive is an A.C. gear motor with the specified horsepower for the specified speed and will include a motor mounted brake, across-the-line NEMA 1 starter with manual disconnect, and operator's station.

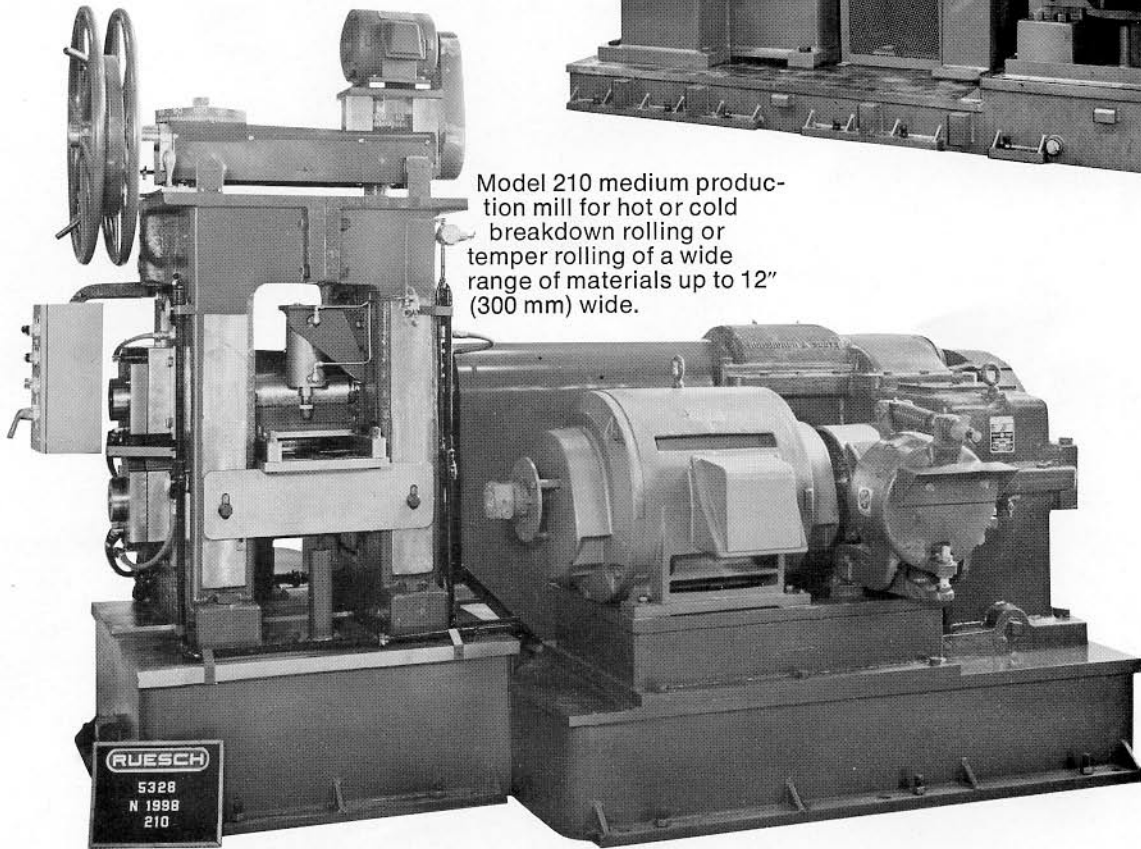
Emergency stop buttons will be provided on the entry and exit sides of the mill in addition to the "Stop" push button on the operator's control panel.



Model 129 Mill with 8" (200 mm) diameter rolls, one of a series of manual adjustment mills for low production or research and development work. Material widths up to 8" (200 mm) wide.



Model 166 multi-purpose mill, used for cold breakdown rolling, hot or cold rolling of continuous cast metal or for temper rolling applications. Material widths to 16" (400 mm).



Model 210 medium production mill for hot or cold breakdown rolling or temper rolling of a wide range of materials up to 12" (300 mm) wide.

Model	Roll Diameter		Roll Face		Housing Postal Area		Typical Speeds	
	In.	mm	In.	mm	Sq. in.	Sq. cm	FPM	M/min.
142	3	75	5	125	25	160	40	12
126	4	100	6	150	45	290	40	12
127	5	125	8	200	85	550	70	21
229	6	150	8	200	160	1050	70	21
129	8	200	10	250	170	1100	100	30
200	8½	215	10½	270	180	1150	200	60
210	10½	270	12	300	240	1550	200	60
166	14	350	16	400	510	3350	300	90
235	16	400	20	500	660	4250	300	90
285	21	525	26	650	825	5350	300	90