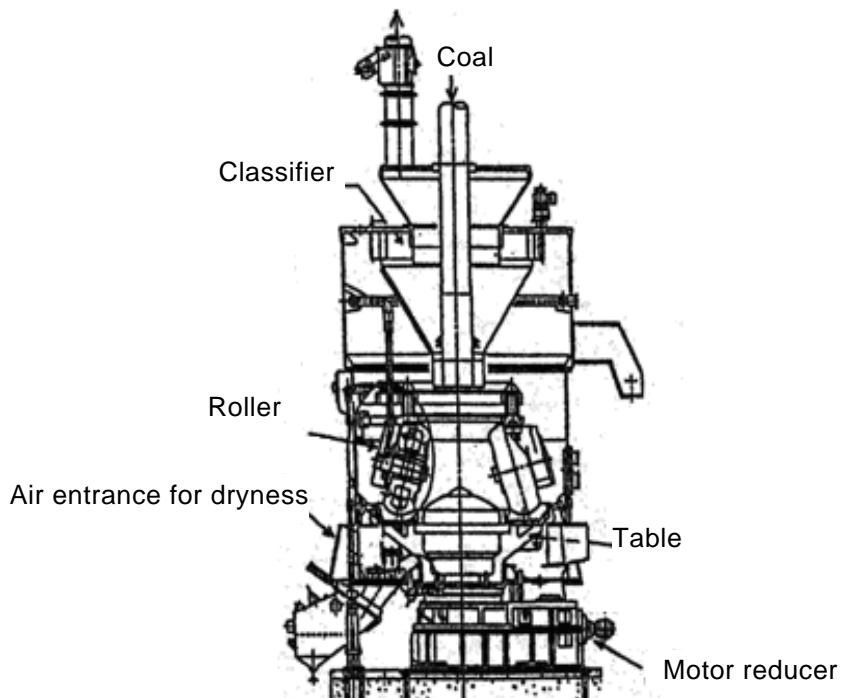


Item	Vertical coal mill	Application
		Burning process
<b>Background</b>	<p>Tube mill had been used for coal grinding. Steel balls were used as the grinding media, and tube mill should have enough room to allow attrition between the balls and coal. This result in higher initial costs, higher electricity consumptions and limits the downsizing of the tube mill.</p>	
<b>Descriptions</b>	<p>In a vertical coal mill, drying, grinding, and separating/classifying of coal can be done simultaneously. Hence, production and energy efficiency is higher. This technology became popular after oil shock time, when the fuel switched from oil to coal.</p> <ol style="list-style-type: none"> <li>1. Wet coal is feed from the upper part or side of the mill onto the rotating table.</li> <li>2. It was then crushed and ground by the pressing of the steel roller.</li> <li>3. Fine coal particles are dried and swept away into the separator by a high velocity of hot air flow from the bottom of the mill.</li> <li>4. Separated fine coal particles are captured by a bag filter and used as fuel.</li> </ol> <p style="text-align: center;">Pulverized coal exit [air sliders]</p> 	
<b>Results</b>	Capable of reducing electricity consumptions for coal grinding by 20-25%.	
<b>Cost estimation</b>	About 9 million US\$ including cost of supplemental facilities [20t-coal/h] [1US\$=¥110]	
<b>Related matters</b>		
<b>Reference</b>		