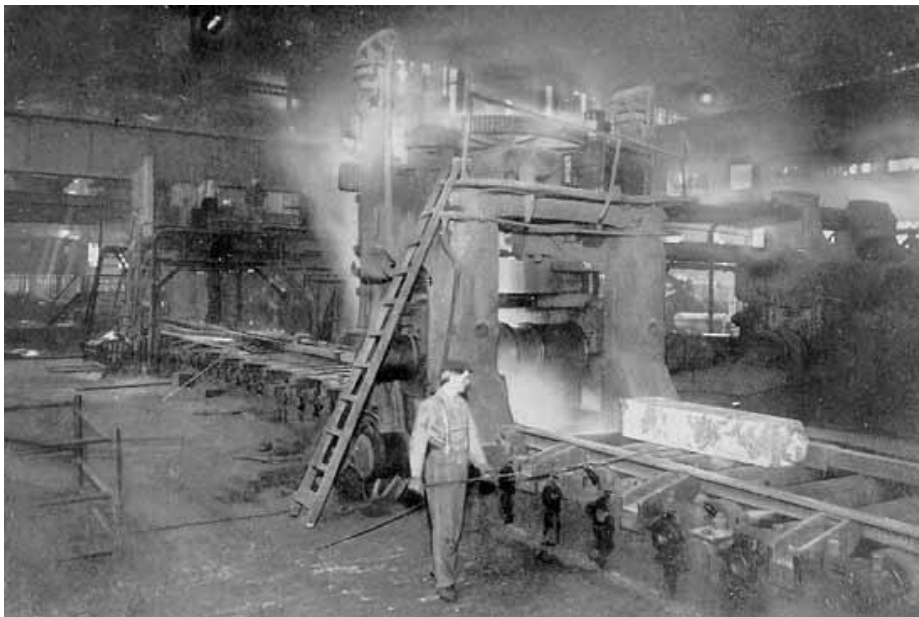


Student Handout 3-Blooming Mill

One of the hard conditions which the working force must face in iron or steel manufacture is heat. It is difficult to convey to the understanding of one who has never visited a mill, or who has visited one only in winter, the intensity of the heat in certain departments during the summer months. Lofty and specially designed roofs have added greatly to the comfort of the men in the more recently constructed plants; but in rolling mills the sheds can never be made so large nor the ventilation so good that much discomfort will not be occasioned by radiation from the red hot steel. In the blooming mill a glowing ingot weighing from two to ten tons is being worked all the time.

It is possible to afford relief to the men by means of air tubes, such as are in operation in the rod mill of the American Steel and Wire Company at Rankin. Here the heat is very great and the work requires considerable strength and activity. A revolving fan sucks air from the outside of the mill and forces it into a main that runs over the heads of the men at work. From this main smaller tubes run down and terminate with a flaring mouth just above each workman, supplying him steadily with air comparatively pure and much cooler than that of the mill. A similar system is in operation in the rod mill of the Schoenberger works of the American Steel and Wire Company. At the welding furnaces of the National Tube Company at McKeesport, large sized electric fans play on the men in the hot positions, who are further protected by water-cooled shields.

Source: *The Pittsburgh Survey, Chapter VII: Health and Accidents in Steel Making, p. 59*



Blooming Mill as the Ingot Enters the Rolls

Credit: Fitch, John A. *The Steel Workers: The Pittsburgh Survey findings in six volumes*, ed. P.U. Kellogg
New York: Charities Publications Committee, 1910.

Photography by Lewis Hine