



EXPLORING STEEL ENERGY AND THE WEST



NUMBER TWO IN A SERIES OF 10

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CF&I steelworks facility blast furnaces

STEEL PRODUCTION

A blast furnace steel manufacturing facility needs much more than coke to produce its products. Iron ore is another essential ingredient in steelmaking. Iron ore and various fluxes, or binders, are fed into a blast furnace with super-heated air to produce carbon monoxide. The carbon monoxide reacts with the iron ore to melt the iron. A hole at the bottom of the blast furnace is opened and allows the iron to drain once the slag has been skimmed. The slag is then separated leaving only the iron. For decades, CF&I steelworks, the steel producer in southern Colorado established in 1881, used the iron in its different facilities to make rails, wire, rod, pipe and other steel products. Today, EVRAZ Rocky Mountain Steel, located in Pueblo, Colorado, uses an electric arc furnace powered by electricity to melt scrap to produce steel at its four different facilities: the steel mill that produces steel for further manufacturing, the rail mill, the rod and bar mill, and the seamless pipe mill.