




FINISHING MILL



Big River Steel's continuous pickle line and state-of-the-art in-line tandem cold mill produces cold rolled steels ranging in thickness from 0.012" – 0.1280" and 36" – 74" in width. In addition, our temper mill has up to 10% elongation capability, critical when making cold rolled motor lamination grades. Our galvanizing line produces steels ranging in thickness from 0.012" – 0.1280" and 35.5" – 73" in width.

PICKLING LINE TANDEM COLD MILL (PLTCM)

Big River's PLTCM includes a laser welder needed for production of the newest steel grades that traditional line welders cannot perform.

A five-stand tandem cold mill with continuous variable crown (CVC) control on every mill stand provides for best-in-class gauge and shape control.

An in-line inspection station provides the advantage to visually inspect surface quality to verify process standards are yielding the demanding quality requirements necessary.

CONTINUOUS GALVANIZE LINE

Big River's innovative galvanizing line includes the ability for dual process, allowing for easy conversion from hot dip galvanizing to continuous annealing.

The furnace section is equipped with an ultra-rapid cooling section, achieving best-in-class cooling rates of 82 k/second - 94k/second, vital to producing multi-phase and other advanced high-strength steels.

The in-line, dual-shuttle roll coater affords the capability to apply multiple post treatments that will enhance the corrosion performance and formability of our galvanized product while complying with Restriction of Hazardous Substances (RoHS) standards.

Ultra high-quality, closed loop air knife wiping systems at the coating pot area allow operators to achieve coating weights from G30 – G235.

The galvanizing line also accommodates a wider range of thicknesses and width offerings from 0.0180 – 0.1000 thickness for both cold rolled and hot rolled products.

Our design includes space allocated in the cooling tower to easily add the capability to produce Galvanneal product. Foundations for a second coiler have also been placed for added flexibility in production and higher uptime for future needs.

BATCH ANNEAL PLANT AND OFF-LINE SKIN PASS MILL

Big River's batch anneal plant consists of 24 hi-flo hydrogen stations, each able to handle a maximum coil weight of 42 tons and a total stack weight of 142 tons. These stations also process hot rolled pickled (HRP) material. The next set of annealers will allow for higher temperature annealing needed for higher-end electrical steels.

Our off-line, four-high skin pass mill is the most powerful SMS temper mill available. It has 18000kN of roll force as well as entry and exit bridge rolls with the ability to achieve elongations of up to 10%, required for many niche products including electrical steels.