

Material Tracking in Billet Mill.

BILLET MILL

The Light and Medium Merchant Mill of VSP is a combined Billet mill and merchant bar mill. The mill has been envisaged to produce 18, 57,000 T of billets, out of which bar mill to produce 7, 10,000 T of finished bar product 8, 50,000 T for feeding to WRM. The feed material for the mill is C.C blooms of 320X250 mm with a nominal length of 6.0 to 6.4 meters.

PRESENT SYSTEM

The bloom transfer from bloom storage yard (BSY) to LMMM is done on the basis of daily discussion held at BSY, PPM and LMMM representatives.

Blooms are placed on charging grid by BSY. Blooms are received at the charging grids heat wise or part wise from bloom storage yard. Bloom transfer record shows heat number, grade and number of blooms supplied by BSY. Non conforming blooms, if any, placed on grid are removed by lifting with the electric Over head travel crane of bloom storage yard. Blooms then are sent for charging in to the walking beam furnace.

Whenever two charging grids are operated with two different heats for two walking beam furnaces, the ratio of taking blooms from the charging grids for charging in the walking beam furnaces are decided by the shift in charge (operation).

Blooms are charged into the walking beam furnaces. Charging sheet showing heat number, number of blooms and door position is prepared in the duplicate by control pulpit CP2 operator and sent to control pulpits CP3 and CP4. Blooms are heated in walking beam furnaces.

The billets are cut either for TOCB or for bar mill as per the heat details for LMMM rolling, given on-line through PPC. Rolling parameters are set and controlled from CP4. In case the ERP is not in use, charging sheet prepared and sent by control pulpit CP2 is used for identifying the heat number and number of blooms. The heat number and number of billets taken to TOCB are informed to the billet storage yard at the end of every heat, **and last four digits of heat number is written on all the billets.** The tracking of material is done by press to talk communication system.

EXISTING PROBLEMS

As most of the time two furnaces have different heat number and grades charging and discharging it is very difficult to track heat numbers manually apart from number of billets along with heat numbers charged to TOCB and Bar Mill.

REQUIREMENT

Tracking of correct heat number from charging to TOCB and feed material to bar mill.