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Comments on Rolling Procedure

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Comments on Rolling Procedure

When starting a new multi-strand rod mill it is advisable to start on a single strand basis and continue until that line is running smoothly. Next start the second line also on a single strand basis until it is running properly with the same speed adjustments obtained for the first strand. The same comments would apply to a third strand. It is advisable to keep track of the approximate time each line is run single strand so that the others can be operated for substantially the same period in order to obtain the same uniform pass wear between lines.

If the down loop following a roughing mill increases suddenly just before the last end of a bar has left the roughing mill, it is usually a sign that there is a pull somewhere between the last few stands in the roughing mill. If a loop tends to form sooner than described above then the pull is farther back in the roughing mill.

A repeater is an ideal observation post to let the operator know if he has pass or guide trouble farther back in the mill. For instance, if one strand suddenly tends to pull up against the repeater bulkhead it usually indicates that an under filled square back in the mill is tending to lie down going into the following oval.

Between continuous stands, if a square is under filled it would also tend to lie down going into the oval. In other words, it will enter the oval with the flat corner of the square in a vertical position. This tends to produce a wider oval, which, in turn, may buckle between the following two stands.

If trouble develops with an underfilled square in a given stand then the trouble should be traced back to preceding stands in the mill.

In a rod finishing train one should watch to be sure that the black line is always dead on top of all round sections. If the black line on the rod is either side of top center, then the preceding oval twist guide is over or under twisting and should be readjusted.

A rod finishing mill should be set so that when the back end goes through it will be sufficiently slack to rattle a bit and still not buckle.
In a multi-strand mill one can tell when one strand is pulling more than the others by either striking it with a hammer or by trying to lift it with a pinch bar and comparing it with the other strands.

In a conventional billet mill where a number of stands are geared together and driven from the same motor, it is impossible to tell where pull exists between any given pair of stands by watching the ammeter. A bad pull can easily be detected by watching the process bar as a pull tends to stretch the bar which causes the fine secondary scale to crack and flake off on the sides.

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