Analysis of cold rolling – a more accurate method

R. Chandramouli Associate Dean-Research SASTRA University, Thanjavur-613 401

NPTEL -	Mech	anical	Fngin	eering	- Fo	rming
141 1	1410011	uiiicui		CC11115		

Table of Contents

1.Quiz – Key:..... Error! Bookmark not defined.

1.Quiz- Key

1. What happens to rolling pressure as the reduction increases? Why?

As reduction increases, the roll pressure increases because the arc of contact and hence the projected length of contact also increases.

2. What is forward slip? Can it be negative? Explain.

Forward slip is the ratio of difference between exit velocity of strip and roll velocity to the roll velocity. It can be negative if strip velocity at exit is less than roll velocity. This is possible with high back tension.

3. What is the importance of friction in hot rolling?

In hot rolling, in order to increase the pull of strip inside the rolls, longitudinal grooves are machined on the rolls. This will increase the friction.

4. What happens to neutral section if back tension is applied on the strip?

Neutral section gets shifted forward.