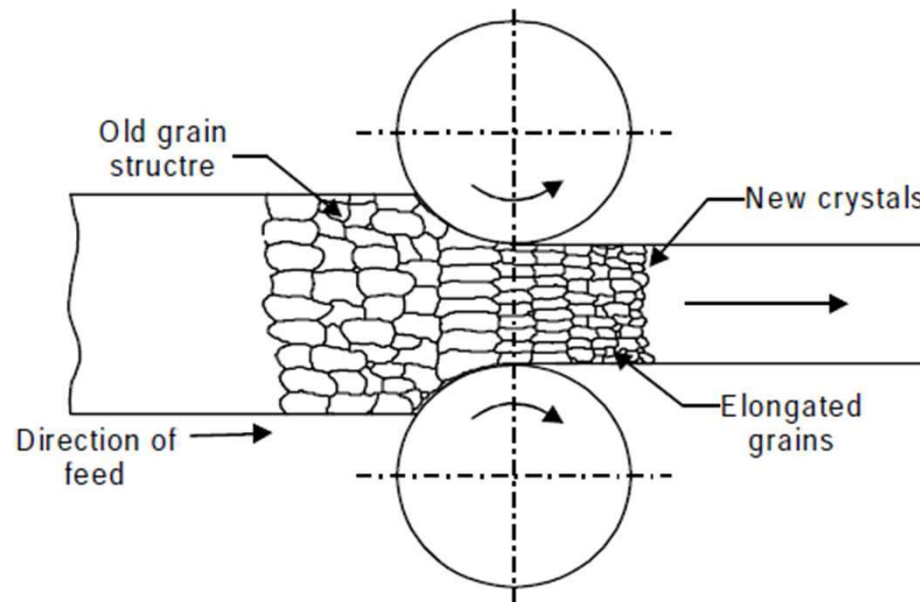


Rolling

It is one of the most widely used of all the metal working processes. The main objective of rolling is to convert larger sections such as ingots into smaller sections which can be used either directly in as rolled state or as stock for working through other processes.

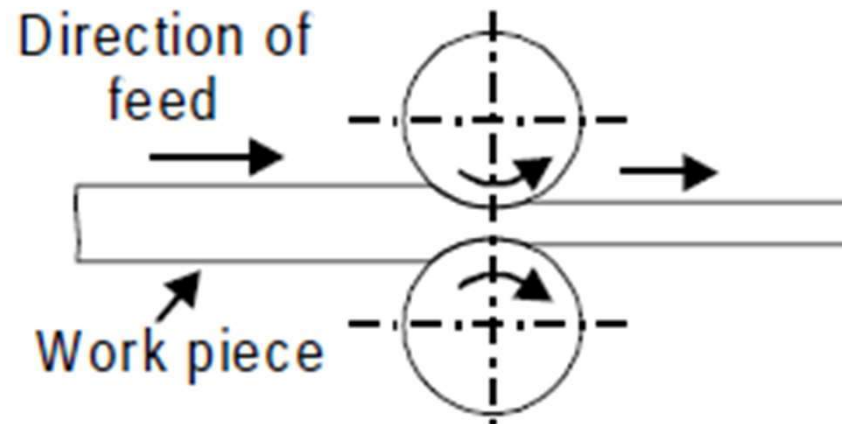


Types of Rolling stand

- Two-High Rolling Mills
- Three-High Rolling Mills
- Four-High Rolling Mill
- Cluster Mill

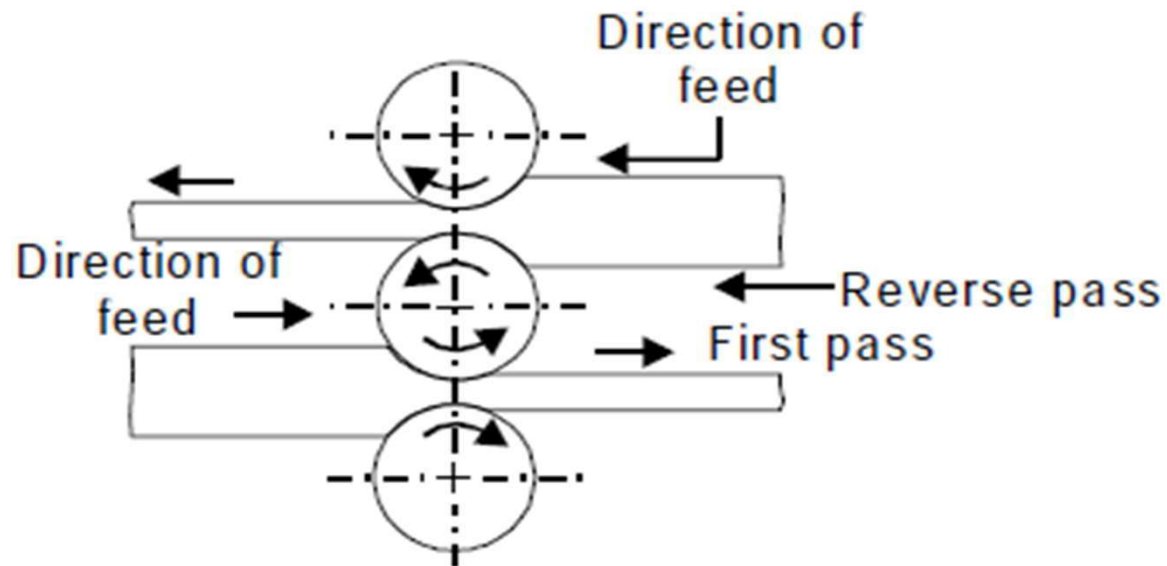
Two-High Rolling Mill

In two-high rolling mill the rolls are supported on bearings housed and rolls revolving at the same speed but in opposite direction. The space between the rolls can be adjusted by raising or lowering the upper roll.



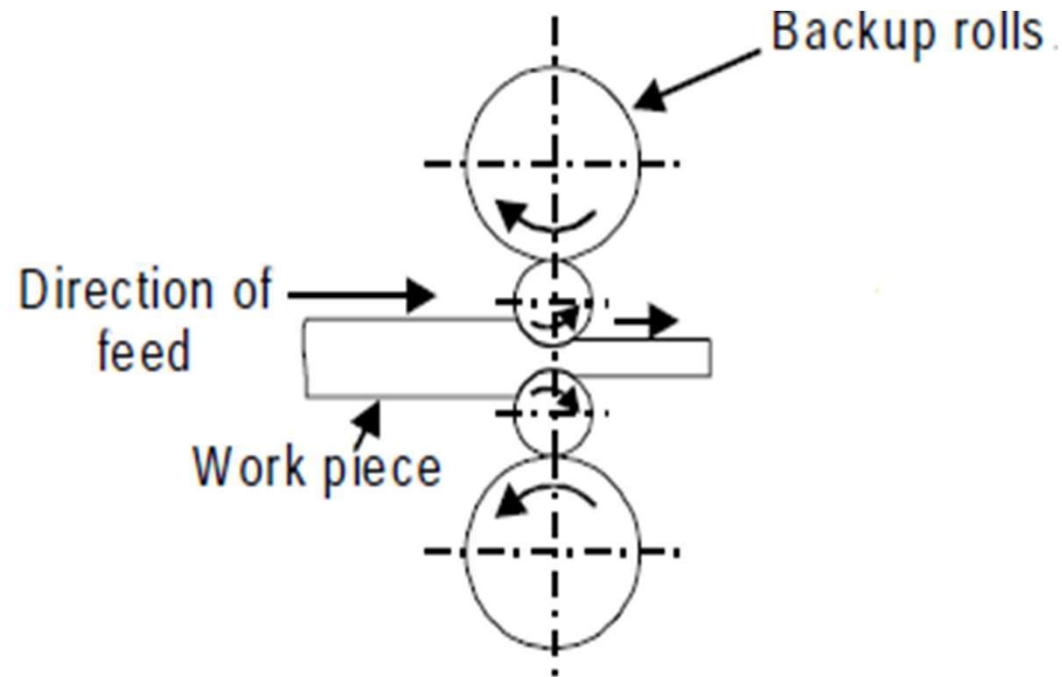
Three-High Rolling Mills

In three high rolling processes the directions of rotation of the upper and lower rolls are the same but the intermediate roll rotates in a direction opposite to both of these. This type of rolling mill is used for rolling of two continuous passes in a rolling sequence without reversing the drives.



Four-High Rolling Mill

In four high rolling it consists of four horizontal rolls, the two middle rolls are smaller in size than the top and bottom rolls. The smaller size rolls are known as working rolls which concentrate the total rolling pressure over the workpiece.



Cluster Mill

In cluster mill each of the two smaller working rolls are backed up by two or more of the larger back-up rolls. For rolling hard thin materials, it may be necessary to employ work rolls of very small diameter but of considerable length. In such cases adequate support of the working rolls can be obtained by using a cluster-mill.

