



MULTOTEC

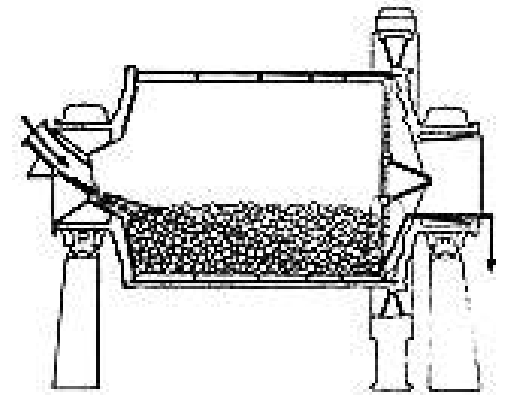
DISCHARGE SYSTEMS

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July 2018



Discharge Systems

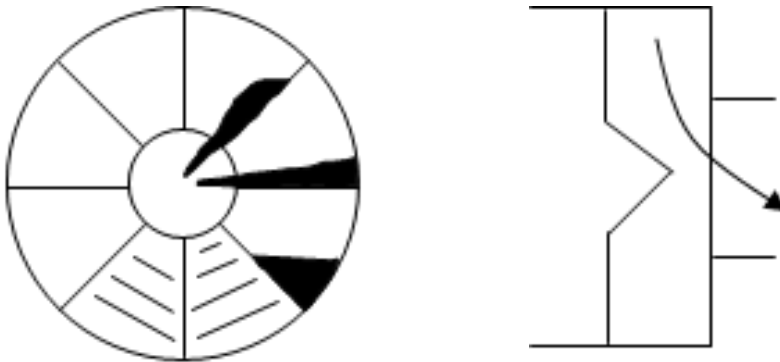
- Grate Discharge
- Semi-overflow
- Overflow



Grate Discharge

Discharge Systems

- Grate Discharge
 - Function of grates is to retain charge & control top size
 - Tph is controlled by how fast can material be pumped out
 - Pulp can go 3 ways i.e.

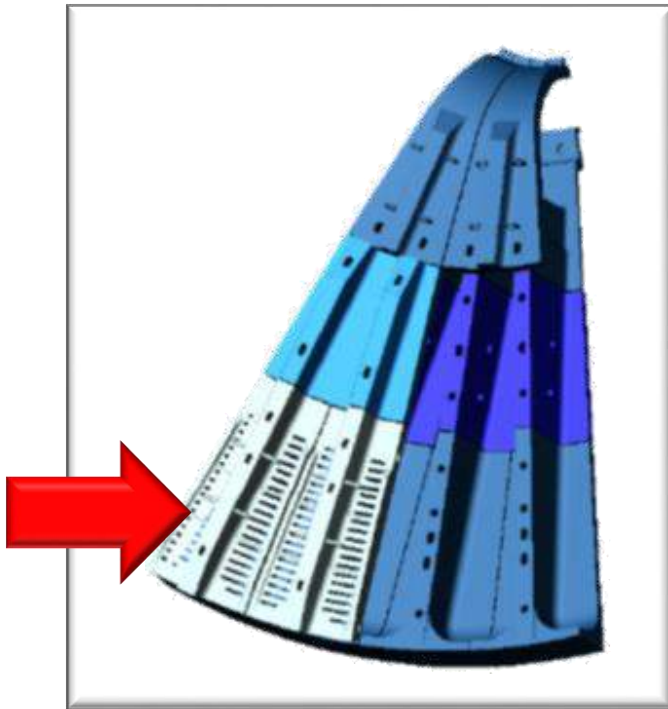


- Discharge rate is function of grate design, pulp lifter dimensions & shape, charge holdup and viscosity

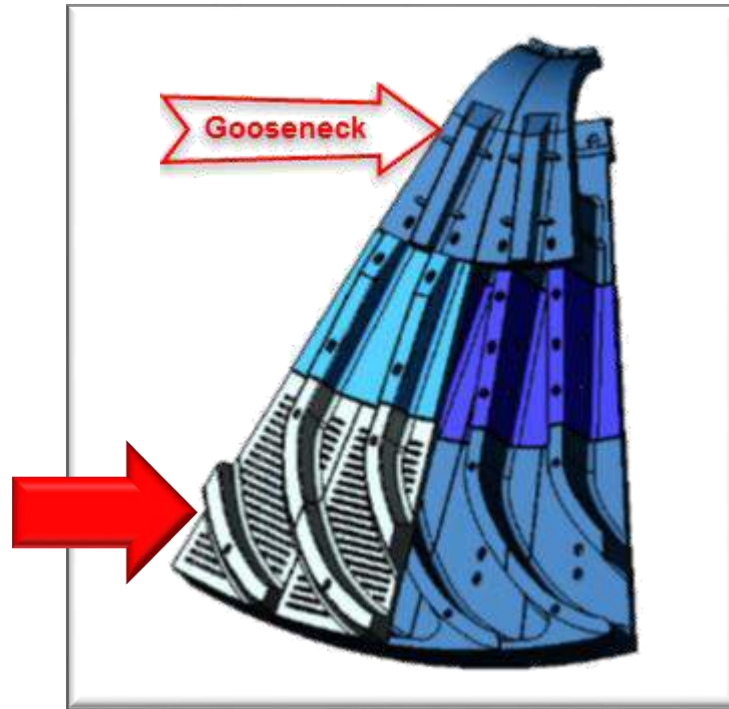


Discharge Systems

- Grate Discharge Types



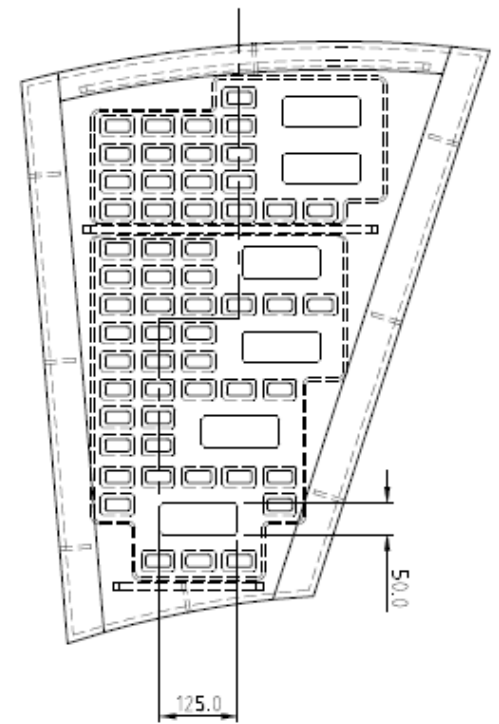
Radial



Spiral

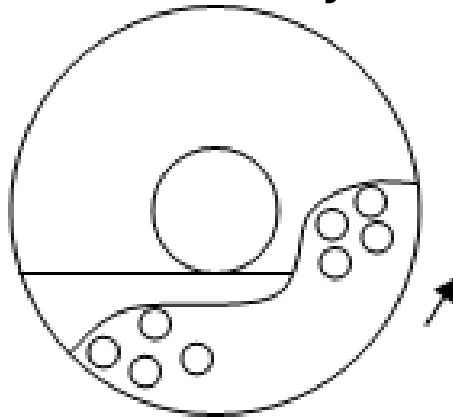
Discharge Systems

- Pebble Ports
 - Used to remove pebbles (critical size), crush & return to SAG mill or crush & return to ball mill
 - Increase in tph by ~ 10-15 %
 - Coarser product



Discharge Systems

- Overflow Discharge
 - Pulp can only exit via trunnion
 - Material level is controlled by trunnion diameter



- PSD of product from overflow mills is less steep than for grate discharge i.e. more fines and more coarse particles
- Up to 200-300 % of void filling has been observed (100 % filling all voids in charge are filled)

