

Tab. 1 - Angles of surcharge, repose, and material fluency

Fluency

very high

high

medium

low

Profile

on a flat belt

Angle of surcharge β

5°



10°



20°



25°



30°



β



Angle of repose

0-19°

20-29°

30-34°

35-39°

40° and more

Others

Characteristics of materials

Uniform dimensions, round particles, very small size.

Very humid or very dry such as dry sand, silica, cement and wet limestone dust etc.

Partly rounded particles, dry and smooth.

Average weight as for example cereal, grain and beans.

Irregular material, granular particles of average weight as for example anthracite coal, clay etc.

General everyday material as for example bituminous coal and the majority of minerals.

Irregular viscous fibrous material which tends to get worse in handling, as for example wood shavings, sugar cane by product, foundry

Here may be included materials with a variety of characteristics as indicated in the following *Tab.2*.