

Penanganan Bahan Padat

S1 Teknik Kimia FT UNS

1. Pendahuluan:

Beberapa Proses Industri Kimia dengan bahan padat.

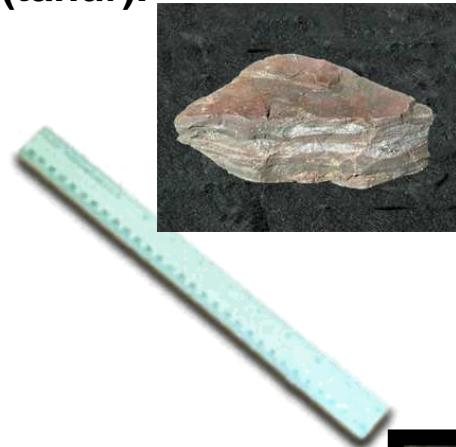
Sperisa Distantina

Steel Industry

Bijih Taconite : LOW grade mixture of Silica and Magnetite Fe_2O_4 .

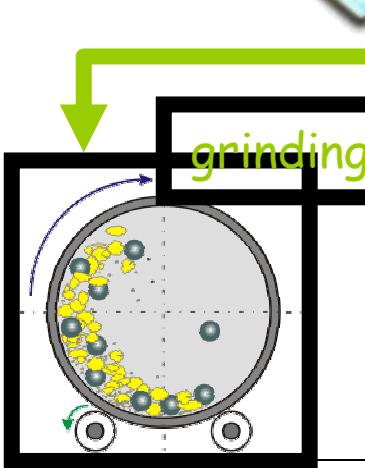
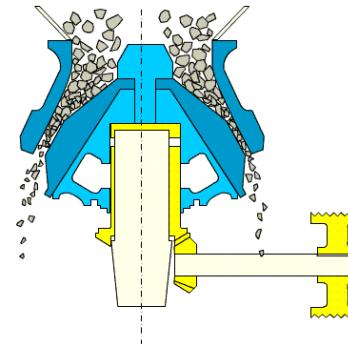
Hematite Ore Fe_2O_3 = bahan baku baja.

Dibutuhkan proses pengolahan biji Taconite menjadi hematite sebagai umpan blast furnace (tanur).

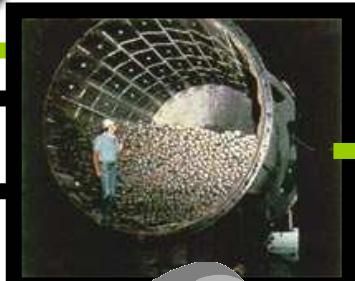


Crushing

<http://www.aggdesign.com/Cone-Crusher-info.htm>



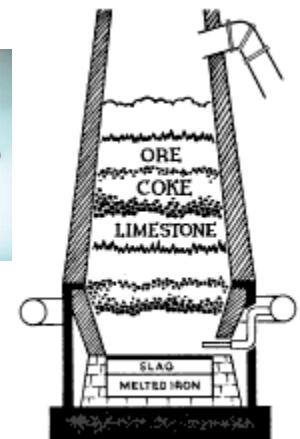
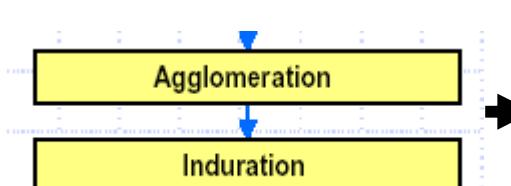
grinding



At grain size
Magnetite can
Be separated



Product too
small and wrong
chemical composition
so agglomerated
and indurated
 $\text{Fe}_2\text{O}_4 \rightarrow \text{Fe}_2\text{O}_3$



Product can be shipped
and used Directly in BF

Penyiapan batubara dr >10 mm menjadi ukuran bahan bakar.

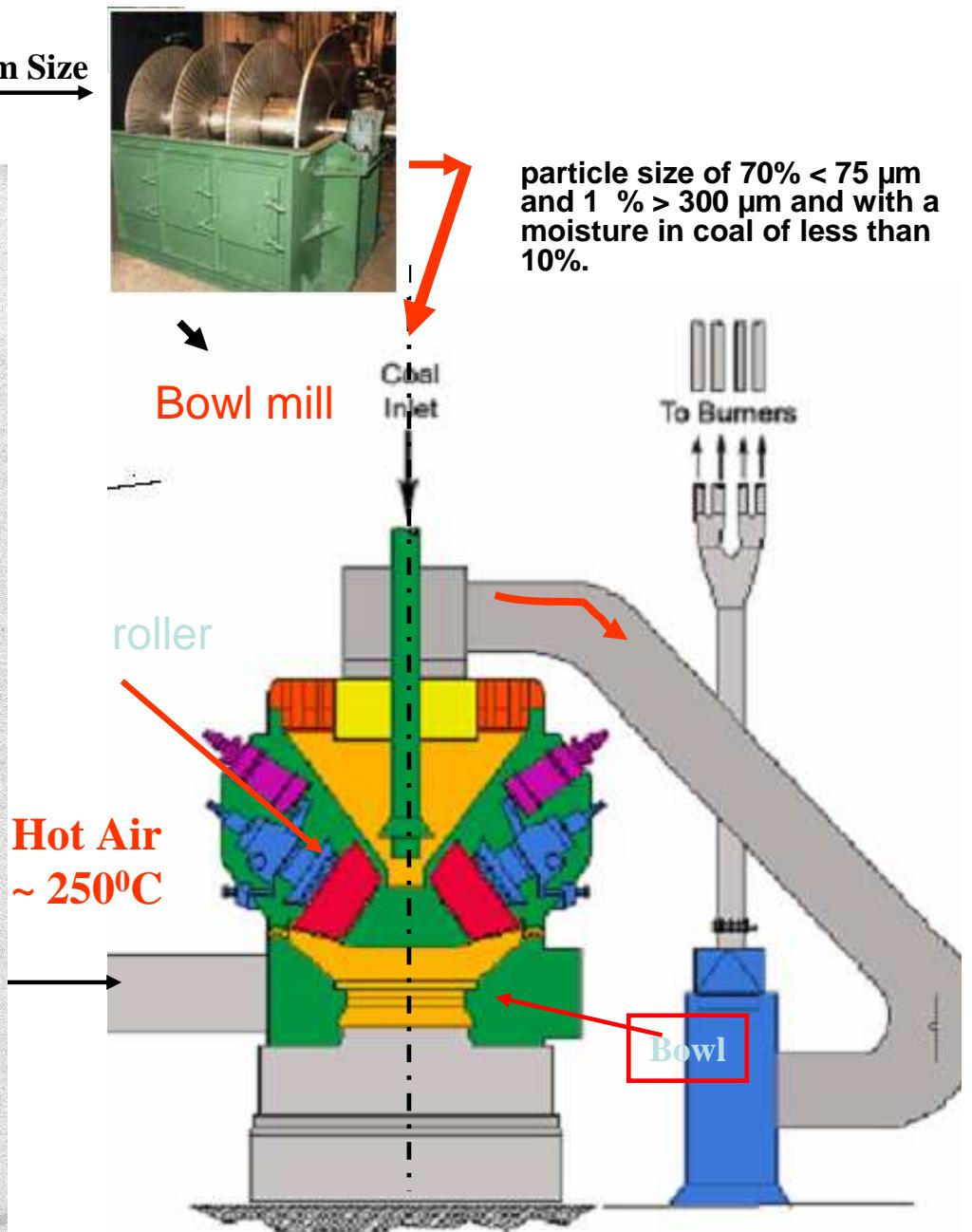
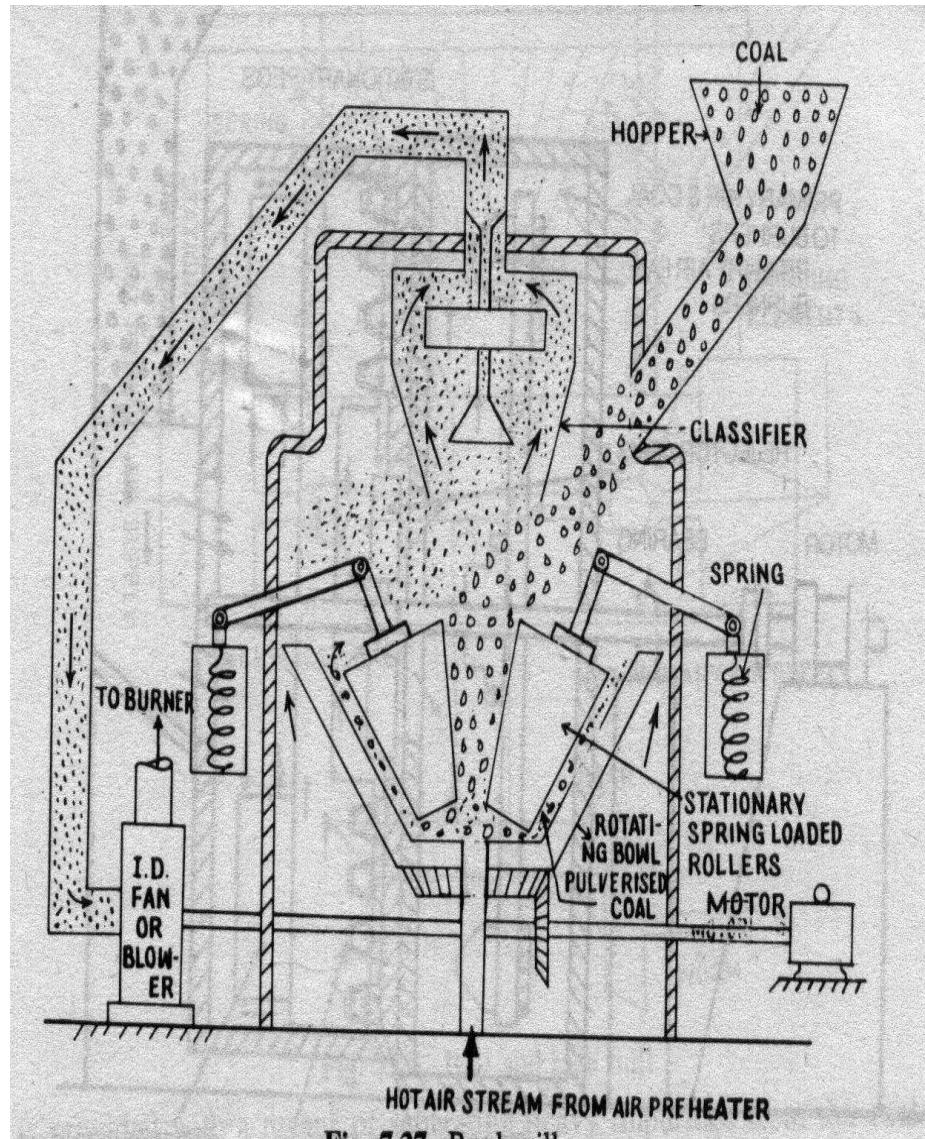
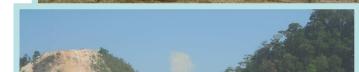


DIAGRAM ALIR PENAMBANGAN BATU KAPUR

DRILLING - BLASTING

RIPPING - DOZING



LOADING



HAULING



CRUSHING

LOADING



UNLOADING

Cement plant

