Dwarf Fortress user modification
planned features

Mining derived materials, related processes and structures

Processes

Crushing
Grinding
Sieving (Size sorting)
Gravity separation (Density sorting)
Solvent extraction (Chemical processing)
Heat extraction or melting (Thermal processing)
Manual sorting (Dwarven labour sorting)

Refinement depth of raw materials

These types of processes could be classified as separation processes;
In which constituent parts of a resource are separated into two or more fractions,
when successfully separated, yield different components.
In the process of refining mining derived resources shrink in size,
so that e.g. a large crushed granite stone yields rocks that maybe variable in type.
This makes the size of the chunk of ore a factor in refinement depth.

Materials and reagents

By refining and separating raw mined resources the purity of the resource is increased and it's
size is decreased (Not without exceptions, though), yielding mineral nuggets, chemical
powders and the like. The refined raw materials then are used in other processes where
something else is created.

Melting and solvent extraction processes can also be used to combine refined products into
larger objects, thus being also a process of a different type. They can combine a separation
process with a concentration process.

E.g. (This example is probably inaccurate due to lack of understanding of the process)
Aqua regia is used as a solvent to extract platinum and gold from a specific type of ore.
This would as far as I understand produce a liquid containing platinum and gold as
sometype of compounds. In this sense small nuggets of gold can be concentrated into a
single pool of liquid. At the same time, the dissolution leaves dense metals like iridium
and osmium behind, therefore also separating these constiuents into smaller segments.