

## Solvent Extraction - procedures and steps involved in the process

by [Virendra Verma](#) on June 1st 2010 and filled under [Business \(General\)](#)

What is Solvent Extraction? Solvent Extraction, as the name suggests is a process to extract oil from oil bearing materials by means of a solvent. Generally, Hexane (a petroleum by-product) is used as the solvent. What are Solvent Extraction Plants? [Solvent Extraction Plants](#) are used to extract oil by using chemicals. These plants use cake as the raw material, which is obtained from the oil press section. An organic solvent is used to dissolve the cake's or seed's oil content after the process of dipping or spraying, which ensures that the oil content is in close contact with the feeding material. After this, the solvent is vaporized out and the oil is collected. In these plants, the vaporized solvent is recycled. There are many [Solvent Extraction Plants](#) manufacturers, who use the quality assured materials and latest technology in the fabrication process. Generally, these plants are designed especially for extracting oil directly from oilseeds that contain less than 20% oil such as Soybean after the process of flaking. Pre-pressed or fully pressed seed cake that contain over 20% oil such as cotton seed, palm kernel, sunflower, copra, Castor, peanuts, and others. Most of the edible oil manufacturers now-a-days use the horizontal extractors that operate on the principle of counter current, moving bed. It has varying height of bed and varying speed mechanism that allows absolute extraction by perfect penetration & percolation of the solvent. Procedures followed in the solvent extraction process: Dip oil-rich flake or pre-pressed cake into solvent

Dissolve vegetable oil into chemical solvent

Filter solid material

Evaporate oil mixed solvent to separate oil and solvent

Cool and recycle solvent

Further process oil and cake. The best attribute of the solvent extraction plant is that it offers simple change-over of the process materials. These plants also find usage in the extraction of various useful solvents in assorted industries. Salient features of the standard solvent extraction plants: Available in solid & liquid and liquid & liquid extraction systems

Uses various solvents polar or non polar or a combination of both

Versatility to process all types of seeds, bran or oil cakes For more information on solvent extraction plants, [oil expellers](#) , oil extraction process, oil refining machines, oil mill machinery, visit: <http://www.oilmillmachinerysuppliers.com>