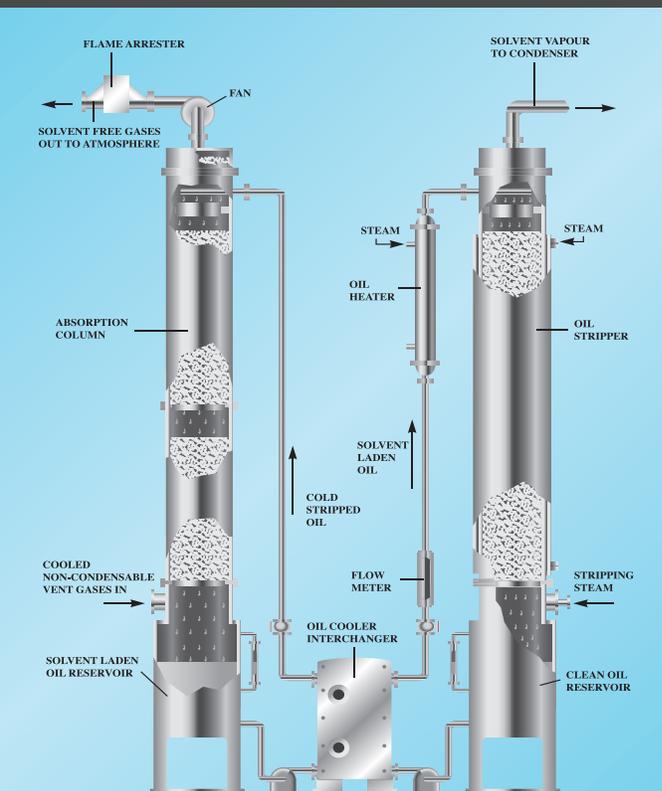




CPM Crown's Mineral Oil Absorption System



SAFEST AND MOST ECONOMICAL



Solvent air separation system

Various methods of solvent recovery, including refrigeration and absorption, have been used to recover solvent vapors from exhaust gases. The mineral oil absorption system has proven time and time again to be the safest and most economical system.

Since 1948, oilseed extraction plants fabricated by CPM's Crown have successfully used a mineral oil absorption system called the Crown Solvent-Air Separator. This system uses cold mineral oil to absorb solvent from vent gases. As an option for warm climates, chiller systems can be furnished.

The Solvent Air Separation System, also known as the Mineral Oil System (MOS), removes solvent from vent gasses before discharging out to the atmosphere. Noncondensable gases enter the mineral oil absorber at the bottom and rise through the tower packing. The noncondensable gases are flowing counter-currently to the cold mineral oil admitted at the top. The solvent is subsequently absorbed by the mineral oil, and desolventized gasses are drawn off through a demister at the top.

Air is drawn through a fan and vented through a flame arrester well below lower explosive limits. The solvent-laden mineral oil collected at the bottom of the absorption column is pumped through a heat exchanger, then to the Mineral Oil Heater, and finally to the top of the Mineral Oil Stripper. Here the solvent is removed from the mineral oil by live steam evaporation as the mineral oil trickles down through the tower packing. The solvent vapors drawn off at the top of the stripping column travel back to the evaporator condenser (or in some cases the vent condenser). Solvent-free mineral oil collected at the bottom of the mineral oil stripper is recycled through the Mineral Oil Interchanger/Cooler, then back to the absorption column where the cycle is repeated.

For ongoing innovation, Crown's technology and team are second to none.

CPM Crown's Global Innovation Center is a facility unlike any other. A fully functional 15,000 sq. ft. pilot plant, analytical lab and training facility, the GIC offers piloting capabilities from benchtop lab scale to multiple tons per day of continuous production, simulating real life and enabling customers to develop and test new product concepts in a confidential, controlled environment. The GIC has capabilities in preparation, extraction, desolventizing, drying, deodorizing, refining, fat splitting, renewable diesel and specialty extraction (including Hemp CBD Oil). Crown's technical expertise, R&D and full lifecycle process provide guidance and support at every step from feasibility, trials and custom processing to commercial-sized operations and aftermarket.



Feeding, Fueling and Building **a Better World.**



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