

LIQUID-LIQUID EXTRACTION

Make : **ETHER**

Model No : **EE-1624**

DESCRIPTION

The set-up consists of a glass column packed with Rasching rings. Continuous counter current contacts between the solvent and solute phases are made, which results into extract and raffinate streams. Flow meters (Rotameters) are used to note the flow of solvent & solute respectively. The continuous and dispersed phase streams are metered and derived from separate containers. The total set-up is housed in a well-designed rigid structure. The structure also supports tanks, piping, Rotameters, panel and other units.

EXPERIMENTATION

- To determine overall mass transfer co-efficient based on continuous & dispersed phase.
- To determine individual “Height of Transfer Unit” based on continuous & dispersed phase.
- To determine overall “Height of Transfer Unit” based on continuous & dispersed phase.

UTILITIES REQUIRED

- Compressed Air Supply at 2 Bar, 0.5 CFM.
- Water Supply
- Drain
- Required Chemicals & Laboratory Glassware.

TECHNICAL DETAILS

- Extraction Column : Material Borosilicate Glass, Dia 55 mm, Height 750 mm (approx).
- Packing : Rasching Rings, Material Borosilicate Glass
- Feed Tanks : Material Stainless Steel, Cap. 20 Ltrs. (2 Nos.)
- Extract & Raffinate Tanks : Material Stainless Steel, Cap 10 Ltrs
- Feed Circulation : By Compressed Air
- Pressure Regulator : 0-2 kg/cm².
- Pressure Gauge : Bourdon type, 0-2 kg/cm²
- Flow Measurement : Rotameters (One each for solvent & solute)
- Instruction Manual : An ENGLISH instruction manual will be provided along with the apparatus
- Arrangement is done for changing height of interface zone
- To be supplied with a Compressed Air Supply: 0.5 CMH at 1 bar
- All the water tank should be of SS 304 Grade with minimum 1.2 mm thickness.
- Equipment should be upgradable for Data Logging Facility in future.
- An ENGLISH instruction manual will be provided along with the apparatus.
- The whole set-up is well designed and arranged in a good quality painted structure

