

## MSU - 0,5 - RESEARCH MIXER-SETTLER EQUIPMENT

Equipment ideally suited for:

- Development of Reagents used in Solvent Extraction
- Evaluation of Process Flow Sheets
- Small Scale Production





### MSU-0,5 compactly designed laboratory mixer-settler equipment for evaluation of the chemistry in solvent extraction processes

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#### MEAB Product Info 01-2010

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# MEAB

### **MSU-0,5 MIXER-SETTLER RESEARCH EQUIPMENT**



The MSU-0,5 units are compactly designed, self-contained mixer-settler units, built in blocks, one for each function – extraction, scrubbing, stripping, washing etc. The blocks include builtin heavier and lighter liquid flow transfer. The mixer includes a top-mounted, variable speed motor with mixing impeller. The stirrer also acts as a pump for the heavier liquid. The settler is equipped with a picket fence for distribution of the mixture and an adjustable interface control-ler (a jack-leg). The heavier liquid can be recycled.

All together, the construction eliminates the need for excessive pipelines, bulky framework and unnecessary bench space. The equipment possesses the inherent flexibility needed for rapid evaluation of solvent extraction data. In addition, the experience shows that the mixersettlers are large enough to provide reliable chemical data and sufficient product solutions for further evaluation. At the same time, the units are small enough to minimize consumption of chemicals, maintenance and operation attendance.

Each MSU-0,5 unit is machined from solid material, thus avoiding cemented or welded joints. The dimensions (LxWxH) of one unit are 260x60x240 mm (incl. motor). The active mixer volume is 0,12 liter and the settler volume is 0,48 liter with a loading surface area of 0,006 m<sup>2</sup>. Recommended max. total flow (org+aq+recycle) is 10 l/h at normal settling velocity.

The mixer-settler units are available in PMMA (acrylic) or PVDF (floro carbon) plastics. A PMMA arrangemant aids visual inspection of operation, while PVDF is a very tough and durable plastic that resists severe chemical attack. The units in PVDF therefore possess an excellent chemical resistance to liquids, normally used in solvent extraction systems and are well suited for R&D work in the temperature range up to 80 degC.

