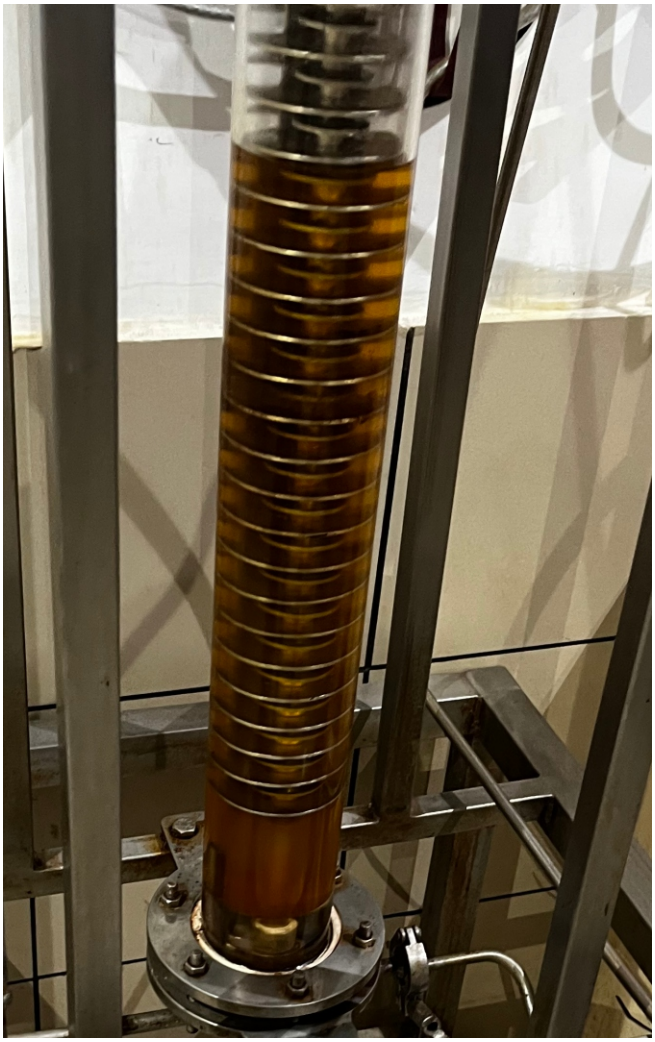
Liquid - Liquid Extraction Column

The cost efficient solution for multi-stage extraction processes

- Continuous product separation
- Cost efficient realisation of multi-stage processes
- Various design types to suit different applications



The more theoretical separation stages have to be realized the more an extraction column becomes economically interesting compared to mixer-settlers since increasing the number of theoretical separation stages just increases the height of the column. The 2 liquid phases pass the column by gravity in a counter current manner. In extraction columns the same 2 process steps as mixing and settling have to be realized per separation stage.

The mixing process in a column can be carried out in different ways differentiating the types of extraction columns.

The settling processes in columns is mostly less efficient as in mixer-settlers since back mixing and dispersion entrainment are less avoidable and more or less fixed by the selection of the mixing process and hence the type of extraction column.

Global Antico Process Systems offers different column types as:

- Pulsed Packed Extraction Columns
- Pulsed Sieve-Tray Extraction Columns
- Oscillating Disc Contactors
- Rotating Disc Contactors
- Stirred Cell Extraction Columns

When to use the extraction process

The liquid/liquid extraction process is favorable for separations as for:

- products having similar volatilities
- products forming azeotropes
- products which would require high energy input in distillation
- products being temperature sensitive
- non-volatile products as e.g. metal salts