

MULTI MICRO REACTOR UNITS

HIGH THROUGHPUT

Catalyst evaluation units for the refining and petrochemical industries have been a mainstay of Xytel's product line throughout its 25 year history. Now, to meet the fast-paced demand of researchers today, Xytel is pleased to present its Multi Micro Reactor Unit. The Multi Micro Reactor Unit is designed specifically for the quick screening analytical methods required to understand the performance of catalysts in the shortest possible time.

CONSISTENT

The Unit features up to 10 reactors operating in parallel; all at the same conditions:

- Gas and/or liquid feed flow rates
- Pressure
- Temperature

The Unit features a dedicated, PC based control system, specifically configured for your particular application. They are fully automated, yet modifiable.

FLEXIBILITY

The Multi Micro Reactor Units are intended for the catalytic study of various types of processes. The Units are designed for catalyst screening, evaluation, and kinetic studies. To date, these units have been considered for isomerization, reforming and oxidation.

Although designed to be as turnkey and compact as possible, the Multi Micro reactor Unit is designed to be adaptable should research plans take a different direction.

TYPICAL SYSTEM SPECS

Reactors : 3 cc catalyst charge
Reactor pressure: to 500 psig
Reactor temperature: to 650 °C
Reactor MOC: 316 stainless steel
Gas flow rate: 2 – 15 sccm
Liquid flow rate: 0.02 – 0.16 g/min

Feeds

Xytel uses a proprietary gas distribution modules to evenly regulate the flow to all of the reactors. The module is designed specifically for each application. When required for a wider range of applications, multiple pre-made, quick loading systems can be provided.

Reactors

To ensure isothermality, the reactors are positioned in a solid metal block which fits into a custom designed isothermal furnace. Multiple sets of the reactor / block assemblies can be provided. When the first set is being run, the operator can get the second set packed and ready for the next run.

Products

Handling of the reactor effluent depends on the application. All have automatic pressure control. Xytel has designs for the following:

- Gas product: sent to GC.
- Gas-liquid product: liquid vaporized and composite sent to GC.
- Gas-liquid product: gas separated, passes through a sampling valve which directs the reaction stream to the on-line GC.

XYTEL CORPORATION
1001 Cambridge Drive
Elk Grove Village, Illinois 60007 USA
847-357-8700 / FAX: 847-357-8787
e-mail: sales@xytelcorp.com