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CATalyst Screening Products COMPARISON TABLE

| |  CAT 7 CAT 18 CAT 24 |  PolyCAT |  DigiCAT |  CAT 96 |
|---------------------------|--|--|--|---|
| Operating Method | Manual | Automatic | Manual or Semi-Automatic | Semi or Fully Automatic |
| Test Conditions | Same temperature & pressure for each sample vial | Separate temperature and pressure for each reactor | Same temperature but individual pressure for each reactor | Same temperature & pressure for each sample vial |
| No. Of Samples | Parallel: 7, 18 or 24 | Parallel: 4 / 8 individually controlled reactors | 1 to 3 (depending on size) | Parallel: up to 96 |
| Pressure | 100 bar | 200 bar | 200 bar | 35 bar |
| Temperature | 250 °C | 250 °C | 300 °C | 200 °C |
| Reactor Volumes | CAT7 (7 x 10 ml vials) CAT18 (18 x 2 ml vials) CAT24 (24 x 2 ml vials) | 16 ml - 120 ml reactors | 16 ml to 300 ml reactors or CAT 7, CAT 18, CAT 24 | 96 x 1 ml vials |
| Stirring Methods | Hotplate (not supplied) | Built-in | Hotplate (included) | Built-in |
| Stirrer Type | Flea | Flea, *suspended or overhead | Flea, *suspended or overhead | Flea |
| Device Description | <p>A single pressure vessel which allows the use of vials with a typical volume of 2 to 10 ml.</p> <p>Simple and inexpensive system for rapid screening.</p> | <p>4 or 8 totally separate reactors allowing the effect of temperatures & pressures to be determined.</p> <p>Computer controlled system for process development and catalyst screening</p> | <p>Based around a digital stirrer/hotplate on which 1 to 3 small reactors can be placed.</p> <p>CAT 7, CAT 18, CAT 24 can also be used.</p> <p>Simple but flexible platform for catalyst screening with reactors or CAT-BLOCKS</p> | <p>A custom chamber designed to take standard Zinsser blocks with magnetic stirring</p> <p>Much higher throughput than the CAT 7, CAT 18 or CAT 24 - but otherwise similar in principle</p> |

* "Suspended" stirring uses conventional mechanical impellers without overhead motors, suited to low viscosity liquids