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# High-Pressure Reactors

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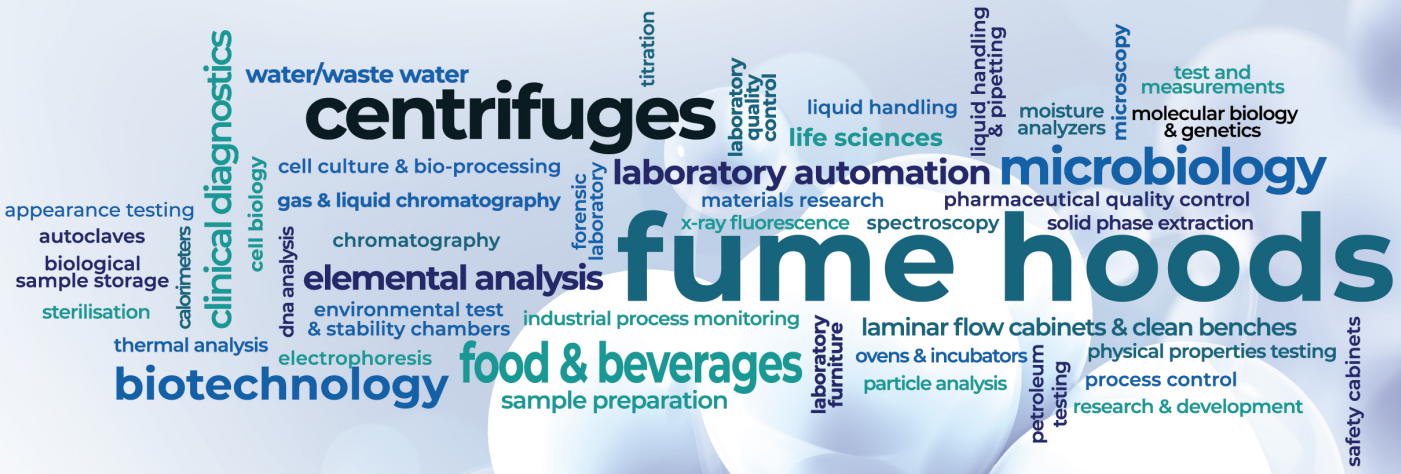
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Mini Scale Pressure Reactor IPR-1000 Series reactors permit research and produced homogenous concentrated reaction mass. The concentration reaction mass builds the basis for reliable and reproducible experiment results. Build-in stainless steel SUS 316L and sophisticated Hastelloy with a total of 5 to 6 connection options are provided in the lid including an immersion tube for temperature probes, rupture disc of metal for the safe limitation of maximum pressure, pressure display, and vent valve, and gas sampling valve or liquid sampling point is available as optional. The system can accommodate 6 different capacities of reactors as standard 30 ml, 47 ml, 45 ml, 68 ml, 170 ml, and 190 ml.

- Suitable for valuable reagents
- O-seal ring made of PTFE insert or completely made of SUS 316LTl or Hastelloy
- Heating and stirring by laboratory hot-plate with integrated magnetic stirrer
- Provide high-pressure range up to 200 bar along with high temperature 250 to 300 °C
- The reactor accommodate different capacities ranging from 30 ml 47 ml, 45 ml, 68 ml, 170 ml, and 190 ml
- Build-I special design of magnetic clutch to prevent leakage of fluid with low maintenance
- Provide maximum yield with zero impurities
- Design with excellent corrosion and stress resistance, providing high stability
- The reactor designs with strong and robust construction ensuring high consistency and stability
- Note: When using PTFE inserts the maximum allowable temperature is 230℃ and The number of free ports can be enlarged by the use of T-connections

| Model | IPR-1025 SUS316Ti or HC | IPR-1025 SUS316Ti + PTFE | IPR-1040 SUS316Ti or HC | IPR-1040 SUS316Ti + PTFE | IPR-1100 SUS316Ti or HC | IPR-1100 SUS316Ti + PTFE |
|---|---|---|---|---|---|---|
| Material | SUS316Ti or HC | SUS316Ti + PTFE | SUS316Ti or HC | SUS316Ti + PTFE | SUS316Ti or HC | SUS316Ti + PTFE |
| Reactor Volume | 30 ml | 47 ml | 45 ml | 68 ml | 170 ml | 190 ml |
| Temperature Range | 300? | 250? | 300? | 250? | 300? | 250? |
| Pressure Range | 200 bar | | | | | |
| No. of Tube Connection | 1/8" Tube Connection | | | | 8 mm | |
| Ports (total) | 6 | 6 | 6 | 6 | 5 | 5 |
| Ports (free) | 2 | 2 | 2 | 2 | 1 | 1 |
| Stirring | Magnetic stirrer | | | | | |
| Reactor Dimension | 25x62 mm | 27x83 mm | 24x99.6 mm | 29x104 mm | 42x126 mm | 44x127,7 mm |
| Reactor Weight | 0.6 kg | | 0.7 kg | | 1.8 kg | |
| TFMTM-PTFE Insert Volume | - | 29 ml* | - | 45 ml* | - | 95 ml* |
| TFMTM-PTFE Insert Dimension | - | 22x77 mm | - | 24x101 mm | - | 32x121 mm |
| Catalogue No. | 2300505-04 | 2300510-04 | 2300515-04 | 2300520-04 | 2300525-04 | 2300530-04 |

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