


BDL-550-MPS

The BDL-550 Modular Processor System "**Patent Pending**". Includes a 400 micron WVO pre-filter with pneumatic feedstock transfer pump, one 360 gallon cone bottom 304L stainless steel pre-conditioning vessel with internal 220VAC SS alloy heaters, 200 micron WVO intermediate filter, two 360 gallon cone bottom 304L stainless steel reaction vessel with internal 220VAC SS alloy heaters, and two 300 gallon carbon steel holding/storage tanks with four integrated Amberlite dry wash cells, 5 micron final filter and maintenance access covers w/gasket, 1 micron polishing filter and maintenance access covers w/gasket 80 gallon HDPE methyl/oxide mixing tank all mounted and piped in a 8 ft X 20 ft steel HC container complete with lighting, air compressor and locking doors. Each MPS comes with an installed pneumatic methanol transfer pump, two magnetic drive 110VAC methyl/oxide injection pumps, one 220VAC/TEFC oil transfer pump, three 220VAC/TEFC mixing pumps, three 220VAC/TEFC glycerin removal pumps, two 220VAC/TEFC dry wash pumps, one 220VAC/TEFC high speed methoxide prop mixer with stainless steel shaft and two SS 3-blade props, two 220VAC/TEFC fuel transfer pumps, 220VAC SS alloy flash separator/heater, water chiller cooled methanol recovery condenser, visual level indication gage's, welded carbon steel piping, solid state low liquid level controls, optical flow switch's, optical level control switch's, NEMA 4/12 control panel, liquid tight flexible conduit, spring loaded 1.5 psig vacuum breakers, spring loaded 1.5 psig vent valves, 484 lb Amberlyte charge, removable man-way cover for routine maintenance and cleaning of reactor, three horse power air compressor and step-by-step directions for use. The reactor and pre-conditioning vessels are insulated with 1/4" high density ceramic fiber insulation and wrapped with a hammered finish aluminum cover. The unit NEMA 4/12 control panel features five digital temperature controllers with illuminated oil-tight push buttons for each process stage.

- **Dimensions:** 240"w x 96"d x 114"h
- **Weight:** aprox 9600 Lbs. (empty)
- **Capacity:** 550 gallons @ 8 hrs
- **Electrical:** 110/220 VAC 1 PH 60HZ 80Amp Circuit

The BDL-550 Modular Processing system does not include feed-stock storage tanks, methanol storage tanks, glycerin by-product storage tanks or finished fuel storage tanks; however flanged inlet and outlet connections are provided in recessed access panels. Optional diesel powered generator to make package stand alone can be ordered and factory installed.

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| 1 - Feedstock Pump | 8 - Dry wash cells | 15 - Transfer pump | 22 - Finished fuel tank |
| 2 - Prefilters | 9 - Flash separator | 16 - Transfer pump | 23 - Test station/bench |
| 3 - Chemical mixing tank | 10 - Methanol condenser | 17 - Recovered methanol pump | 24 - Air compressor |
| 4 - Methoxide mixing tank | 11 - Operator station | 18 - Cooling tank | 25 - Main elec panel |
| 5 - Pre-conditioning vessel | 12 - Dry wash pump | 19 - Chiller | 26 - Chemical/methoxide pumps |
| 6 - Stage one reactor | 13 - Process pumps | 20 - Final fuel transfer pump | 27 - Methanol pump |
| 7 - Stage two reactor | 14 - Final polish cell | 21 - Chilled water pump | |

