

Petroleum Pump Calculation Sheet Instructions

Page 1 – Write in the distributor and the job name at the top. List as many of the product details that are known (sp. gravity, viscosity, vapor pressure). The flow rate desired must be specified. Indicate the operation of the pump (unloading, loading, fueling, or transfer). Indicate the type of pipe material being used (steel, PVC, fiberglass). List all straight piping lengths, pipe fittings, and valves located on the suction side of the pump on the lower left side of the page. List the sizes and quantities of each. If strainers, hoses, or other equipment is used on the suction side of the pump, please show them on the lower right side of the page. On line (S2), indicate if the pump is on a suction lift or if there is positive suction head and show the height of the lift or how much suction head there is on this line.

Page 2 – NPSH Calculation can be done here if needed. To determine system losses on the discharge side of the pump, list all straight piping lengths, pipe fittings, and valves on the lower left side of the page. Give the sizes and quantities of each. If a strainer, air eliminator, meter, etc. is present on the discharge side of the pump, please show them on the lower right side of the form. On line (D2), write in the static discharge head which is the high point in the system. Some examples would be the high point of a top loading arm assembly or the maximum fill level of an above ground storage tank.

Page 3 – This is filled in by the individual doing the system calculations. If you are having your total dynamic suction and discharge heads calculated by the factory, then leave this page blank. If you do this page your own, it is self explanatory.

Page 4 – This page is where you can sketch out the system. A sketch or drawing is always helpful and goes a long way to provide a better understanding of the application. If there are drawings available that were done by another party, those can be included when the calculation sheets are returned to Gorman-Rupp.

Note:

A petroleum pump calculation sheet is required for each operation the pump is expected to perform. If there are multiple pumps, a petroleum pump calculation sheet is required for each pump.