Comparison: Vacuum-Assisted Diesel Dewatering Pump vs Piston Wellpoint Dewatering Pump

Dewatering pump vacuum assisted Diesel Driven	**Piston Dewatering Pump DWP-400 Diesel Driven**
– Requires constant operator monitoring (risk of overheating during “dry run”).	+ Designed for extended dry-run operation, enabling autonomous operation for up to one week without an on-site operator. Pulsating flow (~70 cycles/min) helps keep wellpoint screens clear in sandy soils and reduces clogging.
– Fuel consumption (0.8–1.3 gallons per hour).Requires a high-power engine.	+ Lower fuel consumption (0.18–0.26 gallons per hour). Fuel savings of up to 500 gallons per month, achieved by the pumpend design.
– High maintenance cost.	+ No fast-wearing parts, simple and low-cost maintenance.
– Hydraulic performance depends on the pump performance curve (the higher the head, the lower the flow rate, and vice versa).	+ Discharge heads up to 65 ft regardless of flow rate, with efficiencyrating up to 90%.
– Suction lift up to 26 feet.	+ Suction lift up to 31 feet.
+ Open excavation dewatering, emergency response, wellpoint systems,and irrigation. Handles solids up to 3".	– For wellpoint dewatering only. Not suitable for open dewatering, as it may damage the piston assembly and cylinder liner.