FASTER ▪ QUIETER ▪ SMARTER

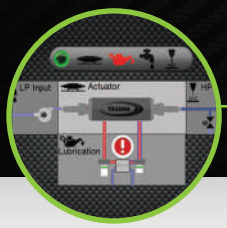
QUANTUM NXT™

ELECTRIC SERVO PUMP

THE SMARTEST AND MOST EFFICIENT PUMP ON THE MARKET

CYLINDER
Change threaded cylinders in under 10 min for reduced downtime and fast maintenance

SERVO TECHNOLOGY
Reduces dead-head pressure spikes plus prolongates life of high pressure components



HMI
Advanced Diagnostics System diagnoses maintenance issues before they occur, and advises on solutions

WORK BENCH
HDPE work bench resists chipping, scratching and will not damage or dent components during maintenance

TOOL KIT
Easy access spare parts and maintenance tools

FILTERS
Automatic lubrication system with filtration and cooling

TECHNI Waterjet™
A GMM Group Company

WWW.TECHNIWATERJET.COM

QUANTUM NXT™ G4

The TECHNI Waterjet™ Quantum NXT™ (Electric Servo Pump) incorporates core "direct servo" technology that was first applied by NASA for the Space Shuttle Program by replacing old-fashioned hydraulic cylinders with new, highly compact, efficient, reliable and infinitely controllable Servo Linear Actuators. This same style actuator is used today in many high end machine tools and presses replacing inefficient hydraulic systems. Similarly, TECHNI Waterjet™ is the first water jet pump manufacturer to utilize "direct servo" technology in an ultrahigh pressure waterjet pump and has developed patented designs to integrate the core technology into the most efficient, reliable and controllable ultra-high pressure (UHP) waterjet cutting pump.

- **Most Efficient Waterjet Pump**
  Up to 60% more efficient than standard hydraulic intensifiers
- **Lowest Cooling Water Requirement**
  Up to 75% less cooling water than standard hydraulic intensifiers
- **Most Quiet**
  70dBA with almost silent operation
- **Smallest Footprint**
  Up to 50% less sq. ft. than an average hydraulic intensifier and lower profile and more ergonomic
- **Longest Life Fittings and Tubing**
  Due to the elimination of "dead head" pressure spikes
- **Easiest Maintenance**
  Easy access and improved visual diagnostics
- **Superior Design**
  Quick-change seal components for the fastest seal change in the industry
- **Smartest**
  Intelligent Diagnostic Control reduces maintenance and increases uptime
- **Environmentally Friendly**
  Significantly less consumption of water & power, and minimal oil usage compared to standard hydraulic intensifiers

SPECIFICATIONS	ESP30/55	ESP37/66
Max Output Pressure PSI (BAR)	55,000 (3790)	66,000 (4550)
Max Output Volume GPM (LPM)*	1.0 (3.8)	1.0 (3.8)
Physical Dimensions (L x W x H) (m)	73"(1.8) x 26" (0.66) x 50" (1.27)	73"(1.8) x 26" (0.66) x 50" (1.27)
Weight Lbs (Kg)	1390 (630)	1390 (630)
Max Noise Level	70 dBA	70 dBA
Power Requirements*	3 PH 380-480 VAC, 50-60 Hz, 60 Amp	3 PH 380-480 VAC, 50-60 Hz, 60 Amp
Cooling Water Requirement	1.6 GPM (6 LPM) @ 57°F (14°C)	1.6 GPM (6 LPM) @ 57°F (14°C)

* Due to constant endeavour to improve the machine, the specification may be changed without prior notice
* Output volume based on 480 vac electrical supply

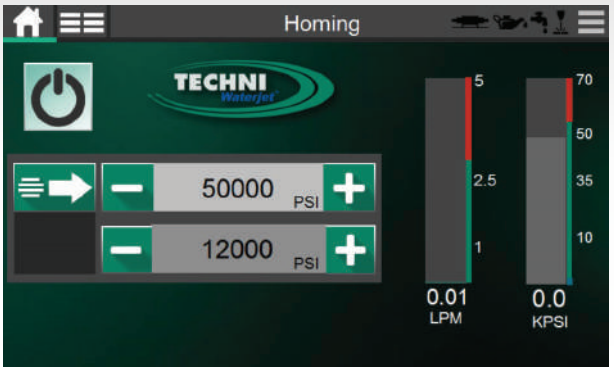
ADVANCED DIAGNOSTICS (option) - The most complete control system

Waterjet pumps are designed to operate at pressures high enough to cut through steel, so unless they are maintained correctly, they have the power to self-destruct. This is because once leaks develop, the water is at such high pressure that it will erode away the very parts which are designed to contain the water.

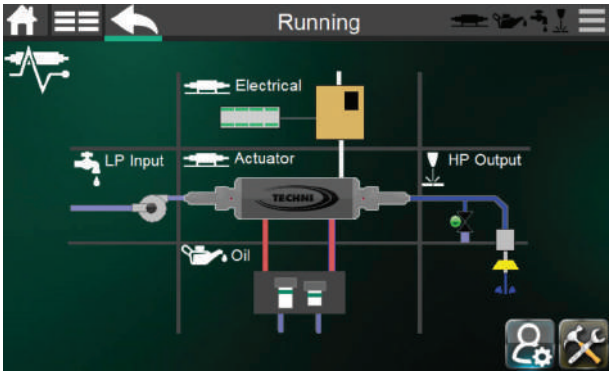
The combination of information from the Advanced Diagnostic sensors and the Servo Drive technology are fed into a computer, where 30 years of waterjet experience have been used to develop algorithm's to accurately predict which parts are close to failure.

Advanced Diagnostics System capabilities:

- To ensure the ESP continues to perform at its capacity without unplanned downtime due to maintenance issues.
- To protect the ESP against damage due to poor maintenance practices and unforeseen utility failures.
- To minimize the risk of ESP failure, even if maintenance routines are neglected.
- To protect the ESP if the incoming utilities fall below the minimum requirements to ensure safe operation.
- To help an operator maximise the output of the ESP without causing unnecessary maintenance downtime.
- To diagnose potential maintenance issues before the ESP fails, and then advise the operator how to perform the maintenance.



Advanced diagnostics overview and quick access on home page



Quick and easy to oversee the entire system from only one page