



# LIGHT SERIES

# POWER SERIES

# ULTIMATE SERIES

GREEN TECHNOLOGY

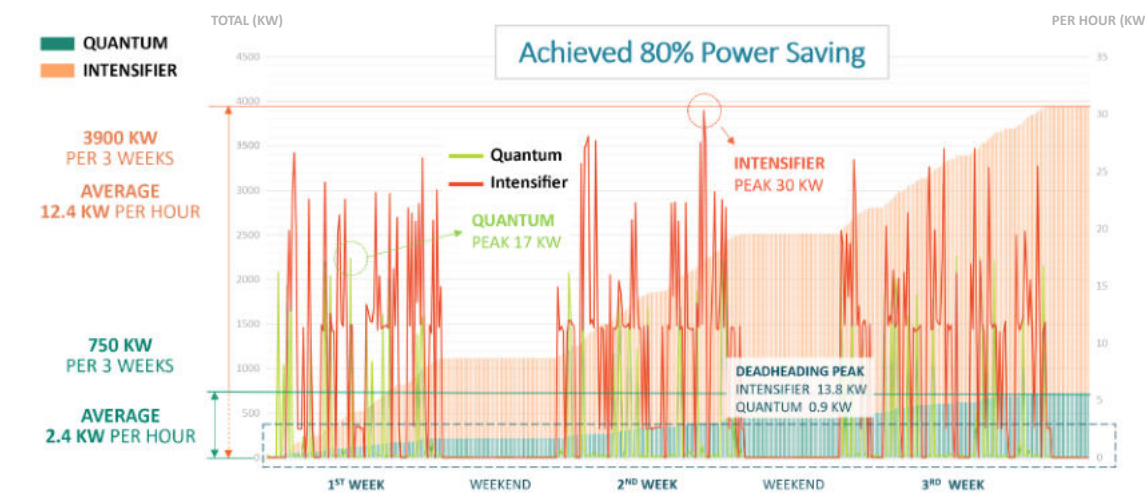
## FIRST STEP INTO THE QUANTUM WORLD

Quantum SPT 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 UHP waterjet pump.

Quantum Electric Servo Pump (ESP) takes minimal energy to generate pressure and flow. **It can hold pressure with less than 1 kWh of energy**, and when the cutting head opens, HP water supply is instantaneous.

The graph is a study conducted by a Tier 1 supplier in the automotive industry. The measurement was taken on two separate robot cells cutting the same part.

Quantum has shown a much lower power consumption, with a total of **750kW against 3900kW** consumed by the intensifier. The energy savings are significant.



## ALL-ROUNDER QUANTUM SOLUTION

Cut any type of material with ease and smooth edges. This pump series has proven its reliability and efficiency through several years of development and fine tuning. Like all Quantum ESPs, it offers low power consumption, low cooling water requirement, constant pressure, and nearly silent operations.

**High-tech sensors** covering the oil and water circuits are employed to warn the user of potentially harmful running conditions long before the pump stops with an alarm. 30+ years of waterjet experience have been used to develop algorithms to accurately predict which parts need attention. **Thanks to this predictive maintenance, downtime is minimized.**

Connecting through the built-in router, Quantum Engineers can monitor the activity of the pump (or multiple pumps) from remote and provide the necessary support, no matter where you are.

## QUANTUM CUSTOMER SERVICE

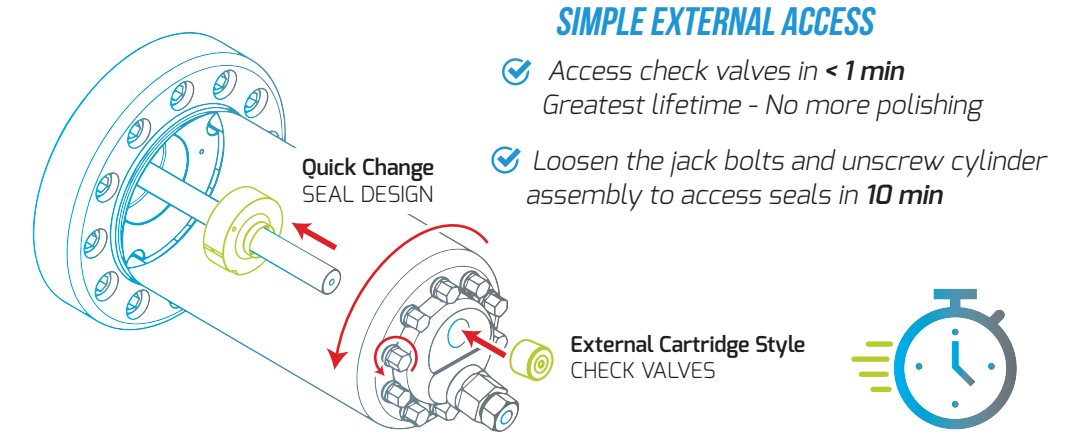


## NEXT-LEVEL QUANTUM EXPERIENCE

Be ready to cut any material that comes through your workshop with hyper-pressure! The latest addition to the Quantum family includes a redesigned metal frame to include all peripheral parts, such as water filters. Everything is spaced out within the frame to allow for easy access.

Thanks to **patentable cartridge check valve and long-lasting seal design**, the longevity of its components is still the same, despite the hyper-pressure that's able to generate. The Ultimate Series ESPs can reach the hyper-pressure while keeping the power consumption to a minimum. We brought all our advantages into the world of hyper-pressure to benefit our customers with increased profitability.

This pump series only require **60 Amp to produce 88,000 PSI pressure**, only using enough energy required to produce desired pressure and flow. The Ultimate Series ESPs use less of the World's limited resources than any other waterjet pump. It is currently the only one to fully meet today's criteria of sustainability.



### TECHNOLOGY & DESIGN BENEFITS

- > MOST EFFICIENT WATERJET PUMP
- > LOWEST COOLING WATER REQUIREMENT
- > LONGEST LIFE FITTINGS AND TUBING
- > EASIEST AND FASTEST MAINTENANCE
- > MOST QUIET
- > SMALLEST FOOTPRINT
- > SMARTEST HMI
- > MOST ENVIRONMENTALLY FRIENDLY

SPECIFICATIONS	VP 15/52	VP 22/60
Max Output Pressure PSI (BAR)	52,000 (3585)	60,000 (4100)
Max Output Volume GPM (LPM)	0.5 (1.9)	0.53 (2.0)
Cooling Water Requirement GPM (LPM) Temperature	1.0 (4) at 60°F (16°C)	1.0 (4) at 60°F (16°C)
Physical Dimensions L W H (Meter)	51" x 21" x 42" (1.3 x 0.5 x 1.1)	51" x 21" x 42" (1.3 x 0.5 x 1.1)
Max Noise Level	68 dB	68 dB
Power Requirements	30 Amp	40 Amp

### TECHNOLOGY & DESIGN BENEFITS

- > ALL LIGHT SERIES BENEFITS +
- > HIGH-CAPACITY OIL FILTERS
- > LARGER PLUNGERS
- > BOOSTER PUMP
- > BUILT-IN ROUTER
- > ADVANCED DIAGNOSTICS READY

SPECIFICATIONS	ESP 37/66	ESP 40/60
Max Output Pressure PSI (BAR)	66,000 (4500)	60,000 (4100)
Max Output Volume GPM (LPM)	1.0 (3.8)	1.1 (4.2)
Cooling Water Requirement GPM (LPM) Temperature	1.6 (6) at 54°F (12°C)	1.6 (6) at 54°F (12°C)
Physical Dimensions L W H (Meter)	73" x 26" x 50" (1.8 x 0.66 x 1.27)	73" x 26" x 50" (1.8 x 0.66 x 1.27)
Max Noise Level	70 dB	70 dB
Power Requirements	60 Amp	60 Amp

### TECHNOLOGY & DESIGN BENEFITS

- > ALL POWER SERIES BENEFITS +
- > EXTERNAL CARTRIDGE STYLE CHECK VALVE
- > QUICK CHANGE, LONG-LASTING SEAL DESIGN
- > HEAVY-DUTY FRAME
- > INTEGRATED LP WATER FILTERS
- > ADVANCED DIAGNOSTICS FEATURE

SPECIFICATIONS	UL 45/4100	UP 40/6000
Max Output Pressure PSI (BAR)	60,000 (4100)	88,000 (6000)
Max Output Volume GPM (LPM)	1.1 (4.2)	1.0 (3.0)
Cooling Water Requirement GPM (LPM) Temperature	1.6 (6) at 68°F (20°C)	1.6 (6) at 68°F (20°C)
Physical Dimensions L W H (Meter)	79" x 28" x 54" (2.0 x 0.7 x 1.37)	79" x 28" x 54" (2.0 x 0.7 x 1.37)
Max Noise Level	70 dB	70 dB
Power Requirements	60 Amp	60 Amp



## DUAL TRIPLE QUAD



## ULTIMATE PRODUCTION

SPECIFICATIONS	UP 80/6000	UP 120/6000	UP 160/6000
Max Output Pressure PSI (BAR)	88,000 (6000)	88,000 (6000)	88,000 (6000)
Max Output Volume GPM (LPM)	1.6 (6)	2.4 (9)	3.2 (12)
Cooling Water Requirement GPM (LPM) Temperature	3.2 (12) at 54°F (12°C)	4.8 (18) at 54°F (12°C)	6.4 (24) at 54°F (12°C)
Physical Dimensions L W H (Meter)	79" x 43" x 54" (2.0 x 1.0 x 1.37)	79" x 59" x 54" (2.0 x 1.5 x 1.37)	79" x 73" x 53" (2.0 x 1.87 x 1.35)
Max Noise Level	73 dB	75 dB	76 dB
Power Requirements	125 Amp	140 Amp	180 Amp

4100 BAR versions available  
Power Series versions available



## QUANTUM SERVO PUMPING TECHNOLOGY

### LIGHT SERIES



 60,000 PSI


### POWER SERIES



 66,000 PSI

### ULTIMATE SERIES



 88,000 PSI

GREEN TECHNOLOGY FOR THE WATERJET INDUSTRY

# GREEN TECHNOLOGY For The WATERJET INDUSTRY

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