



TOWLE WHITNEY

Water Booster Pump Systems

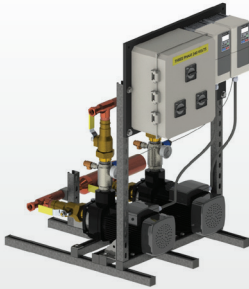
VALUE ENGINEERED SOLUTIONS

WATER BOOSTER PUMPS



Proudly Serving the Water Booster
Pump Industry for 25+ Years

MULTIPLIX BOOSTER SYSTEMS



TW2018T

with optional Single Point Connection



TW3018T

with optional Single Point Connection



TW2018V

with optional Single Point Connection

ALWAYS VALUE ENGINEERED

Reduced Horsepower using IAPMO Water Demand Calculator

- Design each system case-by-case
- Lower capital expenditure
- Lower maintenance cost
- Lower energy costs

Top Shelf Components

- Pumps: Gould, Grundfos, Walrus
- VFD: Yaskawa

Constant Pressure

- All systems are VFD controlled and designed to maintain the programmed set pressure

Short Lead Times

- Extensive inventory allows two week turn-around on 80% of our systems

Three Year Warranty

- All systems are backed with a 3 year warranty



YASKAWA VFD

- Programmable with 100+ parameters
- Logic Ladder intelligence
- VF drives are wired together to communicate (network)
- Controls the pump(s) operation
 - LEAD pump ALTERNATES every 24 hours (field adjustable)
 - LAG pump(s) remain in standby, and ramp up to meet demand

ELIMINATES THE NEED FOR:

- UL508 Panel (not required with individual disconnects)
- PLC Controller (not required with networked Yaskawa VFD's)

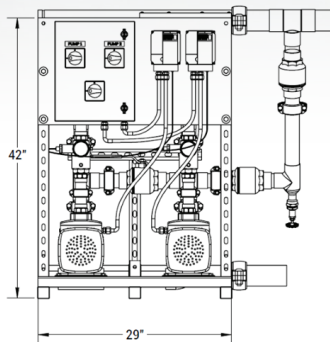
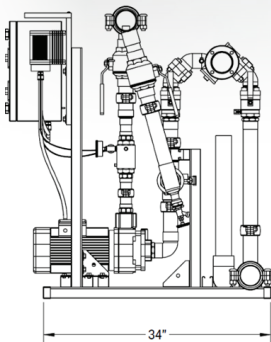
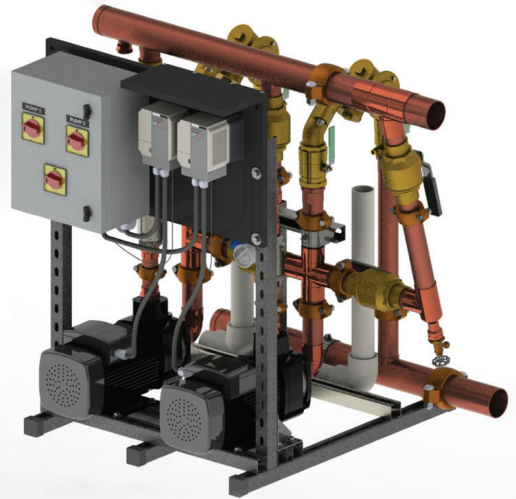


SAVE SPACE, SAVE MATERIAL, SAVE TIME.

- Combines VFD controlled booster pump system, DWV, and RP backflow preventers
- Small diameter RP's replace oversized and expensive backflow preventer
- Mitigates biofilm that harbors legionellae
- Eliminates water shut-down for RP testing

OPTIONAL EQUIPMENT

- Pump bypass
- Strainer & Ball Valve
- NEMA-4X VFD
- Low Pressure Port
- Flood Control
- Meter TT & BV (NYC)
- Copper DWV (MA)
- Single Point Connection



Depth Varies from 34" to 45" | Duplex: 29" Wide | Triplex: 42" Wide

US. PAT. NO. 11,268,265

CONTRACTOR CASE STUDY

PROJECT:	West End Yards Portsmouth, NH
APARTMENTS:	134 Units (x2)
ESTIMATED PEAK USAGE:	65gpm
CONTRACTOR:	Oliver Mechanical

BACKGROUND

May 2021, Sean Sullivan, project manager with Oliver Mechanical, had visited our shop, where we introduced him to the GEN5 PLATFORM. Shortly thereafter, Sean approached Towle Whitney about a perfect opportunity for Oliver Mechanical to save time, and lots of money, on an installation. This is the perfect case study, as there are two identical buildings on the project: BUILDING A & BUILDING B.

BUILDING A

Sean had already built a huge duplex structure for 4" RP backflow preventers, including strainers, gate valves, and meters. And then Sean needed to install our 2Hp duplex booster pump. The estimated installed cost:

4" Backflow Preventer Rack ...	\$25,000
TW2018T Standard Booster ...	\$16,000
Booster Labor	\$5,000
Wasted Real-Estate (Space) ...	\$2,000
Total.....	\$48,000

BUILDING B

Sean decided to use a GEN5 Platform with integral 2" RP backflow preventers.

TW2975 GEN5 Platform	\$22,000
Booster Labor.....	\$5,000
Total.....	\$27,000

CONCLUSION

Very simply, Sean saved about \$21,000 and a lot of aggravation.

For more details, contact Sean Sullivan at Oliver Mechanical, 603-621-9063.



COMPACT DUPLEX HOTEL BOOSTER PUMP SYSTEMS

THE OVER/UNDER WAS DESIGNED FOR EXTREMELY TIGHT SPACES

Engineers have been specifying our VFD-controlled OVER/UNDER design for over 18 years. Not only saves space, but positioning is simplified, which reduces on-site labor.

PLUG & PLAY

With our systems all you have to do for installation is pipe and plug & you're ready to go.

SUPPORT

Before, during, and after the sale, we're here to help you and ensure efficiency.

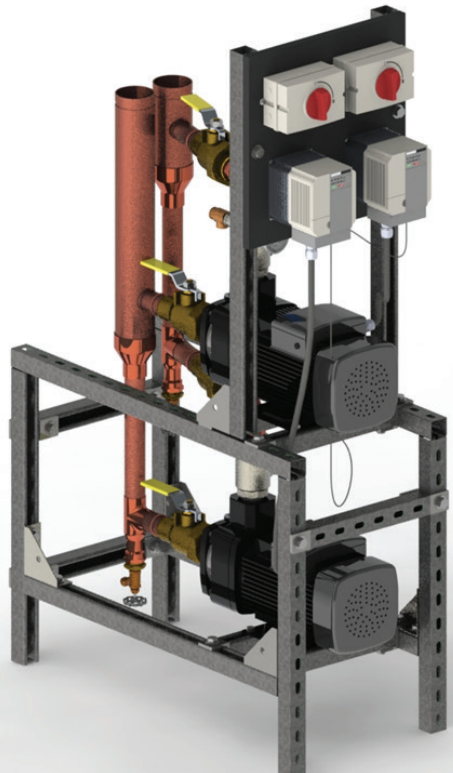
GREEN

VFDs are designed to provide variable speed control. They maintain the optimal speed required to maintain set pressure which enhances production and save energy.

QUIET

Because nobody wants to hear a noisy pump!

**SAVE
SPACE:**
16" X 34"
FOOTPRINT



THE WALL SERIES

EVEN MORE COMPACT

The TW2018W WALL SERIES booster pump system is designed for mechanical rooms with limited floor space, aiming to save space, labor, and materials. It can easily be hung on any wall, offering flexibility in installation. The system includes high-quality components for reliable performance.

SAVE LABOR, SAVE MATERIAL

Just Connect Manifolds and Incoming Power

WALL MOUNT OR FLOOR MOUNT

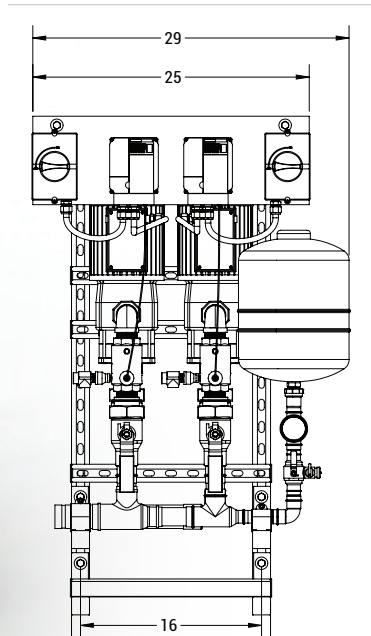
Easily fits in any mechanical room

SAVE SPACE

29" W x 20" D x 45" H

BIG PERFORMANCE IN A SMALL PACKAGE

Can be configured with up to 4 HP pumps



SIMPLEX WATER PRESSURE BOOSTER PUMPS

VARIABLE SPEED SYSTEMS FOR COMMERCIAL PROPERTIES AND HOMES

For homes or small businesses with low pressure (city or well water), our simplex pumps can be the best solution. These systems are equipped with a centrifugal pump regulated by a variable frequency drive that controls pump operation to maintain constant pressure regardless of varying demand or fluctuation in incoming pressure. With low city or well water pressure our line of simplex pumps can be a perfect fit.

- Variable Frequency Drive controlled pump
- Commercial Grade Equipment
- Residential & Commercial application
- Quiet, Compact & Powerful
- Prewired & Factory Tested
- Plug-and-Play Installation
- Energy efficient operation
- Adjustable Set Pressure



TW1018V VERTICAL



TW1000 LARGE HP



TW1000 SMALL HP

REDUCE HORSEPOWER

Engineers trust us to **VALUE ENGINEER** systems using IAPMO's Water Demand Calculator.

For example, compare the peak demands for the IPC and WDC for a 88 unit apartment building. For two full baths, a dishwasher, and a washing machine, the PEAK DEMAND is:

146 GPM IPC Fixture Count | **51 GPM** IAPMO Water Demand Calculator

PROJECT NAME: Total No. of Apts in the Building →
 Click for Drop-down Menu → Total Apts in this Calculation →

FIXTURE GROUPS		FIXTURE	ENTER TOTAL NUMBER OF FIXTURES	PROBABILITY OF USE (%)	ENTER FIXTURE FLOW RATE (GPM)	MAXIMUM RECOMMENDED FIXTURE FLOW RATE (GPM)
Bathroom Fixtures	1	Bathtub (no Shower)	0	0.39	5.5	5.5
	2	Bidet	0	0.55	2.0	2.0
	3	Combination Bath/Shower	176	1.44	5.5	5.5
	4	Faucet, Lavatory	176	1.12	1.5	1.5
	5	Shower, per head (no Bathtub)	0	0.96	2.0	2.0
	6	Water Closet, 1 28 GPF Gravity Tank	176	0.55	3.0	3.0
Kitchen Fixture	7	Dishwater	88	0.32	1.3	1.3
	8	Faucet, Kitchen Sink	88	1.12	2.2	2.2
Laundry Room Fixtures	9	Clothes Washer	88	1.36	3.5	3.5
	10	Faucet, Laundry	0	1.12	2.0	2.0
Bar/Prep Fixtures	11	Faucet, Bar Sink	0	1.12	1.5	1.5
Other Fixtures	12	Fixture 1	0	0.00	0.0	6.0
	13	Fixture 2	0	0.00	0.0	6.0
	14	Fixture 3	0	0.00	0.0	6.0

COMPUTED RESULTS FOR PEAK PERIOD CONDITIONS

Total No. of Fixtures in Calculation
n = 792

99TH PERCENTILE DEMAND FLOW
Q = 50.7 GPM

HUNTER NUMBER
H(n,p) = 7.9

STAGNATION PROBABILITY
Pr[Zero Demand] = 0%

↓ Select Units for Water Demand ↓

Cut the demand by 2/3, and cut the horsepower in half:

IPC Method: 5HP duplex | WDC Method: 2HP duplex



TOWLE-WHITNEY.COM
800-807-9827

A Veteran-Owned Company

SCAN TO VISIT OUR WEBSITE

