

Watercraft Decontamination Station (WDS)

Des Moines Lake Association

- Turnkey Industrial Grade Systems with Heavy Duty Capacity
- Propane Fired
 - Electrically heated tanks will require 3 phase service.
 - Equipment is more expensive and higher maintenance costs
- 3000 PSI and 4 GPM, capable of 140F
- 1 Phase Electrical at 40 amps or less
- Auto On with press of gun trigger
- Easy Winterization
- Durable Triplex Pump Belt Driven Made for High Temp Water
- Custom Control Auto Off Delay of 30 sec to 2 minutes for pump and boiler protection
- Custom On/Off button to mount on exterior of structure
- Decent Warranty and local support for repair or parts
- Adjustable Pressure & Adjustable Temp
- High temperature rated spray wands and hoses
- Ability for Multiple Spray Guns setup for different users/temps.pressures
- Hose Reels
- Undercarriage spraying accessory
- UL-1776 Certified, CSA cert, ISO 9001
- Electric Pump Motor for Lower Decibels
- Thermal Relief Valve
- IBC Totes for water Supply: 275 or 330 gallon daisy chained with low water sensor and custom shut off relay to machine
- Booster pump rated for at least 5 gpm and 30 PSI
- Highly rated amongst users (score 1 through 5 on spreadsheet based of complaints/praises)
- Minimal Interaction from volunteers (filling gas, filling water, etc)
- Flow activated unloader <- safer than other options
- PPE, Signs, User Guides
- Shed - 8x8 with lockable door

Pressure Washer Specifications from Authority Sources

DNR of MN

<https://files.dnr.state.mn.us/jobs/watercraft/decontamination-specs.pdf>

3000-3500 PSI and 4.5 GPM

U.S. Department of the Interior & The Army Corps of Engineers

https://ec8c3022-1480-4580-96c0-98958d49781f.filesusr.com/ugd/0e48c2_08f7971540914812b1d3799521a49578.pdf

3000 PSI and 4 GPM

Connecticut Department of Energy & Environmental Protection

<https://portal.ct.gov/-/media/DEEP/Boating/ZebraMusselDecontaminationpdf.pdf>

3000 PSI and 4GPM

Pacific States Marine Fisheries Commission & U.S. Fish and Wildlife Service Regions 1 and 6

<https://invasivemusselcollaborative.net/wp-content/uploads/2018/11/UMPS-III-7-14-2016.pdf>

3000 PSI and 5GPM

Adjustable up to 180F (helps maintain 140F for extended periods)

HydroBlaster 5/3000GHO-WDS

<https://www.hydroblaster.com/Specialty/WDS.htm>

3000 PSI and 5GPM

Steam Ability

Dealers

3810 West Broadway Ave

Robbinsdale, Mn 55422

<https://americanpressureinc.com/>

(763) 521-4442

Landa, Aaladin, Alkota

Impact Force

<https://www.hydrotek.us/is-more-pressure-always-better/>

<https://www.hydrotek.us/frequently-asked-pressure-washer-questions/>

<https://www.pumptec.com/blog/cleaning-impact-of-pressure-washer-nozzle>

Pounds of force = $.0526 \times \text{volume} \times \text{square root of pressure}$

Nozzle Size

<https://www.ultimatewasher.com/nozzles-size-pressure-washer.htm>