Portable equipment sanitizing station for California strawberries

Z. Azevedo, A. Carrillo, E. Carrillo, U. Figueroa, N. Mercado and M. A. Sadek

The system allows for precise injection of sanitizing chemicals into the hot water stream of a pressure washer, ensuring efficient debris removal and disinfection of tools, clothing, footwear, and tractor tires—common carriers of contaminated soil. By using this specially equipped wash trailer, users can take proactive steps to reduce the spread of soilborne pathogens in strawberry fields.

Trailer specifications

Dimensions: 7 ft long by 5 ft wide, pin hitch.

\$3,000

Weight: 4,016 lb (full) and 1,725 lb (empty).

Lighting: 200W LED flood light outdoor with plug

+ 10 ft wire, adjustable height. \$50

Tank capacity: 275-gal IBC Tank, \$700

Cleaning: Hotsy 1075BE hot water pressure washer with Honda GX390 engine, and adjustable chemical injection system. 4 GPM, 3500 PSI, 200 F. \$10,000

Power supply: RYOBI generator 1800 watts (running), 2300 (starting watts), Bluetooth

technology. \$2,000

Trailer features: toolbox, wash ramps, boot

scrubber.

Total cost: \$16,000



Figure 1. Custom built portable ramp.



Figure 2. Hot water pressure washer unit.





