

# Giant Wash Rig Cleans Big Sprayers

By Jim Ruen, Contributing Editor

Neil Welsh keeps his spray rig and himself clean with his drive-thru equipment washer. The 17-ft. tall legs and 20-ft. crossbeam with integrated booms and nozzles make it easy to keep the 1,500-gal. Miller Nitro sprayer clean. The 20-year old does most of the spraying for his family's farming operation. He is also responsible for keeping the tall sprayer clean.

"With a front boom, you are driving into the spray mist all day long," says Welsh. "The sprayer gets coated with chemicals and road dust. After a couple of days spraying, even a new sprayer starts to show signs of corrosion. It's hard to spray it off with a hand wand without getting the chemicals and dirt on your body and clothes."

Welsh designed the washing unit to clean away the bulk of the day's deposits. The triangular structure consists of three 2-in., schedule 80 stainless steel pipes locked at 2-ft. distances in a cross web of 1 3/4-in. dia., 1/4-in. thick steel pipes.

The pipe structure is strong enough to

serve as its own ladder for maintenance. The 2 pipes forming the base of the triangular structure are plumbed to deliver 180 gal. of water at 150 lbs. pressure. The water blasts equipment passing through from flat fan nozzles positioned at opposing 35-degree angles and staggered every foot. Separate spray nozzles mounted at ground level direct water up and into the inside wheel wells.

"The angle of the nozzles ensures that the sprayer gets hit by streams of water from 2 directions, not just straight on," says Welsh, who built the washer as a 4-H project. "The Hypro 4200 pump is unusual with its impeller shape. It's hard to get both volume and pressure, but this one offers both."

Welsh built the entire system from stainless steel so it would stand up to the corrosive chemicals. An accomplished metal worker, cutting and drilling the stainless steel was less of a challenge than getting the web of pipes bolted to each other.

"I used an auto-feed drill press to drill the sixty plus holes that were needed," says Welsh. "The flanges had to be perfectly square so the bolt holes all lined up."

Although the spray season is limited, the structure is left up year round. Drain valves at the bottom of water carrying pipes empty them at season's end. The entire pump system is enclosed to the side of the structure for easy disconnecting and moving to storage with a forklift.

Currently the washer framework is bolted to large concrete slabs at either side. Plans are to install a concrete pad that will be used both for washing sprayers and filling. A drain will direct wastewater to an evaporation ponding area. At that point other changes may be made, such as placing undercarriage tips in the pad and using a larger pump or multiple pumps, one on either side, for higher pressure. Welsh notes that the third pipe could also be used to carry water.

"We may add a cleaning solution tank for use every few days," says Welsh. "We will be installing reverse osmosis water treatment



Neil Welsh keeps his self-propelled sprayer clean with this drive-thru equipment washer. Pipe framework bolts to large concrete slabs on either side.



Nozzles positioned at opposing 35-degree angles blasts equipment as it passes through. Separate nozzles at ground level direct water up and under machine.

to make the washer work better, but also to improve the spray solution quality."

Check out a video of Welsh's washer at [www.farmshow.com](http://www.farmshow.com).

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## Human Foosball Game Set Up In A Barn

"I recently modified the alleyway that runs through my barn to make a human foosball game," says Harvey Harrington, Dawn, Mo.

"We've played it with family and our church youth group and everyone thinks it's a lot of fun.

"It was fairly easy to construct and could be set up most anywhere with some modification. I ran six 12-ft. long pieces of 2 1/2-in. dia. metal pipe across the barn's alleyway and made a goal out of wood at each end. Lightweight plastic sleeves slide over the top of the metal pipes and each player must stay attached to the sliding sleeves, just like in real foosball. By staying attached, they can only reach so far and remain confined to their own space. The only thing I purchased was the pipe.

"We use a rubber ball because it's a little softer than a soccer ball. The game gets very competitive. I made up my own house/barn rules, since I couldn't find much information about such a game. Generally, the first team to score 5 points is the winner. We use a referee who blows a loud horn every time a score is made, and stops play if someone gets too aggressive with their kicking.

"It's designed so we can quickly take the game apart in order to park my tractor in the alleyway."

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Harvey Harrington used the alleyway that runs through his barn to set up a human foosball game. Six 12-ft. long metal pipes run across alleyway, which has a wooden goal at each end. Players must keep their hands on plastic sleeves that slide over pipes.