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BUILDING BETTER COMMUNITIES: VERSATILE WELDER/GENERATOR SOLUTION HELPS TEAM ELMER'S DO IT ALL

by [Travis Purgett](#) | on May 18, 2016



The motto at [Team Elmer's](#) is “building better communities.” Commercial/residential asphalt installation, excavation, concrete ready-mix supply, crane and rigging operations, earth moving, land clearing and road paving are just a few of the operations the full-service contractor takes on. Based in Traverse City, Mich., Team Elmer's began as a one-man shop in 1956 with one crane for digging conservation ponds. Today, the family-owned operation has nearly 450 employees with 10 concrete locations and several aggregate operations around the state. The company's customers throughout

northern Michigan and the Upper Peninsula include government entities, shopping centers, grocery stores, schools and even residents who want topsoil delivered or a driveway paved.

“We do a little bit of everything, from driveways to highway work,” says president Troy Broad.

“We’re all about servicing the customers. We have a lot of repeat customers because of that — word of mouth is still a great advertising tool for us because we work to keep customers happy.”

With a variety of projects both big and small — some driven by tight deadlines or emergency repairs — plus large-scale equipment, the fast-paced, varied nature of the work requires durable, versatile tools and solutions. To help meet the repair and service needs in the field, the contractor relies on the Trailblazer 302 Air Pak engine-driven welder/generator from [Miller Electric Mfg. Co.](#)

By having the Trailblazer 302 Air Pak unit on several of their service trucks, Team Elmer’s gets one field solution that provides multi-process welding capabilities, a 13,000-watt generator, 31-cfm rotary screw air compressor and a 12/24-volt battery charger/jump-starter.

“It’s amazing what comes out of that little unit,” Broad says. “Compared to what we had before, just the amount of power with both the air compressor and the welder was night and day.”



The air compressor is one of the most-used tools on Team Elmer’s field mechanic trucks.

ALL-IN-ONE SOLUTION SAVES SPACE

With hundreds of pieces of equipment to maintain and repair — from large cranes and concrete trucks to graders and milling equipment — the company’s crew includes shop mechanics, field mechanics and full-time welders. Team Elmer’s does most of its repair, maintenance and equipment rebuilding in-house, along with building new equipment from scratch such as trailers, crusher frames and conveyors.

The solution the company previously used on its service trucks did not meet the requirements of the variety of jobs to be done. A switch to the engine-driven welder/generator on three of the service trucks provided the amount of power and air capacity necessary for many jobs — all while saving space and weight on the trucks.

“It seemed like all the units that we’ve tried before just did not have the power and air we required. You really needed two individual units,” Broad says. “This unit supplied what we needed and was compact enough. This combination, along with the weight reduction and the space savings, was huge for us.”

The machine takes only half the bed space of a separate engine-driven air compressor and welder, freeing up more room on Team Elmer’s trucks for equipment and supplies. The unit also is lighter than the company’s previous solution, which provides payload advantages that help Team Elmer’s easily pass the gross vehicle weight rating for its trucks. The ability to save weight and space is also important because Team Elmer’s uses slightly smaller service trucks to save mileage in the remote areas they serve. Any extra space and weight on the trucks can be used for tools or supplies needed for emergencies and the varied jobs field mechanics encounter, from repairing a hydraulic system to changing a tire on a concrete truck, to welding in the field or jump-starting a crane.

“You’ve got to be able to have everything on hand, to make sure the job’s done at the end of the day,” says Chase Bates, field mechanic.

CRITICAL AIR COMPRESSOR NEEDS

Compressed air is one of the most critical assets on Team Elmer’s field mechanic trucks. The Trailblazer 302 Air Pak unit’s rotary-screw compressor delivers 31 cfm at 80 to 160 psi of air at 100 percent duty cycle. High compressor output eliminates the need for a reservoir tank or the time necessary for the tank to refill.

“It seemed like we were always waiting for the air to regenerate on the other systems, or there just wasn’t quite enough when you started getting in the larger jobs,” Broad says.

The unit’s air compressor has the power to run air tools, including the large 1-in. air guns that mechanics use to inflate tires.

“You never run out of air. It’s there on demand as you need it,” says Tom Sampier, a field mechanic. “It’s more than enough for our 1-in. guns, which is the most demanding air tool that we use.”

The ability to have enough air on demand — without having to wait for the unit to recharge — is especially important in critical situations, such as a full concrete mixer truck having a blown tire on the side of the road — when time is of the essence.

“You’ve got a certain amount of time from when that truck is loaded to the time it gets to the jobsite,” Sampier says. “It’s pretty critical on the time factor before the concrete starts going bad. And that’s what’s really nice with the Trailblazer. I can get there, get out my air jacks, never run out of air, run my 1-in. gun, get the tire off, changed, back on and get the driver back going.”



RELIABLE WELDING PERFORMANCE

A Team Elmer's repair or project in the field may call for stick welding, so the company's field mechanics also rely on the engine-driven welder/generator for any welding needs they have. Frequent welding projects involve welding on 1/2- to 1-in.-thick plate. Mechanics can choose from four preset settings for stick welding to make the arc softer or more stiff depending on electrode type and operator preference. The unit also provides easy arc starts for stick welding, which is important for mechanics in the field who need reliable performance to get a job done so they can move on to the next task.

“It does a great job of being able to close the gap at either end of the spectrum,” Bates says. “It’s ready when you’re ready, and you’re not fighting with it.”

In addition, independent generator power provides 13,000 watts of peak generator power independent of the machine's weld windings, so the company's mechanics can use the unit to run lights and tools such as grinders even when they're welding.

"I may have one job I need two different tools for, and I can throw my air grinder on one line and pull an extension cord out with another. It's so much more efficient, time-wise," Bates says. "You can get the job done a little quicker."

DITCH THE BATTERY BOX

Team Elmer's is a year-round operation. With a sizable fleet of large equipment, it's not uncommon for a piece of equipment to need a jump-start, especially during the harsh winter months in northern Michigan. The Trailblazer unit has a selectable 12/24-volt battery charging capability that provides up to 450 amps for jump-starting.

"We do a lot of plowing during the winter. Sometimes you show up at 4 in the morning, and your loader won't start. You've got snow flying, and it's 30 below," Bates says.

Eliminating the need to carry a separate battery box for jump-starts in the field is another factor that helps the mechanics save space on their service trucks. "The integrated jump-start is a really nice feature," Sampier says. "Not having a separate battery box frees up space on the truck for other jobsite tools. It takes up a lot less space."

SPEND LESS TIME FILLING UP

Another benefit of the unit is its fuel efficiency, which means the mechanics can spend more time focused on repairs and projects and less time filling up the tank. The air compressor, welder and generator are all run with one engine, which helps reduce fuel consumption.

"I definitely don't have to worry about filling it up halfway through the day," Bates says. "I can run six or eight hours, and I still have half a tank or so left at the end of the day."

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