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## High Performance Crushing



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Terex Pegson XR400 portable jaw crusher receives large concrete chunks fed by a Kobelco SK 350 excavator.



# High Performance Crushing

Premier Demolition and Aggrecon use Terex Pegson crushers from Powerscreen Midwest

Story and photos by Tom Hale

**A**s proponents of recycling in the construction industry, longtime friends Bill Buell and Phil Myers are excited by the surge in recycled concrete, asphalt and other material – most notably in the St. Louis area. “Phil and I have been pushing the advantages of recycling to associations and state highway departments since 2005, and this year we are starting to see more and more recycling projects,” says Buell, president of Premier Demolition Inc., Cedar Hill, MO, and vice president of Aggrecon, based in Washington, MO.

He adds, “A lot of the agencies – federal, state and private – are

being more conscious of recycling efforts. We are now finding recycling mentioned more in contract specifications.”

With St. Louis being rich in limestone and associated aggregates, it has been an uphill battle to get people to use recycled material, notes Myers, president of Aggrecon and executive vice president of Premier Demolition. However, many construction companies are taking a second look at recycled material, especially with fuel costs on the rise and landfills filling up with oil-rich asphalt.

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– Bill Buell of Premier Demolition Inc. and Aggrecon

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“Fuel prices are forcing people to realize the advantages of recycling,” says Myers. “They are saying, ‘Before we were iffy about recycling. Now it makes financial sense.’”

Over the last few years, Premier Demolition and its sister company Aggrecon have been trying to recycle concrete, asphalt, metals, etc., on all demolition projects. In 1995, Bill Buell – a 30-year-plus construction pro – founded Premier Demolition, which performs all kinds of demolition work across the country. Then, in 2005, Buell and Myers formed Aggrecon, which does concrete/aggregate crushing and recycling, mainly in the St. Louis metropolitan area.

In setting up their Aggrecon operation, Buell and Myers approached Powerscreen Midwest Inc., Blue Springs, MO – authorized distributor for Terex Pegson, Powerscreen and Terex Crushing & Screening equipment in Kansas and Missouri – for a crusher to crush and recycle concrete and asphalt. “We purchased a primary crusher that was on wheels from Powerscreen, and a year later we bought a Terex Pegson 4242SR secondary impact crusher,” says Buell. “Then, as we started using both machines on projects, we talked some more with Micheal McCusker (sales engineer for Powerscreen Midwest), who recommended the use of a new jaw crusher on tracks (a Terex Pegson

XR400). So, we traded in the old jaw crusher for the new one earlier this year.”

Terex Pegson XR400

The Terex Pegson XR400 is a portable jaw crusher that can crush up to 400 tons per hour. “The first thing that hits you when you see the crusher is that it is on tracks and it is very mobile,” says Buell. “The costs to deliver it to a job site and get it working are very minimal. We can deliver and unload the machine and start crushing in just 20 minutes.”

The unit, with an operating length of 49 feet 1 inch and operating height of 13 feet 7 inches, features very low fuel consumption, typically only 6 gallons of diesel per hour. “With fuel prices these days, the machine is very fuel-efficient,” says McCusker. “That is why customers love it.”

During a recent visit by Construction Digest to Premier Demolition’s St. Louis facility on Wise Avenue, the XR400 easily gobbled up large concrete chunks fed by an excavator. The tracked crushing plant showed its aggressive crushing action, with a high swing jaw encouraging material to enter into the crushing chamber.

Terex Pegson XR400 has an operating length of 49 feet, 1 inch and an operating height of 13 feet.



## Crushing

The XR400 is powered by a Caterpillar C-9 Tier III Acert engine capable of producing 230 horsepower at 1,600 rpm. “The XR400 has about everything a contractor wants,” says McCusker. “Its main feature is the clearance underneath the crusher – the machine offers excellent under-crusher access for removal of rebar and metal with a hydraulic tilting conveyor system.”

Other key features of the XR400, according to Terex Pegson, are a 12-foot, 9-1/2-inch-high product conveyor that can be lowered for transport; hydraulic crusher setting adjustment; hydraulic crusher overload system ideal for applications with uncrushable material in the feed; hydraulic unblocking facility; finger grizzly with under-feeder screen option; hydraulic folding feed hopper with wedge fixing system; easy access power pack canopy; and optional dirt conveyor, magnet and radio remote control. A combined PLC control system is fitted onto the plant with auto-start facility to operate the engine, feeder, product conveyor, crusher adjustment, and dirt conveyor.

Aggrecon has utilized the XR400 on a variety of construction projects. “We recently used the machine on a city of St. Louis project – the Jefferson Avenue Bridge project,” says Buell. “The project was in a very, very small restricted area and the jaw crusher was ideal for it. We went in there and crushed up all the material to be reused on site.”



Above: Bill Buell and Phil Myers oversee activities of Premier Demolition Inc. and Aggrecon.

Below: Concrete material begins journey in crusher.



## Crushing

In East St. Louis, IL, Aggrecon was able to make IDOT spec material (CA-6) for a project. The company was able to recycle concrete streets and pads into this material to place back down as a base to make new streets. Aggrecon used the Terex Pegson XR400 as the primary crusher to take the material down to a minus 6 inches, then used their secondary impact crusher – the Terex Pegson 4242SR – to reduce the material to a minus 1-inch street base.

Terex Pegson 4242SR

Suitable for primary and secondary applications in quarrying, contracting and recycling, the 4242SR impact crusher comprises a complete crushing, screening and stockpiling unit built onto one tracked chassis.

McCusker says the Terex Pegson 4242SR can crush up to 350 tons per hour and burns just eight gallons per hour of diesel. This unit, with an operating length of 53 feet 9 inches and operating height of 13 feet 3 inches, features a heavy-duty, vibrating grizzly feeder with two-step grizzly, optional underscreen and side conveyor for stockpiling waste material or an additional product. Scalped material can also be fed on to the main product conveyor via a bypass chute to increase overall capacity. An overband magnetic separator is available for removal of rebar and steel when used in recycling applications before the crushed material is fed into a 3.4- by 1.5-millimeter, two-deck screen for sizing.

The 4242SR is powered by a Caterpillar C-9 engine, capable of producing 309 horsepower at 1,800 rpm.



Above: High-performance Terex Pegson XR400 can crush up to 400 tons an hour.

Right: Micheal McCusker of Powerscreen Midwest Inc.



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