



PUMPKINS TAKE TO THE AIR—THANKS TO COMPRESSED AIR

By Stephanie Roberts



When fall arrives, it means pumpkin everything—from pumpkin-flavored foods and drinks to finding the perfect pumpkin to carve. Others prefer finding the perfect pumpkin to launch into the air at impressive speeds in an activity called punkin chunkin.

While punkin chunkin peaked in the 2010s, people continue to converge on parcels of land each fall with one thing on their mind: how far can my pumpkin fly? Festivals and competitions are held to see who can toss a pumpkin further than anyone else. Engineers and budding engineers alike use catapults, torsions, air cannons, trebuchets and human-powered systems to construct a machine that will launch the farthest pumpkin. Many of the air cannon variations are powered by none other than portable air compressors.

HOW PUMPKIN CANNONS WORK

Some cannons are powered with air from an air compressor, like the Sullair 185 Series. The 185 Series compressor delivers 185 cfm at 100 psi, which can break pavement, so imagine the force on a pumpkin...





Others use even higher-pressure air compressors like the Sullair 900XHH/1150XH compressors. These compressors produce more than 500 hp and velocities over 700 mph.

Here's how it works:

- After picking the pumpkin to catapult, the pumpkin is loaded into the barrel, making sure the opening is closed.
- The storage chamber is filled with compressed air at about 100-125 psi.
- The machine operator typically rings an air horn or gives some kind of indication to tell everyone the cannon is about to be fired.
- The operator then pushes the level, which opens the valve. The faster the valve is opened, the further the pumpkin will go.
- When the valve is opened, all of the air in the tank is expelled at once from the storage chamber into the barrel of the cannon and the pumpkin shoots out.

SULLAIR HELPS AMERICAN CHUNKER TEAM ACHIEVE PUNKIN CHUNKIN WORLD RECORD

For many, punkin chunkin is just fun and games; but for many others, it is (or was) serious business. One example is the now-retired American Chunker team of Merrimack, New Hampshire.

For more than six years, Brian Labrie captained the team of more than 28 professionals from mechanical engineers

to transport logistics to statisticians and more. The team used an air cannon, as they knew it would shoot the pumpkin the furthest. This air cannon was powered by Sullair.

“The American Chunker team used Sullair portable air compressors all the way through,” said Labrie. “We tried the Sullair 185 one year, we used the 900/1150XH another year, and the 375H another year. We found the 375H worked the best for our application. The 375H got up to a high amount of pressure and air quickly.”

The American Chunker team partnered with Ring Power, a Florida-based authorized Sullair distributor, throughout its successful journey. Ring Power buys and sells both Sullair portable and industrial air compressors.



On November 1, 2013, the American Chunker team set the world record in the World Championship Punkin Chunkin Association's (WCPCA) Adult Air Cannons category, launching a pumpkin an astonishing 4694.68 feet, or over $\frac{3}{4}$ of a mile.

Although the American Chunker team is retired, their legacy continues to live on.

“To this day, we hold the current long-distance record, and we achieved it through power from Sullair,” said Labrie.

COMPRESSORS IN INCONSPICUOUS PLACES

Punkin chunkin events are held and are usually independently organized, throughout the United States and Canada. If you find yourself attending one, don't be surprised if you see a Sullair portable air compressor making it all possible.

Photos courtesy of Brian Labrie