Thinking Inside the Box

The SandBox system is designed to change the way frac sand is transported for the better.

“We wanted to create a true end-to-end solution.”

// JOSH OREN, founder and CEO

SandBox Logistics
www.sandboxlogistics.com | Headquarters: Houston | Service: Frac sand transportation and services | Employees: 15

[ BY JIM HARRIS ]

The development of the metal shipping container in 1956 revolutionized the shipping industry and defined the legacy of its inventor, Malcom McLean. Prior to McLean’s innovation, goods were loaded and unloaded individually in bags, boxes, crates or barrels as opposed to the more efficient method most frequently practiced today.

Josh Oren, founder and CEO of Houston-based SandBox Logistics, feels his
company can do for frac sand storage
and transportation what McLean did
for general cargo: Make the shipping
process faster and more efficient.

Oren’s company in 2011 developed
the SandBox, an 8-foot by 10-foot
metal crate capable of holding up to
46,500 pounds of frac sand. The box
is at the core of a transportation
process meant to eliminate many of
the existing logistics challenges. It
also helps with what the company
refers to as “the three Ds:” dust, de-
murrage and degradation.

The SandBox is easily transported to
the well site and unloaded by a forklift
in less than five minutes. Once at the
well site, up to 2 million pounds of ma-
terial can be stored in roughly a 40-foot
by 40-foot footprint. The SandBox
process effectively eliminates the need
for traditional sand mover equipment
and actually saves pad space.

Regardless of what issues might be
delaying the job at the well-site, Sand-
Box delivery trucks can always make
the delivery. This completely elimi-
nates any detention charges at the well.
Once the boxes are delivered they are
placed on a cradle which conveys the
sand into the blender. As boxes are
emptied, they are easily replaced with
full boxes.

“We wanted to create a true end-to-
end solution where you could load a
vessel at the mine and take it all the
way through the chain to the well-
loaded into a rail hopper, brought into
a region, placed into silos or just sits in
rail cars, or dumped on the floor of a
warehouse where loaders pick it up.
It’s a laborious, time-consuming
process that we wanted to eliminate
while creating the lowest-cost solution
we could think of.”

The company designed a SandBox
railcar, which can hold four boxes and
be loaded at the sand mine. The car op-
erates exactly like a traditional hopper
car and is filled through the top hatch of
each SandBox. However, once the rail
cars reach the destination, the boxes are
simply picked off and stacked up. Rail
cars can be off-loaded in a matter of
minutes and returned back to origin.
Nearly any rail siding can be turned into
a transload terminal which allows serv-
ices companies to get the material
closer to the frac crew and reduce
ground transportation costs. All in all, Oren believes that as much as $35 to $50 per ton can be saved in overall logistics costs depending on the region.

In addition to the SandBox itself, SandBox Logistics also developed support vehicles to assist in the transportation process. The SandBox cradle allows sand to naturally fall to the conveyor belt and is arguably the cleanest delivery process to the blender that is currently available. The SandBox process eliminates sand from being blown pneumatically, which is the biggest contributor to the silica dust problem. This dust, if inhaled over long periods of time, could be a health hazard. “Dust inhalation has been identified by OSHA as the top safety issue on a frac job,” Oren adds. “By not blowing the sand, we are eliminating that dust. That’s a pretty big deal to us, and one of the more meaningful and compelling reasons we had to begin to evaluate and test this system.”

INDUSTRY DEMAND
Oren became familiar with the “three Ds” and other inefficiencies related to the standard method of frac sand transportation and storage as the owner of PSI Frac Logistics, a logistics and transportation company that delivers ceramic and natural proppants to well site locations. Demurrage in particular is a common challenge for the company. “We saw what they deal with every day, so we started to think about how to solve those problems and create some-

“The economics and health and safety aspects are compelling enough to where companies are putting this equipment out in the field to see how it works.”

// JOSH OREN, founder and CEO

thing valuable to our customers so we could eliminate the detention issue, and that was the genesis of SandBox Logistics,” he says.

After more than two years of developing, engineering and patenting its creation, SandBox Logistics formally
introduced it to the marketplace in 2013. The company has signed contracts with and is building equipment for several oil and gas production companies working near its base in Houston. “The economics and health and safety aspects are compelling enough to where companies are engaging and putting this equipment out in the field to see how it works,” Oren says. Although oil and gas producers actively engaged in fracking activities are SandBox Logistics’ target customers, the company is also seeing demand from frac sand suppliers looking for an alternative – and mobile – storage method. “There’s a large capital commitment to set up silos in a particular region, and in the oil and gas industries you don’t know when the activity may change or where customers may move to,” he adds. “Sand suppliers are viewing the SandBox as an inexpensive mobile and scalable solution that eliminates the need for silos,
High-Quality Custom Trailer Manufacturer
Your One-Stop Shop for All Types of Transportation Equipment

Tel: 800-546-7728 / Fax: 866-546-7728 / Email: Sales@prattinc.com

- ISO Container Chassis
- ISO Tank Container Chassis
- Super Chassis
- Ultra-Light Weight Chassis
- Roll-Off Trailers
- Lumber Dumpers
- Standard Flatbeds
- Step Deck Flatbeds
- Double Drop Flatbeds
- Extendable Flatbeds
- Curtain Side Flats
- Low Boys
- Extendable low boys
- Modular Home Trailers
- Oilfield Trailers
- Glass Trailers
- Power Generator Trailers
- Recovery Trailers
- Custom Dollies
- Agricultural Flats
- B-Trains
- A-Trains
- & Many more custom Trailers

Pratt Industries, Inc. (a Florida State Corporation)
11365 Red Arrow Hwy, Bridgman, Michigan 49106, United States of America
Tel: (269) 465-7676   Fax: (269) 465-7677   e-mail: sales@prattinc.com   web: www.prattinc.com

from Concept to Reality
Consult - Design - Build - Test - Deliver - Support
SandBox believes it created the lowest-cost transportation and storage solution for frac sand.

allowing them to move their business where they need – rather than engage in a large infrastructure project – at less than 80 percent the cost of silos.

“SandBox enables proppant suppliers to create a flexible ‘store-front’ for their product without having to make bets on a specific region,” Oren notes. “Even the smallest players in the proppant market can mobilize and implement a low cost, effective logistics solution.”

+ BRIGGS EQUIPMENT is proud to partner with Sandbox Logistics as they provide innovative solutions to the fracking industry. Briggs Equipment is a trusted dealer for Taylor forklifts which are critical in the staging process of the Sandbox Containers at the well site. Briggs Equipment is one of the largest and oldest material handling providers in the United States. Briggs Equipment operates numerous branch locations in the United States, Mexico and the United Kingdom staffing passionate people and offering powerful solutions to the oil and gas industry across the globe. Briggs Equipment offers new/used equipment, rental/leasing, 24/7 field service and local parts inventory to maximize your profits and reduce your down time. For more information call 713.672.1100.