

NEW VISION @ BREWSTER FERTILIZER TERMINAL

- Seed Warehouse:** 60 feet wide by 150 feet long. Sidewalls are 20 feet high. This building is used for seed and cold chemical storage.
- Rail Receiving:** 1200 ton per hour unloading system. It takes approximately 12.5 hours to unload a unit train, or 7.3 minutes per car. The unloading system is computerized; each product has a different density. The computer system will adjust gates to the proper height to maximize leg capacity. We can check weights of cars with a scale located on the belt in the tunnel going to the leg, it is within 1% accuracy.
- Receiving Leg:** The elevator is 84 feet tall and has two sets of cups inside
- Top Conveyor:** The red cable is for emergency shutoff. The belt is 4 feet wide by 414 feet long. The slinger sets on a rail and can be moved only when the system is running empty.
- Catwalk:** The catwalk runs the entire length of the building and can gain access by the receiving leg, center of the plant, or on the far end.
- Fertilizer Bins:** Bin # 1 by leg is 15,000 tons
Bin # 2 is 1,900 tons
Bin # 3 is 11,000 tons
Bin # 4 is 1,900 tons
Bin # 5 is 15,000 tons
Sizes of bins are 120 feet wide by 454 feet long.
- Alleyway:** The alleyway is 40 feet wide by 321 feet long. On the three big bins, there are two doors to each bin. The reason for this was so you can always rotate product. There are two in-floor pits; each has a conditioner installed to break up any chunks. The pit to the south is also used to fill the three micronutrient bins. Each Microbin can hold 100 tons. This product has to be delivered by truck. The pay loader operator can control the tower bins with remote control.
- Load out Area:** The two conditioner conveyors discharge into a 350 ton per hour leg. Each leg can reach either tower. These legs are 127 feet tall
- Blending Tower:** 200 ton tower with 9 bins:
2 bins are 40 ton
4 bins are 25 ton
3 bins are 5 ton
There is a straight thru spout into the scale (12 ton stainless steel) for small items. The mixer is a 12 ton per minute Scott Blender, which has a clam gate discharge and takes approximately 15 seconds to empty. We have installed a hopper under the mixer to regulate the flow into our tenders or fertilizer spreaders.
- Wholesale Tower:** 150 ton tower with 4 bins, all holding 37.5 tons. This tower has a 16 ton stainless steel scale and discharges directly into the trucks. It takes approximately 5 - 6 minutes to load a semi truck. There is a shed on the west side where semi drivers

stop to untarp their truck. He will enter his load number, tell the system how much weight he wants in the front hopper and back hopper, and then drives in and gets loaded. When loading is done, he pulls out, tarps the truck, and receives the ticket by the door; never once having to go up into the office.

Office: The office is located upstairs overlooking the work area. It is 24 feet wide and 35 feet long. When running at full capacity, there are 2 to 3 salesmen entering orders. 1 person will be in charge of dispatching, and 1 to 2 people operating the towers. Below the office is the electrical/mechanical room, which controls the heating and cooling. A restroom is also located in this area.

Chemical Area: This area is heated with a geo-thermo system. Just outside, there are 25 wells that are 150 feet deep with water lines throughout the floor. This entire area is 100 feet by 100 feet. Chemical Bulk system contains (9) 6,000 gallon tanks. The tanks are set up to have it's product recirculated if necessary. This is all controlled by Kahler Automation. All piping is located overhead to the center load out area. This is where customers will be loaded with there product. A customer will also be able to fill his water supply at the same location.

Special Notes: Over 12,000 pounds of nails were used
6 semi loads of shingles
5,600 yards of concrete
Building itself covers 1.5 acres



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