



High Lift Container Discharger

Application / Equipment Details:

- NBE CSO: E112311052
- Material: Lime, Ferro Alloys
- Bulk Density: 130 to 200 PCF
- Particle Size: Various

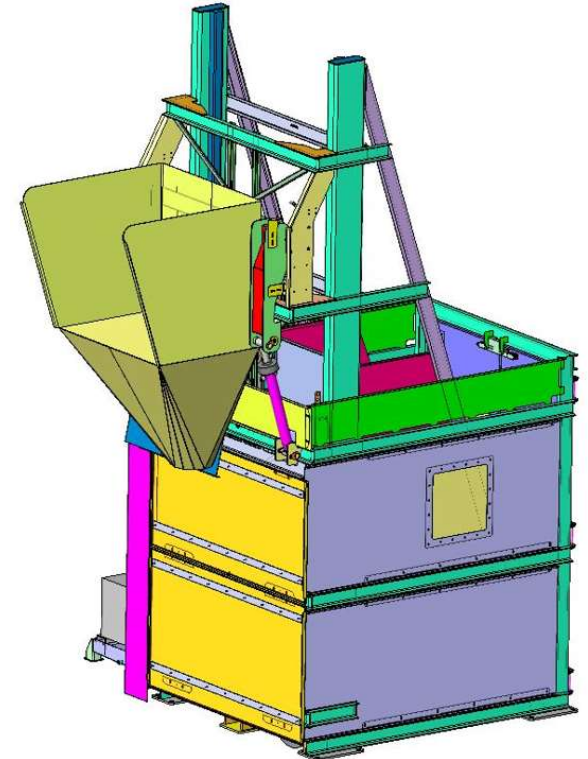
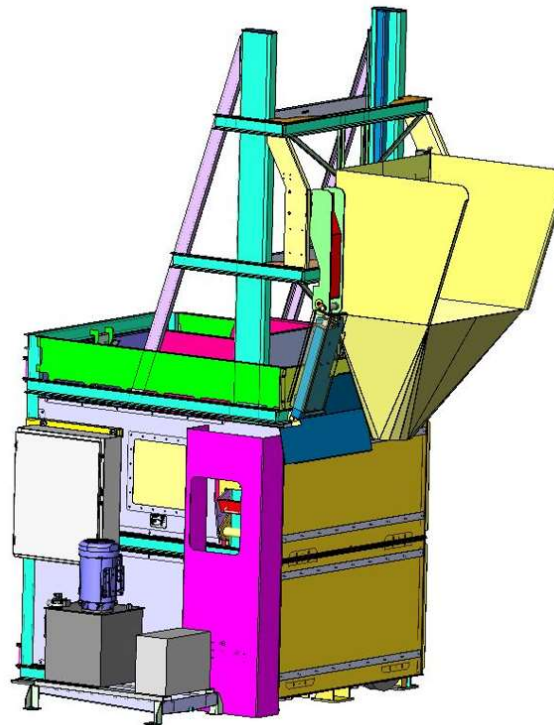
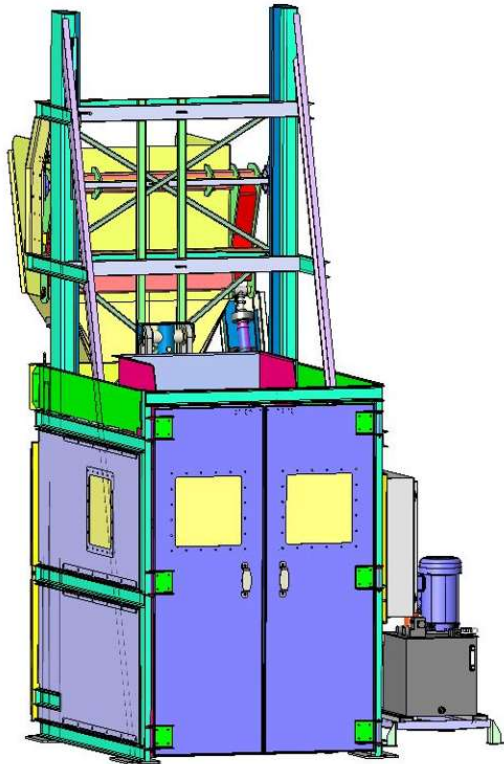
Application Overview: Our second project for this specialized customer calls for an extremely robust and durable High Light Container Discharger. An operator places a rolling tote with 20.5 cubic feet of material that weighs approximately 2500 lbs. of lime and ferroalloy materials for discharge into a Argon Oxygen Decarburization (AOD) vessel in a Alloy Manufacturing production facility. Production design calls for 6 discharges per hour performance, rotating 150 degrees with a chute extension designed to raise up to meet the fixed carriage chute to direct material flow into the AOD. Once the process is complete the discharger lowers both the carriage and the chute extension after the AOD vessel has moved out from the loading position by the operator, all while operating in a continuous 120-degree F. environment.

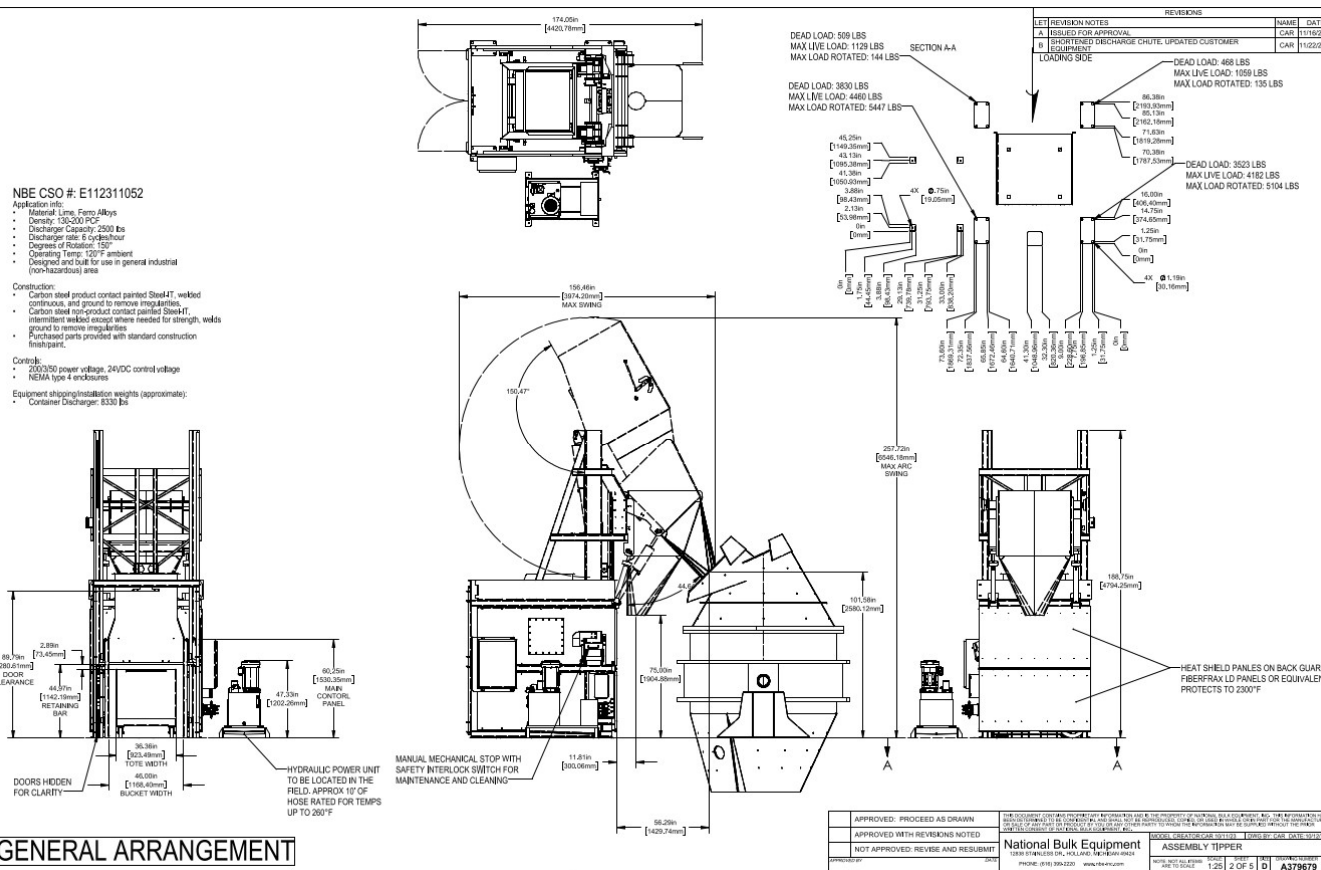
The unique operating environment also requires special heat shielding and specialized hydraulic operating designs to live where the section of the machine is susceptible to highly aggressive flames due to chemical reactions of material entering the vessel upon discharge. The two-part chute (fixed and pivoting) was a challenge to the previous design due to the maximum swing arc for ceiling restrictions and AOD vessel load positioning. This evolutionary design helped solve the dimensional constraints.

Real Results



Real Results APPLICATION OVERVIEW





GENERAL ARRANGEMENT

REVISIONS	NAME	DATE
A	ISSUED FOR APPROVAL	CAR 11/16/2022
B	DISCHARGER DISCHARGE CHUTE, UPDATED CUSTOMER EQUIPMENT	CAR 11/22/2022

APPROVED: PROCEED AS DRAWN	DATE: 11/16/2022	BY: CAROL ANN REED, PROJECT ENGINEER
APPROVED WITH REVISIONS NOTED	DATE: 11/16/2022	BY: CAROL ANN REED, PROJECT ENGINEER
NOT APPROVED: REVISE AND RESUBMIT	DATE: 11/16/2022	BY: CAROL ANN REED, PROJECT ENGINEER

National Bulk Equipment		ASSEMBLY TIPPER
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