



Conveyor Take-Up Weight Failure Vanscoy Potash Operations

SMA Mine Safety Summit 2018
Presenter: Marc Carignan, Inspector

March 1, 2018



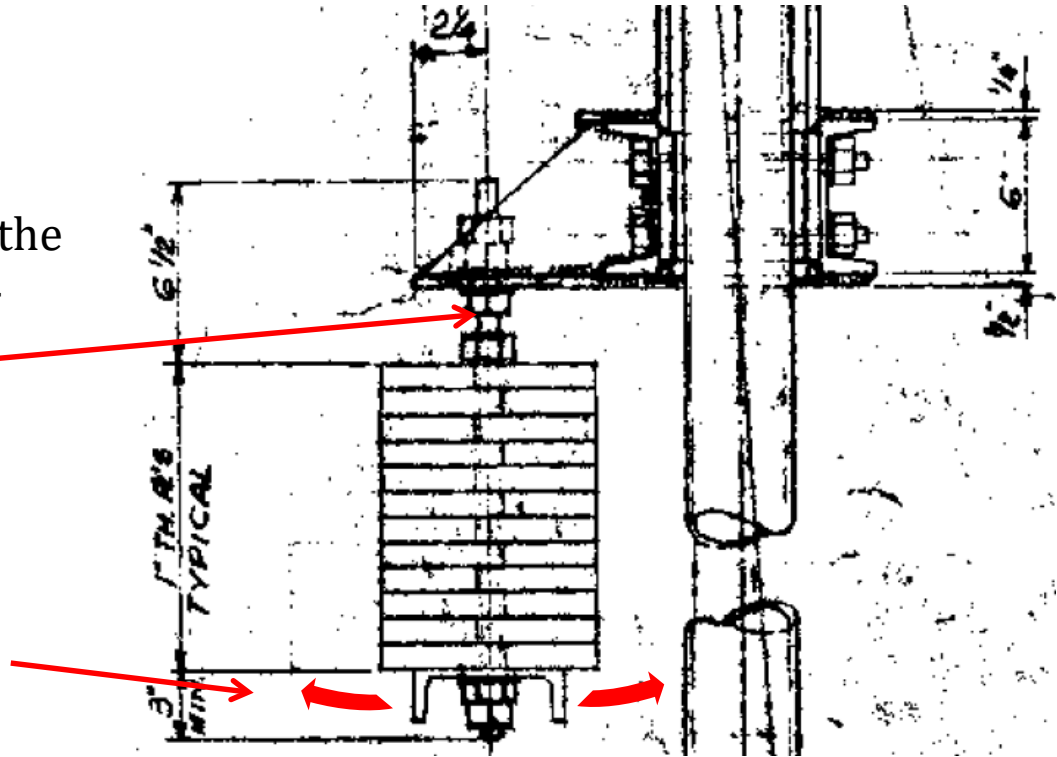
- 1pm October 30, 2017
- Loadout belt SK-14020
- No witnesses to the actual event
- Weight: ~8500 lbs
- Fall height: 8 – 20 ft

Similar Design



Failure Mechanism

- Fatigue cracks developed in the thread roots of 2 of the 3 all-thread support rods at this location
- Vibration/Swaying of the assembly when the belt is in operation



Support Side

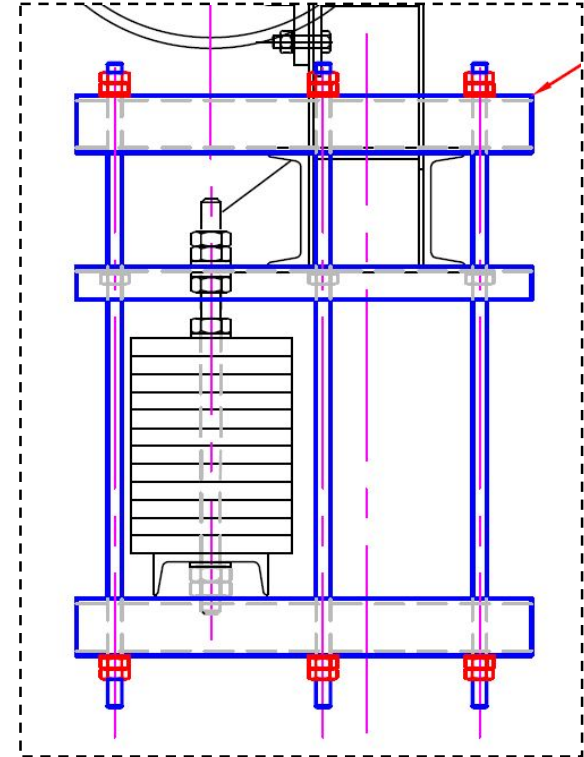
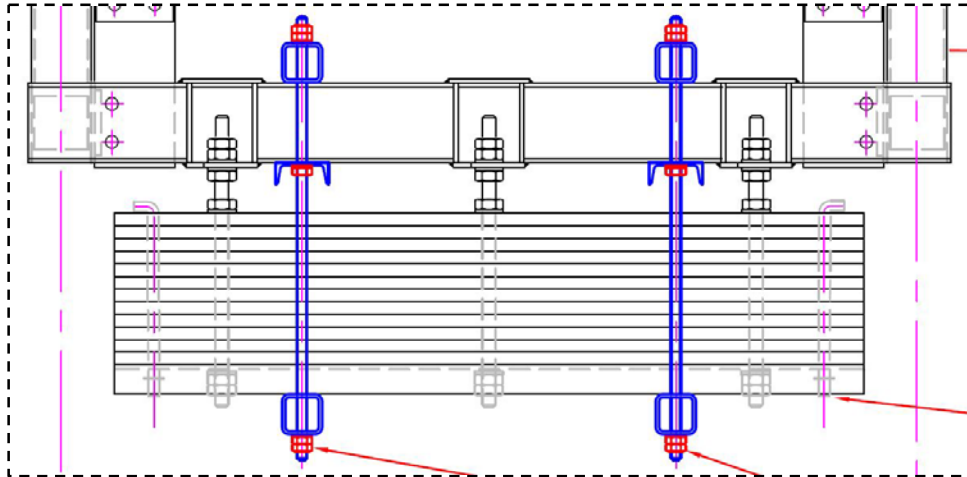


Corresponding Weight Side



Support Reinforcement

- Connections to support structure are solidified, minimizing suspended load sway.
- Wire rope safety lashing also added (not shown)





VPO CONVEYOR TAKE-UP WEIGHT FAILURE
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QUESTIONS?

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