MTV Best Practices

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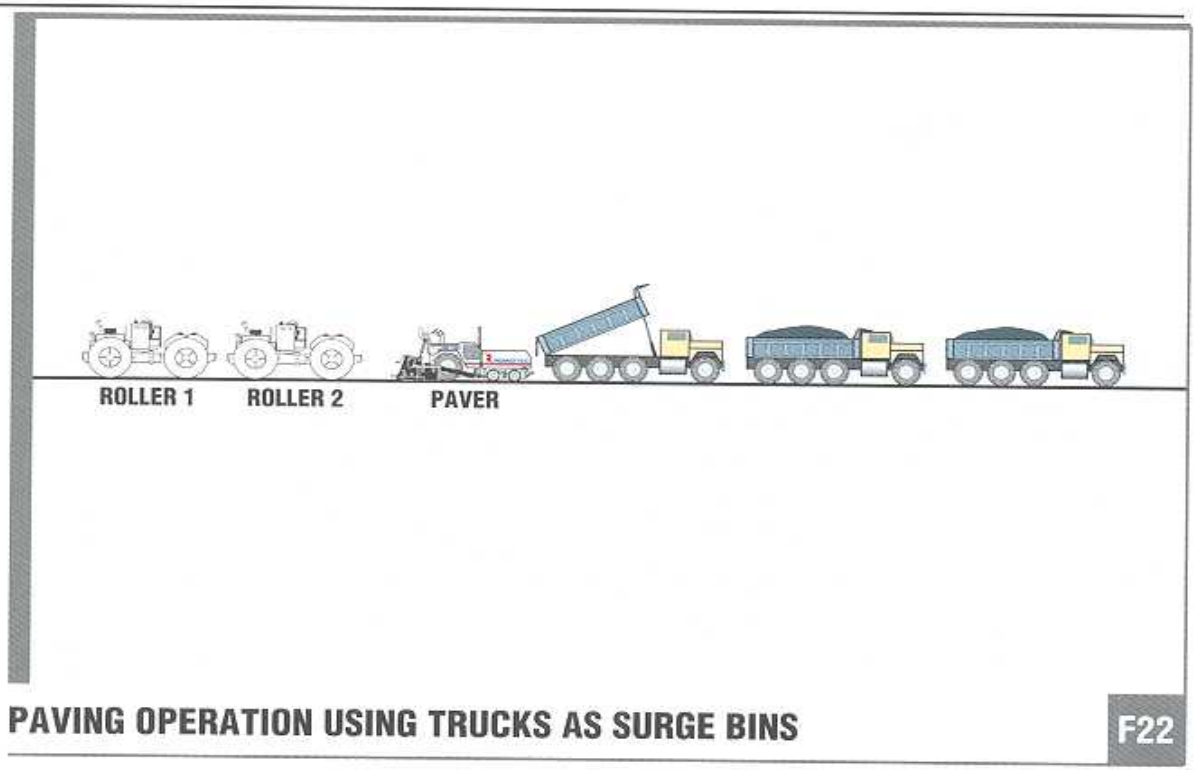
Why Use MTV

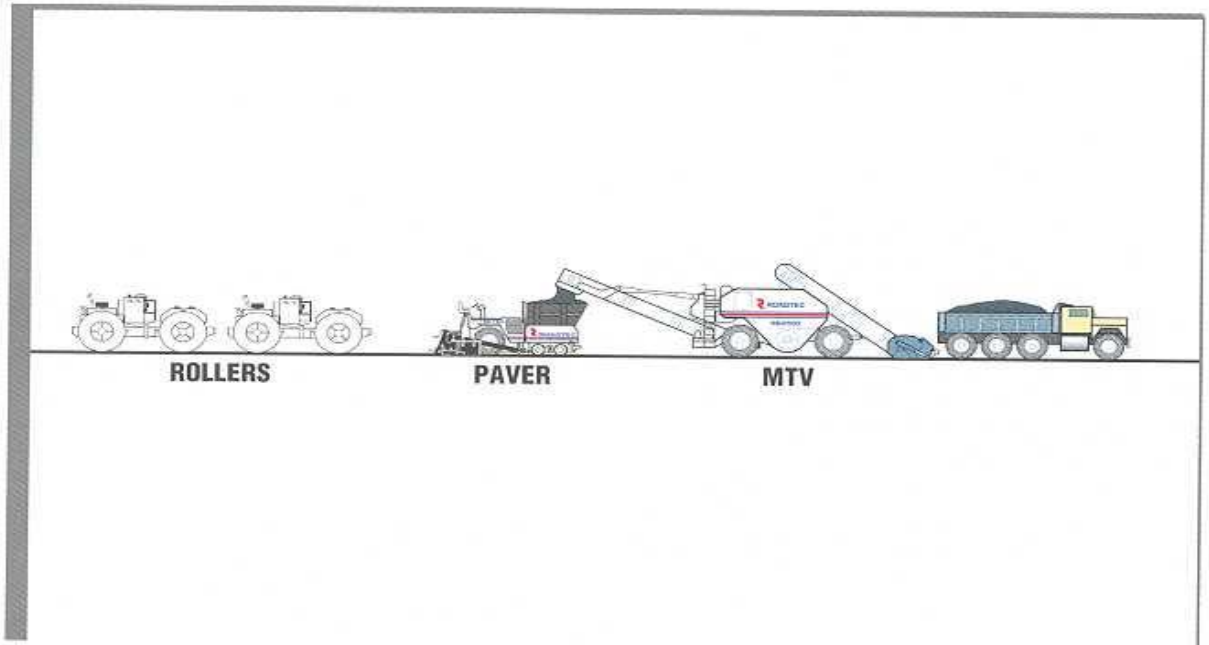
- Eliminate Physical Segregation
- Re-Mix HMA
- Provide Site Storage
- Stop Truck Delays
- Eliminate Paver Stops/Start
- Smoother Roads Last Longer
- Require Less Maintenance
- Compaction



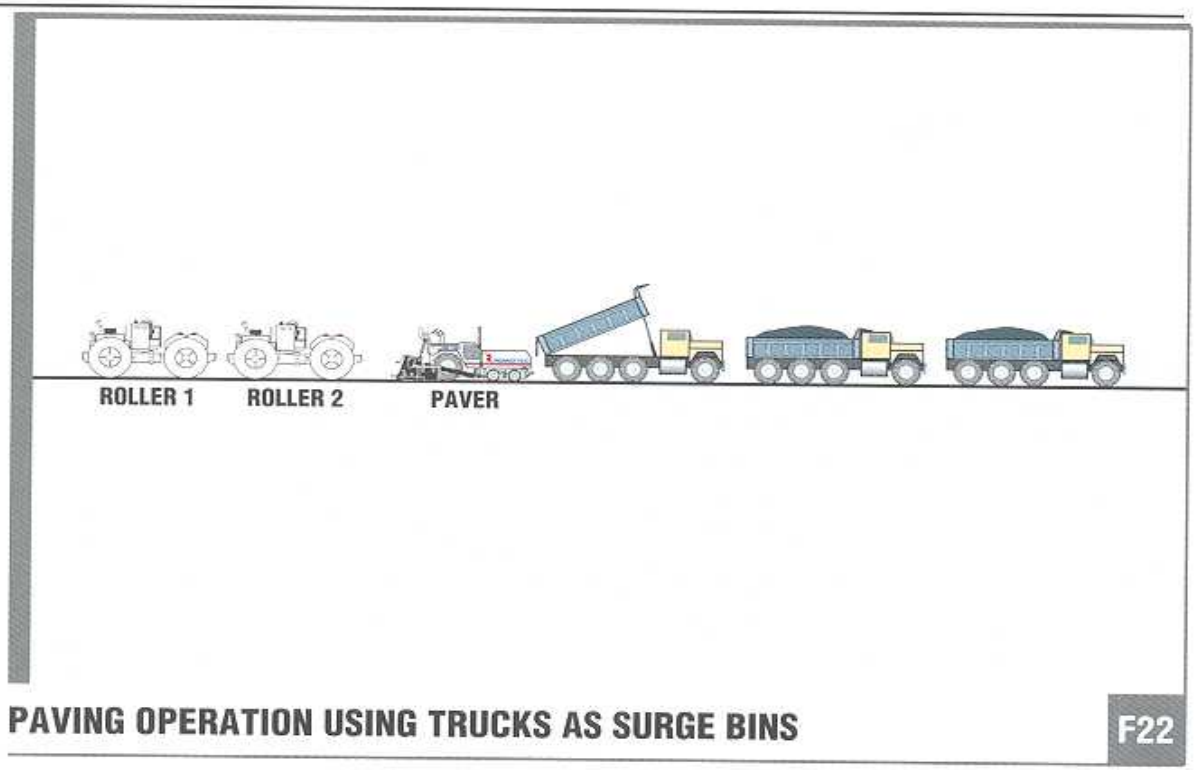
PAVING OPERATION USING TRUCKS AS SURGE BINS F22

Delivery vehicle to paver direct method of paving. Causes segregation both of aggregate and temperature of paving material

Delivery vehicle to MTV is an indirect method of paving. Cures both aggregate size and thermal segregation



PAVING OPERATIONS USING MTV AS SURGE BIN F23



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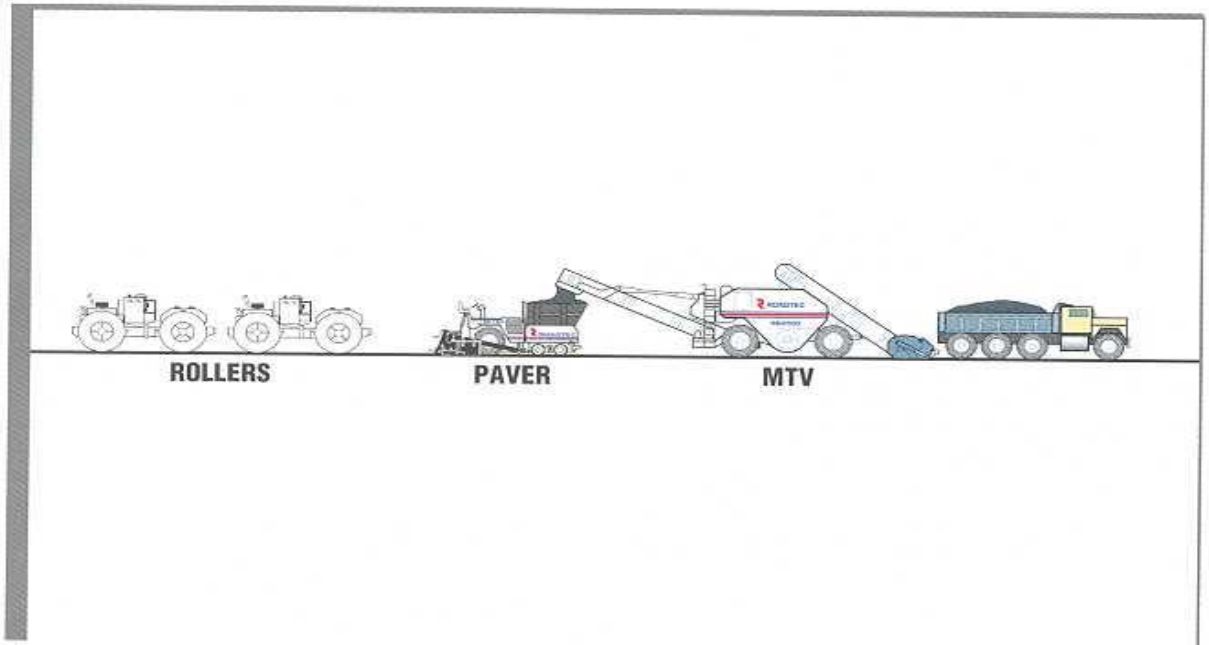


PAVING OPERATIONS USING MTV AS SURGE BIN F23

Non-Contact Paving

- Remove trucks from paver
- Trucks are not bumping paver causing it to change speed and put marks in mat

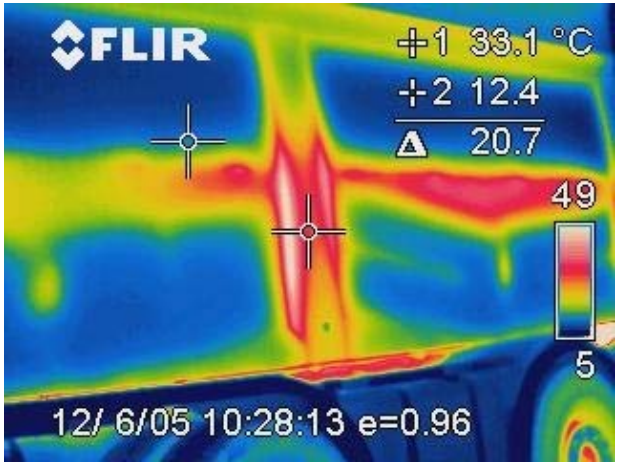
Constant Speed Paving

- Changing speeds while paving changes the forces on the screed
- Shuttle Buggy allows paver to keep moving
- Stores mix on site
- Paver doesn't slow down to accept truck

Non-Contact Paving

- Remove trucks from paver
- Trucks are not bumping paver causing it to change speed and put marks in mat

Both Loose Heat



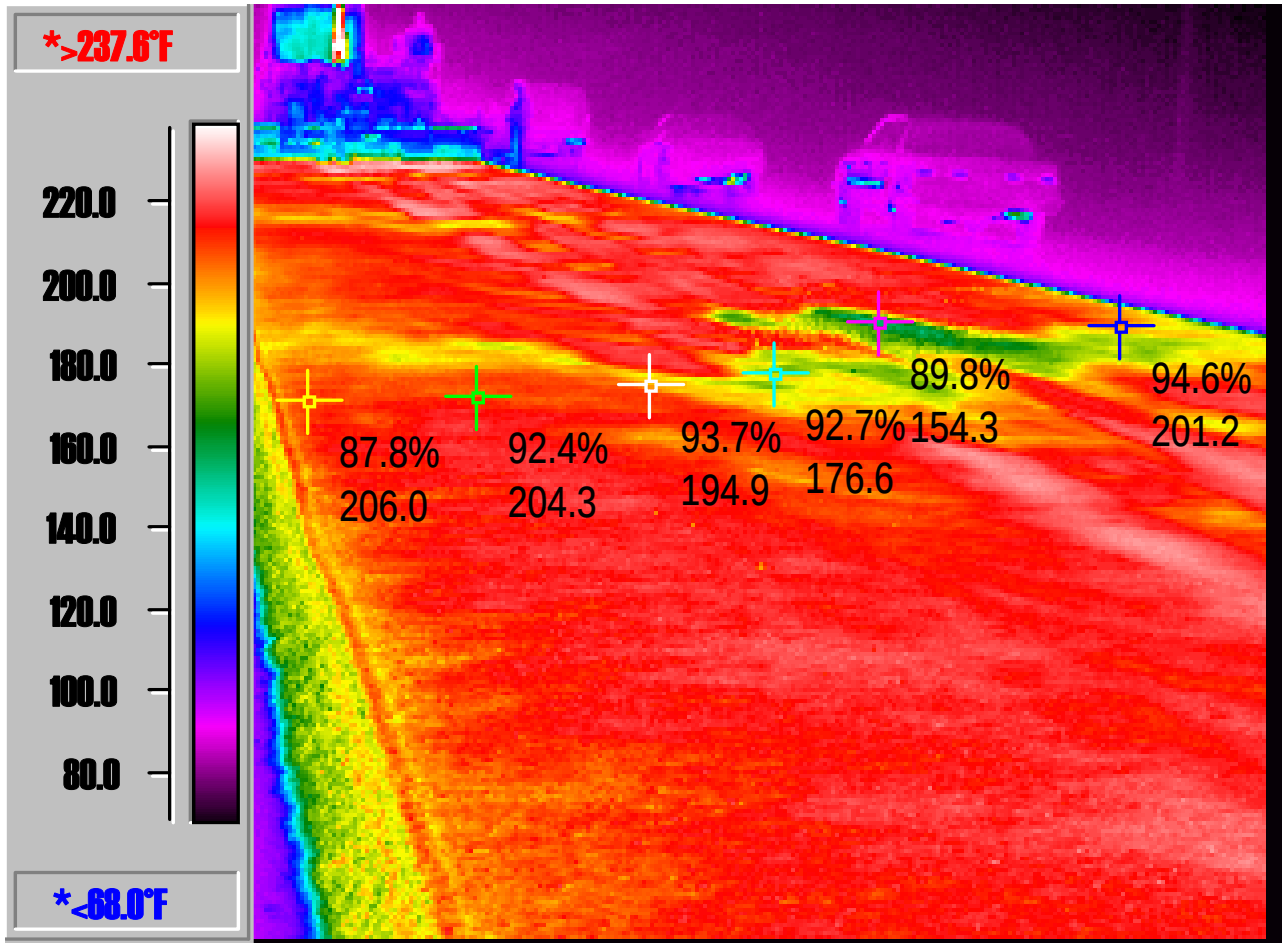
» Thermal Segregation is one of the reasons that asphalt pavement prematurely fails.

» Aggregate Size Segregation is caused by the same movement of the delivery vehicle as Thermal.

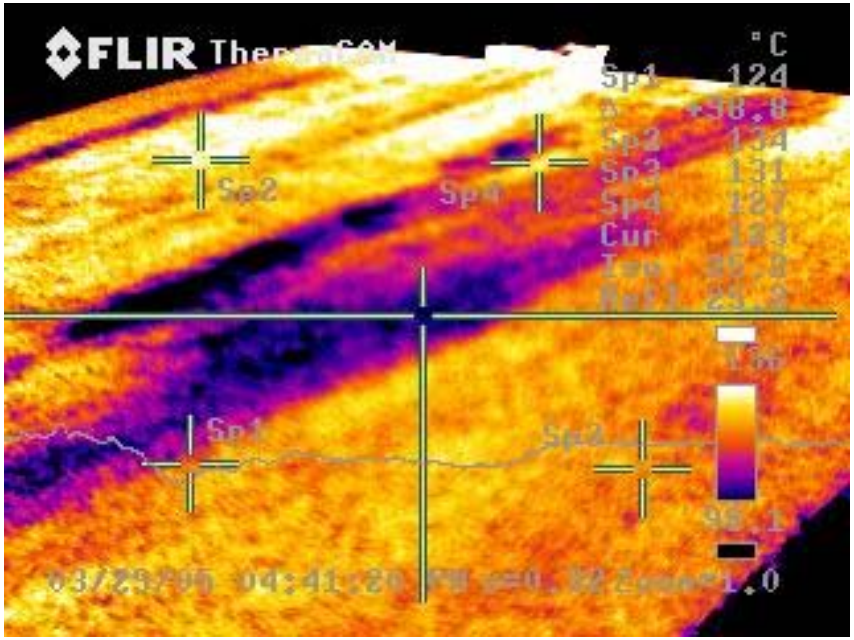
Physical Segregation

End of Load Segregation

End of Load Segregation

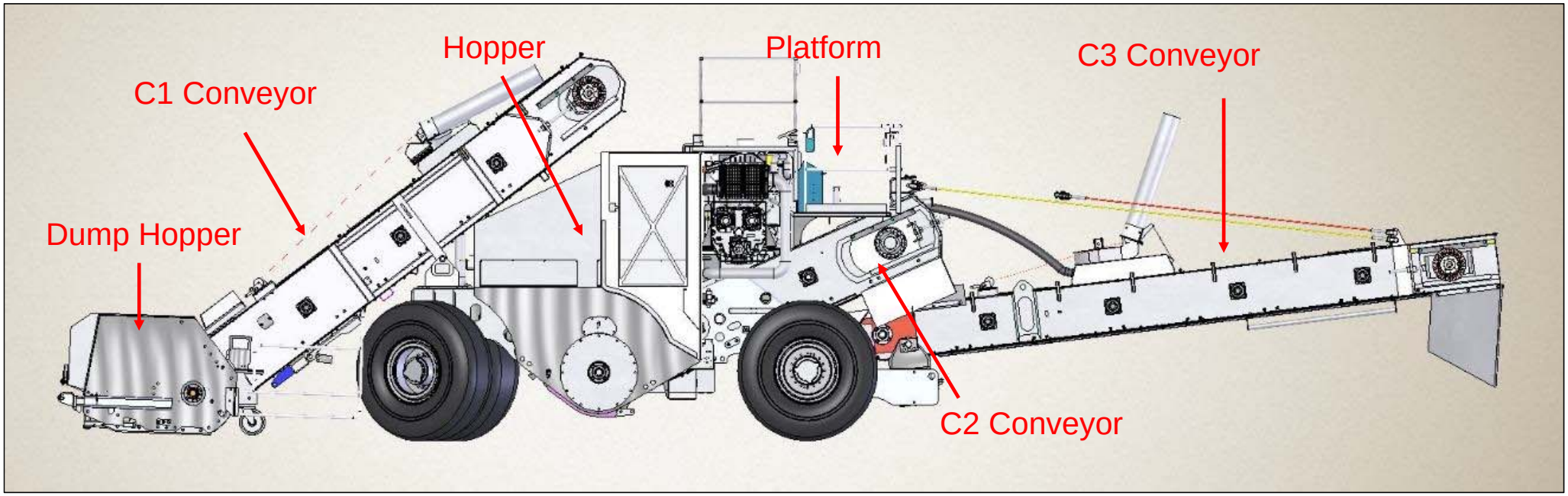


Compacting a cold spot is not good practice



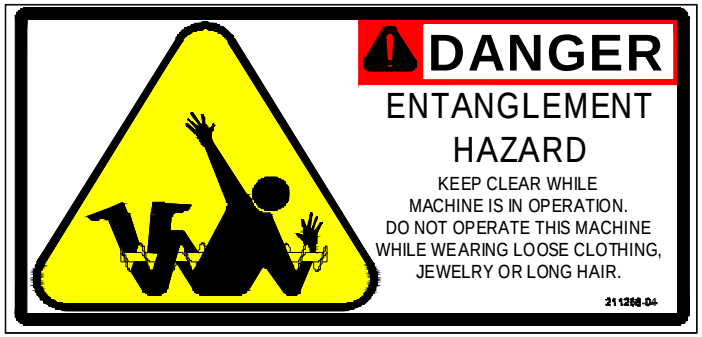
Differing temperatures at compaction means differing density – differing service life

Nomenclature

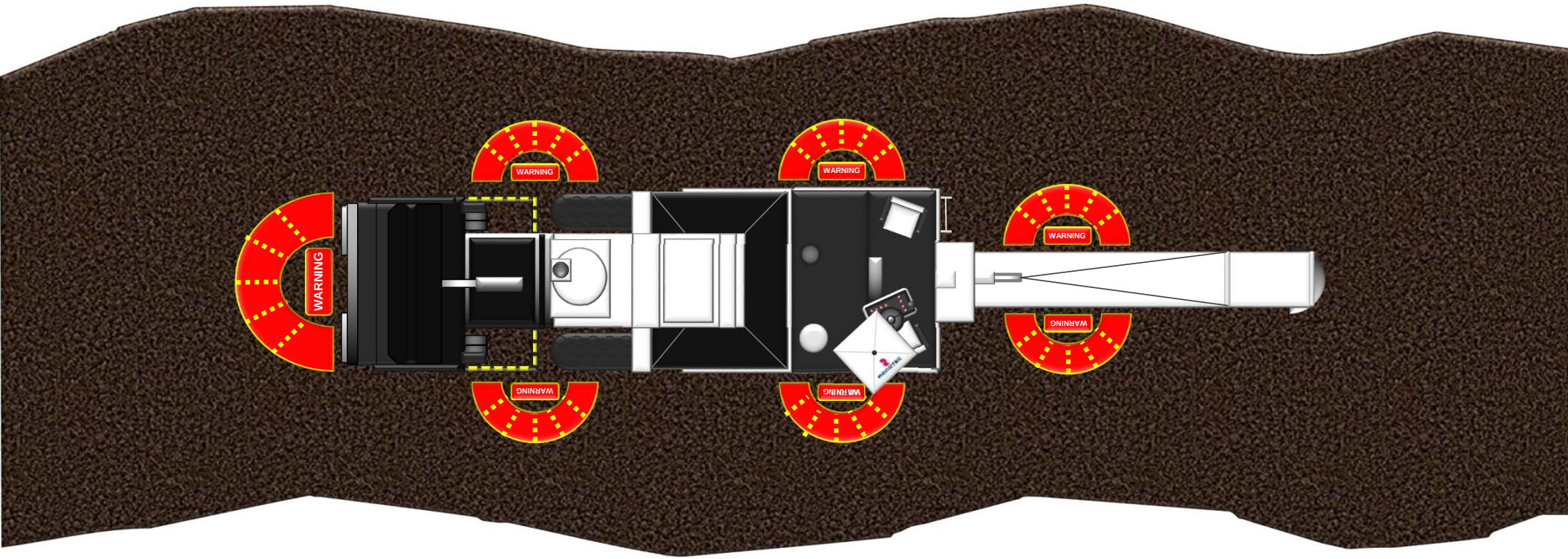


Safety First

- Heavy equipment is dangerous!
- Improper use or maintenance of this machine can result in personnel injury
- Reduce the potential for injury by complying with instructions and warning symbols



Danger Zones

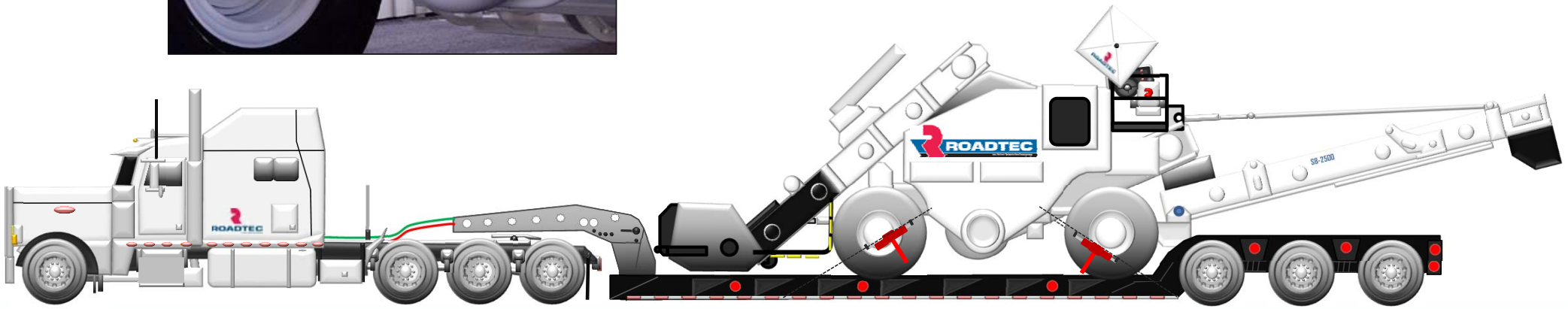


Safe Visibility

- Properly set mirrors are critical to safety
- It is **your** job to see the crew on the ground

Keep eye contact with **dump person and paver operator**

Proper Unloading / Loading



C3 Swing Lock

Main Operator

- Check Machine all over, **leaks-levels of oil, fuel, hydraulic, etc.** Start machine and **let warm up** watching gauges. After it is warmed up **turn on C-1, C-2, C-3 at idle** to let warm up for a little while.
- After warm up turn off conveyors and **move into position to pave**.
- Be sure **C-3 is lowered into position** and turn on all conveyors.
- **Close baffles**. **Communicate** with dump person and operator to start.
- Slowly move travel lever forward to **match paver speed**, may have to also **use speed pot** to help with this.
- **Watch insert** to let dump person know ahead of time to lower the truck bed down in time **to not hold any material in buggy yet.**
- When ready to pave communicate again with dump person to start dumping.
- Help dump person to not hold any material in C-2 until 2 loads have been run thru buggy to warm everything up **to prevent it from clogging up.**
- **Continue after 2 loads to fill buggy and communicate** with operator of paver and dump person to keep moving without running out of material.
- **Use the speed pot to regulate C-2** the amount of HMA delivered to the paver.

Dump Operator

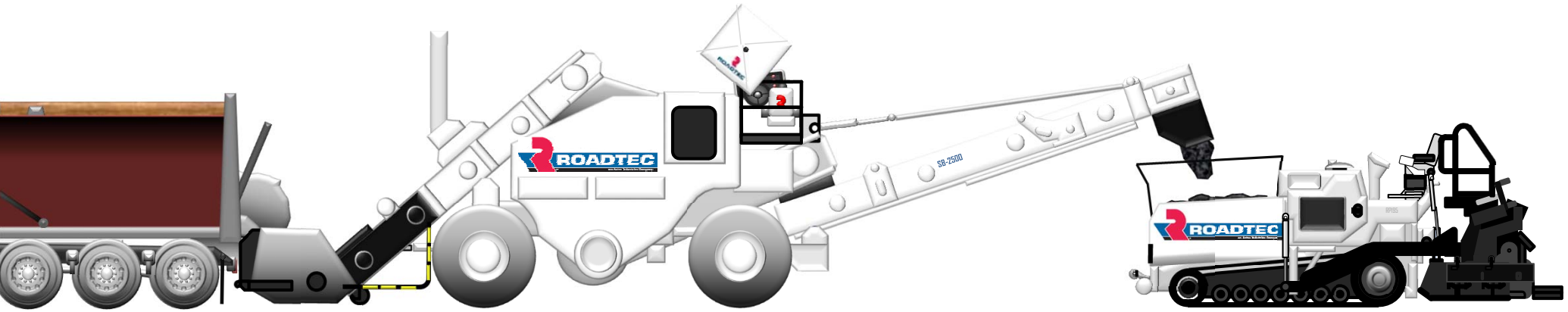


Dump Operator

- Move truck into position to dump.
- **Lower baffle** down all the way.
- **Check with operator** that he is ready to start.
- Raise bed slow to get flow moving, **not to overload hopper**.
- Raise baffle slowly to **not overload conveyor**.
- Only dump enough material to **fill insert in paver** with enough to start paver. Lower bed on truck.
- When you start paving raise bed back up to **keep paver moving without filling C-2**.
- Do this with the **first 2 loads**.
- With the 3rd truck you can start filling the C-2 full, keeping it **2/3s to 1/3 full at all times**.
- **Communicate with operator** to do this. You might have to lower the bed on the truck if the C-2 is getting full so the **operator will not have to turn off the C-1.**
- Repeat these steps the **rest of the day**.

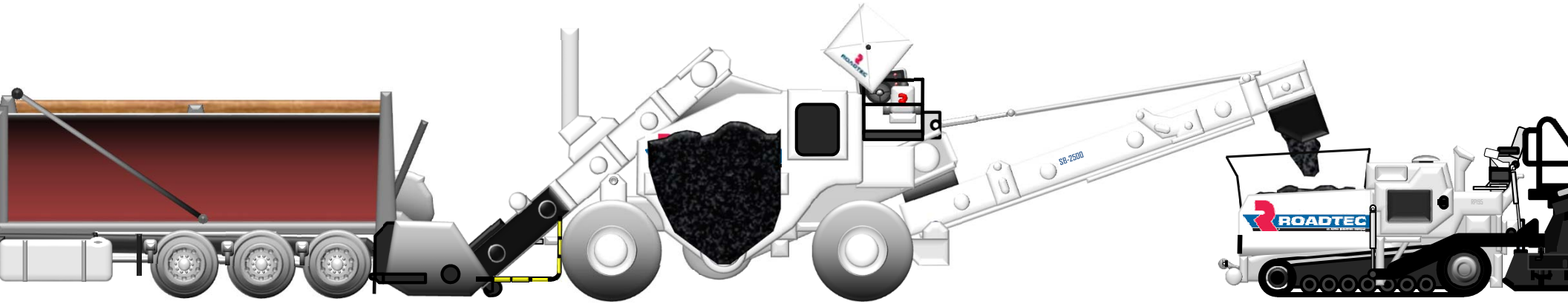
1st Load of Material

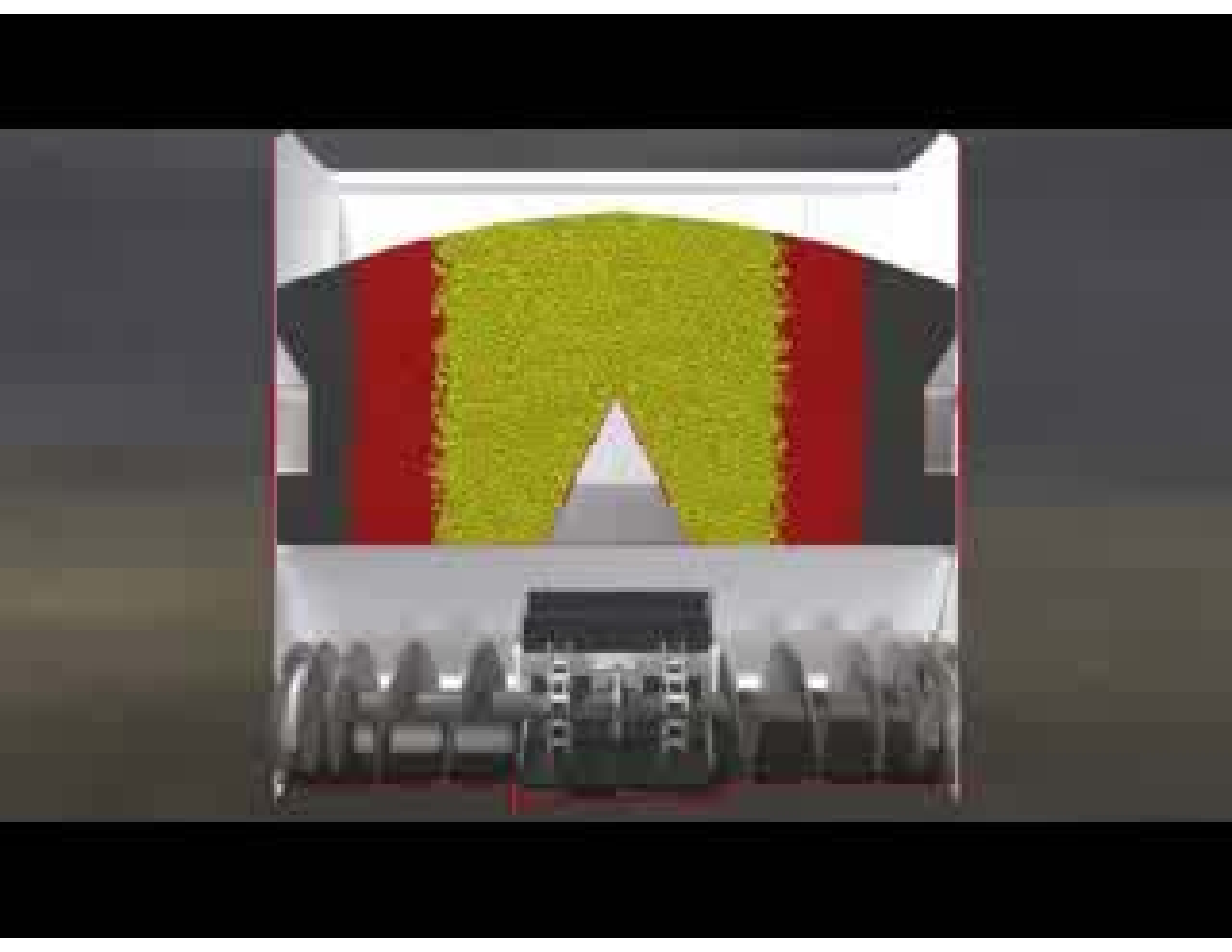
» Best Practice: Always run first truck load or two straight through the machine.



Material Flow & Loading Material

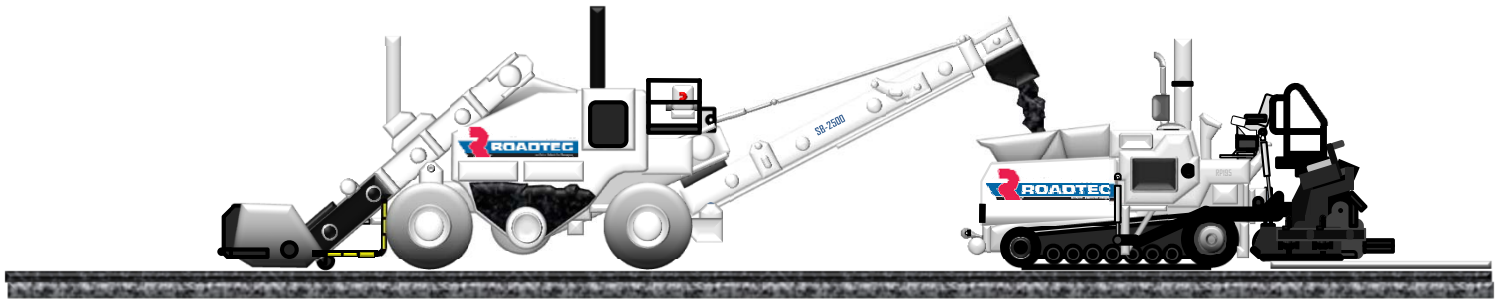
» Remember, make sure that the C2 has at least 1/3rd to 2/3rd capacity at all times.





Hopper Inserts

- Always use a hopper insert with a Material Transfer Machine
- If the insert is always out or low, the same problem with Material Segregation will persist



Correct Hopper Use

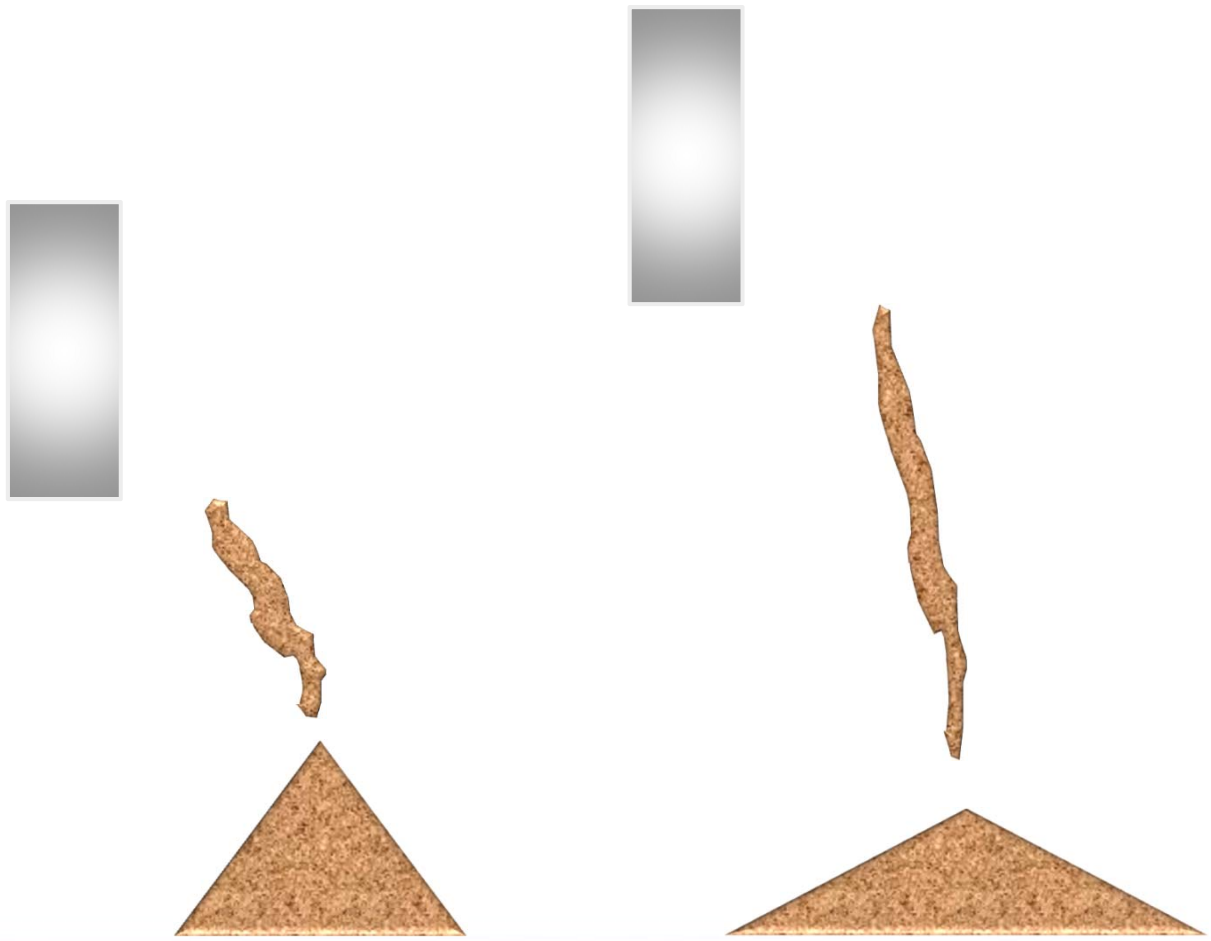
» Always have the C3 as low as possible to prevent material segregation within the hopper

» Keep the conveyor deck covered with a minimum of 12 to 24 inches of material. (152-254mm)

» Stop the paver before the material drops below flow gate.

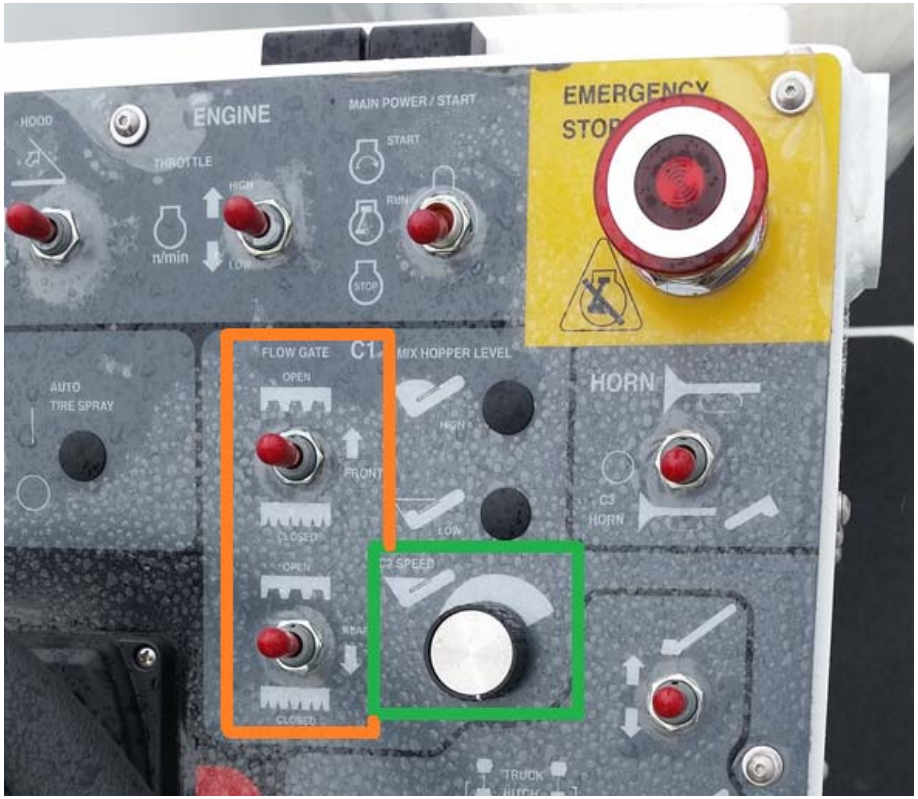
Why keep C3 low?

» Think of how sand would come out of a glass at different heights.



Just keep moving!

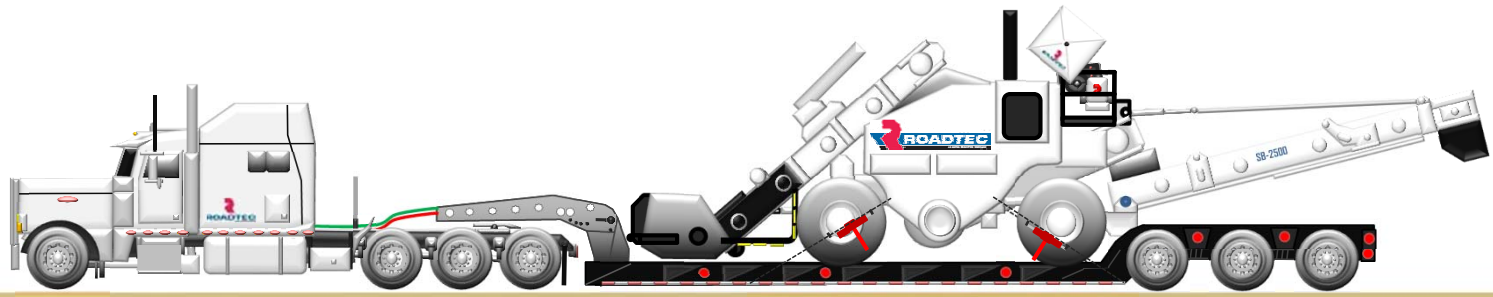
- Our goal is to never turn off the conveyors.
- If C1,2 or 3 are turning on and off while loaded, there is much more strain on everything.



Cleanout

» If there is asphalt left in the machine it is going to create excess wear (and a harder job for you tomorrow)

Questions?



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