

Quality Laydown Practices

Make a beautiful mat every time

Kyle Neisen
Product Manager, Roadtec



Preparing for the job

What does the job consist of ?

Be aware of Existing Grade Conditions:

Slope

Low Spots

High Spots

HMA Design



ASTEC INDUSTRIES, INC.



Preparing for the job

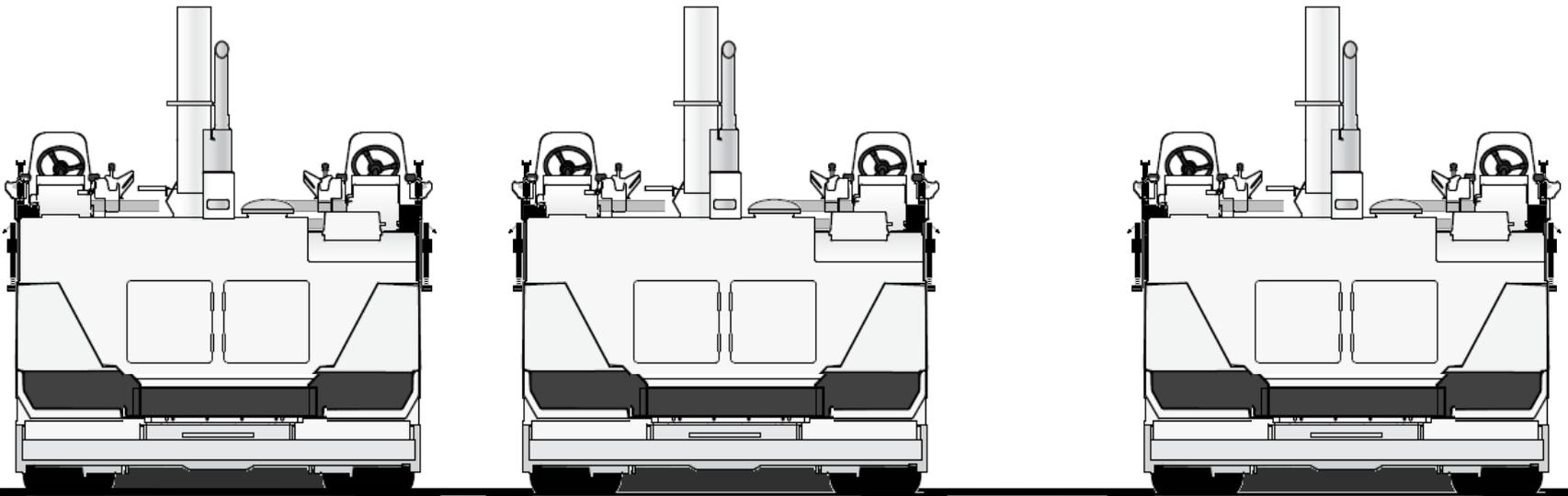
The **paver size** needs to be matched to **production rates** and job conditions.



ASTEC INDUSTRIES, INC.

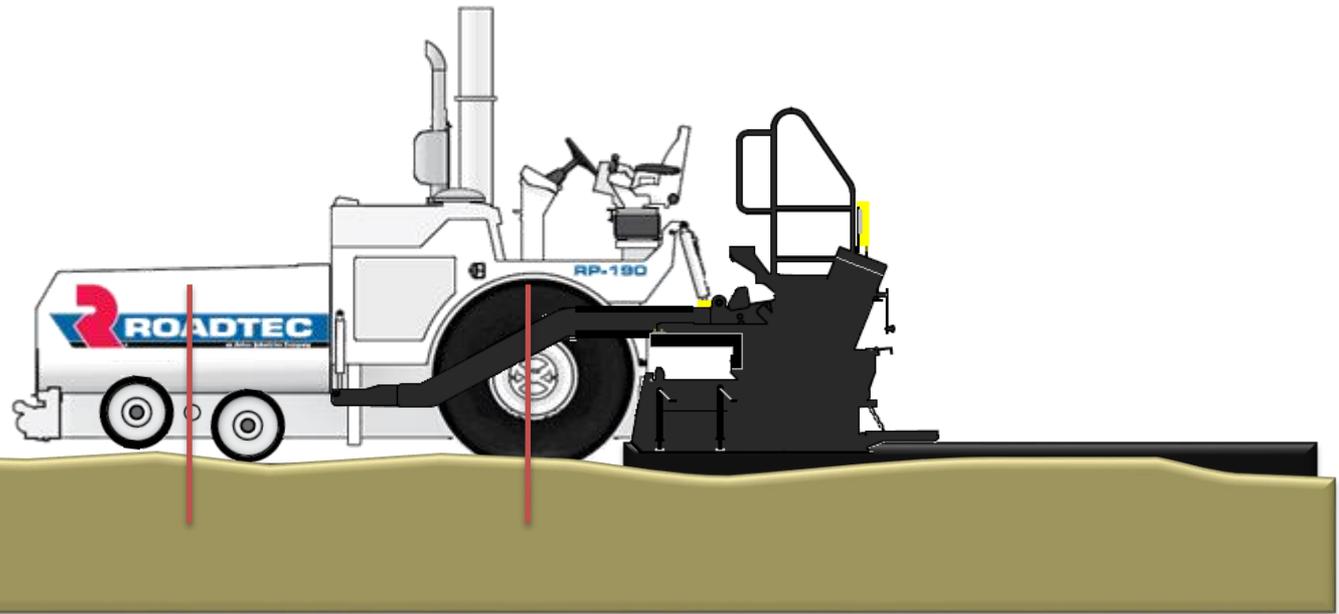


Paving width setup



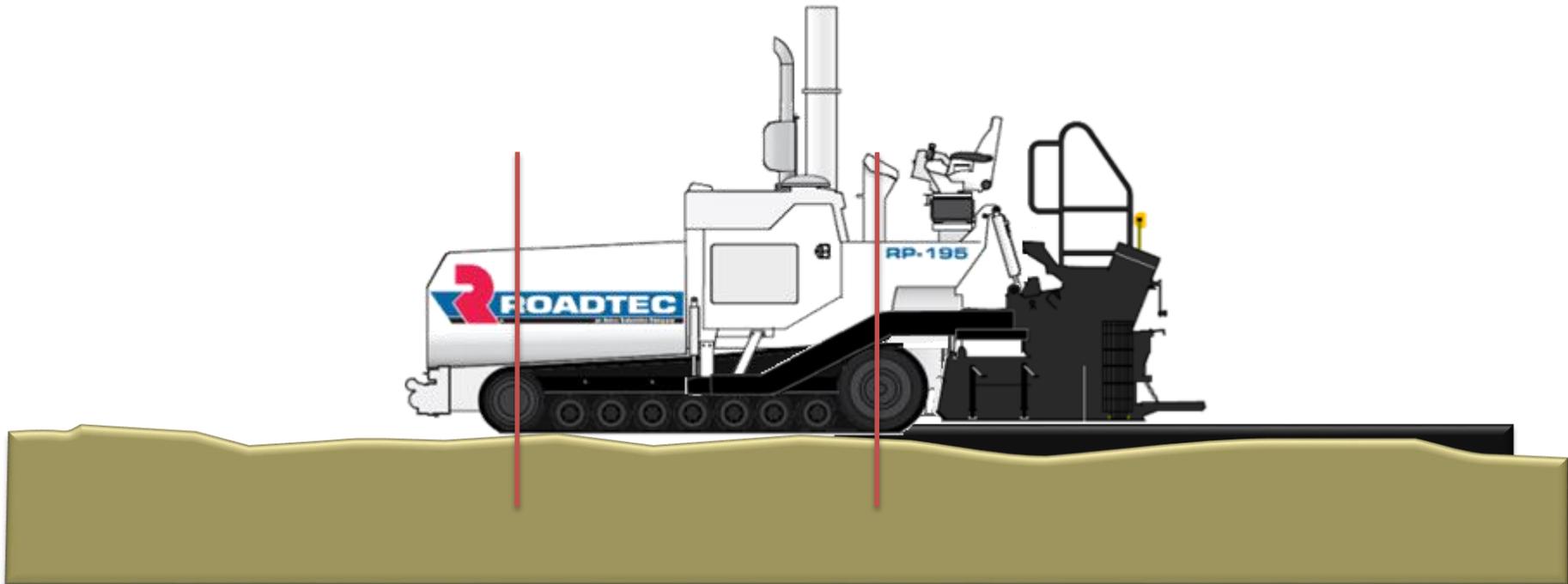
Rubber Tire

The tractor's self leveling action is the wheel base of the paver.



Track-paver

The internal ski here, is the gear box center line to the idler wheel center line.



ASTEC INDUSTRIES, INC.





ASTEC INDUSTRIES, INC.





ASTEC INDUSTRIES, INC.





ASTEC INDUSTRIES, INC.





ASTEC INDUSTRIES, INC.





ASTEC INDUSTRIES, INC.





ASTEC INDUSTRIES, INC.



Bad Tack

Good Tack



ASTEC INDUSTRIES, INC.





ASTEC INDUSTRIES, INC.





ASTEC INDUSTRIES, INC.



Truck Loading



ASTEC INDUSTRIES, INC.



Truck Loading



ASTEC INDUSTRIES, INC.



Truck Loading



ASTEC INDUSTRIES, INC.



Truck Loading



ASTEC INDUSTRIES, INC.



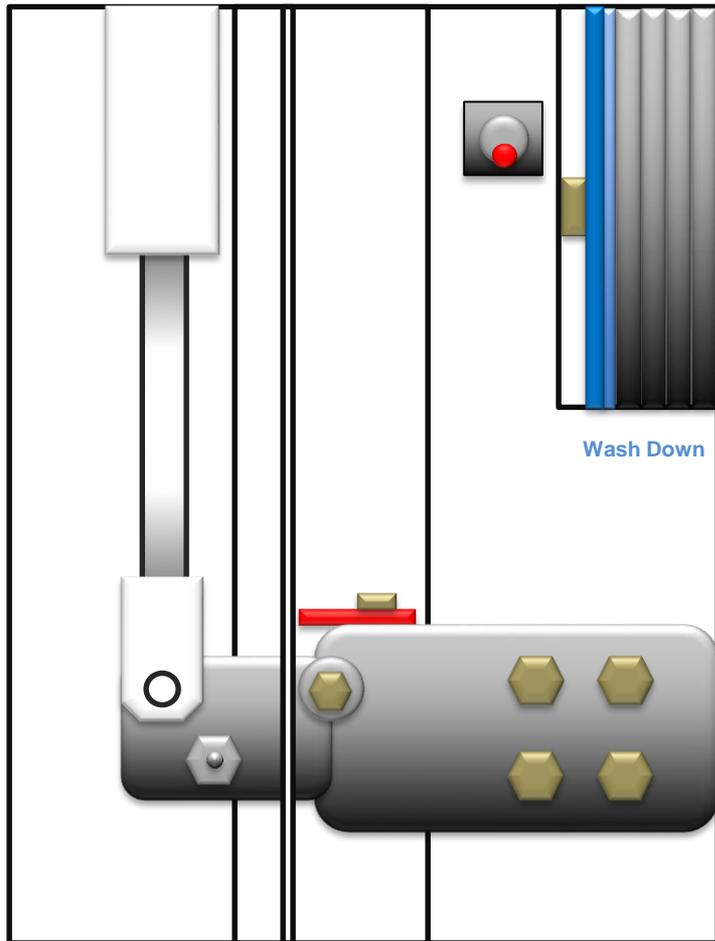
Truck Loading



ASTEC INDUSTRIES, INC.



Set the tow-point



Where should this Tow-Point be set?

This will depend on the thickness of the mat, but **a good rule to follow is 1 inch above the loose mat thickness**



ASTEC INDUSTRIES, INC.



To achieve the proper Mat thickness, you should always allow for roll down.

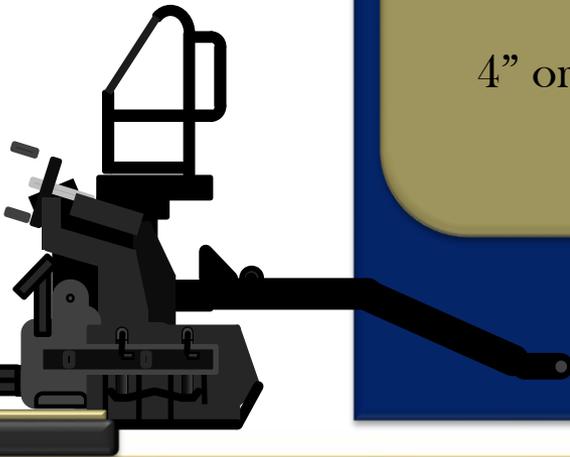
To Achieve Final
Mat Thickness:

1" or 25.4 mm
2" or 50.8 mm
3" or 76.2 mm
4" or 101.6 mm

Requires an Initial
Thickness Of:

1.26" or 32.0 mm
2.53" or 64.3 mm
3.79" or 96.3 mm
5.05" or 128.3 mm

Mat Thickness Chart



Shims Save Joints



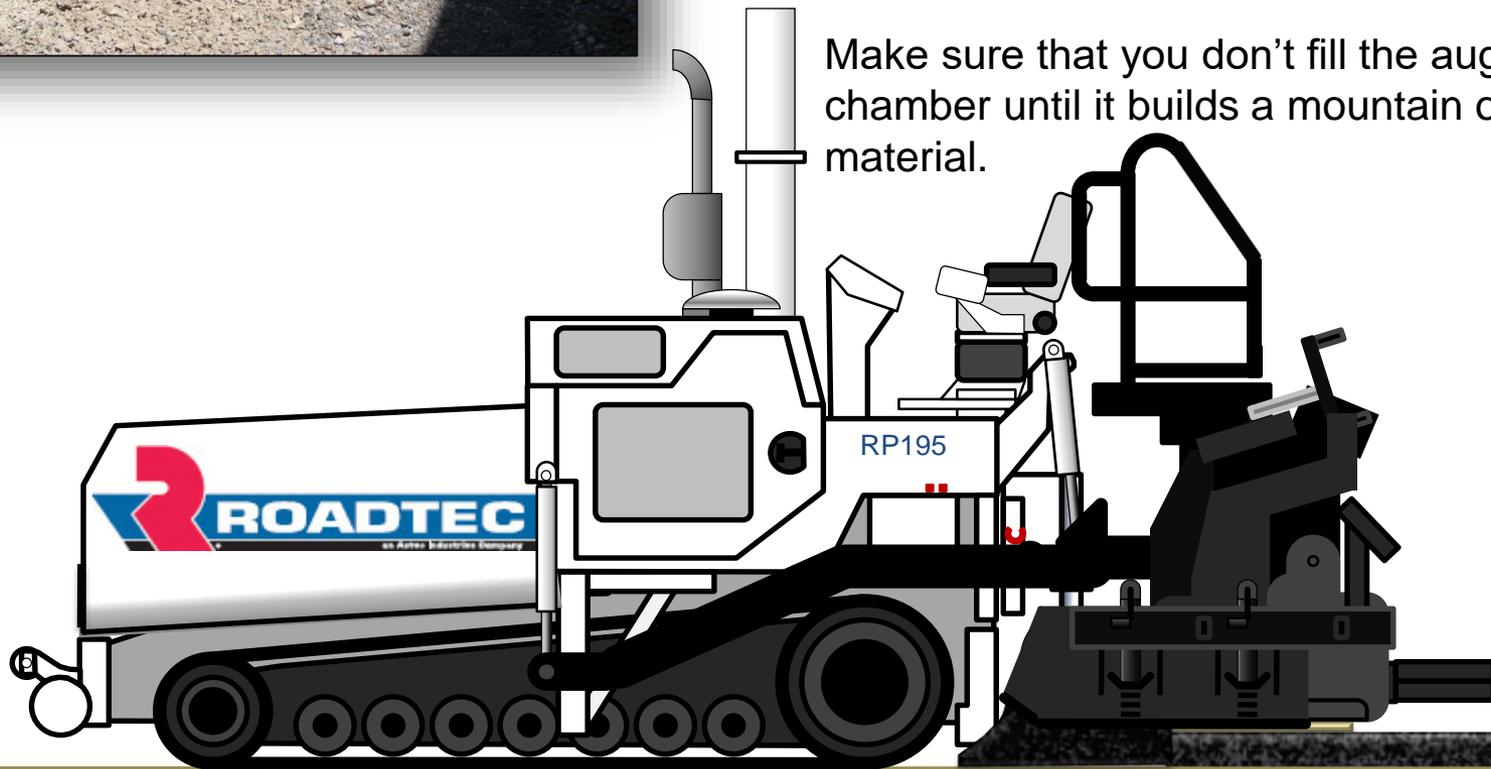


Starting Off

Load your auger chamber with material.

Here is a great example of containing your material as you take off.

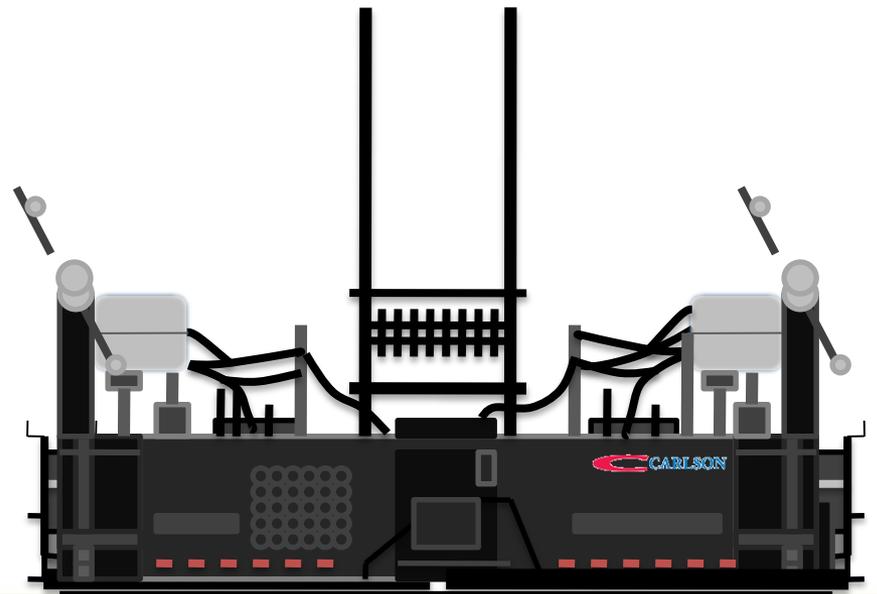
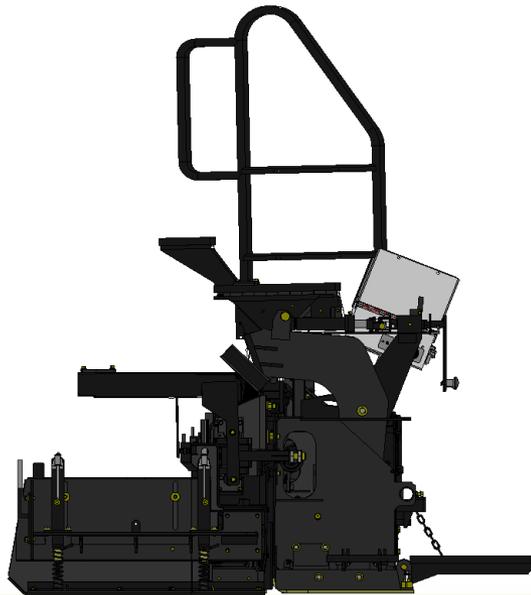
Make sure that you don't fill the auger chamber until it builds a mountain of material.



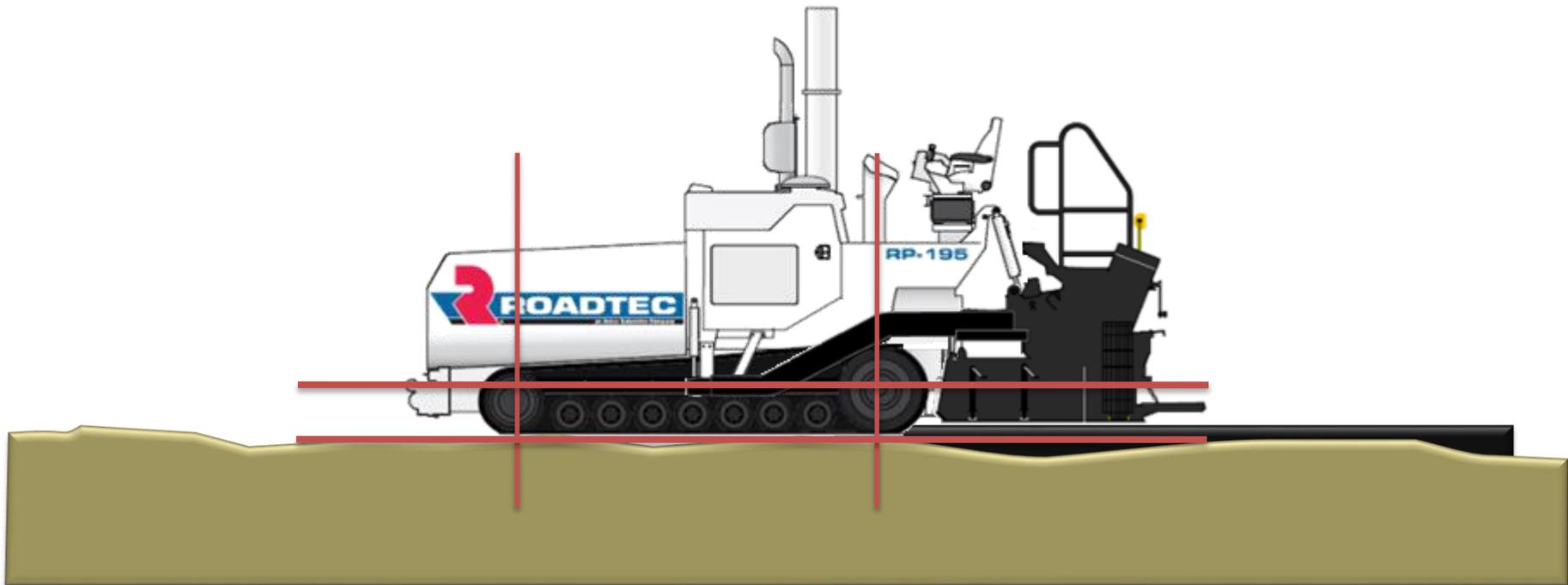
ASTEC INDUSTRIES, INC.



Add angle of attack

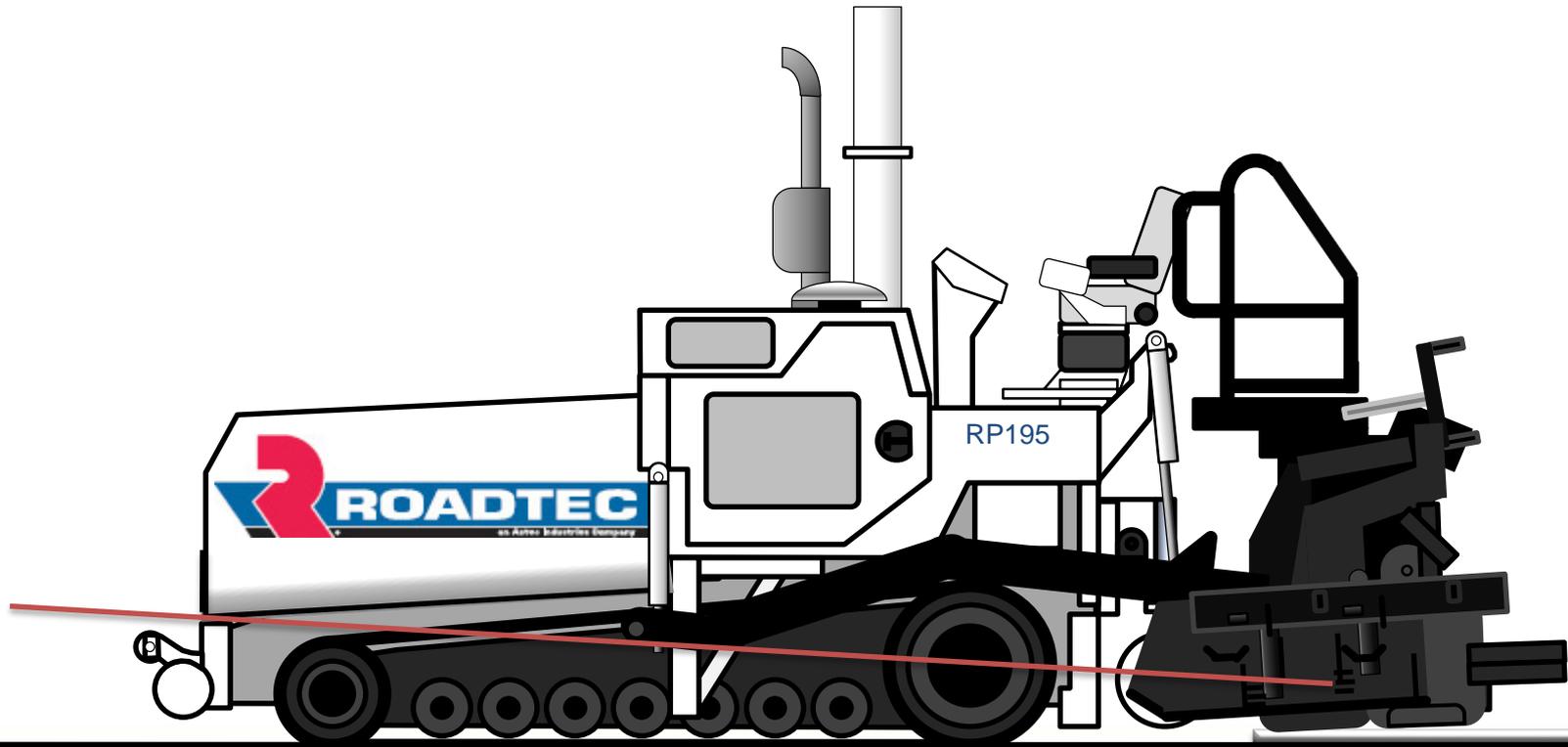


Target Point / Line of Pull



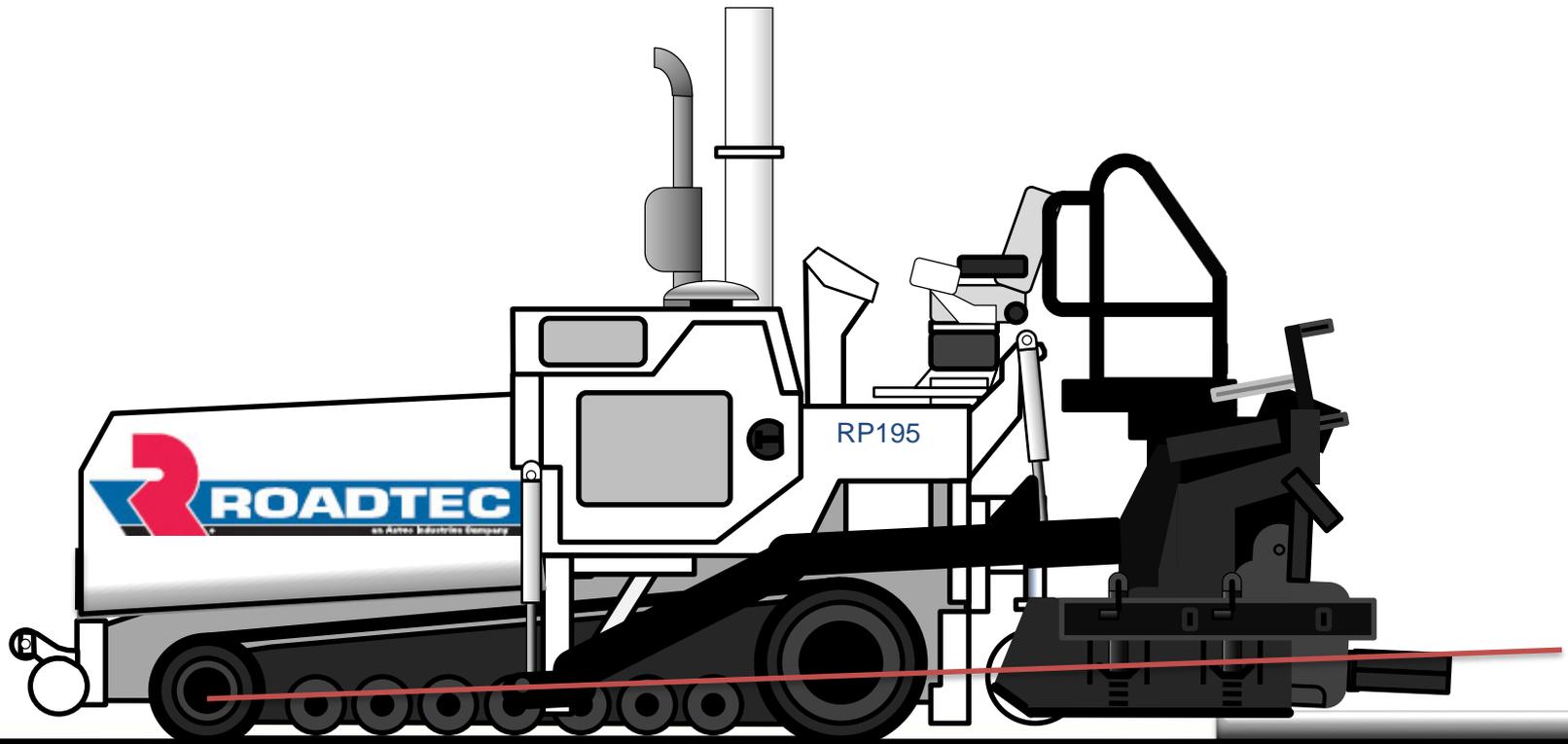
Line of Pull

With a high tow-point and a thin lift you would have a line of pull that is always pulling upward.



Line of Pull

With a low tow-point and a thick lift you would have a line of pull that is always pulling downward.



Line of Pull



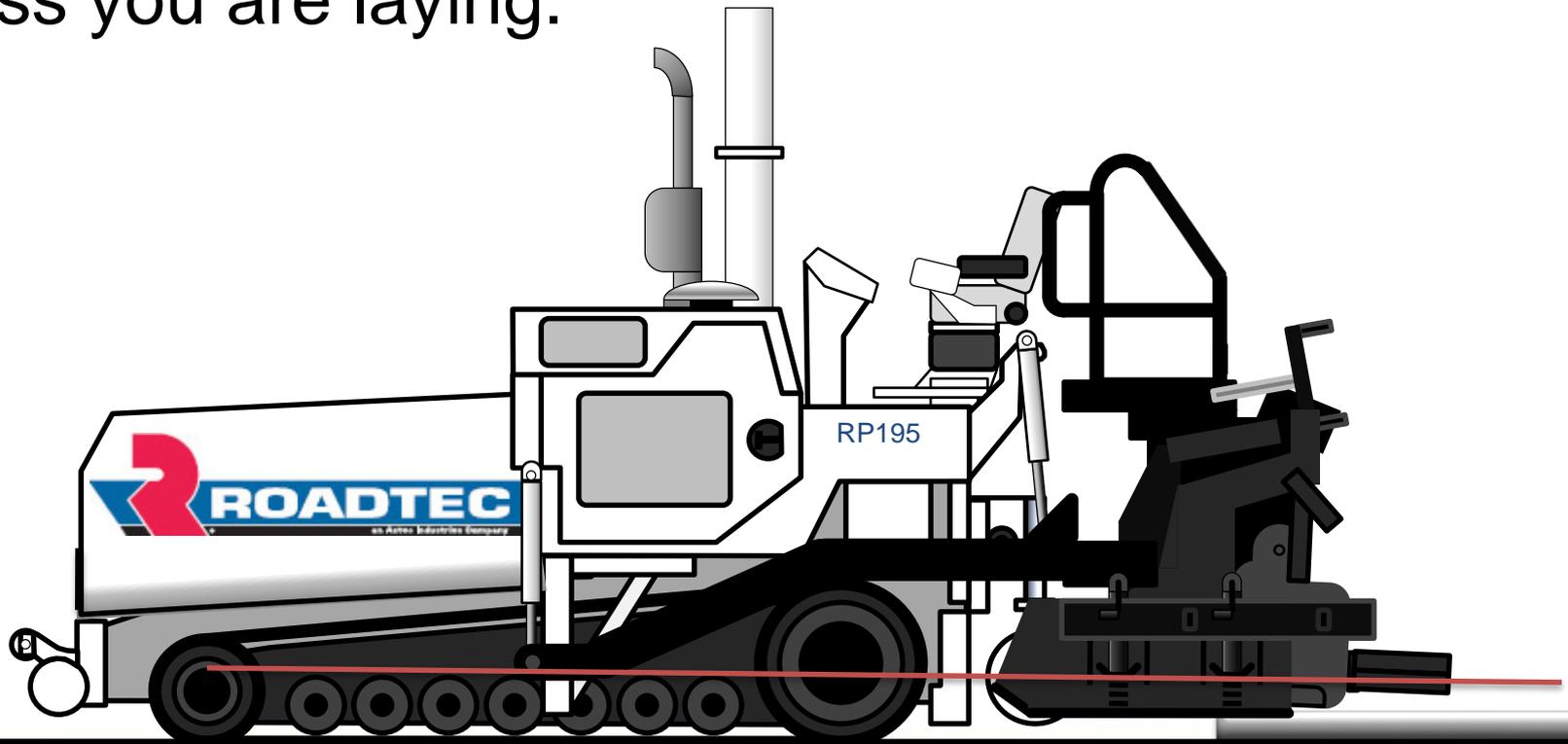
ASTEC INDUSTRIES, INC.



ROADTEC

Line of Pull

Place the tow-point **1 in** higher than the loose mat thickness you are laying.





STAND CLEAR
MATERIAL
DISCHARGE AREA

POWER POINT AREA
KEEP CLEAR
WHILE MACHINE
IS IN OPERATION



ASTEC INDUSTRIES, INC.





Keeps going...



...and going



...and going



ASTEC INDUSTRIES, INC.



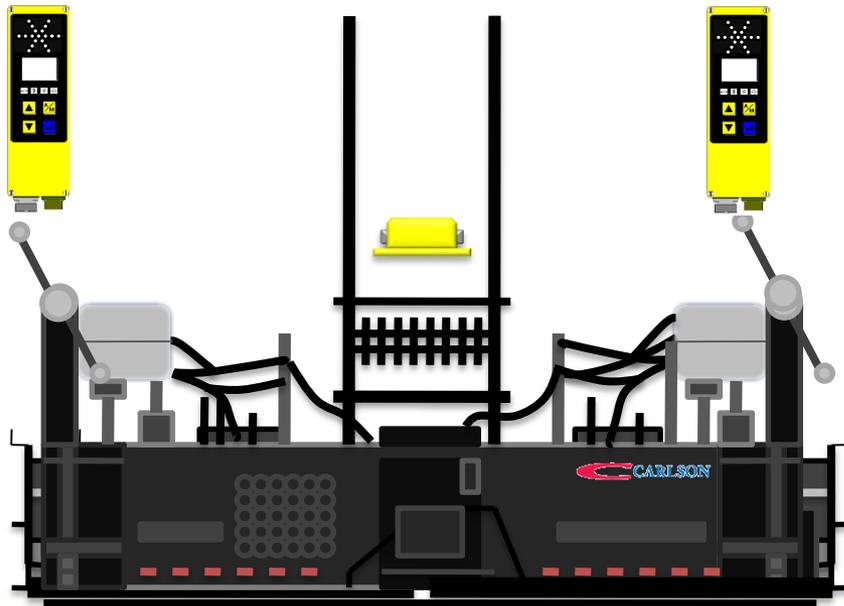


ASTEC INDUSTRIES, INC.



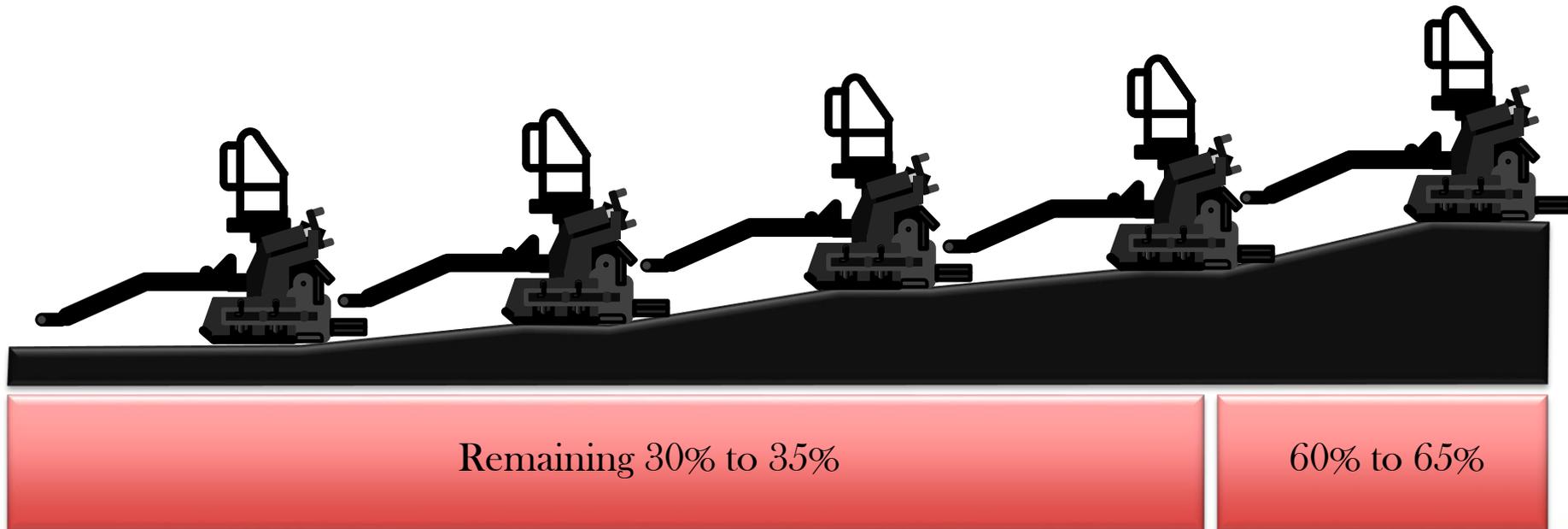
4 Ways to control the screed

1. Manual with the depth screw
2. Grade control & manual
3. Dual grade control
4. Grade and slope control



Screed Reaction Time

For a screed to rebalance, it takes 5 tow arm lengths for the screed to rebalance the forces working against it.





ASTEC INDUSTRIES, INC.



Auger Adjustments

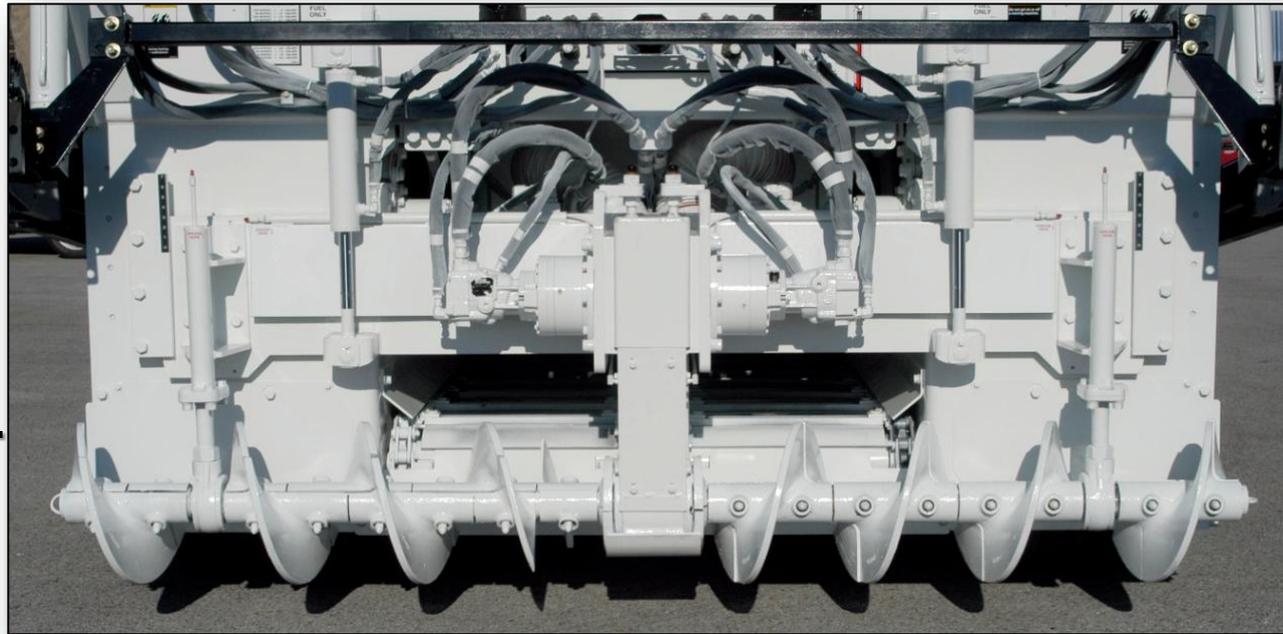
The head of material is the asphalt that is carried in front of the screed

There is no need to carry anymore material in front of the screed than is required to feed the entire length of the screed.

Augers break.

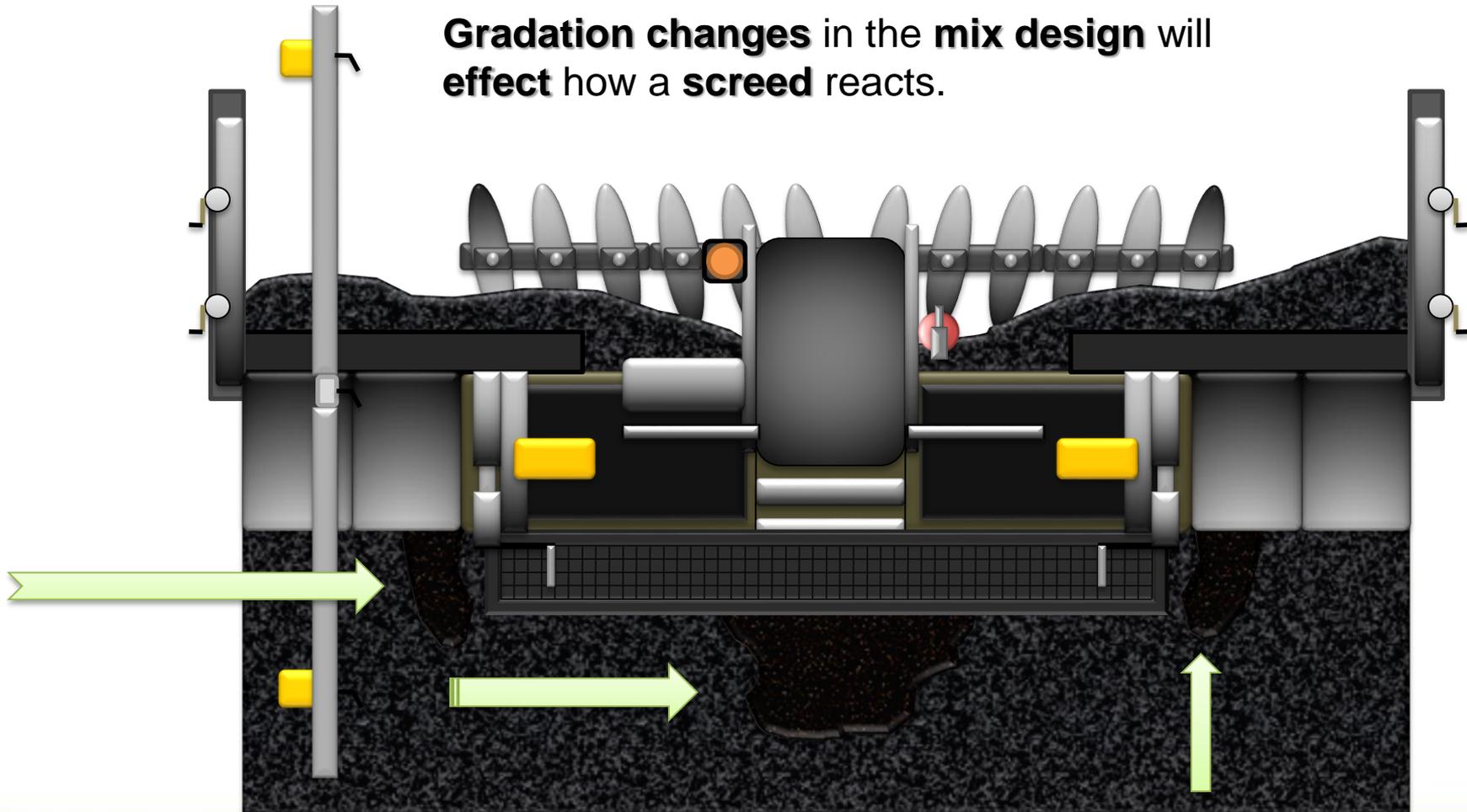
Augers get worn out.

Augers can be changed.

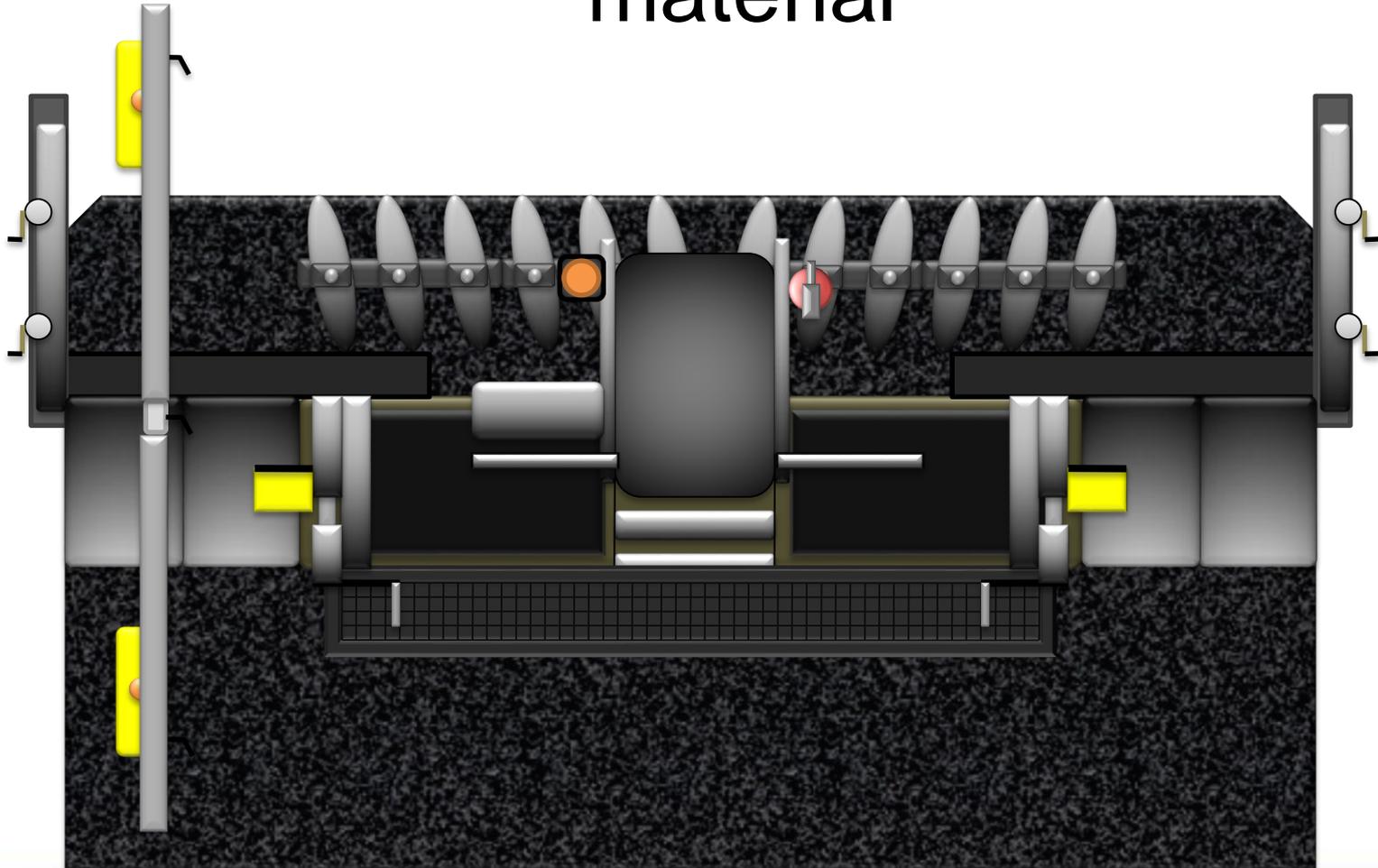


Irregular head of material

Gradation changes in the mix design will **effect** how a **screed** reacts.



Consistent head of material





RP-190e

ROADTEC
an Astec Industries Company



ASTEC INDUSTRIES, INC.



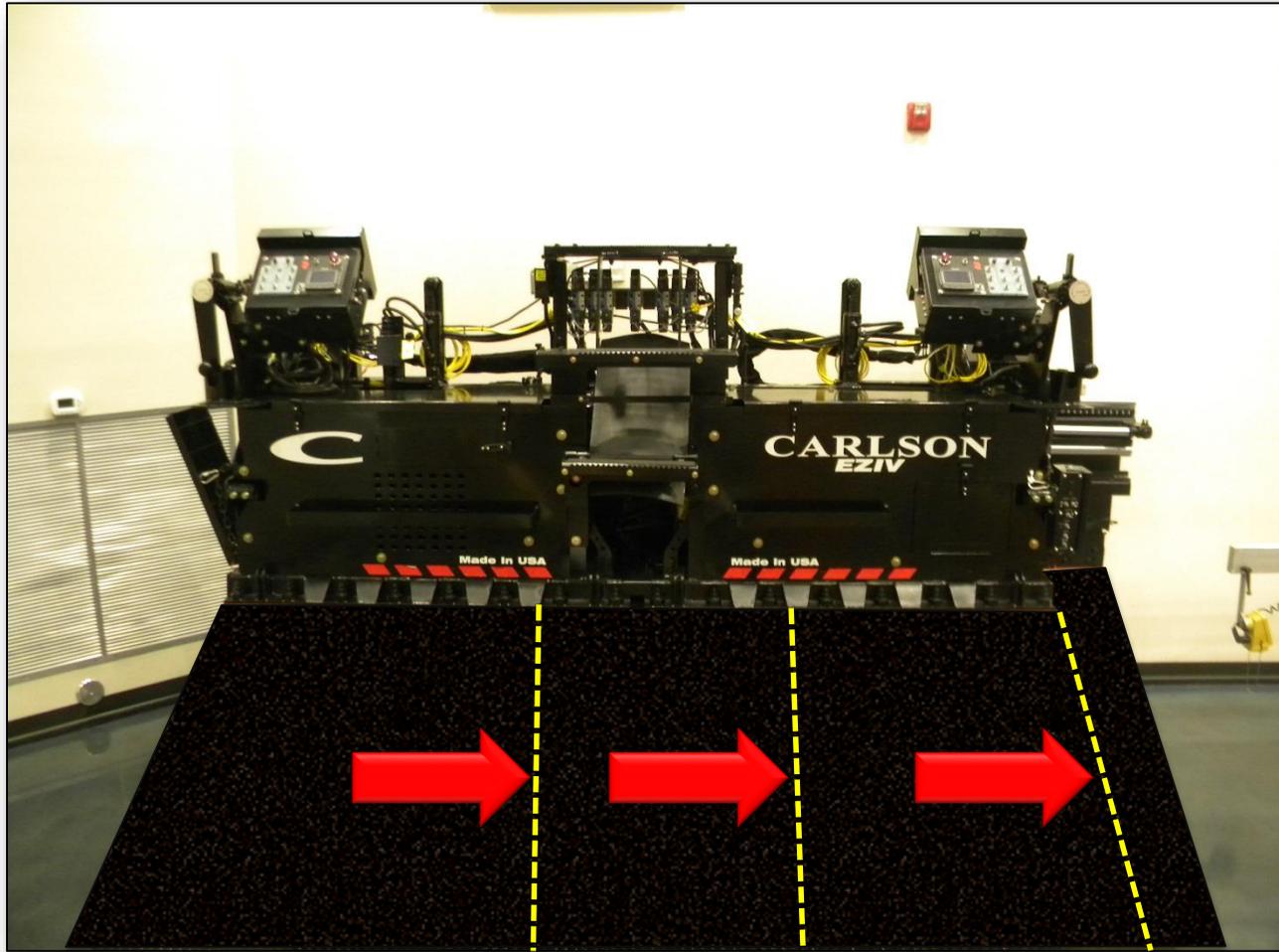
Go Pave



ASTEC INDUSTRIES, INC.



Vertical or match height

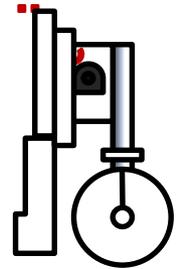


What can you tell about this Job?



Mat Quality and Texture

With streaks' that look like this, you can usually get them out by just adjusting your auger height.



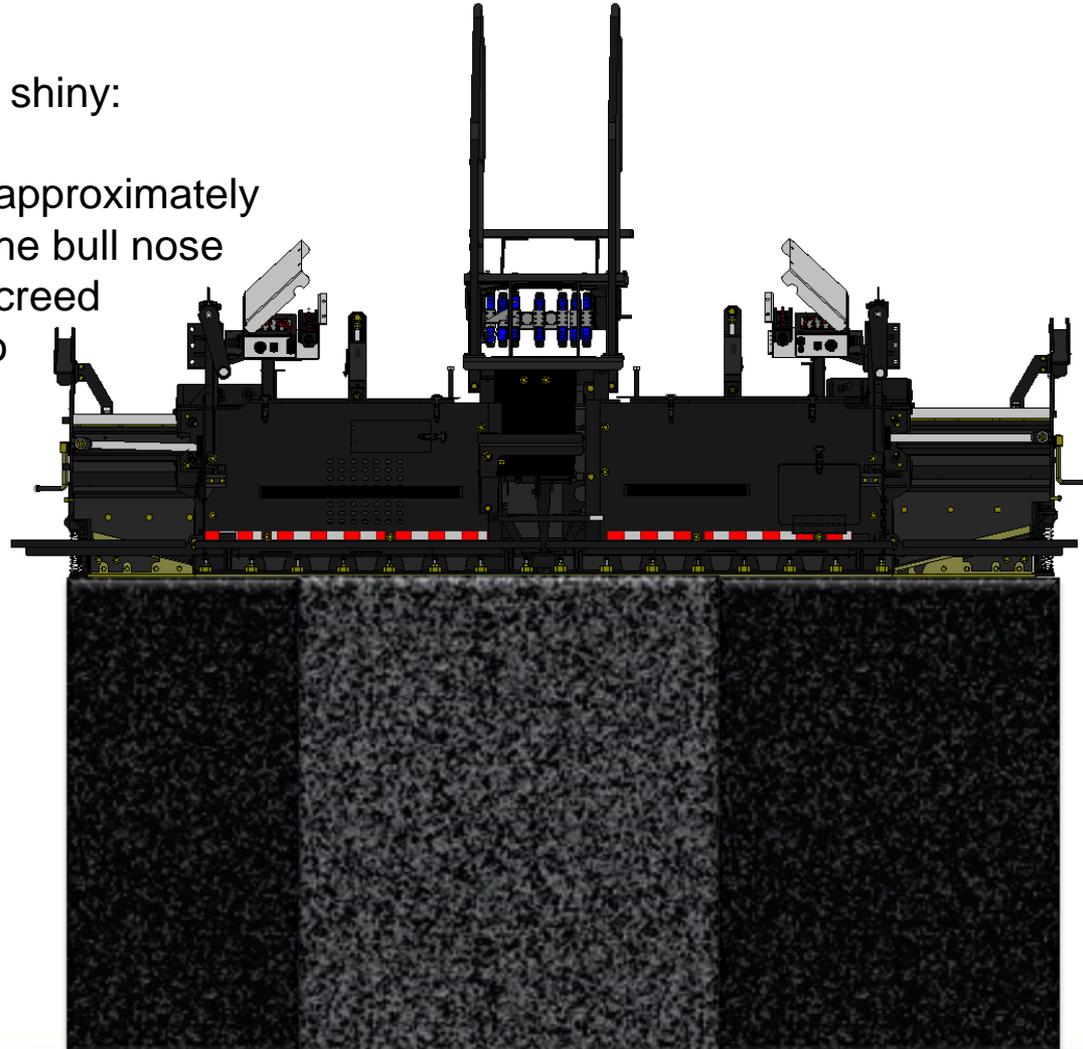
As a general rule start out with the augers 2" above the Mat.(50mm)



Mat Quality and Texture

This mat (under extension) is too tight and shiny:

The angle of attack jack should be turned approximately one revolution counter clockwise to push the bull nose down to decrease mix feeding under the screed extension, thus transferring more weight to the main screed.



Mat Quality and Texture

Taking angle of attack out of the extension will cure this flaw..



ASTEC INDUSTRIES, INC.



Angle of attack.



Paving width setup

