

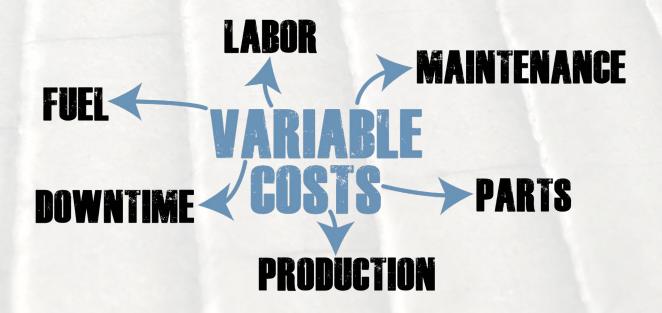
Engineered Wear Resistant Liner Systems





In today's **tight labor market** and **high cost of diesel fuel** it is more important than ever to:

- Keep your equipment running efficiently
- Reduce maintenance hours / Downtime





In the U.S., the V/U ratio was over 1.8 in the last quarter of 2021

- Which meant there were nearly two vacancies for every unemployed worker.
- This was higher than its pre-pandemic level and higher than the recent historical norm of about 0.7 since 2000.
- 11.3 million unfilled Jobs @ the end of Q2 2022.
- 5.9 million people looking for employment
- This means there almost about two open positions for everyone looking for a job.
- Everyone seems to agree that the labor market is still very tight.

Today's tight labor market:

- More and more companies are having to hire based on work ethic due to a shortage of experienced workers.
- This equates to more training time needed.
- Training can't be completed if time is being utilized for maintenance / downtime.



Downtime is a large expense / hit to your bottom line:

- Average revenue loss from 24 hours of downtime is \$300,000.00
- A metal recovery facility will lose on average between \$200 and \$250 per minute when down.
- You can see by the numbers above that any increase in service life equates to a big increase in your bottom line revenue.



Solution to Keep your Equipment running efficiently and reduce maintenance hours:

Utilize wear resistant liner systems that are:

- **Engineered to fit properly**
 - Reduce weight
 - Minimal weld seams
- Premium wear resistant materials













Advantages of a Properly Engineered Liner Package:

- Reduce Installation Labor
- Lower Maintenance Labor / Time
 - Increased Production
- Reduced Wear and Tear on Moving Components
 - Reduction in Fuel Expenses



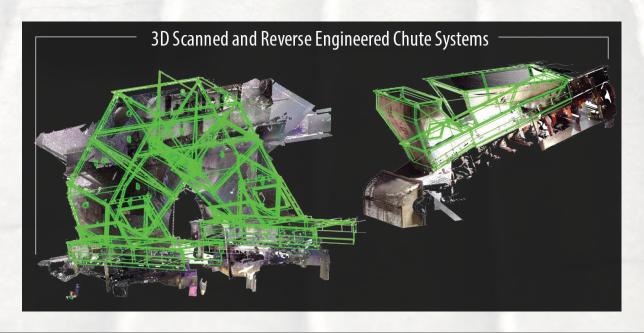


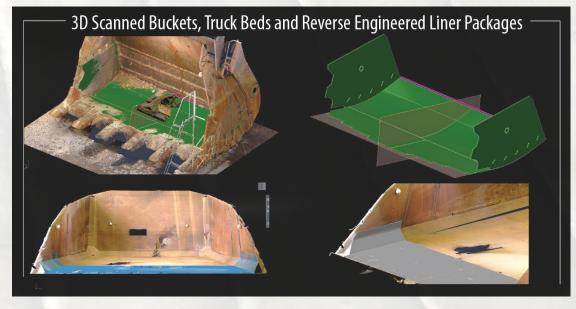




Utilization of 3D Laser Scanners:

- Ensures Proper Dimensions for a Perfect Fit
 - Reduce Installation Time
 - Save on Labor Costs
- Increased Level of Safety from Reduction in Labor Time and Handling







Choosing the Proper Premium Wear Resistant Material:

- Each application is different, therefore require a different type of AR material
- Utilizing a premium material can provide up to 20 times the service life over a standard AR400 or AR500 wear plate.
 - Improved Material Flow
 - Reduction / Elimination of Material Hang-Up



Utilization of a Premium Carbide Overlay Plate to create a very smooth dozer blade liner system.

- This low coefficient of friction allows for:
 - Faster push
 - Increased productivity
 - Reduced fuel consumption
 - Eliminates material hang-up on the blade



Premium Wear Resistant Materials:

Types of premium wear resistant materials that outlast normal AR Steels: Premium Carbide Overlay Plate (such as SureAlloy)

- Provides superior protection from abrasive wear
- Can utilize a stainless steel base plate for increased heat resistance

Premium High Alloy Quench & Tempered Steels (such as Vaguard)

Provides superior protection from abrasion and impact over a standard AR500 Steel

Provide a longer service life which can also allow for the use of a thinner liner.

Utilization of thinner liners equates to:

- Increased Payloads
- Decrease in Fuel Usage
- Less Stress and Wear on Moving Components



Example of Increased Production Realized from the use of a Premium Engineered Wear Resistant Liner System:

The Engineered Liner System dumps a full load in just 19 to 22 seconds.



The OEM Liner takes 30 to 34 seconds to dump a full load.

This (10) second savings in dump cycle adds up quickly. With (15) trucks running per shift and hauling between 280 to 300 loads, this saves between 45 to 50 minutes This time savings equals an additional 1 to 1.5 loads per shift. This mine site is running (2) shifts, giving them an additional 2 to 3 loads each day. These trucks are hauling 250 tons per load and running 7 days a week. These Engineered Truck Bed Liner Systems allow the fleet to haul approximately 273,000 extra tons of material each year.



Partnering with the Proper Manufacturer:

The Liner System Manufacturer should:

- Use 3D Laser Scanning Technology
- Have a Solid Inventory of Premium Wear Resistant Materials
 - Lack of inventory can cause major delivery delays
- Manufacture their own Premium Materials







Key Points to Remember:

Advantages of a Properly Engineered Liner Package:

- Reduce Installation Labor
- Lower Maintenance Labor / Time
 - Increased Production
- Reduced Wear and Tear on Moving Components
 - Reduction in Fuel Expenses

