

Improving Tire Safety and Performance

National Slag Association
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Kevin Rohlwing
Chief Technical Officer



About TIA

- TIA is based in Bowie, MD and has more than 13,000 members from all 50 states.
- Most of the members are tire dealers, retreaders, suppliers and manufacturers.

The mission of TIA is to promote tire safety through training and education, to act as the principal advocate in government affairs and to enhance the image and professionalism of the industry so that our member businesses may be more successful.



About TIA

- TIA is also the global leader in tire technician training and certification with over 200,000 people trained and/or certified.
- TIA's Earthmover Tire Service (ETS) program addresses the proper procedures and safety guidelines for servicing 1-piece, 3-piece, and 5-piece OTR tire and wheel assemblies including lifting and blocking, demounting, inspecting, mounting, removing, installing and inflating.
- TIA trained technicians know the steps that must be taken during service to help ensure safe operation and performance after the service is complete.

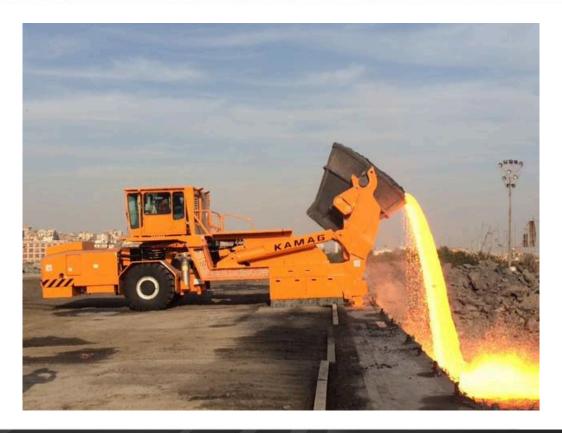


Improving Tire Safety





Improving Tire Safety





Improving Tire Safety

- The most critical factors in tire safety are proper tire inflation and load.
- Underinflation/overloading results in overflexing in the sidewall which creates additional heat in an application with constantly high operating temperatures.
- Inflation pressure should be checked first thing in the morning when temperatures are the lowest.



Tire Inflation Safety







According to OSHA Regulation 29 CFR 1910.177, all tire inflation devices must consist of:

- A clip-on air chuck
- An in-line valve with a pressure gauge, or a presettable regulator.
- And a sufficient length of hose to allow the technician to stand outside the trajectory.



Tire Inflation Safety

- The most important safety step when inflating a tire is to stand outside the trajectory of the sidewall during inflation.
- Tires on slag pot carriers are multi-piece assembly that consist of interlocking components that can separate under pressure if they are damaged or severely worn.





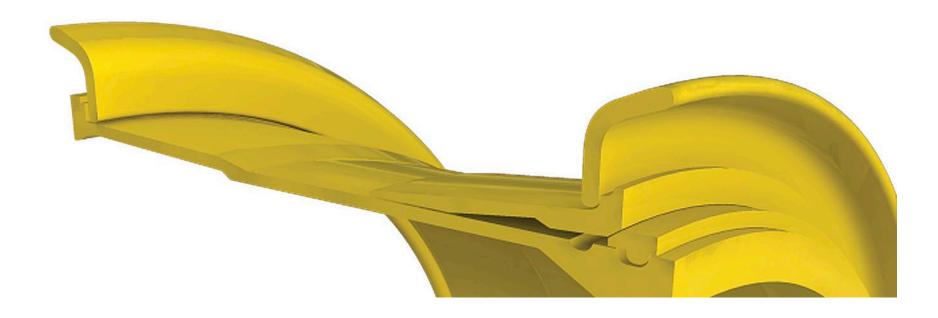
Multi-Piece Wheel







Multi-Piece Wheel





Tire Performance





Improving Tire Performance

- Inflation, inflation, inflation.
- On equipment with dual tires, matching inflation and diameter.
- Clean tipping area at the barrier.
- Clean and smooth haul roads.
- Tire and wheel service from a qualified source.





Improving Tire Performance

- Proper wheel torque.
- Multi-piece rim component cleaning, inspection and replacement when necessary.
- Proper tire selection.
- Driver impact on tire wear.









Improving Tire Safety & Performance

- Tire inflation pressure maintenance is the key factor for both tire safety and performance. Underinflation causes damage to the tire and rim components as the result of overloading.
- When adjusting tire inflation, maintenance technicians must use an OSHA-compliant inflation device and remain outside the trajectory during inflation.
- The condition of tipping areas and haul roads have a direct impact on tire performance. Failing to maintain these areas results in tire damage that forces premature removal from service for the tire and casing.



Thank You!

Kevin Rohlwing

Chief Technical Officer

krohlwing@tireindustry.org

training@tireindustry.org

