ALgov Servicing Tires Safely

A workplace health and safety bulletin on proper tire service highlighting tire and wheel assembly failures.

Inflating a truck tire may seem like a simple, non-hazardous task until one realizes that a 20-inch tire inflated to 100 psi can contain up to 40,000 lbs of explosive force. A properly maintained tire can handle this amount of pressure but one that has been used while flat or underinflated can present significant risks. The ply cords in the sidewalls may have lost their strength and have become permanently damaged. One or more of the weakened cords may then break during inflation, placing more stress on adjacent cords. Cord failures then continue until a rupture occurs and the sidewall “zippers” open.

Particularly serious are events caused by the explosion or violent separation of parts of multi-component wheel assemblies. Blowoffs, the sudden, violent springing of tire lock rings, rims or flanges from tires being assembled, are the main hazard. Blowoffs usually happen when tires have just been mounted on their rims and…