

# SAFETY AWARENESS

Brief Topic Safety Refresher Training For Associates

2024

## Tie Down Chain Grades

There are a few very common misunderstandings that people make when trying to find and purchase a chain grade for their load tie-down. Knowing these common mistakes will help ensure that you can avoid making them! According to fellow truckers and chain manufacturers, there are two very common problems flatbed haulers encounter in the industry:

### Load Chains

Load chains are constructed differently from alloy chains, which are what chain grades 80+ are crafted from. Load chains are specifically used within the inner workings of a hoist, which means that they don't meet the same strength requirements nor hardness requirements that you might find with a Grade 80 or Grade 100 chain rating. If you mistakenly try to use a load chain for overhead lifting, you risk deforming if not completely snapping the chain, which can cause damage to the chain, the hoist, and your load! Load chains are not graded or prepped for the stress that overhead lifting can cause on-chain ratings over 80+ or made with alloy steel.

The second most common mistake is the general misuse or abuse of alloy chains. Frequent inspections are the best way to ensure all your trucking tools and supplies are safe to use. Poorly stored or non-inspected equipment can increase the chances of injury or damage while you're on the road.

### Grade 43

Also called Grade 43 High Test Chain or Grade 43 Tow Chain, this is common in the towing and logging industries. Never use this chain for overhead lifting. This chain includes designs embossed using a 43 or a G4. Though stronger than G30, these tow chain ratings are still not recommended for overhead lifting jobs and have a working load limit of 2,600 to 13,000 lbs.

### Grade 70

Grade 70 Transport Chain, also called "Grade 70 Truckers Chain," works in securing loads for over-the-road hauling. Never use this chain for any overhead lifting. This chain includes designs embossed using a 7, 70, or 700. Their unique gold coating makes them DOT recognizable and provides protection from abrasion which then increases their on-the-road lifespan. G70 has a working load limit between 3,150 to 15,800 lbs.

### Grade 80

Grade 80 Alloy Chain works for overhead lifting due to its heat-treated design. People commonly use this type of chain as a heavy-duty tow chain. Grade 80 chain include designs embossed using an 8, 80, or 800.

### Grade 100

Considered premium quality chain, it offers about a 25% higher workload limit over Grade 80 chain. It is safe for overhead lifting. Grade 100 chains include designs embossed with a 10 or 100.

### Grade 120

Grade 120 chain is up to 50% stronger than Grade 80 chain and 20% stronger than Grade 100 chain. It's also more resistant to abrasion than both Grade 80 and Grade 100 chains. It's safe for overhead lifts.