

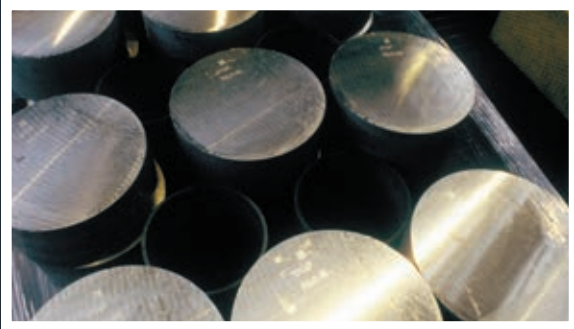
Alcoa wheels for trucks and trailers with concrete mixers and pumps



forged strength • increased payload • protection against corrosion • environmentally friendly



Forged strength



Alcoa wheels are forged from one single block of high strength aluminium alloy. They are 5 times stronger than steel wheels and withstand the most severe tests: LBF, TÜV, JWL-T.



Weight saving vs steel wheels

Weight saving example 2-axle truck

2 x 22.5 x 9.00 4 x 22.5 x 9.00

	Alcoa	Steel
6 x 22.5 x 9.00	141.0 kg	234.0 kg
Saving		93.0 kg

Weight saving example 3-axle truck

2 x 22.5 x 11.75 offset 120 8 x 22.5 x 9.00

	Alcoa	Steel
2 x 22.5 x 11.75 - 4.5T	45.2 kg	87.0 kg
8 x 22.5 x 9.00	188.0 kg	312.0 kg
Total	233.2 kg	399.0 kg
Saving		165.8 kg

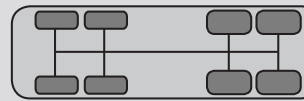


Weight saving examples 4-axle truck



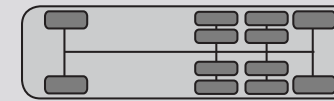
4 x 22.5 x 9.00 8 x 22.5 x 9.00

	Alcoa	Steel
12 x 22.5 x 9.00	282.0 kg	468.0 kg
Saving		186.0 kg



22.5 x 11.75
offset 120, 5T 4 x 22.5x17.00 wheels
single fitment on rear axles
replacing 8 x 22.5x9.00

	Alcoa	Steel
4 x 22.5 x 11.75, offset 120, 5T	94.4	170.0
4 x 22.5 x 17.00 Alcoa instead of 8 x 22.5 x 9.00 steel	142.8	312.0
Total	237.2	482.0
Saving		244.8

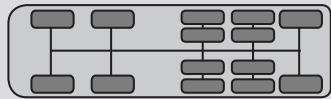


2 x 22.5 x 11.75
offset 120 8 x 22.5 x 9.00 2 x 22.5 x 11.75
offset 120

	Alcoa	Steel
4 x 22.5 x 11.75 - 4.5T	90.4 kg	174.0 kg
8 x 22.5 x 9.00	188.0 kg	312.0 kg
Total	278.4 kg	486.0 kg
Saving		207.6 kg



Weight saving examples 5-axle truck

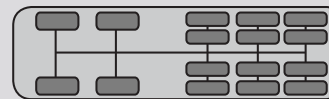


4 x 22.5 x 11.75 offset 120 8 x 22.5 x 9.00 2 x 22.5 x 11.75 Workhorse® offset 120

	Alcoa	Steel
4 x 22.5 x 11.75 - 4.5T	90.4 kg	174.0 kg
8 x 22.5 x 9.00	188.0 kg	312.0 kg
2 x 22.5 x 11.75 - 5T Workhorse®	48.4 kg	87.0 kg
Total	326.8 kg	573.0 kg
Saving		246.2 kg

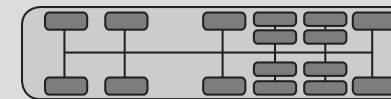


Weight saving example 6-axle truck



4 x 22.5 x 11.75 offset 120 12 x 22.5 x 9.00

	Alcoa	Steel
4 x 22.5 x 11.75 - 4.5T	90.4 kg	174.0 kg
12 x 22.5 x 9.00	282.0 kg	468.0 kg
Total	372.4 kg	642.0 kg
Saving		269.6 kg

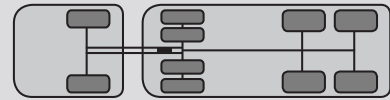


8 x 22.5 x 11.75 offset 120 8 x 22.5 x 9.00 dual mounting

	Alcoa	Steel
8 x 22.5 x 11.75 - 4.5T	180.8 kg	348.0 kg
8 x 22.5 x 9.00	188.0 kg	312.0 kg
Total	368.8 kg	660.0 kg
Saving		291.2 kg



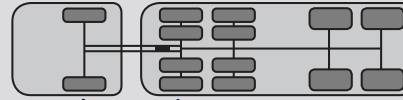
Weight saving example 2-axle truck plus 2-axle trailer



2 x 22.5 x 11.75
offset 120 4 x 22.5 x 9.00 4 x 22.5 x 13.00

	Alcoa	Steel
2 x 22.5 x 11.75 - 4.5T	45.2 kg	87.0 kg
4 x 22.5 x 9.00	94.0 kg	156.0 kg
4 x 22.5 x 13.00	100.8 kg	192.0 kg
Total	240.0 kg	435.0 kg
Saving		195.0 kg

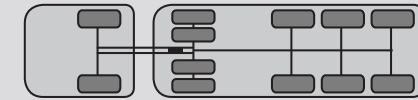
Weight saving example 3-axle truck plus 2-axle trailer



10 x 22.5 x 9.00 4 x 22.5 x 13.00

	Alcoa	Steel
10 x 22.5 x 9.00	235.0 kg	390.0 kg
4 x 22.5 x 13.00	100.8 kg	192.0 kg
Total	335.8 kg	582.0 kg
Saving		246.2kg

Weight saving example 2-axle truck plus 3-axle trailer



2 x 22.5 x 11.75
offset 120, 4.5T 4 x 22.5 x 9.00 6 x 22.5 x 11.75
offset 0

	Alcoa	Steel
2 x 22.5 x 11.75 - 4.5T	45.2 kg	87.0 kg
4 x 22.5 x 9.00	94.0 kg	156.0kg
6 x 22.5 x 11.75 offset 0	126.0 kg	237.0 kg
Total	265.2 kg	480.0 kg
Saving		214.8 kg



Alcoa forged aluminium wheels

Weight saving advantages

Economical

- More product transported in one trip = more payload = more profit
- Less fines for overloading; more and more countries install weighing bridges and use Weigh in Motion to control the weight of vehicles

Ecological

- Less trips = less fuel consumption = less CO₂ emission

WorkHorse® wheels

Alcoa WorkHorse® wheels have no ventilation holes, to protect the disc brakes in off-road applications. The tire/wheel combination does not overheat because aluminum dissipates heat much better than steel.

On top of this, the 22.5x8.25 and 22.5x9.00 Workhorse® wheels have a higher load rating than standard wheels in the same size.



	Load rating standard	
	Standard Alcoa wheel	Workhorse® wheel
22.5 x 8.25	3750 kg	3835 kg
22.5 x 9.00	4125 kg	4335 kg

Environmentally friendly

- Aluminium is 100% recyclable.
- 75% of all of the aluminium ever produced since 1888 is still in active use today.



Better corrosion resistance compared to steel wheels

Due to aluminum's natural resistance to corrosion, Alcoa forged aluminium wheels do not need to be painted. Certain environments, such as construction sites, can lead to corrosion. Other potentially corrosive materials are salt, highly alkaline substances and chloride compounds.



Alcoa



Steel

ALprotect

The use of ALprotect reduces corrosion and improves the protection of Alcoa wheels.





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