Alcoa® Wheels
The best solution for your business

Leading manufacturer of aluminium wheels

We advanced the transportation industry with the first forged aluminium wheel in 1948 and have been reinventing it ever since. Find more information on our website: alcoawheels europe.com

Alcoa® Wheels are forged from one solid block of aluminium. With an 8,000 tons press, the block is forged into a wheel shape. Once forged, the wheels are heat-treated to maximize overall mechanical strengths. The Alcoa® Wheels forging process aligns the grain flow of aluminium with the shape of the wheel, even in the critical area where disc and rim meet. This process results in wheels with unrivalled forged strength that withstand the most severe tests to ensure highest standards and quality. We are so confident in the durability and quality of our wheels, we give a 5-year unlimited mileage warranty.

Alcoa® Wheels are a must. The ultimate choice for your vehicle. Compared to steel and cast aluminium wheels, Alcoa® Wheels offer numerous benefits.

Weight saving

Up to 51% lighter than steel

By switching from steel to aluminium Alcoa® Wheels you can easily save up to 51% in weight, depending on the wheel size, allowing you to:

• increase the vehicle’s payload
• reduce your operating costs
• boost your profitability

We offer a wide range of forged aluminium wheel dimensions, from 17.5” to 22.5” wheels. Our high-quality Alcoa® Wheels can be selected in the truck, bus and trailer manufacturer’s option books as well as they are available through our wide network of official Alcoa® Wheels distributors.

Find here the most nearby to you: www.arconic.com/alcoawheels/europe/en/where-to-buy.asp

Alcoa® Wheels is a brand and product of the Arconic Wheel and Transportation Products business unit, which is part of Arconic Inc. (formerly known as Alcoa Inc.).
Calculate your individual weight saving with the Alcoa® Wheels Calculighter!

The individual weight saving can vary based on the specification of the vehicle.

*Compared to exemplarily steel wheel weights with same dimensions and load rates.

Unrivalled forged strength

Stronger than steel and longer lasting.

Forged aluminium Alcoa® Wheels are literally stronger than steel.

High strength test results

Wheels are placed in a press and closed until the wheel deforms by 5 cm.

- A forged wheel from Alcoa® Wheels withstands a load of 71,200 kg before deforming, while
- the rim of the steel wheel already deforms at 13,600 kg

Alcoa® Wheels are up to 5 times stronger!
Contribution to fuel efficiency, CO₂ reduction and improved tyre performance

Fuel efficiency

Tyre performance

Alcoa® Wheels run truer and contribute therefore to better tyre wear than a steel wheel. This also positively supports rolling resistance.

That’s not all! Aluminium is more conductive than steel and the material of choice for heat sinks in laptops and radiator fins for cars and trucks as it helps to dissipate heat. Better heat dissipation impacts tyre life, brake performance and brake pad life positively.

Thermal images of aluminium vs. steel in identical operation conditions show how aluminium Alcoa® Wheels run up to 22°C* cooler.

*Internal testing

CO₂ reduction

On hybrid buses with Alcoa® Wheels, compared to steel wheels.

Fuel efficiency

Up to

-1%

Fuel usage

On hybrid buses with Alcoa® Wheels, compared to steel wheels.

CO₂ reduction

Up to

-3 tons

CO₂ emission

Replacing 6 steel wheels with Alcoa® Wheels on a 2-axle diesel city bus over the 12-year lifetime of the bus and 750,000 km.

Up to

-5 tons

CO₂ emission

Replacing 10 steel wheels with Alcoa® Wheels on a 3-axle diesel articulated city bus over the 12-year lifetime of the bus and 750,000 km.

Up to

-4 tons

CO₂ emission

Replacing 12 steel wheels with Alcoa® Wheels on a 2-axle truck and 3-axle trailer over the lifetime of a truck (2x5 years) and trailer (10 years) and 1,300,000 km.
Alcoa® Wheels’ finishes

Dura-Bright® EVO
Great looks, easy maintenance

LvL ONE®
Entry level wheel with a brilliant finish

Brushed
Basic maintenance finish
Alcoa® Wheels’ finishes

Dura-Bright® EVO
Great looks, easy maintenance

Alcoa® Wheels are available with Dura-Bright® EVO surface treatment that keeps wheels looking bright and shiny for years without polishing. Maintenance is extremely easy by just using water and soap thanks to the extraordinary technology.

Cleaning Dura-Bright® wheels

There is no easier wheel to maintain than a Dura-Bright® wheel. Just 6 steps to follow for fabulous looking wheels:

1. Allow wheels to cool below 35° C (95° F).
2. Remove nut covers.
3. Pour Dura-Bright® Wheel Wash in a bucket. No need to dilute with water.
4. Clean the wheel.
5. Rinse the wheel.
6. Repeat weekly.

For more information: youtu.be/QU9ggcm8HhI
**LvL ONE®**

Arconic's advanced LvL ONE® finishing technology results in a brilliant finish with a smoother and glossier surface than Brushed.

LvL ONE® wheels require the usual procedure when it comes to maintenance. If a shiny surface is desired, polishing is needed. Nevertheless, the wheel looks great and comes with the same advantages as the other finishes of Alcoa® Wheels.

**Brushed**

Brushed is a basic maintenance finish. Brushed Alcoa® Wheels do not corrode and repainting is not necessary.

**Cleaning LvL ONE®, Polished and Brushed wheels**

1. Rinse with warm water, preferably with a high pressure cleaner.

2. Pour a quantity of ALclean into a bucket and dilute with 1, 2 or 3 parts of water.

3. Gently brush ALclean onto the wheel.

   - 1. for difficult spots
   - 2. for medium pollution
   - 3. for regular use
   - 4. for frequent use

4. Spread it evenly over the wheel using a moist cloth and polish the wheel.

5. Rinse with clean water. Repeat these steps if needed.

6. Dry the wheel.

7. Continue by applying a small amount of ALpolish.

8. Repeat steps 7 and 8 section by section to prevent the polish from drying out.

**LvL ONE® and Polished wheels**

Recommended quantities:

1. for difficult spots
2. for medium pollution
3. for regular use
4. for frequent use
Technology

Ultra ONE®

The Wheel Reinvented - The Lightest, The Strongest

Ultra ONE® Alcoa® Wheels are our lightest and strongest wheels. They are made of Arconic’s latest innovation alloy named MagnaForce®. The Arconic MagnaForce® alloy is 17 percent stronger than the industry standard alloy allowing to create lighter wheels without compromising on their strength.

Specialised applications

Dura-Flange®

Additional protection for an even longer service life.

Dura-Flange® Alcoa® Wheels have a proprietary treatment that provides a protective shield to reduce rim flange wear, giving them up to double the lifetime compared to other aluminium wheels under the same conditions. Dura-Flange® wheels are the most appropriate for transport where loads are heavy and prone to shifting, causing the tyre bead to rub against the wheel flange.

Dura-Bright® / Dura-Flange®

Two revolutionary treatments combined into one

Dura-Bright®/Dura-Flange® Alcoa® Wheels are the result of 2 treatments combined, resulting in a shiny looking easy to maintain wheel with a protective shield to further increase the wheels’ service life.

WorkHorse®

Disc brake protection and increased wheel load.

WorkHorse® Alcoa® Wheels are designed without ventilation holes to protect the disc brakes from sand and gravel. WorkHorse® wheels are mainly used on construction vehicles with disc brakes.

The wheels are available in selected wheel sizes: 22.5”x9.00” and 22.5”x11.75”, offset 120 mm.