



Forged Aluminium Wheels

Weigh much less, resist much more.



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Transporting much more.

In this edition we back to Brasil from north to south east to west, our presence is prominent nationwide. We prepared a special issue in the northeast region of the country to confirm the truths, myths and the advantages on the application of Alcoa Forged Aluminum Wheels that has been used with success by our transportation companies. The CERAMA TRANSPORTE, for 39 years on the market with headquarter in Fortaleza - CE and branch in Bahia, focused on the transport of asphalt and containers, transporting all over the country cargo considered dangerous, obtain better savings of its vehicles with Alcoa solutions - "the ideal solution".

Enjoy the reading!

Eduardo J Lacerda

Cerama Transportes carries more loads, with reduced weight

Focusing on the transport of asphaltic loads and containers, the company obtains a better performance for its vehicles with Alcoa's aluminum forged solutions

The transport company obtained a reduction of approximately 1.200 kg for its vehicles



"We were looking for a component able to provide greater profitability to our fleet". This is how Renato Massari, director and owner of Cerama Transportes, defines the choice of his company for Alcoa's aluminum forged wheels.

For 39 years operating in the market, the company – with headquarters in the city of Fortaleza (CE) and a branch office in the state of Bahia – transports all through the Country dangerous loads such as CAP, CM-30, emulsions, paraffin, LCC

and BPF, among others. "We transport chemical substances and we care, above all, for safety during rides" says Marco Massari, also an owner of the transport company. "With Alcoa's aluminum forged wheels, we have found the ideal solution", he explains.

Running on many different types of roads, including smooth tracks and depressions, the director comments that Cerama Transportes' trucks have never experienced tears, failures or any type of setback while using Alcoa's aluminum forged wheels. "We

have run through all regions in the Country and we've already been able to prove the resistance and durability of these solutions", he ensures.

Since 2003, the company has also been responsible for the transport of 20" and 40" containers and of isotanks. To comply with the applicable legislation on the transport of such substances, the company is registered at many different port terminals, and it may, therefore, regularly execute its activities.

Lighter Vehicles, greater quantity of load

With its own fleet comprising approximately 150 mechanical

wheels have offered us the advantage of a real load gain per ride, since they are lighter".

Another important characteristic

our trucks", says Marco. "Besides all the benefits we have obtained, we can also count on that differential", he concludes.

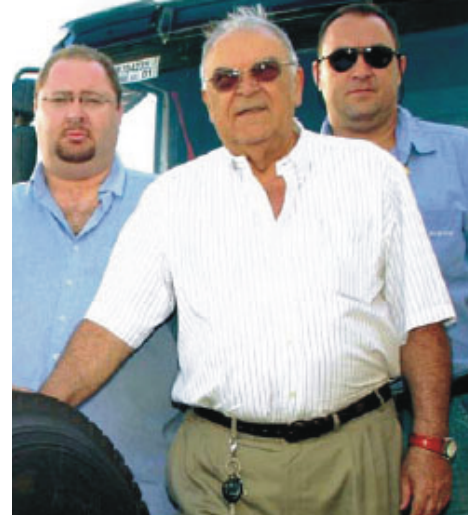
horsepower, 200 semi towing tanks and 80 semi container-carrying towing trucks –, the transport company has been equipping, for seven years, at least 30% of its fleet's cars with Alcoa's aluminum forged solutions. "Since they are lighter, Alcoa's aluminum forged wheels provide us with a 1.200 kg reduction in total weight for road trains and conventional sets", says Marco.

He comments on the main difference observed between new components and conventional steel products. "Only Alcoa's aluminum forged

stressed by that professional is related to the maintenance of the company's fleet's wheels. He observes that sandblast cleaning and periodical painting are no more available. "This work has become easier, since the simple application of polishing on Alcoa's wheels already make them clean and ready to run".

100% visibility

Because they are made of aluminum, Alcoa's forged wheels increase vehicles' visibility, wherever they may be running. "They are beautiful and we've realized that they bring value to



From right to left: Mauro, Renato and Marco Massari: "With Alcoa's aluminum forged wheels, we've found the ideal solution"

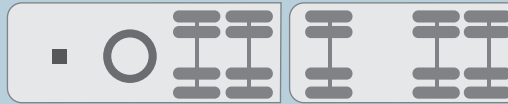


How much Cerama has reduced the weight on its vehicles Comparison of weight among wheels

Road train set (24 wheels + 2 replacement wheels) equipped with Alcoa's aluminum forged wheels (24 Kg each), in comparison with the conventional set equipped with tube-type steel wheels (57 Kg)

Road train

Reduction per vehicle: **825 kg**



Conventional set (12 wheels + 1 replacement wheel) equipped with Alcoa's aluminum forged wheels (24 Kg each), in comparison with the conventional set equipped with tube-type steel wheels (57 Kg)

Conventional

Reduction per vehicle: **429 kg**

