

WHITEPAPER

CUSTOM SOLUTIONS FOR MINING TRUCKS

*WHY LOOKING BEYOND STANDARD SOLUTIONS
ALWAYS BRINGS ECONOMIC ADVANTAGES.*





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Investing in appropriate and cost-effective haulage solutions? A lot of money can be saved with an integrated analysis of the purchase price of haul trucks on the one hand and operational costs on the other. After all, the purchase price is only one part of the game. While it is an important starting point, there is more to be taken into account when making decisions.

It is the combined logistics costs, spread over a longer period, that determine how much you can save in the end. Think of the personnel costs, related to the deployment of specialist drivers, maintenance and service costs, insurance, minimization of damage and failure risks, service life, and - last but not least - fuel costs.

Especially in mining, quarrying, infrastructural and industrial projects, the quality, capacity and special functionalities of the used equipment make the difference. After all, utilisation is intensive and haulage over short distances -often in rough conditions- results in high technical demands.

HAULAGE COST PER TONNE

The range of traditional tippers and heavier equipment, such as dumpers, is large. Regardless of the brand and pricing, most of them are standard solutions. Each application has an optimal haulage solution. By taking the specific application as a starting point and investing in a customized solution on that basis, you optimize the operational benefits. It is not the purchase price that is decisive, but the sum of all parts. When investing in a fleet, the greatest profit can be achieved by taking the total cost per tonne of transported load as a criterion.

With this approach, customization is often an economically more attractive alternative. BAS Mining Trucks offers custom-made haulage solutions for heavy duty use with specialized mining trucks. These are assembled according to customer needs to transport large volumes of heavy, loose and robust material frequently and over short distances, with an optimum balance in direct and indirect costs.

Consultants and engineers from BAS Mining Trucks have extensive knowledge of the international mining industry and know their way around haulage requirements in larger public works and in heavy industries. BAS Mining Trucks is your preferred partner for specialist haulage solutions. Central to this are the customer, the material to be hauled and all project details. The truck technology serves solutions for mining, industrial and infrastructural projects that guarantee the lowest costs per tonne of material hauled.

In consultation with our customers, we develop specific truck configurations that are optimally designed for the nature of the work to be carried out and local conditions. Customization of mining trucks is our strength. Every truck we deliver is the result of the ultimate combination of customer requirements, expertise, site surveys, process analyses and calculation models.

FEATURES, BENEFITS AND CONSTRUCTION 10X4 AND 10X6 MINING TRUCKS

Application

With their 18-40 m³ capacity and 50-56 tonnes payload, the 10x4 and 10x6 models from BAS Mining Trucks deliver power and efficiency in intensive, short haul operations. They are designed for high and reliable productivity under tough conditions. Under "average" conditions - stable ground, gradient up to 15% - the 10x4 offers the best price/performance ratio. For more challenging ground conditions requiring more traction - muddy ground, higher gradients - the 10x6 delivers the best performance with the best fuel efficiency.

Purchase criteria

The haulage solutions from BAS Mining Trucks are in use at projects worldwide. Mutual feature is that they are tailor-made engineered, based on the specific needs for each project. Various factors influence the optimal truck and its operating benefits.

Factors that determine which truck is most ideal are, amongst others:

- Haul distance;
- Quality of the haul road (maintenance, rolling resistance, dust);
- Gradient/slope ((percentages of ascent and descent);
- Underground routes (in some cases);
- Type of material to be hauled.

Furthermore, an important question is: how many trucks of the specific design guarantee optimal continuity and cost efficiency? Decisive factors include:

- Frequency and intensity of use;
- Production rate (x tonnes per year);
- Loading procedures and conditions;
- Desired dumping speed and related processes;
- Desired flexibility and scalability.

Advantages

By analyzing and answering these questions in detail, a blueprint is created for the specifications of the 10x4 and 10x6 mining trucks. Compared to most existing standard solutions, the use of our customized BAS Mining Trucks nearly always results in lower cost per tonne.

LOW COST PER TONNE OF THE 10X4 EN 10X6 TAILOR-MADE BAS MINING TRUCKS

- High payload with low fuel consumption per tonne of material hauled;
- Maximum dumping efficiency due to the two hydraulic cylinders;
- Optimal protection of vulnerable components;
- High mechanical availability;
- Low TCO (reduction in total operating costs per tonne hauled).



TCO (Total Cost of Ownership), or the Owning & Operating principle, is THE criterion for achieving high margins. Cost-consciousness looks beyond the investment price of trucks and includes all relevant operating costs in the decision-making process. At BAS Mining Trucks we have extensive analysis and calculation tools at our disposal for an independent calculation of the costs per ton of hauled material under very specific conditions.

Construction

BAS 10x4 and 10x6 Mining Trucks are built from a reliable and stable base and known for their reliable performance even in challenging conditions. Distinguishing features include:

- Robust chassis and high-level, armoured housing;
- Advanced engine and combustion technology;
- Powertronic transmission technology for heavy-duty work.
- User-friendly and efficient control functions;
- Comfortable cabin that meets the highest safety standards;
- Smart electronics.

Trucks from BAS Mining Trucks are tailor-made, anticipating on customer-specific assemblies and additional features. BAS transforms basic trucks into specialist vehicles for mining activities and heavy infrastructure and industrial projects. When required, BAS Mining Trucks also offers an integral maintenance and service concept, tailored to your requirements and local possibilities and conditions.

ADDITIONAL ADVANTAGES

- **Optimum fuel management** due to the lifting of the third axle when driving empty.
- **Significant time saving** during unloading due to two pneumatic side cylinders.
- **Maximum operational safety** due to positioning vulnerable components up high, including the fuel tank. Result: maximum protection against dirt, upsplashing stones and rough road surfaces.

[DOWNLOAD specs sheet BAS 10x4 mining truck](#)

[DOWNLOAD specs sheet BAS 10x6 mining truck](#)

HIGH PERFORMANCE WITH SIGNIFICANT COST BENEFITS - LOOKING CRITICALLY AT THE TOTAL COST OF OWNERSHIP

Choosing for customized 5-axle trucks result in high cost benefits. High payload and quick dump cycles result in fewer trucks required on site. This results in a more manageable fleet, high site safety, less downtime and, of course, the lowest cost per tonne.



The biggest gain that companies make by using the 10x4 and 10x6 trucks is in the sum of all parts - in the Total Cost of Ownership. This translates into measurable savings:

The lowest haulage costs per tonne, with greater guarantees of safety and sustainability than by using multiple, smaller and lighter standard trucks.

By definition, the use of a smaller fleet of heavier trucks optimized for specific operations and local conditions provides a better balance in performance and cost. After all, the purchase price of individual trucks only partly influences the total transport and process costs. Cost-conscious investment in a customized fleet means: taking a critical look at the sum of its parts.

Cost factors

The total costs related to intensive, short- and long-cycle transport are only partly determined by the depreciation of the investment in trucks. The various, often fluctuating operational costs are at least as important for the margins ultimately to be realised. The most important factors are:

- driver costs;
- fuel costs;
- costs related to repairs,
- maintenance and services;
- downtime;
- tyres costs.

Savings in driver costs – Moving more material per truck with fewer trucks automatically means considerable savings in personnel costs. After all, you need fewer drivers. This saves money and reduces employer risks.

Less expenditure on diesel – Although heavier trucks with higher payloads consume more diesel than individual vehicles, the total volume of fuel required is always less than when several smaller trucks are used. Due to their modern fuel technology, the 10x4 and 10x6 versions of BAS Mining Trucks also provide more economical fuel performance than existing trucks of similar payload. An important additional advantage: contractors who take on work without direct responsibility for fuel costs help clients save on overall costs and reduce emissions.

Reduced replacement, maintenance and service costs – The fewer trucks in a fleet, the lower the maintenance and service costs. Fewer parts and tyres need to be replaced overall. This gives a considerable cost advantage. BAS Mining Trucks' 10x4 and 10x6 customized trucks are also constructed to minimize the risk of damage to delicate components due to poor road conditions.

Smart electronics ensure effective monitoring, minimizing unscheduled downtime. If required and possible locally, BAS Mining Trucks supplies its vehicles in combination with a maintenance and repair contract. This can even include an availability guarantee. If you wish, we can discuss this option with you without any obligations.

***CALCULATE THE COSTS TOGETHER
FOR AN OPTIMAL AND CAREFREE
PERFORMANCE?
CALL OR USE THE CONTACT FORM!***

Lower costs by reducing downtime – Every truck that stands still because of damage, maintenance or breakdowns costs money. The fewer trucks in a fleet, the lower the risk of downtime. In addition, if trucks are optimally matched to the type of load and the local conditions, and if the service and maintenance cycle ensures optimal prevention, planning and timing, there is less chance of unscheduled downtime. By using specialist systems, the need for maintenance can be identified and the more efficient the maintenance and replacement can be carried out. The result: cost savings through fewer breakdowns and shorter service times.

Additional advice and services

The above cost items and savings options are very specific and, with the right information, can be quickly calculated. This always provides surprising insights into the optimization of the Total Cost of Ownership. With the aim of realizing better margins.

But we do more. We know the haulage processes in the mining industry and heavier infrastructural and industrial processes well, and from that expertise we provide locally applicable advice. We provide advice on haulroad improvement and maintenance, the deployment of extra equipment, but also on safety and innovative service models. In addition, we train drivers in cost-saving and safety-enhancing driving skills. You can read more about this in the next white paper. Don't want to miss any news?

SIGN UP FOR OUR MAILING LIST

ENVIRONMENT

Environmental aspects play an increasingly important role in all operational processes related to mining and infrastructure. In addition to the social interest - think of public opinion and company reputation - there is also a financial interest. Actively contributing to a solution of the CO₂ problem is an important criterion in international tenders and increasingly the subject of stringent laws and regulations. Therefore, it is crucial to consider environmental impacts in fleet investment decisions.

WANT TO RECEIVE A DEDICATED TCO-CALCULATION?

Not the purchase price but the sum of all parts determines the result. A critical look at the Total Cost of Ownership / Owning & Operating costs can result in high benefits and increase efficiency. The professionals at BAS Mining Trucks are happy to make a calculation for you.

PLAN A NON-BINDING COST CALCULATION





THE MINING HAULAGE SPECIALIST

The mining industry is a highly specialist sector which sets unique criteria, expectations and requirements with regards to haulage. For example, it demands very strong and durable materials. It involves the haulage of large quantities of ore, minerals, coal and overburden. And it requires high rimpull. BAS Mining Trucks delivers when it comes to strong and durable trucks that are ideally suited for the mining, quarrying and construction industries.

The mining industry is very demanding. Both on people and materials. At BAS Mining Trucks, we understand that better than anyone else. Therefore, operators need full support when doing their work. The equipment must therefore offer them optimum comfort, a perfect overview and awareness of their workplace, maximum protection of health & safety and complete user friendliness. This all leads to high productivity at the highest degree of safety and at the lowest cost per tonne.

We enable companies to boost the efficiency of their operations while optimising the facilities placed at the workers' disposal. We call this 'the new efficiency'. The knowledge, skills, products and passion of BAS Mining Trucks can even make the interests of our customers and the interests of BAS Mining Trucks reinforce each other. In every partnership we take our responsibility, both socially as well as financially, with respect to people and environment. Together we can move mountains!

www.basminingtrucks.com