600 TONS. 8 AXLES. NO BOOM SUSPENSION.

What do our customers value most about TADANO? The answer is almost always the same: reliability. We achieve this by avoiding the use of overly complex systems in the construction of our cranes.

That certainly applies to the ATF 600G-8. Its Triple-Boom System may be revolutionary but in essence we have drawn upon proven technologies from the TADANO stable. This means you can look forward to a highly reliable, functional system which is just as easy to operate as our previous ones.

Its Triple-Boom System brings with it some major economic operative benefits for you as a crane owner. The new ATF 600G-8 also offers numerous other features that will help make your crane rental business more profitable than ever.

Alexander Knecht
Chairman of the Managing Board

www.ATF600G-8.com
THE ATF 600G-8: AN OVERVIEW

KEY BENEFITS

EFFICIENT JOB PLANNING
- Supplies data for all open-source, commonly available job-planning tools
- PAGE 12

POWER ON THE ROADS
- New engine brake with extremely high braking output
- PAGE 13

EFFICIENT TRANSPORT
- No need to transport a boom suspension system
- PAGE 14

QUICK TO SET UP
- No boom suspension system to set up or dismantle
- PAGE 16

VERSATILE AND EFFICIENT TO USE
- Wide scope of use thanks to small tail swing radius of 6.95 m
- High lifting capacity, including when using the boom in short and medium lengths
- High torsional stiffness enables reliable use of luffing jib
- Performance-optimized superstructure engine saves fuel when operating crane
- PAGE 18

TECHNICAL HIGHLIGHTS

ASYMMETRIC OUTRIGGER BASE CONTROL
- Radial outrigger base means less increase of working radius
- High-lifting capacity even with a limited outrigger base
- Soft-Stop safety feature means loads don’t swing into overload area
- PAGE 23

AML CRANE CONTROL
- Safety components with ‘Performance Level d’ (pLd)
- Data exchange via ‘CANopen Safety’ bus
- Useful new features and improved operation
- PAGE 24

TWO-ENGINE CONCEPT
- New fuel during crane operation using performance-optimized superstructure engine
- Engines last longer and have higher crease value
- No fault-prone rotary joints
- PAGE 24

ENGINE TECHNOLOGY
- Powerful, reliable Mercedes-Benz engines
- Global Mercedes-Benz service network
- New engine brake produces extremely high braking output
- PAGE 24

HELLO-NET FLEET MANAGEMENT SYSTEM
- Instantly view the position and operating status of your ATF 600G-8
- Clear, efficient service and maintenance planning by computer
- PAGE 27

THE ATF 600G-8: AN OVERVIEW

The new ATF 600G-8 all-terrain crane is the result of intensive development work in which the prime focus was on the requirements and needs of crane owners. The new model simplifies your logistics because you no longer have to transport a separate boom suspension system. Cranes are optimized because you no longer have to set up a boom suspension system. In addition, a smaller tail swing radius means you can perform more jobs on narrow construction sites. These benefits will significantly increase the profitability of your investment.

Find out here why the new ATF 600G-8 is revolutionary while remaining typically TADANO – and how it will make your crane rental business more profitable than ever before.

MAX. LIFTING CAPACITY: 600 t
BOOM LENGTH: 15.2 m – 56 m
BOOM EXTENSION: 24 m – 90 m
MAX. SHEAVE HEIGHT: 146 m
MAX. RADIUS: 104 m
NO. OF ENGINES: 2

TADANO TRIPLE-BOOM SYSTEM
- Capable of carrying heavy loads with high flexural and torsional stiffness
- Reliable, sequential loading mechanisms
- Reduced expenses for transport and setup
- Small tail swing radius means a broader range of applications
- PAGE 8
TADANO TRIPLE-BOOM SYSTEM: HIGH FLEXURAL AND TORSIONAL STIFFNESS. WITHOUT A BOOM SUSPENSION SYSTEM.
Unlike a conventional telescopic boom, our Triple-Boom System consists of not one but three telescopic tubes. These tubes give the overall system a permanently high level of flexural and torsional stiffness. It’s pure physics: the further away the materials of a load-bearing structure are from the center of that structure’s cross section, the more stable the overall system will be. It is precisely this principle that we employed in our new Triple-Boom System. The mass of the total amount of available steel is no longer distributed in just one main boom, but instead between another two telescopic tubes connected by what we refer to as ‘partitions’. These tubes are farther away from the center of the system’s cross section, which makes the overall system much more stable than a conventional single telescopic boom system.

The Triple-Boom System has even more stiffness than suspended booms. The cables in a boom suspension system can bear traction alone, whereas the Triple-Boom System with its telescopic Power Tubes on either side can also absorb the kind of torsional forces (twisting) that can be caused by wind, rotary acceleration, and other factors. This is an important point, especially if long luffing jibs are being used.

The weight of the new Triple-Boom System is very similar to that of a conventional boom system, which was one of the key concerns of our designers. That allows the new 8-axle crane to comply with the 12 t per axle limit mandatory on many countries’ roads. But we didn’t compromise on the strength of a conventional steel structure, nor sacrifice our performance-optimized, fuel-saving superstructure engine.

The new Triple-Boom System is essentially based on an optimum distribution of material and not on a highly complex new technology. For example: the separate telescopes in the new Triple-Boom System are extended and retracted using our familiar TADANO one-cylinder system. The way the telescopes are bolted is, in principle, the same as in other TADANO models, except that the telescopes of the two additional booms are now bolted together. But because the three tubes are bolted up consecutively rather than simultaneously – first the Power Tubes then the telescopes of the main tube – the Triple-Boom System is extremely reliable in this respect as well.

The benefits of the TADANO Triple-Boom System

- You can reduce the time and expense conventionally associated with transporting, setting up, and operating boom suspension systems.
- A much smaller tail swing radius than on similar large cranes with suspended booms gives you much more scope for jobs on construction sites with limited space.
- When it comes to lifting capacity, our Triple-Boom System’s high level of flexural and torsional stiffness allows the ATF 600G-8 to easily compete with similar models in its class. And when operating with boom lengths of between 15 and 35 m, at which separate boom suspension systems cannot yet be effectively used, it even leaves many of its rivals far behind.

FIND INITIAL LIFTING CAPACITY CHARTS AT WWW.ATF600G-8.COM
CLEAR BENEFITS. FROM PLANNING TO OPERATION.
Using modern job-planning tools such as KranXpert and craniMAX, you can plan your ATF 600G-8's work easily, accurately, and clearly on your own desktop or laptop. It doesn’t matter whether your ATF 600G-8 is working alone or in a multiple-lift situation: you can use your job-planning tool to simulate even the most complex operations, taking into account other buildings, interfering edges, and subsurfaces. These programs are easy and intuitive to use and do not require any in-depth CAD expertise.

Your ATF 600G-8's data is available for every commonly available open-source job-planning tool. That means you can keep on planning efficiently in your familiar environment.

MODERN SOFTWARE MAKES IT EASIER FOR YOU TO PLAN YOUR JOBS.

THE ATF 600G-8’S DATA IS AVAILABLE FOR ALMOST EVERY PROGRAM.

Like every other TADANO crane, the ATF 600G-8 utilizes powerful, reliable industrial engines made by Mercedes-Benz – in the undercarriage as well as the superstructure. Mercedes-Benz created a special new feature for the 625 HP undercarriage engine to help it fulfill the new Euromot 4/Tier 4f exhaust standards: an extremely powerful engine brake. This new decompression brake works without wear, just like the engine exhaust brakes in Euromot 3b/Tier 4i engines. That makes it especially suitable for extended periods of use, such as when driving down long hills.

Similarly convenient is the fact that you can drive the ATF 600G-8 on the road with 12 t per axle. You can even take the two rear outriggers with you along for the ride. The crane is so stable that you can use the two rear outriggers to install the front ones without difficulty and without an auxiliary crane.

In countries where higher axle loads are permitted on the roads, you can of course drive the crane with all four outriggers. Because you don’t need to carry an additional boom suspension system, this will only increase the axle load slightly. That, in turn, has a positive influence on wear and tear, both when driving and when applying the brakes.

POWERFUL: the new engine brake in the ATF 600G-8’s Euromot 4/Tier 4f undercarriage engine.
A major factor in the economics of any large crane is transporting the complete system quickly and easily to the construction site. We know that every crane owner has his own way of going about this, and that it depends on the distance to the site and the trailers that are available.

The diagram shows just how compact and space-saving the ATF 600G-8’s complete equipment is during transport. To arrive at this, we opted for a three-stage luffing jib with three different cross sections. This means you can transport up to three parts of the lattice jib by sliding them into each other – and you only need two trailers for most of the jib. The height of the largest cross section is such that you can also transport counterweights beneath parts of the lattice jib.

There’s one trailer you’ll no longer need at all: the one for the boom suspension system. The Triple-Boom System makes it superfluous, which will reduce your transport costs considerably – job after job, throughout the entire period of use of your ATF 600G-8. Work it out for yourself:

• What does it cost to rent a truck, including driver, for each return journey?
• How many jobs do you need a boom suspension system for each year?
• How many years do you intend to use your ATF 600G-8?

| TRUCK RENTAL incl. driver, to the site and back: | €1,000 | €1,500 | €1,750 |
| NUMBER OF JOBS for a suspension system per year: | 40 | 40 | 40 |
| PERIOD OF USE of your ATF 600G-8 in years: | x 15 | x 15 | x 15 |
| SAVINGS because you don’t have to transport a boom suspension system: | €600,000 | €900,000 | €1,050,000 |

THE LESS YOU SPEND ON TRANSPORT, THE GREATER YOUR PROFITS WILL BE. SO IT’S GOOD IF YOU DON’T HAVE TO DELIVER A BOOM SUSPENSION SYSTEM.

A Triple-Boom System means you don’t need a boom suspension system, so you don’t need to transport one. The entire equipment of the ATF 600G-8 can therefore be delivered on just six trailers.

ECONOMICAL TRANSPORT

NO BOOM SUSPENSION SYSTEM. NO EXTRA TRAILER.

The subsections of the luffing jib have three different cross sections. This means you can slide up to three subsections inside one another for transport, and you need just two trailers for most of the luffing jib. Counterweights also fit beneath the subsections.

How much will you save if you no longer need a trailer for a boom suspension system? If you’ve always bought your own trailer for transporting a boom suspension system then you will save three times over: no acquisition cost, no operating cost, and no servicing cost.

These savings add up to a significant amount over just a few years. And they are savings that keep on repeating themselves throughout the entire period of use of your ATF 600G-8. If you sell it later, it will increase the value of your used ATF 600G-8 considerably.

FIND THE KEY DIMENSIONS AND WEIGHTS OF THE EQUIPMENT YOU HAVE TO TRANSPORT AT WWW.ATF600G-8.COM
Are you still rigging – or are you already lifting? Because the Triple-Boom System means as you don’t need a boom suspension system, you don’t have to set one up. This saves a lot of time, even over the very latest boom suspension systems – time you could be using for your next job.

There is one whole process stage less during the setup phase, which has a significant impact on the operating costs of your new ATF 600G-8. Work out for yourself just how much you will save:

- How many hours does it take to set up a boom suspension system? How many hours does it take to dismantle it?
- How many workers do you need for that?
- What are the hourly wages of those workers?
- What do the auxiliary items of equipment cost that you need for setting up and dismantling (such as an auxiliary crane)?
- How many jobs do you need a boom suspension system for each year?
- How many years do you intend to use your ATF 600G-8?

Furthermore, how much more will your turnover be if the time you save by not having to set up and dismantle a boom suspension system means you can do more jobs?

It’s often necessary to relocate a crane on a construction site. Because the ATF 400G-8 doesn’t need a boom suspension system, it has less weight bearing down on its axles when you move it around. Instead, you can carry more counterweight or more equipment, especially since the ATF 600G-8 is steered on, and can be powered by, all its axles. This means you eliminate dismantling, separate transport, and reassembly.

Another advantage: as the head of the Triple-Boom has a large enough base for the attachment of the 90 m luffing fly jib, you do not need an additional spacer to increase the base. This reduces your setup costs and makes your construction site even more efficient.

By the way: construction site managers and your own staff will benefit from not having to set up equipment high above the ground. All in all, everyone involved enjoys not only more time and flexibility, but more safety too.
The new Triple-Boom System doesn’t just bring you big economic benefits during transport and setup, it also has advantages for use on the construction site.

**SMALL TAIL SWING RADIUS**

Because it doesn’t need a boom suspension system, the ATF 600G-8 has a tail swing radius of just 6.95 m – approximately half that of large cranes with suspended booms. This means you can use your 8-axle crane even on construction sites with limited space (such as in refineries, plants, and city centers). This will greatly expand the range of use of your crane, and ensure that it remains in use as much as possible; or to put it another way, the space you gain by not having a boom suspension system means you’ll often be able to position the ATF 600G-8 nearer to the load point and be able to lift more, depending on the situation.

This makes your ATF 600G-8 a genuine all-rounder that you can use for all sorts of jobs.

**HIGH LIFTING CAPACITY POTENTIAL**

This is an all-rounder that can handle heavy loads too, thanks to the high flexural and torsional stiffness of its unique Triple-Boom System. The ATF 600G-8 can activate its lifting capacity potential much more easily and quickly than similar large cranes with suspended booms. It can also easily lift as much, which makes it a genuine alternative purely in terms of its lifting capacity profile.

Unlike suspension technology, the Triple-Boom System is fully effective even at short and medium main boom lengths. This is clearly evident when you look at the lifting capacity – including in conjunction with a luffing jib or rigid boom extension. And speaking of luffing jibs, the triple-boom handles the use of a luffing jib on medium to large work radii like no other system. The cables on suspension systems cope with tension alone, whereas the ‘Power Tubes’ at either side of the Triple-Boom System also absorb any torsion introduced by lateral forces such as wind and rotary acceleration.

A new feature called ‘Asymmetrical Outrigger Base Control’, which maximizes the lifting capacity potential in the area around each outrigger, further increases the range of use and the occupancy level of your ATF 600G-8.

**SAVE FUEL WITH TWO ENGINES**

TADANO has opted to equip the ATF 600G-8 with its famously economical two-engine solution. This gives the new 8-axle crane its own independent superstructure engine. Because this engine’s size and performance are suited to crane operation, it uses much less fuel than big undercarriage engines that power crane work as well as driving the whole vehicle on the road and around the construction site. So the efficiency principle on which the ATF 600G-8 is based takes full effect even while the crane is at work. As a crane owner it will noticeably reduce your overall operating costs.

**FIND MORE BENEFITS OF THE TWO-ENGINE SYSTEM ON PAGE 26**
WE LISTENED.
WE UNDERSTOOD.
AND WE DESIGNED TO MEET YOUR NEEDS.
We wanted our ATF 600G-8 to break new ground. That’s why we gave it some other new technical features alongside the Triple-Boom System. The next-generation AML crane control system, the Asymmetrical Outrigger Base Control, and our two-engine solution all add up to a package which satisfies your every requirement.

Andreas Hofmann
Development Project Manager

We are working with long boom systems and large working radii, you want to avoid extending the radius any farther than necessary because of any deformation of the undercarriage. That is why TADANO opted for the more elaborate radial outrigger base. It makes your crane work safer and more reliably. Another advantage of radial outrigger bases is that the outriggers are easier to assemble and dismantle whenever it is beneficial to reduce the weight of the crane.

Because space is often limited on construction sites, and the crane cannot always be supported in its full breadth, you can utilize Asymmetrical Outrigger Base Control for the ATF 600G-8. This allows you to avoid unnecessary lifting capacity losses. It uses length sensors to automatically determine the length of all four outriggers, and records the position of the superstructure on the basis of the angle of rotation. These two figures are sent to the crane control system, which then indicates the maximum permissible lifting capacity. But – and this is what is special about it – it does so separately for each individual sector of the four outriggers. It divides the entire 360-degree lifting capacity area into four sectors, each of which can be maximized depending on the outrigger length. This allows you to make the best possible use of your ATF 600G-8’s lifting capacity potential.

The TADANO Soft-Stop safety feature prevents your driver from accidentally swinging a load into overload areas when turning. It’s another useful feature of the ATF 600G-8 that gives you even more additional safety.
AML CRANE CONTROL

A crane control system is the equivalent to your crane’s ‘brain’. Thousands of pieces of data converge there and are processed in milliseconds and then sent out again as new information.

We have evolved our tried-and-true AML crane control system specially for the ATF 600G-8 in order to fulfill the latest regulations and standards even more effectively, thereby raising the level of safety to a new degree. This involved installing Performance Level d (PLd) safety components in both the upper and lower carriage of the ATF 600G-8. These are among the safest components currently available on the market. Data is exchanged between them using a ‘CANopen Safety’ bus, which is currently the world’s highest CAN standard in data communication. What this means is an even more reliable crane controller than the one you already know – a system which monitors itself permanently, and detects and prevents potentially dangerous situations before they occur. It’s further proof of TADANO’s commitment to safety and quality.

USEFUL NEW FEATURES

When we further developed the AML crane control system, we took the opportunity to give your crane operators some useful new features, such as a slewing gear controller that can be customized, and which takes your current rigging status into account. Your crane operator can, for instance, start up and brake the slewing gear quickly or slowly depending on personal preference and the task in hand. The rotation speed of the superstructure can also be adapted to the length to which the boom is extended and how much counterweight is set up.

OPTIMIZED OPERATION

We have also improved the crane control system’s user interface. New features include two new color displays for your crane operator in the superstructure cab. The main display can be operated by touch, keys, or a rotary push button. It shows images from two cameras and can be electronically tilted to adjust to changing light conditions. The other display shows another camera view and can even be taken out to make it easier to use.

But that’s not all. Your crane operator can decide which display he wants to use. He can call up new additional information about the crane’s various operating statuses, such as average diesel consumption, oil temperature, and hydraulic oil level.

Rotary push button. Removable secondary display.

Primary and secondary displays.
TANDO has held firmly to its two-engine concept for the ATF 600G-8, as it did for its predecessors. Why? Because we’re convinced that it pays off for you. Our new 8-axle crane has a powerful engine for its undercarriage (625 Hp) and a much smaller engine for the superstructure (354 Hp). That’s because crane operation requires much less engine power than moving the crane on the road or around the construction site. This arrangement allows you to reduce your fuel consumption during crane operation – hour after hour, throughout the entire period of use of your ATF 600G-8.

What kind of savings can you expect? The diesel consumption of the smaller superstructure engine is certainly quite a few liters per hour less than the undercarriage engine. Our customers report an average of four to five liters less fuel use per operating hour. If you operate the crane for 1,500 hours each year, that means savings of up to 7,500 liters every year in succession for as long as you keep using your ATF 600G-8. This is what makes two-engine technology such a winning investment.

TYPICAL TANDO: TWO ENGINES ON THE JOB. YOU SAVE FUEL AND INCREASE EFFICIENCY.

TWO-ENGINE CONCEPT

OTHER BENEFITS OF THE TANDO TWO ENGINE CONCEPT – AN OVERVIEW:

• Because the undercarriage engine doesn’t have to perform the time-intensive crane operation which it would if it were the only engine, it suffers much less wear and tear as time goes on. This means less frequent servicing and it reduces the total number of services, provided you have the undercarriage and superstructure engines serviced together. It also means the engines will last longer and will have a higher resale value.
• Fault-prone rotary joints through which energy (e.g. hydraulically) has to pass in order to operate the superstructure are no longer required.
• The second engine is always at hand for any emergency operations that might be needed. This means you don’t have to buy or take care of any separate systems.
• Should a battery fail, you always have the second engine available. This can help you to start the other engine quickly and easily without your crane operator needing any extra support.

FUEL SAVED per operating hour (in l):

<table>
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<tr>
<th>OPERATING HOURS per year</th>
<th>FUEL PRICE per l</th>
<th>PERIOD OF USE of your ATF 600G-8 in years</th>
<th>SAVINGS gained by two-engine concept:</th>
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<tr>
<td>4</td>
<td>1,500</td>
<td>15</td>
<td>€90,000</td>
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</table>
ENGINE TECHNOLOGY

The undercarriage and superstructure engines in the new ATF 600G-8 are both made by Mercedes-Benz. Intensive ongoing development by the Stuttgart-based engine specialist, coupled with an enormous number of real-life trials – including in the demanding truck segment – has led to a series of extremely reliable, top-class industrial engines.

You will also benefit when it comes to service. Because Mercedes-Benz is a global player, you can be sure that help will not be far away if anything goes wrong, however remotely situated you may be.

EUROMOT 4 / TIER 4F EXHAUST STANDARD COMPLIANT

The engines in the ATF 600G-8 comply with the new Euromot 4 / Tier 4f exhaust standard, and like their predecessor, they can boast 90% less particle emissions than Euromot 3a/Tier 3 engines. But what is new about them is that they now reduce the level of poisonous nitric oxides by around 80%. That means you can use your ATF 600G-8 even on building sites subject to stringent environmental regulations.

POWERSFUL ENGINE BRAKE

The new engines have also been fitted with a particularly powerful engine brake. This new decompression brake is wear-free (just like the engine exhaust brake in the Euromot 3b/Tier 4i engines) and is therefore ideally suited for prolonged applications, such as driving down long hills. What are the benefits for you aside from easy operation and high efficiency? The answer is: powerful braking performance. Our crane operators were amazed and thrilled when they used the new engine brake for the first time, and your operators will be too – that’s a promise.

HELLO-NET FLEET MANAGEMENT SYSTEM

Our HELLO-Net fleet management system gives you firm control of your ATF 600G-8. Using the very latest cellular and satellite communications, your ATF 600G-8 will transmit its current location (GPS position) daily, along with relevant operating statuses, to a designated server. You can then use a web browser on your desktop or laptop to access this data easily, viewing and analyzing information such as utilization and standstill periods, fluid fill levels, and the distance your 8-axle crane has driven.

But that’s not all. You can control all your servicing and maintenance planning (including other TADANO cranes and other manufacturers’ cranes) clearly and efficiently using HELLO-Net.

An automated e-mail feature informs you reliably about any maintenance work that’s due on the crane.

NOT EVERY ENGINE IS BORN EQUAL.
YOUR ATF 600G-8 IS DRIVEN BY RELIABLE MERCEDES-BENZ TECHNOLOGY.

WANT TO MANAGE YOUR NEW ATF 600G-8 PERFECTLY?
HELLO-Net PROVIDES YOU WITH ALL THE IMPORTANT INFORMATION AT THE TOUCH OF A BUTTON.
600 TONS. 8 AXLES.
NO BOOM SUSPENSION.
FACTS THAT SPEAK FOR THEMSELVES.
The ATF 600G-8 is the result of close collaboration with our customers. We have been able to design this new crane to fulfill your requirements exactly, because we listen carefully and understand your needs. We will gladly show you all of the things it can do so that your new all-terrain crane serves you, your fleet, and your needs perfectly.

Thomas Schramm
General Manager, Sales and Marketing

There’s never been a crane like the ATF 600G-8. We would like to take the time to help you get to know it.

CURIous ABOUT THE NEW ATF 600G-8?
WHO TO CONTACT IN GERMANY AND AUSTRIA.

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