

# ATF 400G-6

EXCEPTIONAL LIFTING CAPACITY AND EASY TO ERECT E







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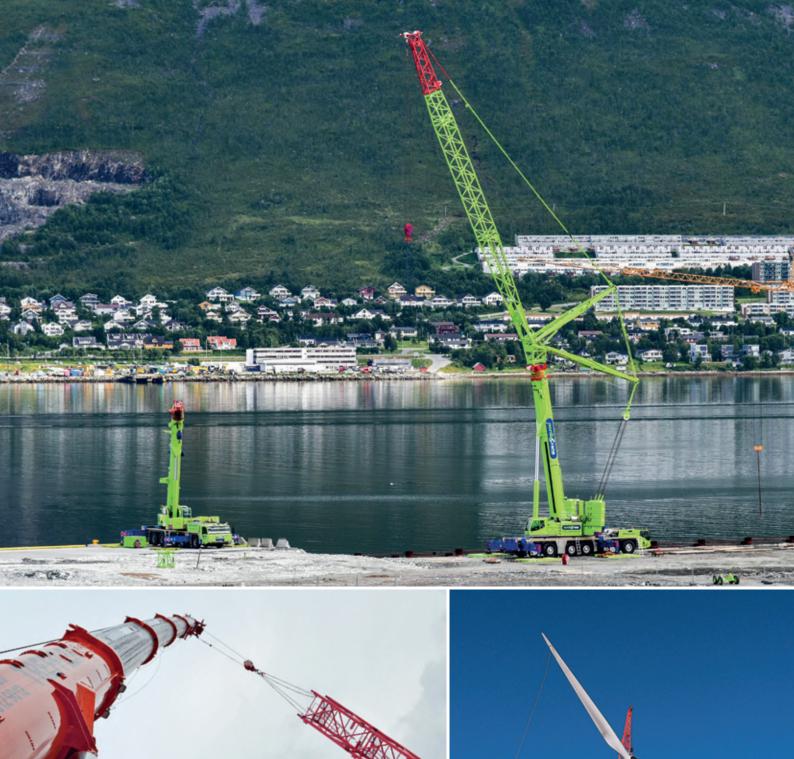
Whatever your deployment requires: the ATF 400G-6 is a superior power pack which easily copes with the most diverse jobs. Excellent lifting capacity of the main boom and improved lifting capacities of the jibs, an elaborate logistics concept for minimum expenses for transport and set-up, and the possibility of using it as a taxi crane make it flexible and fit for purpose – and the crane's capacity utilization economically efficient!















# SET DOWN. REMOVE. DRIVE OFF.

Increasing traffic volumes and overloaded or increasingly dilapidated roads are leading to increasingly stringent regulations in many countries, limiting axle loads and total weight. To be able to use certain restricted routes, large cranes must often loose weight prior to the journey. To reach the work site and return again as fast as possible, TADANO offers a particularly economical option to remove the main boom for the ATF 400G-6 – and this without the need of an auxiliary crane!







### EN ROUTE MORE

By removing the main boom, the axle load of the ATF 400G-6 can be reduced to below 8 t. Depending on the local regulations, this will help to obtain simplified and longer lasting driving permits on the one hand and, on the other hand, the crane can use more routes and bridges. Thus, planning the journey to the jobsite can be done more flexibly. This feature and not needing an auxiliary crane help to ensure significantly more efficient and economical logistics and provide an enhanced range of applications.

Price & delivery period upon request.



#### **INNOVATIVE TRAILER SYSTEM**

On its own, the crane sets the main boom down on the trailer of the accompanying truck and takes it up from there, too. A special trailer system available from TADANO makes it possible. To this effect, the main boom is lowered to the rear and comes to rest in the special holding device of the trailer standing by. By extending the first telescope section, the boom reaches the front holder of the trailer where it can be securely fastened. When, after releasing the retaining pins from boom and boom elevation cylinder, the telescope section is retracted again, the boom pulls itself, supported via special slideway lining on the attachment points, to the final transport position on the trailer. Now, after detaching the quick release couplings of the hydraulic and electrical lines, the crane and the boom are ready for transport.

Removal and mounting in reverse order at the destination can each be done in around two hours by three experienced persons. Hence, the innovative trailer system saves substantial logistical effort and, not least, the costs for an auxiliary crane which otherwise would be required to remove and mount the boom.

**IN A RUSH** 

TADANO.

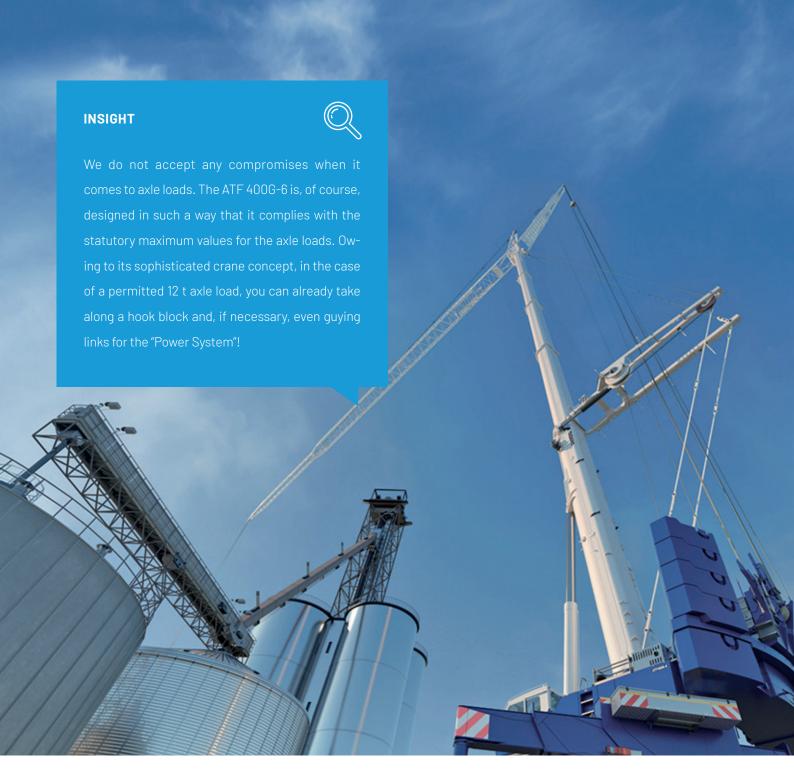
2 hours approx. for each efficient processes

below 8 taxle load

without main boom

no auxiliary crane

cost-optimized logistics





## STRONG LIFTING CAPACITY

Owing to the elaborate manufacturing technology, the ATF 400G-6 offers the best performance also with the FJ (fixed jib) and LFJ (light fixed jib). At a typical 105 m system length, the crane lifts 7.6 t and, thus, up to 22 % more than any competitor\* – a strong argument for working on slewing tower cranes, small wind turbines, and for maintenance tasks on high rooftops in the city. The shortest radius for this example is 22 m – and in this, the competitors are several meters 'ahead'.



## MINIMUM TRANSPORT SPACE

The individual parts of the jibs for the ATF 400G-6 are particularly place saving when stowed on the accompanying truck owed to the possibility to telescope up the intermediate sections to facilitate transport. The advantage: only a maximum of four semi-trailers is required for the transport of the entire jib system.

# TOP PERFORMER IN TERMS OF EFFICIENCY

An uncomplicated access to the work site is just as important for the economical operation of a mobile crane as a convincing lifting capacity and operational fitness on the construction site. When the jibs come into play, too, this will show just how well thought through a crane truly is. Here as well, the ATF 400G-6 proofs to have special strength.



## FLEXIBLE DIVERSITY

So that the ATF 400G-6 can cope with particularly diverse jobs, TADANO offers a luffing jib of a length of up to 78.5 m as additional equipment. When this jib is present, any other possible jib configuration can be put together from the individual elements. The only further equipment required are a tilt block and a heavy-duty head for the use as tiltable heavy duty jib. This full equipment allows combinations for the most diverse applications. Eight jib configurations and a large number of possible lengths are optionally available with the "Power System" – thus, you are prepared for all eventualities.



## **EFFICIENT DERIGGING**

But the luffing jib offers another decisive advantage: it can be dismantled up to 90 % by itself; the only task performed by an auxiliary crane is setting the luffing base section down on the ground after having separated the connection to the main boom. And this is what remains to be done: the ATF 400G-6 itself lifts the segments one by one onto the truck and, again and again, pulls the remaining jib segments towards it via an roller. As the only additional equipment required is a small 3-axle auxiliary crane for around half an hour during the first removal task, the entire derigging procedure is about 50 % more cost-efficient than for comparable jib combinations.

JIB CONCEPT
IN THE COMPETITION



BEST VALUE up to 22% more lifting capacity

with a system length of 105 m

approx. 50% more cost-efficient

derigging procedure

countless combinations

with full equipment of luffing jib

<sup>\*</sup>In accordance with published information

# VERSATILE COUNTERWEIGHT COMBINATIONS

# PREPARED FOR ALL EVENTUALITIES

When does your investment in a mobile crane pay off the most? Without doubt when you can use the crane for the widest possible range of jobs, and the task itself, the rigging and transport can be handled smoothly, quickly and safely. The sophisticated concept of the ATF 400G-6, with its practical division into individual counterweight units, makes this particularly easy.



### FLEXIBLY POSITIONED

The individual counterweight blocks are relatively small and numerous, but they can be taken up with little effort. If the transport truck is parked close to the crane, the ATF 400G-6 can quickly take up much counterweight – a single lifting, for example, is enough for the first three counterweights, which together weight 25 t. If more counterweight is required, two 10 t blocks can be positioned at a time, such that a 80 t counterweight, for instance, can be positioned with only four lifts. In the case of a larger distance between crane and truck, the weights are taken up individually. Quick fasteners between the individual counterweights ensure quick and safe assembly at any time.

#### **CONCISELY BROKEN DOWN**

# Flexible division into units

10 possible counterweight combinations

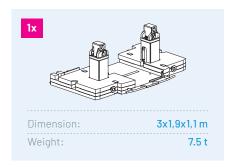
# Saving time and costs

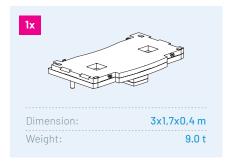
rigging up to 3 counterweights simultaneously

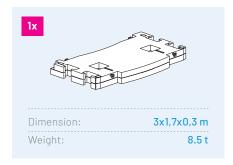
# Easy transfer of the crane

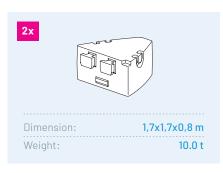
technically manoeuvrable with up to 116 t counterweight

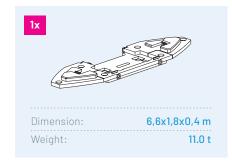
#### OVERVIEW OF COUNTERWEIGHTS

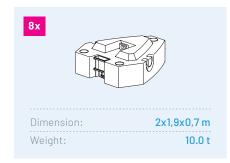














The counterweights of the ATF 400G-6 are tailored to the requirements. As the individual weights only weigh a maximum of 11 t, they can be combined and loaded more flexibly than the weights of other large cranes. With a total of 10 different counterweight variants, you can react quickly to changed conditions at the jobsite.



### MANOEUVRABLE WORK

The ATF 400G-6 also offers maximum flexibility for cramped spaces. The 25 t counterweight, for example, can be set-up within the available vehicle width. Furthermore, the maximum lifting capacity of 170 t can be achieved without any additional equipment and at a tailswing radius of only 5.4 m. The advantages: best operational fitness, even when things get tight.

Transferring the crane on the construction site is also incredibly simple. As the crane is technically manoeuvrable with 116 t counterweight, only the outrigger cylinders have to be retracted, and the crane is ready to be transferred – without any complex removal of counterweights.



# STRONG MAIN BOOM STRONG LIFTING CAPACITIES

# SUPERIOR HIGH PERFORMER

High loads alone do not make an economical crane. What is important, too: how does it achieve its lifting capacity fit for operation? Can it handle as many jobs as possible without additional equipment, keeping the costs for transport and set-up procedures down? If you are looking for flexibility, performance, and cost-efficiency, the ATF 400G-6 is an excellent all-rounder for you, it is in its element in building and bridge construction as well as in loading and mounting transformers – and, incidentally, even can replace a taxi crane of up to 200 t.



Even without any counterweights, the ATF 400G-6 is a real power pack. Strictly adhering to the 12 t axle load permitted by law, it can easily take along a hook block and, owing to its excellent lifting capacity values and compact design, also takes over jobs in the 200 t class, whose cranes must transport the counterweights at high expenses to manage comparable loads. This means that the ATF 400G-6 is the right crane for a wide range of jobs – and, thus, can be utilized particularly efficiently.



up to

67.7 t

telescoping loads at a 12 m radius

# Ot counterweight

can be used as taxi crane for jobs in the class of up to 200 t

# up to 48% stronger

than other 6-axle cranes without guying system\*

BEST VALUE 🔽



CAN SHOULDER A LOT. LIFTS A LOT. DOES NOT NEED NOTHING ELSE.



## CONVINCING LIFTING CAPACITYIES WITHOUT GUYING SYSTEM

Even without guying system, the ATF 400G-6 delivers superior performance at any time. Among the 6-axle cranes in its segment, it stands out with up to 48 % higher lifting capacities.\* Telescoping loads of up to 67.7 t (at a 12 m radius) provide additional freedom of movement on the job. Moreover, without guying system and with full counterweight, it has a tailswing radius of only 5.7 m, providing advantages in terms of space, for example, for jobs in cities or industrial plants. And don't forget: without guying system, you save set-up times and transport costs on top of everything! By the way: the ATF 400G-6 does not only allow excellent lifting capacities but, with the best shortest load radius (10 m) and the greatest hook height (61 m) among the 400 t cranes\*, it is also impressive in the fully extended condition. Thereby, it reaches a greater lifting height – and even more room for manoeuvre and challenging jobs.



# A CLEVER SOLUTION WHILE ANTICIPATING NEEDS

If crane work is fun, every challenge appears feasible, if operations and routes can be managed efficiently and without unnecessary strain or diversions, one thing is obvious: here, performance, safety and comfort harmonize perfectly. This is one of the success factors of the ATF 400G-6.



### WELL ON TRACK IN THE CARRIER

Not only crane operation requires utmost concentration, but also travelling and the preparations on site require full attention – at all times. Thus, the ATF 400G-6 offers maximum convenience and safety also in the carrier, and driving it on the road feels considerably more agile than in some other large cranes.

- > Ergonomic driver's seat, made by Recaro, with integrated armrests: less fatigue during long-distance driving
- > Multifunction display: for quick selection of operator information by touch screen, via buttons or rotary-push button
- Integrated sleeping bed: an ingenious option for relaxing break times
- > Well-balanced driving experience: perfect tuning of running gear and drive train to the 72 t vehicle weight of the 6-axle crane
- Steering program switchable from any steering position: without the need to bring the crane to a neutral steering position first



### WELL SUPPORTED IN THE SUPERSTRUCTURE

#### The cab design makes clear:

safety and convenience are number one concerns with the ATF 400G-6. The slim cab frame sections and large-size glass surfaces provide the crane operator with maximum visibility – all-round. To provide a comfortable view directly upwards, the seat and controls can be tilted – which enables safe exiting in emergencies, other than with completely tiltable cabs.

### $Comfortable\ temperatures\ are\ guaranteed:$

a powerful air conditioning, front and rear window openings and the auxiliary and engine-fed heaters ensure a pleasant working environment at any time of the day and the year.







Such that even outdoor work on the main boom of the crane can be carried out with an appropriate level of safety at any time, a standard feature of the ATF 400G-6 is the **TRAM-System** (Travelling Restraint Access Module).

This flexible restraint system consists of a guide rail with an adjustable handle to which a safety device can be attached and then taken along on the rail over the entire length of the main boom. It offers an effective fall protection and provides additional support during maintenance tasks or while mounting crane equipment on the horizontal main boom.

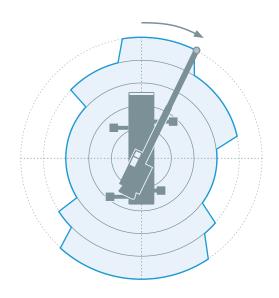


# LACK OF SPACE? HIGH LIFTING CAPACITY!

When things gets tight on the construction site: When space is limited, the outriggers of a crane can often only be extended to a different degree and not to their full width. This results in an asymmetrical outrigger base. The intelligent AML crane control of the ATF 400G-6 ensures that the lifting capacity potential can be fully utilized at any swing angle. After all, we expect maximum performance from our cranes at all times.



The colored line visualizes an example of the maximum lifting capacities within the 360° swing range.









### MAXIMUM PERFORMANCE IN ANY POSITION

With an asymmetrical outrigger base, different maximum lifting capacities apply around the swing motion. The AML crane control enables the maximum lifting capacity depending on the length of each individual outrigger and on the swing angle – i.e. the load position.

This means that if the crane swinging with a load reaches a lifting capacity limit, the crane control automatically adjusts the maximum load moment accordingly, and this separately for each sector around the four outriggers. This helps to utilize the maximum lifting capacities optimally – and the ATF 400G-6 proves to be a top performer irrespective of the outrigger position.

**BIG ADVANTAGES IN VERY CRAMPED SPACE** 

# High precision, high performance

maximum lifting capacity per outrigger

# Comfortable and safe

avoids overload ranges automatically

# Flexible and fit for purpose

optimum lifting capacity utilization, even when things get tight



# LIFT ADJUSTER KEEPS THE RADIUS CONSTANT DURING LIFTING

# SO THAT LIFTING A LOAD IS NOT A BURDEN

Sometimes physics steps out ahead: A boom extended to great lengths increases its radius when deformed by a heavy load. This not only pulls the load upwards but also forwards when it is lifted. Good if this space is now free of obstacles and people; better if an experienced crane operator compensates for the swinging of the load via the sensitive crane control – and safest if the Lift Adjuster has everything under control.



The serial Lift Adjuster of the ATF 400G-6 reacts at the push of a button and tilts the boom fully automatically to a steeper position in order to compensate for the increasing load deformation. Thus, the working radius remains constant. The load is lifted without swinging out forward. The Lift Adjuster works with both winches and all jib systems (with the exception of the luffing jib). This makes it a ground-breaking assistance system available exclusively from TADANO.



# RELIABLY RELIEVES YOUR WORKLOAD

The Lift Adjuster aids concentration considerably. The crane operator need not watch his instruments permanently to observe the radius – alternately with furtive glances towards the load. Instead, his head is freed-up again for full attention onto the load, its environment and the announcements of his colleagues. Sounds relaxing, but is also very safe. Of course, the crane operator retains control at all times and can intervene in the lifting process manually.

100 % SOFTWARE INTELLIGENCE

# Maximum safety

lifting without swinging out

UNBEATEN



# Optimum comfort

stress-free work

UNBEATEN







# DECISIVE APPLICATION SCENARIOS\*

- unfamiliar load situations,e. g. without weight information
- > crane operators who cannot assess the load deformation of a crane
- work with lattice jib or HTLJ in confined spaces
- ➤ load visibility considerably restricted or persons in the load environment

#### Lift Adjuster

Lifting without Lift Adjuster Risk of the load oscillating!

#### Schematic diagrams



Lifting with Lift Adjuster

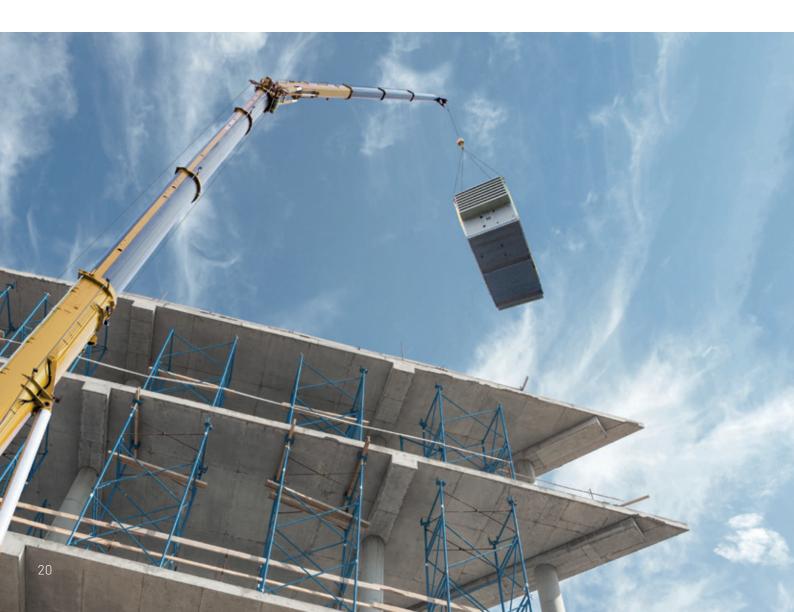
<sup>\*</sup> The Lift Adjuster helps avoid accidents.



HTLJ FULLY HYDRAULIC JIB

# FLEXIBILITY TAKEN TO THE MAX

High is sometimes simply not far enough. Main boom plus lattice boom extension provide a very high hook height, but lifting actions in upwardly limited load environments or beyond interfering edges are not possible in this way. In addition to their constant length, lattice boom extension increase the minimum radius of the overall system. A flexible and uncomplicated alternative: the HTLJ (hydraulic telescopic and luffing jib) offered world-wide only by TADANO.



approx.

94m 9-66m

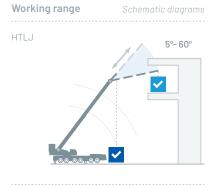
maximum hook height

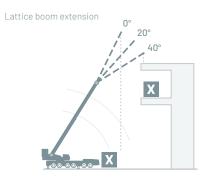
telescopable working radius

steplessly tiltable

5°-60° 38.6 t

maximum lifting capacity





TOP PERFORMANCE, **EVEN UNDER LOAD** 



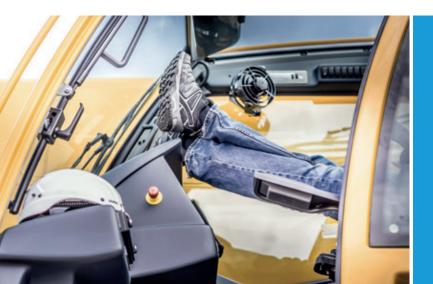
### **ENHANCED RANGE OF APPLICATIONS**

The optional HTLJ is capable of everything the main boom can also do - i. e. enhancing the working range without limiting functionality. As the 33.3 m long HTLJ can be telescoped fully hydraulically and tilted steplessly even under load, the height and radius can be adjusted almost at random. Thus, the load cannot only be lifted, but also moved into the building. And this is only one visible feature for the application options enhanced thanks to the HTLJ.



### **COMPACT IN PROGRESS** AND OPERATIVE QUICKLY

With a weight of approx. 10,300 kg and a length of 12.75 m, the four-piece HTLJ bends down low on its transport route. As it need not be disassembled like a lattice boom extension - a tedious job - the HTLJ can be loaded on a truck in no time, leaving lots of space there for additional equipment. Mounting the self-rigging HTLJ requires little space and no assembly crane. The crane is set-up for new tasks within 30 minutes - independently of the space available on the jobsite.



### **INSIGHT**



Lifting work with the HTLJ is also assisted by the Lift Adjuster, and the flexibly extended boom, in

# ONE IS GOOD. TWO ARE BETTER.

Why does the ATF 400G-6 feature two engines? No question – travelling and crane work have very different power requirements. The 625 HP carrier engine is ideal for a high driving performance for travelling, which accounts for 1/3 of the operating time. But it would be overdimensioned for supplying the hydraulic system optimally during crane work. This share of no fewer than 2/3 of the operating time is easily supplied by the efficient 279 HP superstructure engine. This allocation of tasks significantly reduces fuel consumption – day after day over the crane's entire life.



# REDUCING MAINTENANCE AND DOWNTIMES, ENHANCING VALUE

The carrier engine only has to work during travelling, which avoids damage due to long operation below capacity. Both engines always run at optimum operating temperatures, meaning less wear and tear, hardly any downtimes and reduced servicing requirement in the workshop when both engines are serviced together. All in all, this extends the service life of both engines, which has a positive effect on the resale value of the crane.



#### **WEIGHT BENEFITS?**



On principle, two engines are slightly heavier than one, however, both engines are integrated in the vehicle concept optimally, so that no disadvantage results regarding lifting capacity, range or axle load – on the contrary: the ATF 400G-6 features top performance in the most diversified applications.

EUROMOT 4

#### SUPERSTRUCTURE



2



Engine:	Mercedes-Benz
Model:	OM 936 LA
Class: 6-cy	linder diesel engine
Power:	205 kW (279 HP)
Torque:	1,150 Nm
Fuel tank:	230

#### INSIGHT



By the way, we rely fully on Mercedes-Benz engines. They are proven in commercial vehicles in continuous operation, easy to service worldwide and always represent state-of-the-art.

#### **CARRIER**



Engine:	Mercedes-Benz
Model:	OM 473 LA
Class: 6-cy	linder diesel engine
Power:	460 kW (625 HP)
Torque:	2,900 Nm
Fuel tank:	660

Savings over a operating time of <b>10 years</b>	144,000 €	
Savings per year	14,400 €	
Fuel price per I diesel	x 1.20 €	
Operating hours per year	× 1,500	
Fuel saved per operating hour	8 liters	
CALCULATION EXAMPLE		Your calculation mode

TADANO.



The superstructure engine supplies the hydraulic system without rotary joint, which would be failure-prone. Its battery can also provide starting aid for the carrier engine. This, in turn, assists the hydraulic system in case of emergency. There is no need for a separate module for emergency operation or support for the starting aid. Some additional reasons why the crane fails less frequently. Moreover, the noise and exhaust emissions emanating from the superstructure engine located diagonally behind the cab and also turning, are constantly low over the entire revolution range: a clear benefit both for the health and for the concentration of the crane driver.









# **ALWAYS AVAILABLE** IN CASE YOU NEED IT

You don't know the TADANO Service yet? Thank you, we are happy about this compliment for the robust technology and high reliability of our products. The ATF 400G-6 has been designed for a long service life outside of the service workshop.



### **OUR SERVICE** TO CUSTOMERS

The TADANO Customer Service is available to you by telephone on a 24/7 basis, either directly at the factory or at one of our numerous service subsidiaries around the world. If your problem cannot be solved by consultation, we will be with you as soon as possible, bringing the right spare part with us or sending it to you. We always have 22,000 high-quality spare parts in stock in order to keep you and your crane operational at all times.



### **REPAIR WORKSHOP:** FOREMEN AND EXPERTS

If we cannot repair your crane on site, we will repair it in our service and workshop center in Lauf an der Pegnitz. After a free incoming inspection we will send you a binding fixed price offer. For extensive repairs, you can use replacement cranes from our great variety of used cranes.







support helps.



(**F** 



Customer Service +49-9123-185-5100

Spare Parts

+49-9123-185-5200





and eliminates the malfunction himself.

Service technician arrives with spare part











The TADANO Service provides you with ongoing training.



### **TECHNICAL TRAINING**



We show crane operators and service personnel how to perform maintenance work and remedy minor technical faults themselves. This makes them independent of third parties. The certified training usually lasts five days, with clear learning content in the training center and practical exercises directly on the crane.



### **MOBILE CRANE DRIVING LICENSE**

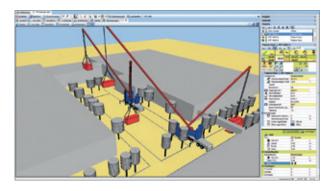


The stronger, more modern and more versatile mobile cranes are today, the more important it is for crane operators to receive thorough training. Our training program comprises ten working days of theoretical and practical training by qualified personnel. At the end there is a qualified examination by the employers' liability insurance association and a certificate of qualification as a mobile crane operator.

The TADANO Service facilitates your work scheduling.



#### SUPPORTING APPLICATIONS SCHEDULERS



No matter whether KranXpert or craniMAX, you will receive the data of the ATF 400G-6 for all open, marketable scheduling systems. This software is easy and intuitive to use and allows you to simulate the most complex applications even without any CAD knowledge. So you can plan and perform crane work efficiently in your familiar environment – with the ATF 400G-6 alone or as part of a multilift job.



### **TADANO FLEET MANAGEMENT**



HELLO-NET helps you manage your machinery pool and provides you with comprehensive status information. Your cranes transmit their GPS location and relevant operating states via mobile communication on a daily basis. Via your web browser, you can conveniently view usage and downtimes, fluid levels or kilometers traveled. You can also manage your service and maintenance schedule via HELLO-NET. And all this for free!



With the takeover of the long-established FAUN GmbH by TADANO Ltd. in 1990, we were able to combine German engineering skills with Japanese quality standards. In today's TADANO FAUN GmbH we consistently continue to develop these competences. The Groups average annual turnover of  $\[mathbb{E}\]$  1.2 billion over the last ten years and more than 500,000 lifting devices produced and successfully delivered speak for themselves. Our contribution to your success is concentrated on three pillars:



### SAFETY. THIS IS WHAT YOU INVEST IN

Safety is our top concern as regards building and operating our cranes. All other values are based on this, because safety always applies: whether the crane is traveling, lifting or being serviced. All components and functions are only available from us if they can be used and operated safely. You would not have expected anything else from us - we are sure of that.



### QUALITY. THIS IS WHAT WE LIVE

Absolute reliability and long service life will convince you in everyday operation of your TADANO crane: for example, carefully laid cables without chafing, faultless screw connections in accordance with our own labelling standards and powder-coated, durable paintwork. We also continuously optimize our business processes and services, because quality goes far beyond the product.



# EFFICIENCY. THIS IS WHAT YOU CAN EXPECT

TADANO is present with 7 production sites, 20 subsidiaries and almost 100 international sales and service companies worldwide. Our outstanding reputation for robustness, quality and reliability is your advantage, which pays off in high resale opportunities and values of your TADANO products.

# YOUR GREATEST BURDEN IS THE ENORMOUS PRODUCT RANGE TO CHOOSE FROM

From 40 to 400 t, from 2 tracks to 6 axles, from light to long:

TADANO provides you with cranes for many well-known
terrain types, application scenarios, and load variants. And
for just as many unknown ones.



