

ATF-100-4.1 | ATF-120-5.1





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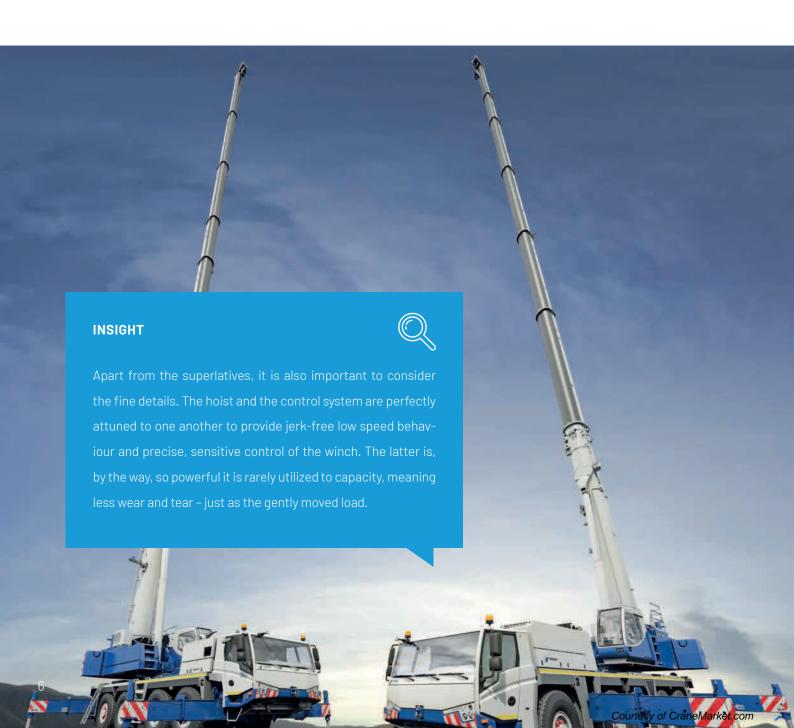
How versatile would you like it? The common superstructure of both cranes with a newly developed 60 m main boom makes the ATF-100-4.1 a compact highlight with up to 8 m more radius compared to other 100-t cranes and telescopes the ATF-120-5.1 up into the 150-t class. The main boom, the jibs and practically all counterweights of both cranes are identical and, thus, ideal for logistics. The tailswing radius is as slim as the range of applications is wide – simply a successful concept.





HIGHER, FURTHER. BETTER.

In the transition range of the four- and five-axle cranes, the ATF-100-4.1 and the ATF-120-5.1 demonstrate what it means to be two all-rounders in the highly competitive environment of the medium-heavy mobile cranes – namely with a 60 m long common argument, the main boom. More radius and more lifting capacity account for a huge range of applications.





ADVANTAGE: RADIUS

We designed the main boom for both cranes for the sake of the radius and, down the road, the ATF-120-5.1 can measure up to cranes from the 150-t class. The range between minimum length (11.4 m) and maximum length of the main boom (60 m) is, by the way, larger than that of any competitor in the 100- to 120-t class.*



ADVANTAGE: LIFTING CAPACITY

The ATF-100-4.1 profits especially from the new common main boom by achieving lifting capacities that are way ahead in the competitive environment - by up to 100 % for individual radiuses. The ATF-120-5.1 is consistently the most powerful crane of its class for radiuses between 16 m and 56 m.*





AS SHORT AS POSSIBLE

It is not only the hook height of the ATF-100-4.1 and the ATF-120-5.1, unbeaten when compared to other cranes in their class, that benefits from the large luffing angle (84.7°), but the shortest load radius, too. At only 2 m, it undercuts all other cranes by up to 33 % - highly beneficial for picking up loads close to the crane when things get tight on the construction site.*

> THE HIGHLIGHTS IN THE 100- TO 120-TON CLASS

ATF-100-4.1

Radius surpasses other 100 t cranes by up to 8 m*

61.7 m

Hook height

BEST VALUE (7)



84.7° 60 m

Maximum luffing angle Boom length

AT THE VERY TOP

DRIVING EFFICIENTLY ON THE ROAD WITH SUITABLE AXLE LOAD

PREVENTION AGAINST BRIDGE PAINS

How much flexibility would you like? The compact ATF-100-4.1 exhausts the possibilities of the four-axle concept optimally and offers maximum manoeuvrability. Thus, you can go practically everywhere. Or would you rather like to travel across nearly everything? This is where the five-axle concept of the ATF-120-5.1 exhibits its strength, allowing routes which other cranes only know from the need of detours.



SMALL AXLE LOAD - GREAT ADVANTAGE MANY EFFECTS

As soon as the axle load is reduced, roads and bridges are at your disposal which previously had been off limits. Driving to the jobsite becomes shorter and, thus, less expensive; doubly so, as the same applies to the return journey. Travelling will also be less complicated as driving permits are granted easier and for longer periods of time. And, with a total weight of less than 48 t and depending on the national regulations, you might even avoid closure times on weekends and national holidays. Isn't that a reason to celebrate – and for your crane to work?

AXLE LOAD HIGHLIGHTS





total weight possible (9.6 t axle load): incomparably light*

BEST VALUE 🜠



10t

axle load: as the only crane among the competitors in the 100- to 120-t class*

BEST VALUE



^{*}In accordance with published information







12t

axle load: with 11.5 t counterweight

AT THE VERY TOP

12t

axle load: with 17.7 m jib and 9.2 t counterweight



INSIGHT



The ATF-100-4.1 and ATF-120-5.1 can be driven in the fully rigged condition – with full counterweight and complete jib in working position. As also the entire counterweight swivels within the width of the outrigger base, it is possible to plan deployments optimally, even for confined spaces.



MODULAR AND YET INDIVIDUAL

The identical superstructure for the two cranes continues with the counterweight logistics as they both use the same modules for 14 counterweight variants – twice as much as compared to most of the competitors.* Furthermore, there are the additional weights attached outside. These are larger for the ATF-120-5.1, to achieve 5 t of extra ballast. With a 1.3 t module of its own (as an alternative for the second winch), the ATF-120-5.1 makes full use of a 10 t axle load.

HEAVY AND STILL LEAN

Gaining a lot of weight and still fitting into everything; a 'slim dream' for humans, no problem for the ATF-100-4.1 and ATF-120-5.1. Quite the 'counterary': the smartly formed and arranged weights keep the tailswing radius at a permanently low 3.80 m - absolutely the best value among 100-t cranes!* Only configurations over 30 t protrude beyond the vehicle width - an additional weight many competitors in the 100-t class are not even able to achieve.



SET-UP QUICKLY AND EASILY

For rigging and derigging the full counterweight, additional elements can be added without disassembling the counterweights already fitted. Owing to elaborate plug connections, no time-consuming bolt-fixing to the superstructure is necessary, in contrast to some of the competitors. The flexibility in combining the counterweights with minimum lifting effort saves time, too – and this doubly so, as it is well known: while rigging as well as while derigging, job after job.



WEIGHTY BUT NOT DIFFICULT

The flexible division into small individual counterweight units makes it easy for the cranes already when driving to the site: with a 12 t axle load, the 4-axle crane offers sufficient reserves for 3.1 t counterweight, the 5-axle crane for 11.5 t counterweight – as an alternative for 9.2 t plus 17.7 m jib. Even with 24 t counterweight, both cranes are still only 2.75 m wide and, thus, perfectly suited for industrial assembly and jobs in buildings with limited space.

MUCH COUNTERWEIGHT FEW RESTRICTIONS



11.5 t

drivable up to 12 t axle load: powerful on the road

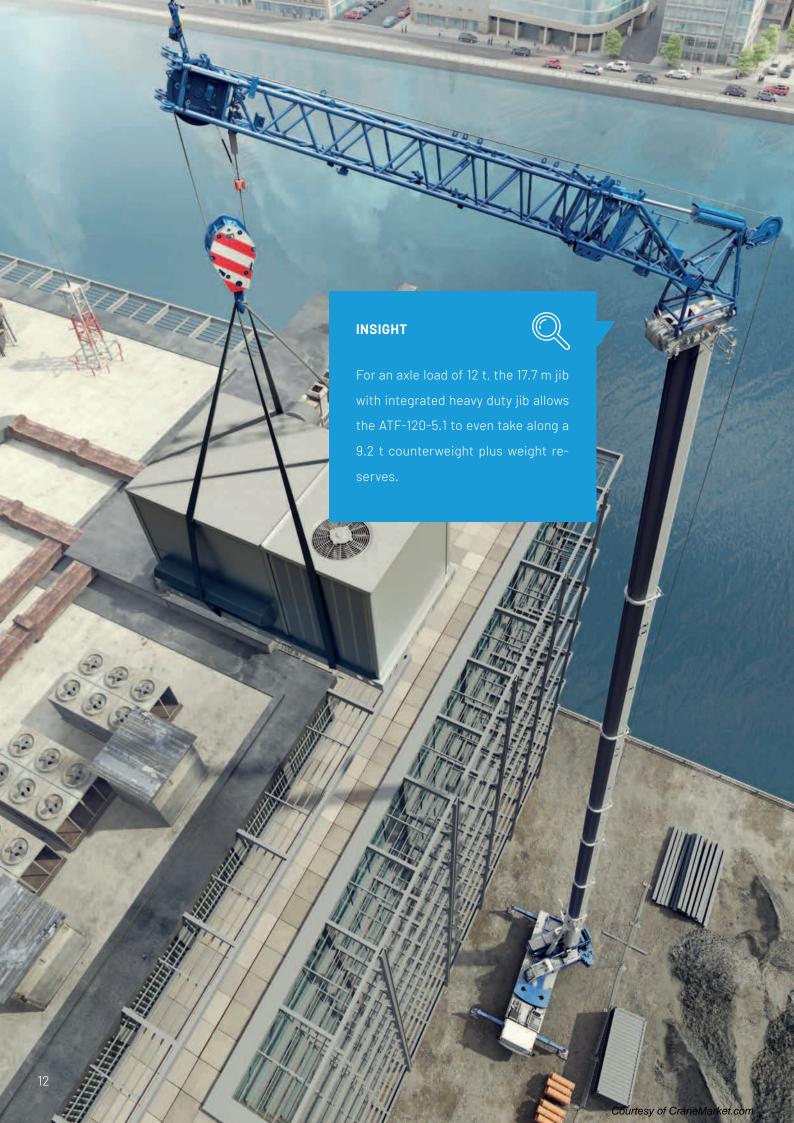
24.0 t

with 2.75 m vehicle width: lean and fit

35.4t

with a 4.0 m tailswing radius: skilfully slewed

^{*}In accordance with published information



AT THE TOP TWICE

Jibs should be short and strong, or especially long. They are available in numerous variants. But: which one is needed on the crane for a specific job? In the case of the ATF-100-4.1 and ATF-120-5.1, you have one jib more and one decision less because, if desired, they carry a jib which fulfils many requests. A 3.5 m heavy duty jib is optionally integrated as luffing basic module in all jibs up to a length of 31.7 m. Thus, working together, they cover numerous load cases.



THIS IS WHAT YOU DO NOT NEED



AND ABOVE ALL

As the entire jib system is self-rigging and the crane is able to attach or transform all elements by itself, no auxiliary crane is required. The hydraulic folding device is another effort- and cost-saving feature. The folded jib transported next to the main boom can be pinned via a crank handle by a single person from the ground.

We have also taken the modularity to a new peak: each and every segment of the jibs can be exchanged between the ATF-100-4.1 and the ATF-120-5.1.



THE TOP PERFORMANCES OF THE ATF-100-4.1 AND ATF-120-5.1

0°/22°/45°

tiltable jibs

90 m

Integrated heavy duty jib



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-100-4.1 and ATF-120-5.1.



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 carrier of both cranes offers maximum convenience and safety, too:

- > Ergonomic driver's seat, made by Recaro, with integrated armrests: less fatigue during long-distance driving
- Multifunction display: identical operator convenience as in the crane cab for quick selection of operator information by touch screen, via buttons or Rotary-push button
- Integrated sleeping bed: a convenient option for relaxing break times
- Comfortable access on both sides: even if the crane is supported by outriggers
- > Control of the outrigger functions directly on the crane side concerned: Avoiding accidents thanks to the outriggers always extending within visibility



WELL SUPPORTED IN THE SUPERSTRUCTURE

The cab design makes it clear:

safety and convenience are number one concerns with the ATF-100-4.1 und ATF-120-5.1. The slim cab frame sections and large-size glass surfaces provide the crane operator with the best all-round vision possible. To provide a comfortable visibility 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.



OPERATIONAL COMFORT OUTSIDE THE SUPERSTRUCTURE

In the event of demanding load situations, the crane operator can operate all functions via a radio remote control – securely and comfortably, on the spot, while keeping an eye on the load at all times.







CRANE CONTROL FOR DEMANDING OPERATORS

The TADANO crane control AML-F offers maximum comfort for safe and efficient crane operation.

- Crane control ready for use on arriving at the construction site no unnecessary waiting times
- > Practical standby feature: the control is immediately operative again after a work interruption (e.g. for adjustments on the load)
- Main display operable by touch screen, via buttons or Rotary-push button: operating technologies familiar for crane operators of all age categories
- Memory function with three profiles: preferred operating characteristic and sensibility of the control levers can be saved for three persons or work situations
- > Errors and operating notes displayed in plain text and with expressive colour marking: sound understanding of the messages



Startup screen of crane control AML-F

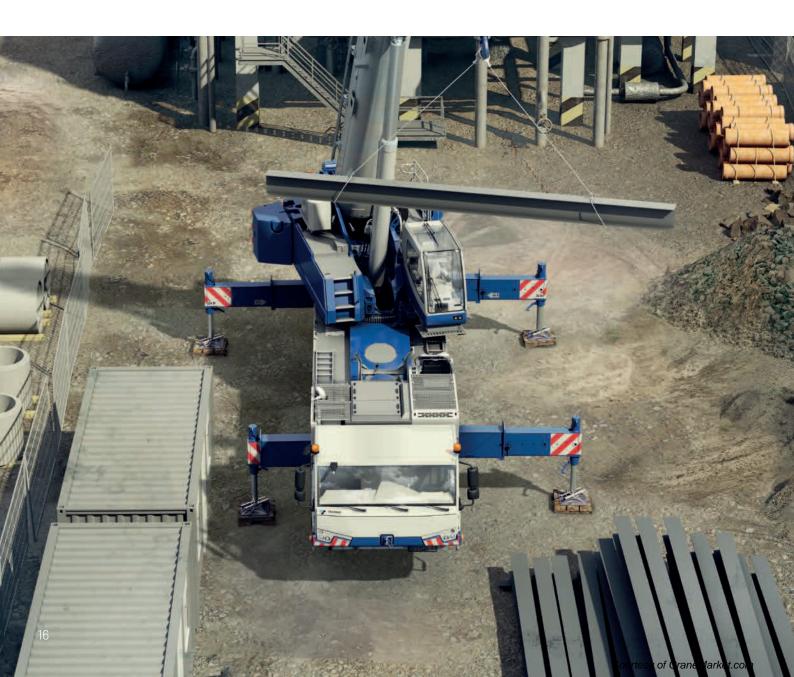




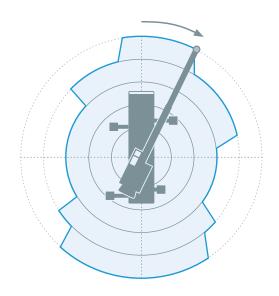
SAFE MONITORING OF THE ASYMMETRICAL OUTRIGGER BASE

LACK OF SPACE? HIGH LIFTING CAPACITY!

When things gets tight on the construction site: when space is limited, the outrigger beams 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-100-4.1 and of the ATF-120-5.1 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 releases 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-100-4.1 and ATF-120-5.1 prove to be top performers 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 away from the crane when 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-100-4.1 and ATF-120-5.1 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. This makes it a ground-breaking assistance system available exclusively made by 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 also retains control at all times and can intervene in the lifting process manually.

100 % SOFTWARE INTELLIGENCE

Maximum safety

lifting without swinging out

UNBEATEN

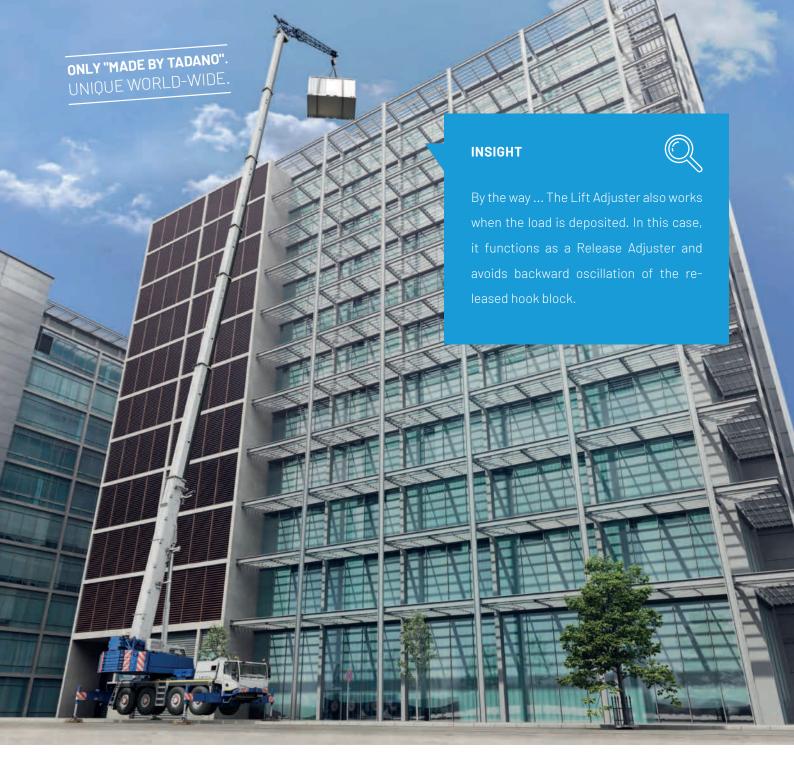


Optimum comfort

stress-free

UNBEATEN







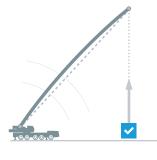
DECISIVE APPLICATION SCENARIOS*

- 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

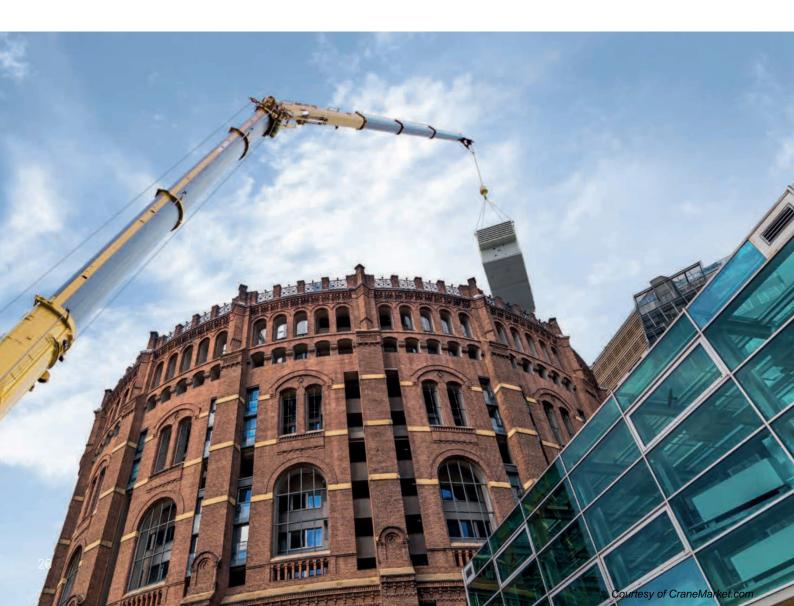
^{*} Lift Adjuster sorgt für Unfallvermeidung



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.

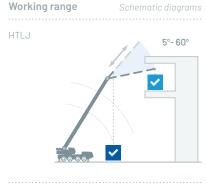


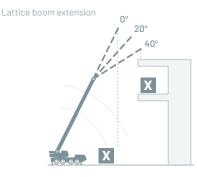
80 m 5°-60°

maximum hook height steplessly tiltable

3-64m 7.3 t

telescopable working radius 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 19 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 EN ROUTE AND OPERATIVE QUICKLY

With a weight of approx. 2,240 kg and a length of 9.4 m, the mono-block 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 HTLJ requires little space and no assembly crane; straightforward construction site equipment suffices for assembly. The crane is set-up for new tasks within 30 minutes - independently of the space available on the work site.



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 is it that both the ATF-100-4.1 and the ATF-120-5.1 feature two EM5 engines? No question – travelling and crane work have very different power requirements. The 462 HP or 530 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 175 HP superstructure engine. This allocation of tasks significantly reduces fuel consumption – day after day over the crane's entire life.



LOW-MAINTENANCE + FAIL-SAFE = MAXIMUM UTILITY

The carrier engine only has to work during travelling. This avoids damage due to long operation below capacity – as well as waiting periods for the regeneration of the EM5 exhaust system. Both Mercedes-Benz engines always run at optimum operating temperatures, meaning less wear and tear, and reduced servicing requirement in the workshop when 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.

kg

WEIGHT BENEFITS?



On principle, two engines are slightly heavier than one, however, both engines are optimally integrated in the vehicle concept, so that no disadvantage results regarding lifting capacity, range or axle load – on the contrary: ATF-100-4.1 and ATF-120-5.1 feature top performance in the most diversified applications.

EU STAGE V

Example: ATF-120-5.1

1

2

SUPERSTRUCTURE



Engine: Mercedes-Benz
Model: 0M 934 LA
Class: 4-cylinder diesel engine
Power: 129 kW (175 HP)
Torque: 750 Nm
Fuel tank: 2301

CARRIER



Engine: Mercedes-Benz

Model: OM 471 LA

Class: 6-cylinder diesel engine

Power: 390 kW (530 HP)

Torque: 2,600 Nm

Fuel tank: 600 I

INSIGHT



adapted to the EU Stage V engine. Thus, the drive concept allows fuel savings of approx. 10 % compared to EU Stage IV units. The gearbox offers a hill-holder and works in a comfortable, low-wear and secure manner.

SAVING FUEL

Savings over a operating time of 10 years	72,000 €	
Savings per year	7,200 €	
Fuel price per I diesel	× 1.20 €	
Operating hours per year	× 1,500	
Fuel saved per operating hour	4 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-100-4.1 and ATF-120-5.1 have been designed for a long service life outside 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.



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

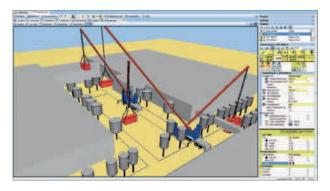


The stronger, more modern and more versatile mobile cranes are today, the more important it is for crane operators to receive thorough training. Our training program comprises ten working days of theoretical and practical training by qualified personnel. At the end there is a qualified examination by 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 your TADANO fleet 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-100-4.1 or ATF-120-5.1 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!

WHY YOUR INVESTMENT IN TADANO CRANES IS WORTHWHILE

INVESTMENT OR SAFETY? WHY DON'T YOU JUST TAKE BOTH?

A reliable partner for all the ups and downs of lifting is invaluable. With us you have an economically sound and reliable business partner at your side – around the world, around the clock, around your crane. Over 5,100 Tadano employees pursue a common target on a daily basis: **Lifting your dreams**.



Tadano worldwide



The takeover of the long-established Faun GmbH by Tadano Ltd. in 1990 combined German engineering skills with Japanese quality standards. In today's Tadano Faun GmbH, we continue to develop these skills. The numbers speak for themselves: the Tadano Group has earned an average annual turnover of € 1.2 billion over the last ten years and produced and delivered over 500,000 units of lifting equipment. Based on high compliance standards, our contribution to your success rests on three pillars:



SAFETY. THIS IS WHAT YOU INVEST IN

Safety is the top priority in the design, the construction, and the operation of our cranes. All other values are based on this, because safety always matters: whether the crane is traveling, lifting or undergoing service. All components and functions are only available from us if they can be safely used and operated.



QUALITY. THIS IS WHAT WE LIVE

Absolute reliability and durability will convince you in the day-to-day operation of your Tadano crane: for example, carefully laid cables without chafing points, powder-coated, permanent paintwork, as well as continuously optimized business processes and services.



EFFICIENCY. THIS IS WHAT YOU CAN EXPECT

Tadano is present worldwide with 11 production sites, more than 29 branches and almost 100 international sales and service companies. Our outstanding reputation for robustness, quality and reliability is your advantage, which pays off in high resale potential and values.



COMPLIANCE. THIS IS WHAT YOU CAN COUNT ON

Compliance with legal requirements and high moral standards make up the foundation of our business. Because only uncompromising compliance standards enable the well-known safety, quality and efficiency of our 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.







ATF-100-4.1 ATF-120-5.1 THAT'S WHY!

Modularity par excellence: virtually no load situation is the same as another. Luckily, working with the ATF-100-4.1 and ATF-120-5.1 poses no difficulty – they are uncomplicated and reliable. As varied as their jobs, as consistent their operation and functioning.

- > HIGH-PERFORMANCE OWING TO NEWLY DEVELOPED 60 M MAIN BOOM
- FLEXIBLY USABLE, INTERCHANGEABLE COUNTERWEIGHT AND JIB VARIANTS
- ➤ HIGHLY VERSATILE WITH A TAILSWING RADIUS OF ONLY 3.8 M INCLUDING THE COUNTERWEIGHT
- > CONTINUOUSLY COST-EFFICIENT



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