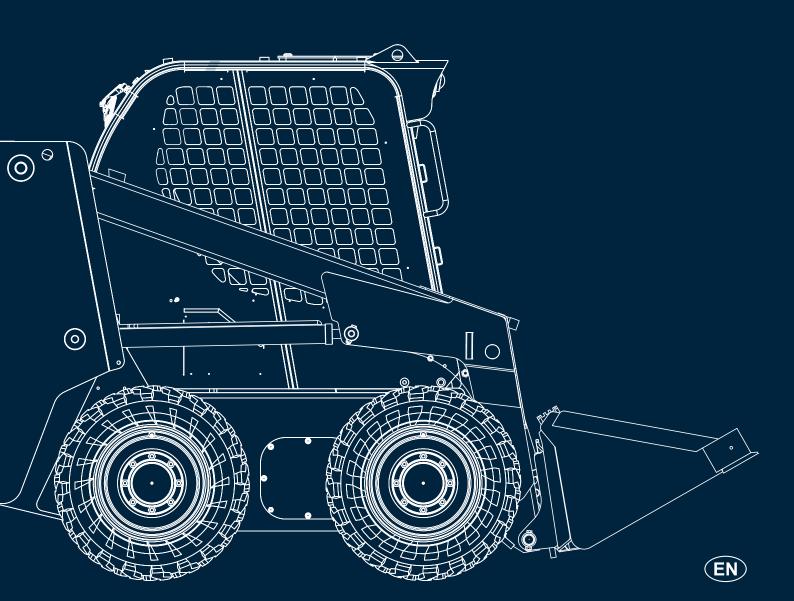


# **SKID LOADERS** 330 / 1000 KG

**AS**12 **AS**20 **AS**25 **AS**28

**AS**34 **AT**33

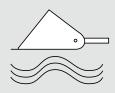


## **COMFORT AND QUICK MAINTENANCE**

The smallest, most compact, silent, productive and easy to service wheeled skid loader. With an operating weight of 1330 kg, the machine reaches an operating load of 330 kg and delivers breakout force of 750 kgf.



No efforts during cab tilting thanks to two powerful jacks



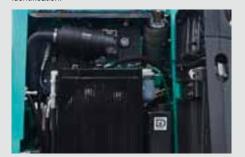
#### **FLOAT FUNCTION**

During reverse travel levelling, the standard float function frees the arms, and hence the bucket, to float over the profile of the terrain, so that the operator can concentrate entirely on driving.

The bucket pivot height of 2540 mm is excellent and the increased bucket return angle of up to 34° prevents loss of material during travel.

#### QUICK, EASY AND SAFE MAINTENANCE

The machine is designed to be easy to service with minimal downtime: the rear hatch opens to 90° for comfortable access to both sides of the engine and oil tank. Two powerful jacks eliminate all effort in quickly tilting the cab out of the way for simplified access to the hydraulic pumps, motors, valves and fluid lines. Daily service points, such as remote discharges, filters and the battery, are always easy to access. The fuses are coloured and numbered and easy to access for identification.







#### **ENGINE**

The YANMAR 3TNV76 1116 cc engine, with its low engine speed, offers reduced consumption and wear, and a total lack of vibration, thus providing unbeatable performance in even the most challenging conditions. The TNV series complies with current regulations on polluting emissions.



#### **EASY OPERATION**

A comfortable and spacious interior, with clearance of up to 73 cm for legs, shoulders and head, makes for high productivity and reduced fatigue. The adjustable seat and easy to operate controls ensure unbeatable comfort over I ong working days.



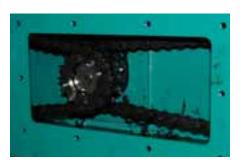
#### **UNBEATABLE COMFORT**

Major structural features: servo-assisted hydraulic grippers, large platform without pedals and hatch for quick cleaning, low noise due to the extensive soundproofing panels, blower fan to reduce the transmission of vibrations and heat to the operator position, safety armrest.

The cab is clad throughout with soundproofing panels. The cab can be equipped on request with heating and full glass panel closure.



The bigger bucket rollback avoids material waste during transportation



#### **EASY TRANSMISSION CHAIN TENSIONING**

The new external access hatch makes it quick and easy to check the chain tension. The screw tensioners and the half-axle mounting, which uses slots rather than round holes, simplifies tension adjustments. Fitting snow chains is made easy by the clearance between the wheels and the chassis.



#### **FLAT FACE QUICK COUPLERS**

The AS12 can mount optional accessories for working in all situations, open areas or in narrow spaces: various types of buckets, snowplow blade and sweeper with bucket, pallet fork, hydraulic breaker and others.

Attachments are easy to fit and replaced thanks to the universal Multi-Tach system.

Attachments are completely visible to the operator, without any obstacles to cab access.

The flat face quick couplers are easier to clean than concave couplers, and prevent contaminating the hydraulics.



#### TOTAL RELIABILITY

In-line transmission, engine compartment fan preventing the radiators blocking, modular fluid lines, protected lights and exhaust pipe-everything assure total reliability. Narrow wheels can be fitted to facilitate passing through gaps as tight as 1 m. The hydraulic parking brake, which engages automatically when the engine is switched off, can also be engaged manually with the engine running. An optional system for bucket self-levelling during lifting is available.







**SKID LOADERS** 330 / 1000 KG



### **TECHNICAL DATA**

Engine	Yanmar 3TNV76
N° cylinders and total displacement	3 / 1116 cc direct injection
Engine rated power	15.6 kW / 2500 rpm
Operating Weight	1368 kg
Weight on delivery with bucket	1288 kg
Operating load	360 kg
Tipover load	720 kg
Breakout force	7.35 kN
Standard bucket	1130 mm
Bucket capacity	0.18 m <sup>3</sup>

## COMPACT SIZE WITH INCREASED PERFORMANCE

The A20 is small and ideal to work in confined spaces where other machines cannot. The compact size and weight facilitate transport. The width of 1220 mm facilitates manoeuvres in narrow passages, corridors, small paths and gates, whereas the nominal operating capacity of 435 kg enables movements in full compliance as a result of an oversized pump ensuring performance from higher category machines.





#### **KUBOTA STAGE III A DIESEL ENGINE**

Equipped with a KUBOTA V1505 - 1498 cc diesel engine, the machine is powerful, silent and has reduced vibrations. The engine's power is 26 kW and the excellent torque features in all operating features make the AS20 ready for all applications.

#### INSTURMENTS AND WARNINGS

The functions enabled and alarms triggered on the dashboard can be easily and reliably read. The position of the warnings makes it easier to use and enables maximum safety of the machine.



## MAXIMUM OPERATOR COMFORT AND INTUITIVE CONTROLS

Pilot-operated hydraulic manipulators, wide platform and pedal tapping, low noise through extensive thermal soundproofing coverings, "blower" fan that reduces vibration and heat transmission in the driver's seat, arm support safety bars, and intuitive and simplified controls. The electrical controls with integrated warning lights make it easier to use, thus facilitating activation of all accessories. The battery master switch is situated in the cab, which can be easily reached. This protects the start-up battery and maximises safety when the machine is not used.



#### **DRIVER'S SEAT**

The seat is spring-loaded, padded and adjustable. The controls are enabled with minimum effort and ensure the necessary comfort required to maintain high productivity to reduce strain. The cab is large and ensures maximum comfort. Access and descent from the machine is facilitated by the position of the handles and dimensions of the cab. The polyellipsoidal working lights illuminate the working area, also in poorly lit places. The cab is fitted with a platform to ensure a clean and comfortable environment.

#### **FACILITATED MAINTENANCE**

The facilitated maintenance of A20 minimises machine downtimes. The oil and fuel tank integrated in the bodywork save space in the engine's compartment and facilitate access to all components. The Level I ROPS/FOPS cab with an integrated platform can be tilted forward to ensure access to the main components. The cab can be opened by one person only and in total safety. The greasing points are reduced by 50% less than average mini excavators as a result of compound bushings. The temperature and hydraulic oil level can be checked rapidly as a result of the large indicator by simply opening the rear hatch. The electrical system is designed to facilitate maintenance: the simple and robust wiring is grouped with main devices in a power box with a reliable and easily accessible electro-mechanical structure.

#### **ACCESSORIES COUPLING AND SUPPLY**

To ensure its operating versatility, the bucket coupling system and accessories power supply comply with the highest market standards. The standard quick coupling is characterised by the manual coupling and disconnecting device from the two lever handles.



#### **TECHNICAL DATA**

Engine	Kubota V1505-M Stage IIIA
N° cylinders / displacement	3 / 1498 cc
Engine rated power	26 kW / 2800 rpm
Weight on delivery	1846 / 1998 kg (without bucket / with bucket)
Operating weight	2095 kg
Operating load	435 kg
Maximum torque	105 Nm at 1700 rpm
Maximum travel speed	0-10.5 km / h
Bucket cylinders breakout force	15.56 kN
Standard bucket width	1270 mm
Bucket capacity stike / heaped	0.22 / 0.30 m <sup>3</sup>

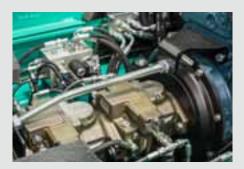
## **AS**25-28

## POWERFUL, STABLE AND STURDY MACHINES

KATO IMER Skid Loaders are built to be compact, agile and sturdy, "small giants" equipped with exceptional hydraulic performance, even in confined spaces, thus more advantageous to the operator in terms of production and returns.



**SKID LOADERS** 330 / 1000 KG



#### **KUBOTA STAGE III A DIESEL ENGINE**

Equipped with Diesel KUBOTA engines, the AS25 engine V2403-MEB - 2434 cc and AS28 engine V2607-DI-T 2615 cc are both powerful, silent machines with reduced vibrations. In both cases, the engine is powerful with 35.8 kW for AS25 and 47.5 for AS28. The excellent torque features at all operating speeds make both models as Skids with higher category machine performance.



#### **FACILITATED MAINTENANCE**



The facilitated maintenance of AS25 and AS28 minimises machine downtimes. The oil and fuel tank integrated in the bodywork save space in the engine's compartment and facilitate access to all components. The Level I ROPS/FOPS cab with an integrated platform can be tilted forward to ensure access to the main components. The cab can be opened by one person only and in total safety. The greasing points are reduced by 50% less than average mini excavators as a result of compound bushings. The temperature and hydraulic oil level can be checked rapidly as a result of the large indicator by simply opening the rear hatch. The electrical system is designed to facilitate maintenance: the simple and robust wiring is grouped with main devices in a power box with a reliable and easily accessible electro-mechanical structure.

#### **MACHINE PROTECTION**

The design of both models makes the machines reliable and sturdy and able to work in the most complex sites. The radiator and heat exchanger containing the hydraulic oil are protected against impacts: the flexible pipes pass through the frame's pillars and arm for total reliability. The cooling holes ensure maximum protection of the components and ideal cooling of the engine's compartment. The position and protection of parts most subject to break as a result of accidental impact, minimise the danger of damage and ensure operation in maximum safety.

## SIMPLE ANCHORING POINTS OF THE MACHINE

The anchoring points are easy to locate and use



#### **BALANCE OF WEIGHTS AND PERFECT STRUCTURE**

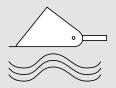
Top travel performance as a result of perfect distribution of the weight. The tapered shape of the front part of the arm enables a long step (stability) with the equipment near the machine. The position of the rotating supports contribute to high performance in the working cycle and, in particular, during material loading and unloading operations, thus maximising the operating load and ensuring a good height of the unloading point.





#### **SELF-LEVELLING FUNCTION**

During the arm lifting phase, the "SELF-LEVELLING function" keeps the bucket in the same departure position with no corrections required by the operator. Self-levelling together with the bucket's rollback angle above 25° prevents the material from leaking during lifting.



#### FLOAT FUNCTION

With levelling operations in reverse, the standard "FLOAT function" makes the free arms float, thus enabling the bucket to "float" by following the ground and therefore enabling the operator to concentrate fully on driving.





#### ACCESS TO COMPONENTS

The inspection points for daily and scheduled maintenance can be easily accessed such as, for example, the battery and fuses under a special hatch under the platform. The hatch is also useful for cleaning operations of the cab. The engine is assembled lengthwise to facilitate access to the transmission belts. It is comfortable to inspect the electrical system.

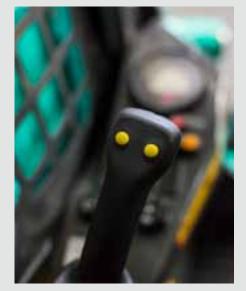


#### ACCESSORIES COUPLING AND SUPPLY

To ensure its operating versatility, the bucket coupling system and accessories power supply comply with the highest market standards. The standard quick coupling is characterised by the manual coupling and disconnecting device from the two lever handles.

#### **INSTURMENTS AND WARNINGS**

The functions enabled and alarms triggered on the dashboard can be easily and reliably read. The position of the warnings makes it easier to use and enables maximum safety of the machine.



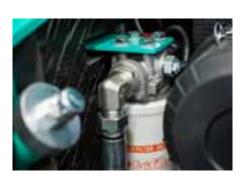
## POWERFUL, STABLE AND STURDY MACHINES

KATO IMER Skid Loaders are built to be compact, agile and sturdy, "small giants" equipped with exceptional hydraulic performance, even in small spaces, thus more advantageous to the operator in terms of production and returns.



#### **HYDRAULIC SYSTEM**

The hydraulic system was designed to improve integration between the components, thus ensuring perfect operating performance of the machines. The storage tank is standard. The oil tank integrated in the structure of both models enables efficient heat dispersion and thus enhances power performance. The safety tie-rod makes the pump unit sturdier. The two models have a large cylinder hydraulic pump compared to competitive models. The traction motors are characterised by their high power. The hydraulic actuators, optimised structural shapes and weight distribution enhance the kinematic and dynamic performance of traction and the arm, thus ensuring work precision and handling.



#### AS28 AUXILIARY HYDRAULIC SYSTEM, HF OPT. HYDRAULIC SYSTEM

AS28 can be fitted with optional accessories that are useful to work in any environment and condition: various types of buckets, snowplough blade, sweepers with collection bucket, brushing machine, hydraulic hammer demolisher, crushing bucket, bucket for concrete, grippers, pallet fork, agricultural fork, crushing head. The HF hydraulic system (optional high capacity) has a maximum flow rate of 108 L / min. The two systems are easy and comfortable to start from the pilot-operated controls situated on the handles. The auxiliary control to check the oil's capacity is a proportional type.







## CAB WITH HEATING AND AIR CONDITIONING (OPT.)

As an optional accessory, the closed cab can be equipped with heating and air conditioning. The air filter and soundproofing are fitted at the back and ensure an excellent, clean, protected and silent work environment. The door of the optional cab has a tube metal structure. The convex shape of the glass enhances the operator's visibility and space.



#### DRIVER'S SEAT

The seat is spring-loaded, padded and adjustable. The controls are enabled with minimum effort and ensure the necessary comfort required to maintain high productivity to reduce strain. On request, the two models can be provided with side windows closure and heating system. The standard rear windscreen wiper also ensures visibility in harsh atmospheric or operating conditions. The cab is large and ensures maximum comfort. Access and descent from the machine is facilitated by the position of the handles and dimensions of the cab. The polyellipsoidal working lights illuminate the working area, also in poorly lit places. The cab is fitted with a platform to ensure a clean and comfortable environment.

#### MAXIMUM OPERATOR COMFORT AND INTUITIVE CONTROLS

Pilot-operated hydraulic manipulators and customised via adjustment situated in cab AS28, wide platform and pedal tapping, with a hatch for rapid cleaning, low noise through extensive thermal soundproofing coverings, "blower" fan that reduces vibration and heat transmission in the driver's seat, and arm support safety bars, which make both models ideal and operational.

The controls are intuitive and simplified. The large electrical control with integrated warning lights make it easier and more reliable to use, thus ensuring simple activation of the wide range of functions and accessories. The battery master switch is situated in the cab, which can be easily reached. This protects the start-up battery and maximises safety when the machine is not used.

#### ROAD CIRCULATION

Skid AS series have passed tests and obtained approval for circulation on the road by the Ministry of Transport. On request, they can be set-up in the approved version for use and free circulation on the road. Maximum protection of the lights is ensured.

#### **TECHNICAL DATA**

#### **AS**25 **AS**28 **Engine** Kubota V2403-ME3B Stage IIIA Kubota V2607-DI-T Stage IIIA N° cylinders / displacement 4 / 2434 cc 4 / 2615 cc **Engine rated power** 35.8 kW / 2500 rpm 47.5 kW / 2500 rpm Weight on delivery (without bucket / with bucket) 2327 / 2501 kg 2621 / 2801 kg Operating weight 2625 kg 2925 kg Operating load 629 kg 782 kg Tipping load 1258 kg 1565 kg Bucket cylinders breakout force 20.29 / 13.34 kN 20.29 / 16.76 kN Standard bucket width 1574 mm 1727 mm Bucket capacity stike / heaped 0.27 / 0.37 m<sup>3</sup> 0.28 / 0.39 m<sup>3</sup>

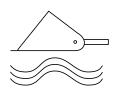
## **AS**34

## **MAXIMUM COMFORT AND HANDLING**

The top-rated KATO IMER rubber tyre Skid, silent and easy to use. With an operating weight of 3640 kg, AS34 has and best operating load of 1040 kg in its category and a breakout force of 2675 kgf that is definitely higher than average.



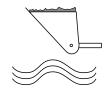
Bucket wiath of 1730 mm





#### FLOAT FUNCTION

With levelling operations in reverse, the standard function makes the free arms float, thus enabling the bucket to "float" by following the ground and therefore enabling the operator to concentrate fully on driving.



#### RIDE CONTROL FUNCTION

When travelling with a loaded bucket lifted from the ground, the "Ride Control" function ensures total absorption of oscillations and vibrations of the arm caused by uneven ground, thus increasing comfort and safety.



#### **HYDRAULIC SYSTEM**

The standard hydraulic set-up of AS34 was designed to meet all market requirements, even the most demanding. Three standard hydraulic lines with standard flow rate of as much as 86 L / min, but with High flow (optional) with a dedicated pump and flow rate of 134 L / min almost breaks the category record.

#### PIPES INSIDE THE ARM

Except for the High flow hydraulic lines, all hydraulic pipes used to move the arm and tools plate and auxiliaries are inside the arms.



#### **COMPACT ARM**

The tapered shape of the front part of the arm enables a long step (stability) with the equipment near the machine. Just 1680 mm wide, AS34 has an operating load of reference. The radial arm that closes in the front makes the machine more compact and facilitates access to the cab. Its compact front enables a long step of 1210 mm and a rear overhang of 1115 mm. All this is translated into a top-range operating load in its category: 1040 kg (1170 kg with additional counterweights).



#### YANMAR STAGE III A DIESEL ENGINE

YANMAR 4TNV98T Turbo 3320 cc, ultra-tested, electronically controlled engine that also intervenes on the EGR actuator. The engine is calibrated at a net power of 61 kW / 2500 rpm and the vehicle is protected (engine speed decreases in the event of faults), thus ensuring less wear and consumption and total absence of vibrations, with perfect performance also in the most difficult and complex situations.



#### **SELF-LEVELLING FUNCTION**

During the arm lifting phase, the "Self-Levelling function" keeps the bucket in the same departure position with no corrections required by the operator.

The height of the bucket pin of 3131 is significant and bucket rollback of up to 28°, together with self-levelling, prevent material leakages during lifting.



#### EASY TENSIONING TRANSMISSION CHAINS

The external access hatch enables rapid inspection of tensioning. The turnbuckle and securing of the semi-axes with a "slotted" hole facilitate adjustment. There is ample space between the wheels and frame, which facilitates assembly of the snow chains.



### HIGH QUALITY AND ACCESSIBLE MECHANICS

The simple mechanics make this Skid a global, efficient, simple, reliable and carefully finished machine with first-class hydraulic components.

Accessibility to the mechanics is exemplary; cab tipping is fast and assisted by removing two bolts and hydraulic jacks. This naturally results in a reduction in maintenance times and costs.





#### TOTAL CAB COMFORT

The dimensions inside the cab are spacious. The space is large and detailed care has been given to the finishing. Except for the footrest tank, the cab's interior is covered with high-quality plastic and the internal covering of the roof is soft to prevent painful "hits on the head". The controls are laid out rationally on two pillars. Optional radio. ROPS and FOPS cab.

#### CAB "DOOR" AIR CONDITIONING

The cab is comfortable and finished in detail. Selecting the "Cab windows closing kit" option, it becomes airconditioned, acoustically isolated and pressurised since the air conditioner becomes a standard set-up. The system's condenser is assembled inside the upper door of the engine's compartment. The door's convex shape of the glass enhances the operator's visibility and space.









#### SIMPLIFIED MAINTENANCE

AS34 was designed to meet all market requirements with reliability and simple mechanics. The "in line" transmission, the blower fan that cools the engine compartment reduces clogging of radiators, modular pipes, lights and protected silencer, ensure maximum reliability. Consequently, the frequency of maintenance is ordinary. Accessibility facilitates work in the workshop.

#### **WORK LIGHTS**

The standard lights are halogen, adjustable and polyellipsoidal. With the same power of bulbs, lenticular technology, as opposed to those with direct projection, enable better direction of the light beam on the work area.

#### **OPTIMAL STRUCTURES**

The AS34 split tool-holder plate is compatible with the world's most widely used equipment, as well as with CE-approved ones. Connections are all flat and ensure total reliability, and the oil's flow rate is always adjustable. The rollback angle of the bucket on the ground of 27.8° is higher than average in the category, whereas the tipping angle of 44° is second to none.

#### **TOTAL RELIABILITY**

The "in line" transmission, the blower fan that cools the engine's compartment, reduces clogging of radiators, modular pipes, lights and protected silencer, ensure maximum reliability.



#### **TECHNICAL DATA**

Engine	Yanmar 4TNV98T-Stage IIIA
N° cylinders / displacement	4 / 3320 cc direct injection
Engine rated power	61 kW / 2500 rpm
Weight on delivery (without bucket / with bucket)	3640 kg
Operating weight	3550 kg
Operating load	1040 kg
Tipping load	2080 kg
Bucket cylinders breakout force	26.2 kN
Standard bucket width	1730 mm
Bucket capacity stike / heaped	$0.38 / 0.44  \text{m}^3$

## **AT**33

## TRACK LOADER

The AT33 Track loader is agile and sturdy, a "small giant" as a result of exceptional hydraulic performance. AT33 has an operating weight of 3575 kg and a lifting force of 23.42 kN.





#### KUBOTA STAGE III A DIESEL ENGINE

AT33 is equipped with a V2607-DI-T 2615 KUBOTA Diesel engine that is powerful, silent and has reduced vibrations. With 47.5 kW, the engine is powerful. The excellent torque at all operating speeds is considered performance of higher category machines.



#### **FACILITATED MAINTENANCE**



The facilitated maintenance of AT33 minimises machine downtimes. The oil and fuel tank integrated in the bodywork save space in the engine's compartment and facilitate access to all components. The Level I ROPS/FOPS cab with an integrated platform can be tilted forward to ensure access to the main components. The cab can be opened by one person only and in total safety. The greasing points are reduced by 50% less than average mini excavators as a result of compound bushings. The temperature and hydraulic oil level can be checked rapidly as a result of the large indicator by simply opening the rear hatch. The electrical system is designed to facilitate maintenance: the simple and robust wiring is grouped with main devices in a power box with a reliable and easily accessible electro-mechanical structure.

#### MACHINE PROTECTION

The design of AT33 makes the machine reliable and sturdy and able to work in the most complex sites. The radiator and heat exchanger containing the hydraulic oil are protected against impacts: the flexible pipes pass through the frame's pillars and arm for total reliability. The cooling holes ensure maximum protection of the components and ideal cooling of the engine's compartment. The position and protection of parts most subject to break as a result of accidental impact, minimise the danger of damage and ensure operation in maximum safety.

### SIMPLE ANCHORING POINTS OF THE MACHINE

The anchoring points are easy to locate and use.



#### **BALANCE OF WEIGHTS AND PERFECT STRUCTURE**

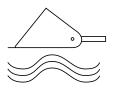
Top travel performance as a result of perfect distribution of the weight. The tapered shape of the front part of the arm enables a long step (stability) with the equipment near the machine. The position of the rotating supports contribute to high performance in the working cycle and, in particular, during material loading and unloading operations, thus maximising the operating load and ensuring a good height of the unloading point.





#### **SELF-LEVELLING FUNCTION**

During the arm lifting phase, the "SELF-LEVELLING function" keeps the bucket in the same departure position with no corrections required by the operator. Self-levelling together with the bucket's rollback angle above 32° prevents the material from leaking during lifting.



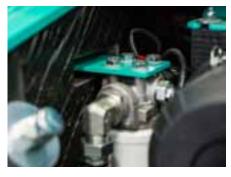
#### **FLOAT FUNCTION**

With levelling operations in reverse, the standard "FLOAT function" makes the free arms float, thus enabling the bucket to "float" by following the profile of the ground and therefore enabling the operator to concentrate fully on driving.



#### SELF-LEVELLING FUNCTION

During the arm lifting phase, the "Self-Levelling Function" keeps thebucket in the same departure position with no corrections required by the operator. The height of the bucket pin of 2891 and bucket rollback of up to 23°, together with self-levelling, prevent material leakages during lifting.



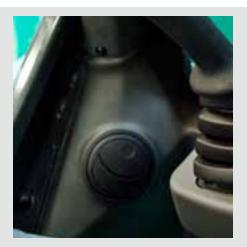
#### ACCESS TO COMPONENTS

The inspection points for daily and scheduled maintenance can be easily accessed such as, for example, the battery and fuses under a special hatch under the platform. The hatch is also useful for cleaning operations of the cab. The engine is assembled lengthwise to facilitate access to the transmission belts. It is comfortable to inspect the electrical system.



### POWERFUL, STABLE AND STURDY MACHINES

The AT33 Track Loader is built to be compact, agile and sturdy, a "small giant" equipped with exceptional hydraulic performance, even in confined spaces, thus more advantageous to the operator in terms of production and returns.





#### **DRIVER'S SEAT**

The seat is spring-loaded, padded and adjustable. The controls are enabled with minimum effort and ensure the necessary comfort required to maintain high productivity to reduce strain. On request, the two models can be provided with side windows closure and heating system. The standard rear windscreen wiper also ensures visibility in harsh atmospheric or operating conditions. The cab is large and ensures maximum comfort. Access and descent from the machine is facilitated by the position of the handles and dimensions of the cab. The polyellipsoidal working lights illuminate the working area, also in poorly lit places. The cab is fitted with a platform to ensure a clean and comfortable environment.

#### MAXIMUM COMFORT

The following are among the main construction features: pilot-operated hydraulic manipulators, dual manual and pedal control accelerator, wide platform with cleaning hatch, arm support safety bars, double sliding adjustable spring-load seat, comfortable cabin entirely covered with plastic panels, printed soffit, courtesy light, minimum idle speed setting (hand idle). The self-engaging hydraulic parking brake on engine switch-off can be manually engaged with the engine running. The traction control system (auto motive drive system) enables use of the engine at maximum power, preventing it from turning off. Additional ballasts increase the operating load.

#### ROPS AND TOPS CAB.

On request, the cab is fitted with an integrated air conditioning and glass closing system with a convex glass door for larger space for the operator. This type of cab set-up makes it airtight and pressurised. ROPS and FOPS cab.

## CAB WITH HEATING AND AIR CONDITIONING (OPT.)

As an optional accessory, the closed cab can be equipped with heating and air conditioning. The air filter and soundproofing are fitted at the back and ensure an excellent, clean, protected and silent work environment. The door of the optional cab has a tube metal structure. The convex shape of the glass enhances the operator's visibility and space.





#### **HYDRAULIC SYSTEM**

The hydraulic system was designed to improve integration between the components, thus ensuring perfect operating performance of the machines. The storage tank is standard. The oil tank integrated in the structure of both models enables efficient heat dispersion and thus enhances power performance. The safety tie-rod makes the pump unit sturdier. The two models have a large cylinder hydraulic pump compared to competitive models. The traction motors are characterised by their high power. The hydraulic actuators, optimised structural shapes and weight distribution enhance the kinematic and dynamic performance of traction and the arm, thus ensuring work precision and handling.



#### **ACCESSORIES COUPLING AND SUPPLY**

To ensure its operating versatility, the bucket coupling system and accessories power supply comply with the highest market standards. The standard quick coupling is characterised by the manual coupling and disconnecting device from the two lever handles.

#### **FACILITATED MAINTENANCE**

The facilitated maintenance of AT33 minimises machine downtimes. The oil and fuel tank integrated in the bodywork save space in the engine's compartment and facilitate access to all components. The Level I ROPS/ FOPS cab (to check if we also include FOPS II) with an integrated platform can be tilted forward to ensure access to the main components. The cab can be opened by one person only and in total safety. The greasing points are reduced by 50% less than average mini excavators as a result of compound bushings. The temperature and hydraulic oil level can be checked rapidly as a result of the large indicator by simply opening the rear hatch. The electrical system is designed to facilitate maintenance: the simple and robust wiring is grouped with main devices in a power box with a reliable and easily accessible electro-mechanical structure.

#### **INSTURMENTS AND WARNINGS**

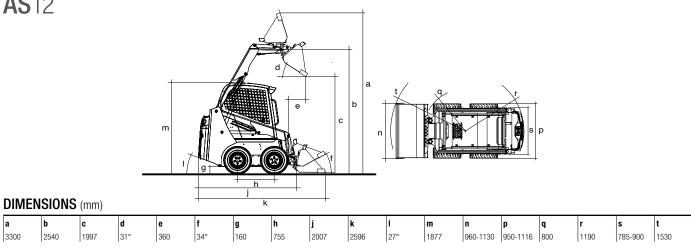
The functions enabled and alarms triggered on the dashboard can be easily and reliably read. The position of the warnings makes it easier to use and enables maximum safety of the machine.

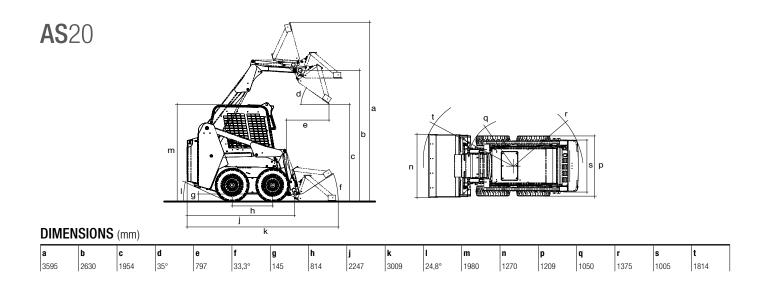


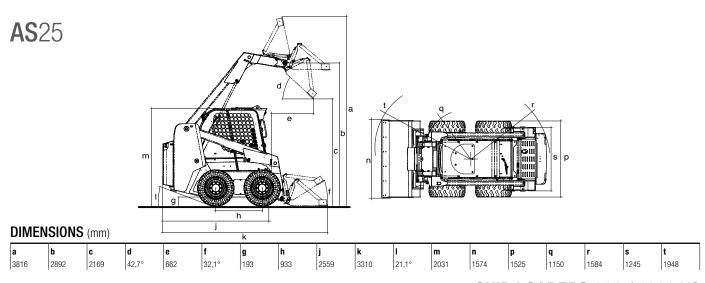
#### **TECHNICAL DATA**

Engine	Kubota V2607-DI-T Stage IIIA
N° cylinders / displacement	4 / 2615 cc
Engine rated power	47.5 kW / 2500 rpm
Weight of delivered machine	3270 / 3451 kg (without bucket / with bucket)
Operating weight	3575 kg
Operating load	766 kg
Tipping load	2190 kg
Bucket cylinders breakout force	20.29 kN
Standard bucket width	1727 mm
Bucket capacity stike / heaped	$0.28 / 0.39 \text{ m}^3$

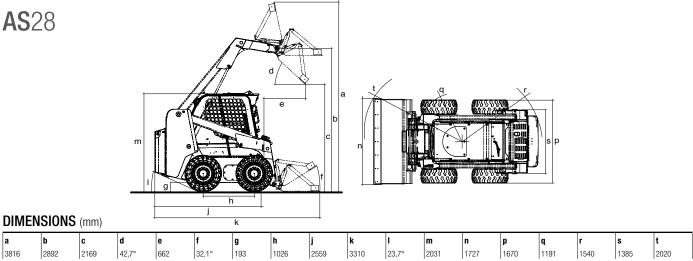
## **AS**12

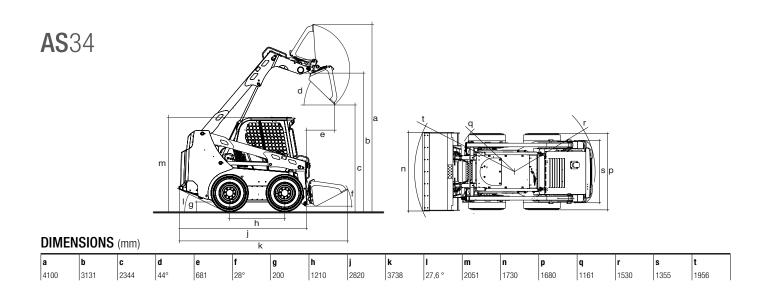


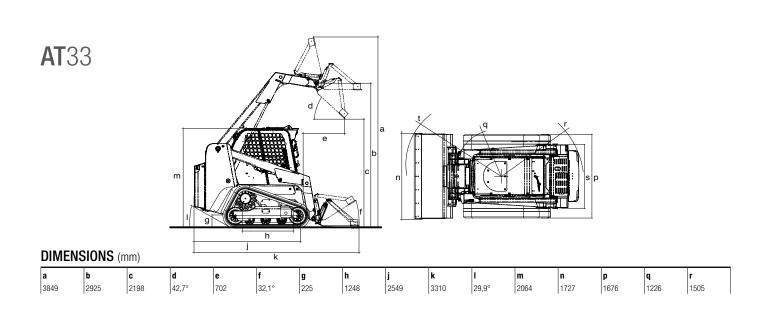








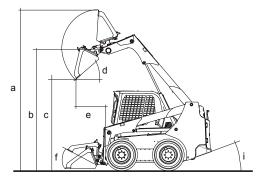


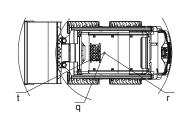


## equipment

equipinent	<b>AS</b> 12	<b>AS</b> 20	<b>AS</b> 25	<b>AS</b> 28	<b>AS</b> 34	<b>AT</b> 33
FRAME	AUIZ	A320	AUZU	A320	A004	AISS
Rear security door	std	std	std	std	std	std
Set-up of 4 lifting and anchoring points for transport  Mechanical locking device of the lifting arm	std std	std std	std std	std std	std std	std std
	std 23-8.50 x 12					
Tyres / Belts	opt 5.70 x 12	27 x 8.5-15	10-16.5	10-16.5	std 12.00 x 16.5	320 x 86 x 4
Semi-pneumatic wheels  ENGINE	opt 23-8.50 x 12	opt	opt	opt	opt 12.00 x 16.5	-
Air filter with double filtrating element and clogging electrical indicator	std	std	std	std	std	std
Buzzer and reverse alarm	std	std	std	std	std	std
12V battery / fuse box	Old	std	std	std	Ota	std
HYDRAULIC SYSTEM		o.ca	o.u.	O.C.		ota -
Brakes and transmission locking system	std	std	std	std	std	std
Pilot-operated hydrostatic transmission	std	std	std	std	std	std
Negative hydraulic parking brake on both traction engines	std	std	std	std	std	std
Oil filter with clogging indicator	std	std	std	std	std	std
Arm "float" function	std	opt	std	std	std	std
Aux. hydraulic system Two-way	std	std	std	std	with draining line	std
	Siu	Siu	Siu			
Aux. hydraulic system HF	-	-	-	opt	opt	opt
Dual advance speed	- ant	- ant	- atd	- atd	std	std
Self-levelling system of accessories during arm lifting	opt	opt	std	std	std	std
Arm "ride control" function	-	-	-	-	std	-
Road circulation validation kit	opt	opt	opt	opt	opt	opt
CAB SPACE						
Tipping cab compliance with standard CE ROPS-FOPS Level I	std	std opt only	std	std	std	std
Front cab-door glass closing kit with wipers and washing system	opt	side doors	opt	opt	opt	opt
Heating system kit / air conditioning kit	opt	-	opt / opt	opt / opt	opt / opt	opt / opt
Internal ceiling light fixture	std	std	std	std	std	std
Rear, removable window for safety exit	std	std	std	std	std	std
Handles for ascent	std	std	std	std	std	std
Auxiliary 12V outlet	std	std	std	std	std	std
DRIVER'S SEAT						
Safety bar with arm support	std	std	std	std	std	std
Adjustable spring seat	std	std	std	std	std	std
Adjustable, self-winding seat belt.	-	std	std	std	std	std
Pilot-operated hydraulic joystick controls	std	std	std	std	std	std
Accelerator control	manual	manual	opt pedal	opt pedal	manual and pedal	opt pedal
Removable cover to clean the floor	std	std	std	std	std	std
INSTRUMENTS AND CONTROL						
Indicators: fuel level-engine water temperature	std	std	std	std	std	std
Hour counter	std	std	std	std	std	std
Key ignition	std	std	std	std	std	std
Warning lights: engine cooling liquid temperature - hydraulic oil temperature engine oil pressure - battery charger - glow plugs	std	std	std	std	std	std
Air filter clogging control warning light	-	std	std	std	std	std
Hydraulic oil filter clogging control warning light	std	std	std	std	std	std
Parking brake engagement switch / float engagement	std	opt / opt	opt / std	opt / std	std	opt / std
Front and rear working light switch	std	std	std	std	std	std
Rear windscreen wiper switch	-	-	std	std	std	std
ACCESSORIES						
Accessories self-levelling kit (ascent)	opt	opt	std	std	std	std
Pallet fork	opt	-	opt	opt	opt	opt
Industrial sweeper	opt	-	opt	opt	opt	opt
4-in-1 dosing blade		-	opt	opt	opt	opt
Adjustable blade	opt	-	opt	opt	opt	opt
Snowplough blade	-	_	-	-	opt	-
Bucket volume	-	_	_	_	opt	_
Crushing bucket		_	-	_	opt	_
Grippers	_	_	_	_	opt	
Crushing head	-	-	_	-		-
OLUGINING LIEAU	_	-			opt	_
Agricultural fork	_	_	_	_	opt	_

## working range the drawing is generic and purely for illustrative purposes





		<b>AS</b> 12	<b>AS</b> 20	<b>AS</b> 25	<b>AS</b> 28	<b>AS</b> 34	<b>AT</b> 33
A	Maximum operating height with the bucket completely lifted	3300 mm	3595 mm	3816 mm	3816 mm	4100 mm	3849 mm
В	Maximum height of the pin with the bucket completely lifted	2540 mm	2630 mm	2892 mm	2892 mm	3131 mm	2925 mm
C	Unloading height	1997 mm	1954 mm	2169 mm	2169 mm	2344 mm	2198 mm
D	Maximum height unloading angle	31°	35°	42.7°	42.7°	44°	42.7°
E	Arm unloading with the bucket at maximum height	360 mm	797 mm	662 mm	662 mm	681 mm	702 mm
F	Rollback angle of the bucket on the ground	34°	33.3°	32.1°	32.1°	28°	32.1°
I	Rear departure angle	27°	24.8°	21.1°	23.7°	26°	29.9°
Q	Front clearance radius	800 mm	1050 mm	1150 mm	1191 mm	1289 mm	1226 mm
R	Rear clearance radius	1190 mm	1375 mm	1584 mm	1540 mm	1772 mm	1505 mm
Т	Front clearance radius with bucket	1530 mm	1814 mm	1948 mm	2020 mm	2195 mm	2052 mm

## features

	<b>AS</b> 12	<b>AS</b> 20	<b>AS</b> 25	<b>AS</b> 28	<b>AS</b> 34	<b>AT</b> 33
GENERAL PERFORMANCE						
Operating weight	1368 kg	2095 kg	2625 kg	2925 kg	3640 kg	3574 kg
Weight when delivered with the bucket	1288 kg	1998 kg	2501 kg	2801 kg	3550 kg	3451 kg
Operating load	360 kg	435 kg	629 kg	782 kg	1040 kg	766 kg
Tipping load	720 kg	870 kg	1258 kg	1565 kg	2080 kg	2190 kg
Bucket cylinders breakout force	7.35 kN	15.56 kN	20.29 kN	20.29 kN	26.2 kN	20.29 kN
ENGINE						
Engine manufacturer	Yanmar	Kubota	Kubota	Kubota	Yanmar	Kubota
Model	3TNV76	V1505 Stage IIIA	V2403-ME3B Stage IIIA	V2607-DI-T Stage IIIA	4TNV98T - Stage IIIA	V2607-DI-T Stage IIIA
No. of cylinders and engine size	3 / 1116 cc direct injection	4 / 1498 cc	4 / 2434 cc	4 / 2615 cc	4 / 3320 cc direct injection	4 / 2615 cc
Horsepower	15.6 kW / 2500 rpm	26 kW / 2800 rpm	35.8 kW / 25 00 rpm	47.5 kW / 2500 rpm	61 kW / 2500 rpm	47.5 kW / 2500 rpm
Maximum torque	69.4 Nm / 1800 rpm	90 Nm / 2000 rpm	160 Nm / 1650 rpm	220 Nm / 1700 rpm	298 Nm / 1850 rpm	220 Nm / 1700 rpm
Battery	12V 480 CCA 62 Ah	12V H350A 65 Ah	12V H430A 80Ah	12V H430A 80Ah	12V 800 CCA 100 Ah	12V H430A 80Ah
Fuel consumption (100% - 70% horsepower)	5.0 L/h - 3.5 L/h	7.9 L / h - 5 L / h	10.9 L / h - 7 L / h	14.4 L / h - 8.8 L / h	16.6 L / h - 11.6 L / h	14.4 L / h - 8.8 L / h
Air Cooling / Supply	water / aspirated	water / aspirated	water / aspirated	water / turbo	water / turbo	water / turbo
HYDRAULIC SYSTEM						
Maximum auxiliary system capacity	35 L / min	56 L / min	65 L / min	65 L / min	86 L / min	70 L / min
Maximum hydraulic pressure of the circuit	180 bar	180 bar	180 bar	180 bar	210 bar	180 bar
Maximum H.F. system capacity	-	-	-	108 L / min	134 L / min (opt)	108 L / min
Max. H.F. system pressure	-	-	-	200 bar	210 bar	200 bar
Maximum travel speed	0-7.0 km / h	0-10.5 km / h	0-11 km / h	0-11.5 km / h	0-10 / 18 km / h	0-7 / 0-11.5 km / h
BUCKET PERFORMANCE						
Standard bucket	1130 mm	1270 mm	1574 mm	1727 mm	1730 mm	1727 mm
Full bucket capacity	0.18 m <sup>3</sup> / -	0.22 / 0.30 m <sup>3</sup>	0.27 / 0.37 m <sup>3</sup>	0.28 / 0.39 m <sup>3</sup>	0.41 / 0.48 m <sup>3</sup>	0.28 / 0.39 m <sup>3</sup>
CAPACITY						
engine oil	2.9 L	7 L	9.5 L	10.2 L	11 L	10.2 L
Chain oil (for tank)	3.5 L	3 L	9 L	9 L	12 L	-
Cooling system	3.5 L	10.1 L	10 L	10 L	15 L	10 L
Fuel tank capacity	20 L	28 L	64 L	64 L	91 L	64 L
Hydraulic tank capacity	28 L	20 L	38 L	38 L	40 L	38 L
OTHER DATA						
Sound power level (outside)	97 dB	101 dB	101 dB	101 dB	102 dB	103 dB
ROPS structure	EN 3471	EN 3471	EN 3471	compliant with standard EN 3471	EN 3471	EN 3471
FOPS structure	compliant with standard EN 3449 Lev. I					





#### KATO IMER S.p.A.