



*"I want a tractor  
that reflects the  
force of nature.  
As well as its  
beauty."*

*"At last, a tractor  
that gives 100%.  
Just like me."*



**VIRTUS**  
100 | 110 | 120











*"I want technology that respects nature. Because the world means everything to me."*



*"The land is both my work and my passion. And I want a tractor that helps me to cultivate it"*



## SAME VIRTUS AGRICULTURE NEEDS MODELS TO GROW WITH.

Only those with strong roots can grow. And can help farmers to grow too. For over 70 years SAME has worked alongside farmers, helping them by producing versatile tractors capable of meeting the needs of arable and livestock farms as well as contractors. The Virtus represents the latest stage in the evolution of this project.

These are tractors that offer a high level of reliability and performance, combining the latest technology with distinctive styling that bears the unmistakable signature of Giorgetto Giugiaro.

The low-profile, aggressively styled hood, the cab with sleek, continuous lines, rounded fenders integrated with the chassis and twin rear lights featuring stylish details are all paired with a powerful engine that reduces fuel consumption.

Because yet another beauty of agriculture is innovation. Which comes from experience in the field.







## WHATEVER YOUR BUSINESS IS, PUT US TO THE TEST.

Adaptation is the very basis of evolution. And this is just as true in technology as it is in nature. And this is why the Virtus can be configured to suit the specific requirements of the user.

Thanks to a wide choice of optional equipment and accessories, livestock farmers can find in the Virtus all the tools they need to carry out their daily activities. The Tier 4i engines, the energy saving hydraulic system and the 40 km/h Eco transmission all help to keep operating costs down.

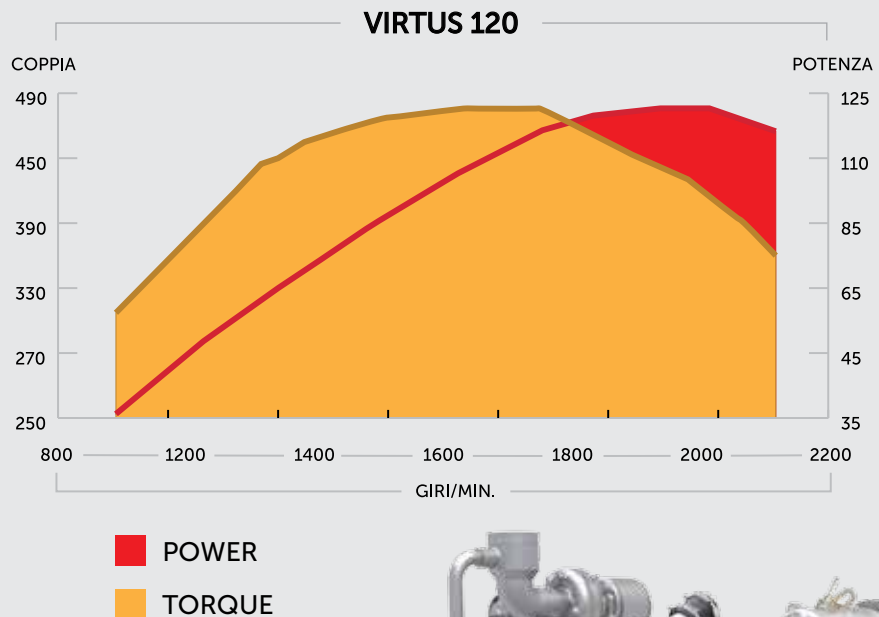
Contractors can configure the Virtus for maximum productivity: a highly flexible engine, 60+60 Powershift transmission that ensures that the optimum working speed is always available, and, for the most demanding operators, the Agrosky satellite guidance system.

The Virtus also meets the needs of medium-large farms with maximum versatility and high productivity: electronic linkage control, 4-speed PTO, automatic control of four-wheel drive and differential lock engagement ensure speed, efficiency and operating comfort.



# DEDICATION TO WORK COMES AS SECOND NATURE TO US.

*"I want an engine that can not only cut emissions. But also costs."*



## ENGINES

**SAME Virtus tractors with 4-cylinder DEUTZ Common Rail engines offer performance, reliability and low running costs.**

The rated power is obtained at 2200 rpm, and power delivery increases in line with the load up to the maximum 99 hp (Virtus 100), 110 hp (Virtus 110) and 112 hp (Virtus 120) at 2000 rpm.

Thanks to the high pressure Common Rail injection system and new combustion chambers in the piston heads, the engine delivers consistently high efficiency even in heavy duty applications. More exactly, the Common Rail system delivers maximum injection pressures up to 1,600 bar, independent of engine revolutions, and this flexibility combined with electronic regulation ensures excellent power and torque over a wide rpm range.

SAME Virtus tractors reach maximum torque value at 1,600 rpm and maintain this up to 2,000 rpm, providing constant pulling power for an impressive 400 rpm. Another important characteristic of the engine is the high torque back-up: this

characteristic ensures outstanding pulling power and ensures strong engine performance even in the toughest of conditions.

## EGR

### External Gas Recirculation

The liquid-cooled exhaust gas recirculation system significantly reduces nitrogen oxides (NOx), which are among the most powerful pollutants produced by the combustion of fossil fuels. A special valve allows some of the exhaust gases from the cylinder back into the inlet manifold, where they mix with the air entering the cylinder. This system safeguards efficient combustion and maintains good fuel economy.

## DOC

### Diesel Oxidation Catalyst

The diesel oxidation catalyst (DOC) significantly reduces the level of harmful emissions, due to low-temperature combustion. After being treated by the EGR system, the exhaust gases pass through the oxidation catalyst which reduces the carbon monoxide and hydrocarbons, enabling SAME Virtus tractors to comply with the new Tier 4i anti-pollution standards.



## ELECTRONIC ENGINE MANAGEMENT

Optimum control and efficiency are delivered consistently by the SAME Virtus engine, thanks to its modern electronic management system, which always guarantees an instant response and a more reliable PTO speed control.

All engine operating parameters are monitored constantly by dedicated sensors and optimised by means of injection system control.

Besides optimum fuel metering, the electronic engine management system ensures stable and consistent performance, with swift, direct and exact response to the different travel and load conditions encountered. And all this with maximum simplicity of use.



*"At long last  
a tractor that  
lets me move  
up a gear  
at work."*



## WE'VE EMBRACED CHANGE TO BRING YOU INCREASINGLY INNOVATIVE TECHNOLOGY.

### TRANSMISSION

Two different transmission versions are available.

**The mechanical configuration offers a maximum of 20 gear ratios for forward and reverse (5 gears x 4 ranges, including underdrive and creeper).**

For those requiring an even wider range of speeds, there is the Powershift 60+60 transmission.





## THREE-STAGE POWERSHIFT

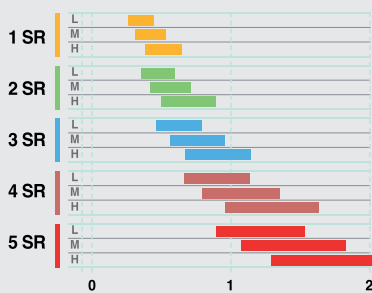
The design of this package ensures a ratio perfectly suited to the demands of the job: **with 5 gearbox ratios, 4 ranges (including creeper) and 3-stage Powershift, the transmission will provide 60 forward + 60 reverse speeds and a top speed of 40 km/h**, even with the engine running in low-rpm economy mode.

Thanks to the Powershift transmission, which employs "Sense Shift" technology (proportional solenoid valves), SAME Virtus tractors guarantee maximum productivity and traction in all applications.

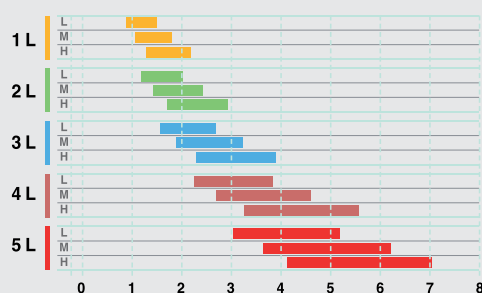
Completing the offering, "Infinity" versions are available with APS (Automatic PowerShift) and a Speed Matching system that selects the best Powershift ratio for the tractor ground speed during gear changes.

### GROUND SPEED IN KM/H

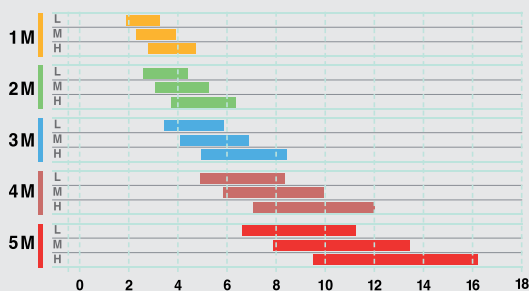
Creeper Range



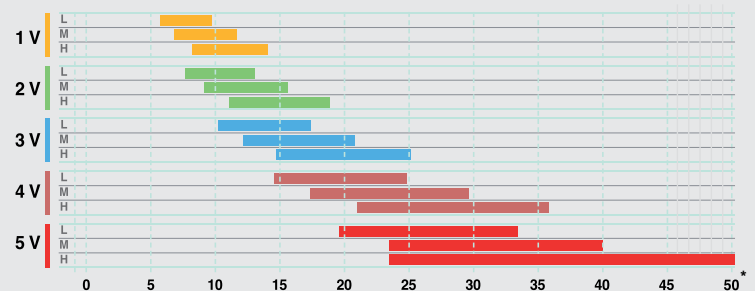
Low Range



Medium Range



High Range



\* Speed electronically reduced to 40km/h, depending on national regulations

*"You need to be prepared for anything. That's why my tractor must be able to change drive direction quickly."*



## EVEN IN REVERSE, WE'RE ALWAYS MOVING FORWARD.

### "SENSE CLUTCH" POWER SHUTTLE

A change-on-the-go hydraulic reverse shuttle is standard on all SAME Virtus models: The shuttle can be used to change the drive direction on all gear ratios, which saves a considerable amount of time when manoeuvring and making return passes. The shuttle lever is located beneath the steering wheel. Ergonomically designed and easy to use, it has a "neutral" position and will function only when enabled, to ensure total safety in operation.

For ultimate comfort and convenience, gear changes can also be made smoothly and effortlessly just by using the Comfort Clutch button on the front of the shift lever.

### RESPONSE CONTROL

The lever of the hydraulic shuttle incorporates a thumbwheel control (potentiometer) that can be used by the operator to select a sharper or softer response from the shuttle.





## STOP&GO

The Sense Clutch hydraulic shuttle offers an important technological innovation: the Stop&Go system. This system extends the features and potential of the shuttle, providing the operator with a higher level of manoeuvrability, especially when the tractor driveline has to be disengaged for intervals of varying duration. **With Stop&Go installed, the movement of the tractor can be controlled utilizing only the brake pedals, with no need to operate the clutch pedal.**

All this makes the tractor incomparably practical when manoeuvring, as well as safe, reliable and comfortable to operate.



*"Just as I respond to the needs of the land, I want a tractor that's able to respond to my needs."*



## PTO

The SAME Virtus range is also highly versatile in terms of power take-off: equipped with independent wet multi-disc clutch, modulated electrohydraulic engagement, speed 540/540ECO/1.000/1.000ECO rpm and groundspeed synchronised PTO with independent output shaft.

With this type of package, any implement can be coupled to the tractor with maximum economy of use and maximum efficiency — features that make SAME Virtus tractors ideal for applications requiring a power take-off. The PTO is extremely easy to manage too: the controls are electrohydraulic, and the selected speed is indicated on the instrument panel by dedicated LCD displays. Duplicate PTO control buttons are provided on the rear fenders.



# STICKING CLOSELY BY YOUR VALUES.

The various Virtus models are characterized by high capacity front axles (the SAME Virtus 120 model in particular features an oversized front axle), wet disc brakes and optional front suspension.

Stable front axle, robust front-wheel drive and an impressive steering angle of 55° 4WD and 70° 2WD guarantee superb manoeuvrability coupled with smooth steering. Front-wheel drive with pushbutton-controlled electrohydraulic engagement and fully locking differentials guarantee maximum traction in difficult working conditions.

**On SAME Virtus models, an intelligent drive axle and differential management system renders the engagement and disengagement of four-wheel drive and differential locks entirely automatic.** The effect is to maximize traction, whatever the operating conditions, while guaranteeing a comfortable and safe ride.

*"A tractor so easy to use, it shows the way."*



## FRONT AXLE SUSPENSION

The electronically controlled front axle suspension system has been developed adopting an innovative approach. Two hydraulic cylinders, a specially designed trunnion mounting and two nitrogen filled dampers combine to give superior driving comfort and ride stability, even at high speeds and over rough terrain. The electronic control system ensures that the suspension is always maintained at the optimum level, regardless of the load on the front

end of the machine, by exploiting the full stroke of the dampers. When traction is more important than comfort, the suspension system can be deactivated to render the front axle 'rigid', for increased grip.





## PARK-BRAKE

All models are equipped with an innovative Park Brake system that will ensure the tractor is always securely and efficiently immobilized. This system features a device that locks the brakes with a high mechanical load. A hydraulic system will release them automatically when the control is released.



## WET DISC BRAKES

In all working conditions, SAME Virtus is extremely safe. Braking efficiency is guaranteed by the integral hydrostatic braking system featuring independent wet disc brakes on all 4 wheels.

The servo-assisted braking system (**Power Brake**) ensures that minimal effort applied by the operator when depressing the brake pedal will produce an instant, powerful and controllable response, thanks to the constant pressure characteristic of the hydraulic circuit in the braking system.

For total safety, the system guarantees up to 10 emergency stops even with the tractor engine not running.

# WORK TICKS ALONG LIKE CLOCKWORK.

## HYDRAULICS

There are three different hydraulic systems: single 60 l/min pump, tandem 90 l/min pump, or the innovative "60-ECO" system with tandem pump which can provide a flow rate of 60 l/min at just 1,600 rpm. The hydraulic system guarantees superior performance and effective, efficient use of all implements requiring an oil supply, even those with a typically high flow demand.

The hydrostatic power steering, meanwhile, is equipped with an independent pump that keeps the action 'light', even with other hydraulic services in operation.

The steering of SAME Virtus tractors can also be equipped with the innovative SDD system (Steering Double Displacement), which **guarantees superior driving comfort, halving the steering wheel turns required to achieve maximum lock (for example, in headland turns).**

Two configurations are available for the auxiliary control valves. A 6/8-way mechanical auxiliary control valve assembly and the more advanced proportional 6/8/10 way electric control valves, with flow/time control

and Power-Beyond. With these features, the system delivers no more oil than is needed for the operation, over the time required for its completion.



## ENERGY- SAVING HYDRAULIC SYSTEM

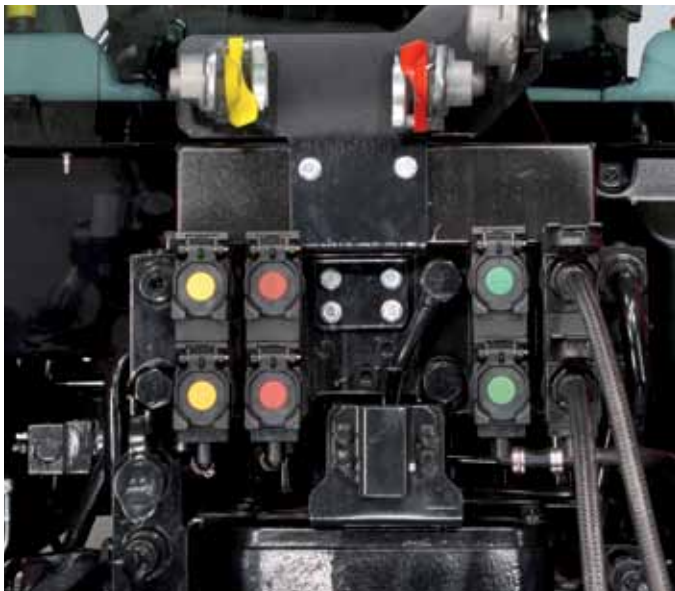
When the lift system and spool valves are not in use, for example during transport duties, oil flow to the services is shut off automatically by a dedicated on/off valve on the hydraulic circuit and returned directly to the transmission. This keeps the oil at a lower temperature, maintaining its quality longer. More importantly, there is less dissipation of heat, which means the overall efficiency of the transmission is improved and less power wasted. With the hydraulic system in Energy-Saving mode, SAME Virtus tractors are able to save up to 2.7 horsepower.



*"At long last a tractor that matches me in terms of precision at work."*







*"Technology so advanced, I can keep everything under control."*



## ELECTRONIC LINKAGE CONTROL

For high-precision, demanding operations, SAME Virtus tractors offer an electronically controlled rear lift as standard, which allows extremely precise management of the various implements. Also available is an automatic system (optional) that engages and disengages the PTO unassisted when the implement is raised or lowered. **All parameters are monitored and optimized with consummate ease:** draft control, position control, mix and float, quick drop, transport lock, lift height limiter and and rate-of-drop control.

On the roads too, a smooth and jolt-free ride is assured, thanks to an exclusive anti-pitching system that prevents mounted implements from bouncing on the linkage. The particularly robust rear lift of SAME Virtus tractors has a rated capacity of 4,650 kg, which can be increased to 6,600 kg by fitting assistor rams.

Implements are hitched to the lift links with unprecedented ease, using a pushbutton-operated, proportional up/down control. This same control is duplicated by two buttons on the rear fenders.

And if you need to carry front-mounted implements too, a front lift is available (1,850 kg capacity) as well as a 1,000 rpm front PTO, making Virtus tractors even more versatile and allowing operations with front hitch equipment.

*"The future of agriculture is now in my hands."*



## WE BELIEVE IT'S IMPORTANT TO IMPROVE THE ENVIRONMENT. AT WORK TOO.

More than in any other area, in farming the work environment is fundamental. And it needs to be comfortable.

**Simplicity in driving functions, total visibility and high comfort levels are all characteristics that SAME traditionally guarantees for all its tractors and that reach new heights in the Virtus range.**

In the cab all the controls, colour-coded into different function groups, are arranged practically and ergonomically around the operator, positioned according to frequency of use.



The instrument panel also provides all the information needed to control the tractor and monitor productivity.

Cab suspension is available in mechanical and pneumatic versions. In the pneumatic version, the compressed air automatically fed into the pneumatic springs according to the weight in the cab, maintains the optimum level of suspension, fully exploiting the air spring. Even the smallest variations in cab loading is detected by the sensor, upon which the system optimizes the stroke of the suspension, maintaining it at the ideal level. Two hydraulic dampers swiftly absorb any bouncing movement of the cab — even the most extreme — whereas pitch and roll are cancelled out by Panhard rods. The front silent blocks drastically reduce any noise and vibrations to the cab.

The combined effect of a suspended cab and a suspended front axle is to optimize performance even when travelling fast over rough terrain, and greatly reduce vibration felt by the driver.

For management of repetitive tasks in the field, the SDS system allows the driver to store and activate up to 32 sequential operations at the touch of a button.



## EQUIPMENT LEVELS

Flexibility has always been a key selling point for agricultural equipment. To ensure the new SAME Virtus meets this essential requisite, the tractors can be equipped with various packages, so customers can choose the specification level that best suits their needs.



### LIFT

- > Light & Ready kit
- > 60 ECO hydraulics
- > SDD steering pump
- > High-visibility roof
- > FOPS





## COMFORT\*

- > HML with APS and Speed Matching
- > ASM
- > Suspended front axle
- > Power Brakes
- > Ground speed PTO
- > Air conditioning
- > Passenger seat
- > Pneumatic cab suspension



## MULTI

- > Creeper and Underdrive
- > 4 PTO speeds
- > Ground speed PTO
- > Iso-Bus
- > 90 l/min hydraulic system
- > Electrohydraulic spool valves
- > Power Beyond
- > 6,600 kg hitch



## ENERGY

- > HML
- > Creeper and Underdrive
- > ASM
- > Power Power Brakes\*
- > SDD steering pump
- > 6,660 kg hitch with radar
- > Air conditioning
- > Passenger seat
- > Mechanical cab suspension\*



## TOP\*

- > HML with APS and Speed Matching
- > ASM
- > Suspended front axle
- > Power Brakes
- > Automatic A/C
- > Passenger seat
- > Pneumatic cab suspension
- > SDD steering pump
- > WOLP (lights control panel)
- > DELUX operator seat
- > 90 l/min hydraulic system
- > Electrohydraulic spool valves



## THE 10 VIRTUES OF VIRTUS

- 1 Engine: 3.6 litre, Tier 4i, Turbo-Intercooler, Common Rail 1,600 bar
- 2 SAME series T5400 transmission, 40 km/h at economy engine revs engine with Automatic 3-stage Powershift and "Speed Matching"
- 3 "Sense Clutch" power shuttle and "Stop&Go" system
- 4 Front axle with hydraulic suspension







5 Rapid steering system SDD ("Steering Double Displacement": halves the steering wheel turns)

6 "Power Brake" braking system and "Park Brake" system

7 Cab with new ergonomic design, customized with mechanical or pneumatic suspension

8 Electronically controlled rear lift with rated capacity of 6,600 kg

9 60 ECO hydraulic system (60 l/min at 1,600 rpm) with electronic control

10 "Energy Saving" hydraulic system with electronic control up to 10 way (5 auxiliary valves with independent electronic controls)

		100	110	120
Version		4WD	4WD/2WD	4WD
<b>ENGINE</b>				
Engine	type	DEUTZ TCD 3.6 L 04 Tier 4i		
Cylinders/ Displacement	n°/cc	4 T I/3.620		
Fuel injection system		Common rail		
Homologated power	kW/hp	69.5/95	77/105	85.5/116
Rated engine speed	rpm	2,200		
Maximum power	kW/hp	72.5/98.5	81/110	89.5/122
Max. power revs	rpm	2,000		
Maximum torque	Nm	397	440	480
Max. torque revs	rpm	1,600		
Torque rise	%	32	32	30
Fuel tank capacity	l	165		

<b>TRANSMISSION</b>				
Transmission		T5400 Series		
Shuttle		Powershuttle		
N° gears		5		
N° speeds	FWD + REV	10 + 10 (20+20 with underdrive and creeper)		
		30 + 30 HML (60+60 HML with underdrive and creeper)		
Top speed	km/h	40/40ECO/50		
Electrohydraulic 4WD and diff lock engagement		std		
ASM (automatic management of differential and 4WD)		opt		
Front axle suspension		opt		

<b>BRAKES AND STEERING</b>				
Braking on all 4 wheels		std		
Boost brake		opt		
Parking brake		Park Brake		
Trailer brake		Pneumatic		
		Hydraulic		
		Pneumatic+Hydraulic		
Hydrostatic steering with independent pump		160 cc		
Hydrostatic steering with independent pump with double-acting twin cylinders (SDD)		125 cc (deactivated)/250 cc (activated)		
Steering angle	degrees	55°	55°/65°	55°

\* The above specifications refer to the highest available equipment package. For standard equipment and options, refer to the current price list and ask your local dealer for details.



**HYDRAULIC SYSTEM:**

Electronically controlled rear hitch		std
Lifting capacity	kg	4,650/6,600 opt
Pump capacity	l/min	60 (std)/60ECO(opt)/90 (opt)
Remote valves	ports	6/8/10/Power Beyond
Remote valves control		Mechanical (std)/Electrohydraulic (opt)
Integrated front hitch (lifting capacity)	kg	opt (1,850)

**PTO**

Wet multi-disc clutch		std
Speeds	rpm	540/540E/1000/1000E
Ground speed PTO		opt, with independent output shaft
Front PTO (speed)	rpm	opt (1000)
PTO engagement control		Electrohydraulic

**CAB**

"Class E" cab with new interior consoles		std
Air Conditioning		opt
Mechanical suspension		opt
Pneumatic suspension		opt

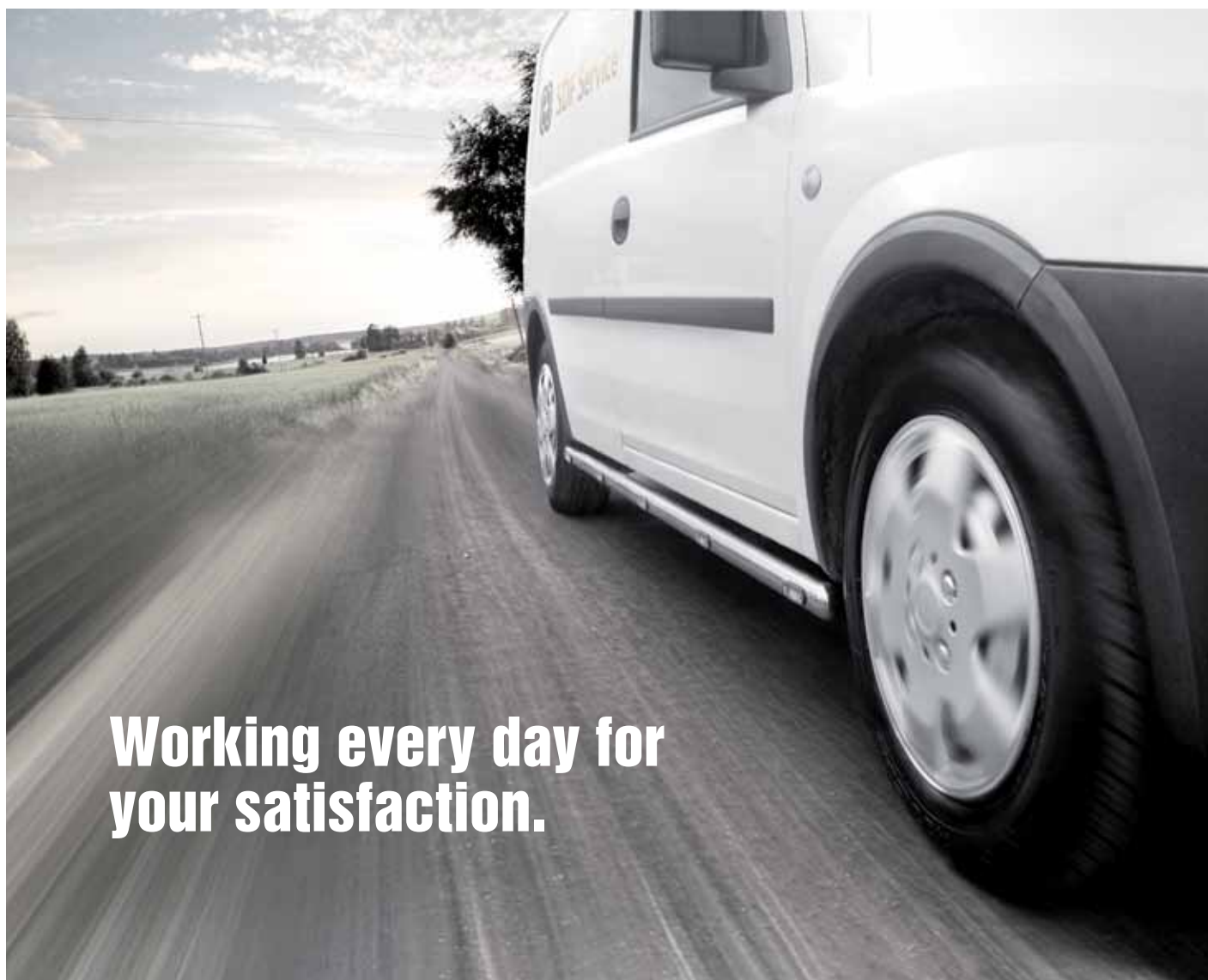
**TYRES**

Front		420/70R24	420/70R24	480/70R24
Rear		480/70R34	520/70R34	520/70R38

**DIMENSIONS AND WEIGHTS**

Wheelbase	mm	2,430	2,430/2,390	2,440
Weight	kg	3,900	4,150	4,350
Width min-max	mm	1,602-2,002	1,602-2,102	1,602-2,102
Length	mm	4,270	4,270	4,270
Height at cab	mm	2,695	2,695	2,725
Maximum working load	mm	7,500	7,500/5,300	8,000

\* The above specifications refer to the highest available equipment package. For standard equipment and options, refer to the current price list and ask your local dealer for details.



# Working every day for your satisfaction.

The task of satisfying a SAME DEUTZ-FAHR customer begins the moment the threshold is crossed at any one of over 3000 Dealerships and Authorized Service Centres worldwide. An extensive Sales and Support network guarantees that maximum attention is given to Customer Satisfaction, a mission founded on excellence in standards of service and, first and foremost, on the enthusiasm and professionalism of everyone involved..

## SDF Service

### **The name says it all.**

From pre-sales negotiation and pre-delivery inspection, to scheduled maintenance, repairs, prompt supply of original parts and accessories, the aim of the SDF support network at every step is to respond to the customer's every need, swiftly, professionally and effectively.

#### LOCAL DEALERSHIP



## SDF Parts

### **SDF original parts: quality that pays.**

Only genuine SDF Parts can ensure that all the qualities and attributes of your SAME DEUTZ-FAHR tractor will stay intact, guaranteeing that the potential of the machine is always exploited to the full. With SDF Parts, you can be confident that the performance and functions of your tractor will be enhanced and stay totally dependable.

Si The use of SDF original lubricants and coolants is recommended



**DEUTZ-FAHR is a brand of**  
[www.same-tractors.com](http://www.same-tractors.com)

 **SAME DEUTZ-FAHR**

