



TGF

THE *ERGOT* 100 SERIES

ERGIT 100: A NEW TRACTOR CONCEPT

Antonio Carraro SPA produces specialized tractors for professionals wishing to experience the emotion of owning something unique and precious that is guaranteed by a one-hundred-year-old brand at the cutting-edge of "Italian Style".



The Ergit 100 series is a new tractor concept. It is the outcome of a construction philosophy based on engineering simplification and the selection of top quality components; factors that allow the company to give these models a 2-year warranty. The care taken in design assures a pleasant and relaxed driving experience. It is not only attractive, but also performance enhancing as it allows for total operator visibility in all directions and ease when working in small spaces. The engines, with power outputs from 70 to 100 hp, offer exceptional torque and power levels combined with lower fuel consumption. The bodywork is painted with environmentally-friendly hydrosoluble enamels. Each technical solution is the result of choices that are based on socio-environmental benefits in terms of reduced pollution and noise levels.



**THE
ERGIT100
SERIES**





TGF: the specialized tractor par excellence



The **TGF** tractor, featuring a super-low profile and unequal wheels, was designed to work nimbly between narrow rows and perform tight turns thanks to its small front wheels. Operators can choose between as many as 16 combinations in order to personalize their TGF and assure exceptional performance on any type of terrain. TGF, a powerful but compact vehicle, remains stable and perfectly balanced even when fitted with the most demanding equipment. It is ideal for working in thick orchards, canopy vineyards, greenhouses, and even on steep terrain with a steep horizontal slope. On request, the TGF can be fitted with the classical Starlight cab or the pressurized Protector 100 cabin, which combines maximum insulation with comfort and visibility. The streamlined and functional design of the cabs is the outcome of years of work at the Antonio Carraro research and development laboratories.



TGF



**DESIGN
TECHNOLOGY
INNOVATION**



MULTI-FUNCTIONALITY: all-in-one

The use of TGF can be changed thanks to the integrated lifting, hydraulic system, and PTO assembly. All of which make it possible to rapidly interchange the towing or frontal equipment that can also be mounted together.



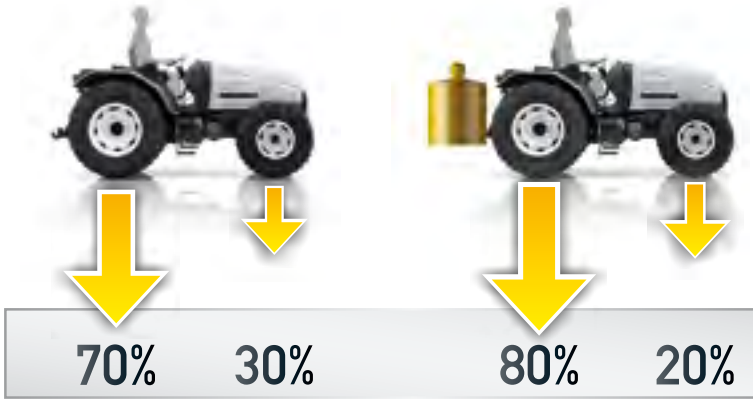
MANY TRACTORS IN ONE



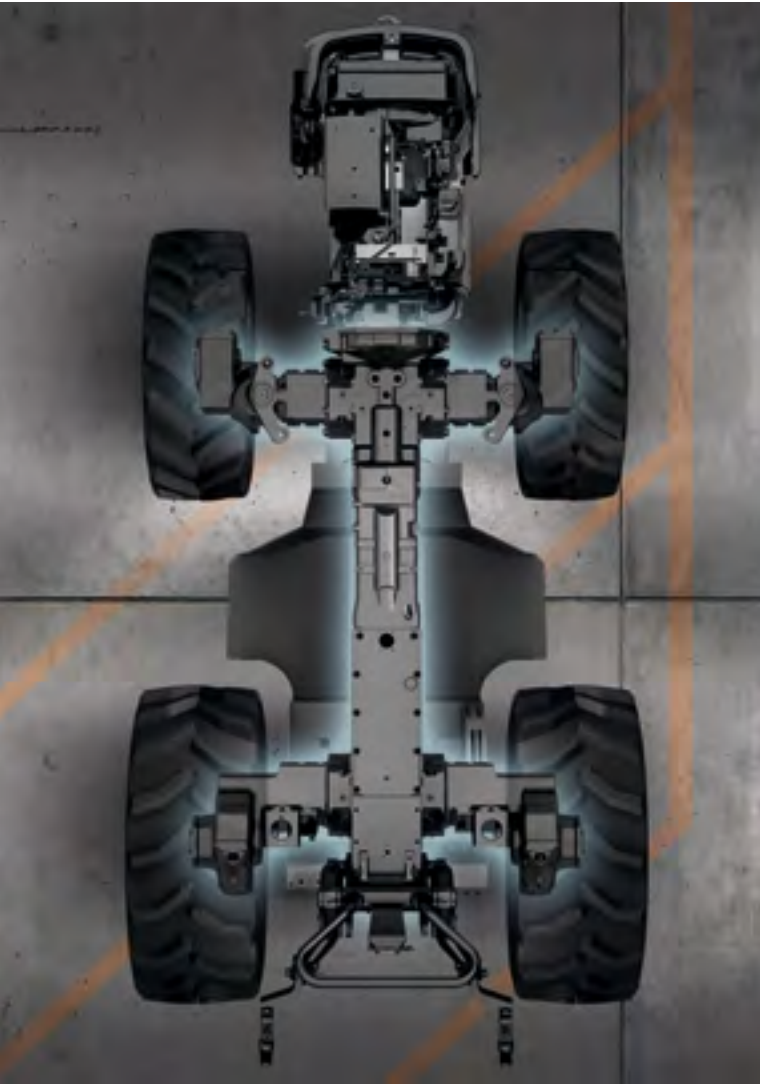
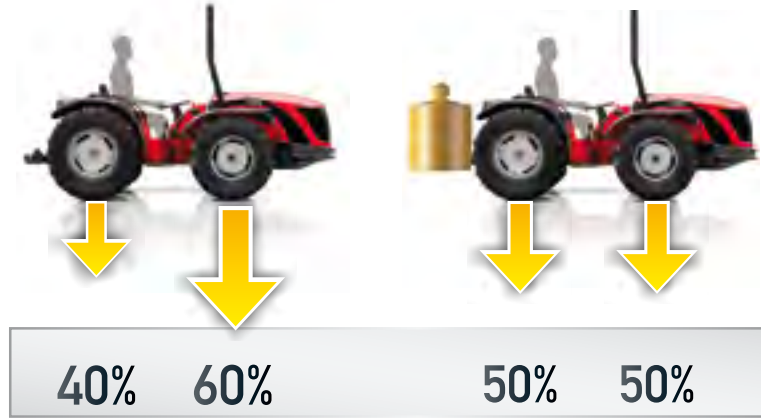
Shredders, sprayers, plows, tillers, trailers, grubbers, and listers are just some of the more common implements that can be used with the Ergit 100 series of tractors. The tires are interchangeable, as every type of terrain requires its own tire that can optimize tractor performance. Dimensions and clearances are other factors that can extend the multi-functionality of TGF by making it perfect for operating in tight spaces. The 60 litre (15,85 gal.) tank assures a high degree of operational autonomy.



TRADITIONAL TRACTOR



AC TRACTOR



ACTIO™: the exclusive chassis designed by Antonio Carraro

ACTIO™, this Full Chassis with Oscillation is comprised of a solid cast-iron chassis fixed to the axles and housing the tractor transmission. It features a central joint with a longitudinal oscillation of up to 15°. The two oscillating ends follow the contour of the terrain independently, thus assuring stability and traction at all times. The constant adherence of the tires to the ground allows engine power to be entirely transferred to the ground, thus increasing performance and safety. The ACTIO™ chassis requires a "projecting" engine configuration in order to assure a low center of gravity and an equal division of the weight of the tractor: 60% on the front axle; 40% on the rear axle. This is an ideal balance with implements attached as it distributes 50% of the weight on each axle.

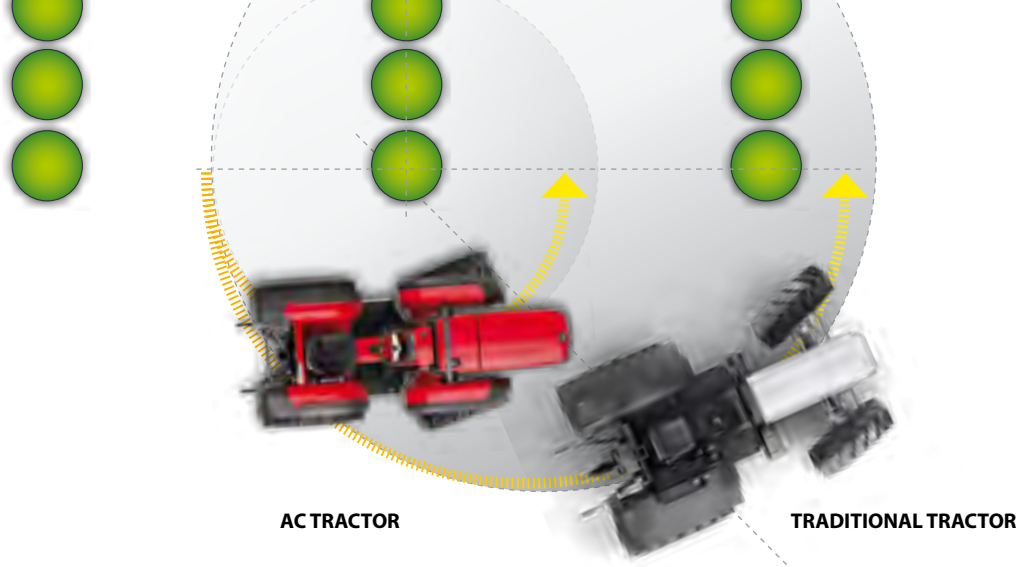
ACTIO™



- + **Stability:** low center of gravity with 4 wheel drive
- + **Safety:** peace of mind
- + **Comfort:** driving position centered over chassis oscillation
- + **Agility:** reduced turning radius
- + **Adherence:** equal division of weight
- + **Traction:** 4 drive wheels always firmly in contact with the ground



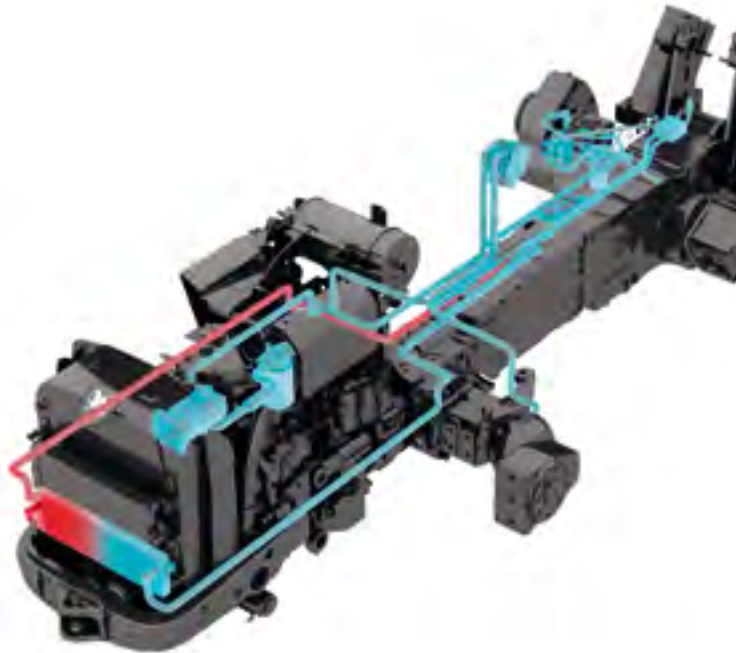
15°



STEERING: precise and tight

The wheelbase and the small front wheels assure a tight turning radius and natural agility of the TGF between rows. To further reduce the turning radius, the steering brakes can be utilized, while accentuating the “superbend” effect obtained thanks to the double-acting constant velocity joints. The front wheel on the inside of the curve naturally increases the steering angle without the vehicle being allowed to stick. The smooth and sensitive hydroguide steering wheel assures precise maneuvering on steep slopes, in crossways movements, in narrow paths, among crop rows and in car parks.

The hydraulic hydroguide system is independent; powered by its own hydraulic pump and fitted with an oil-filtering system.



PLUS

+ *Handiness: comfort*

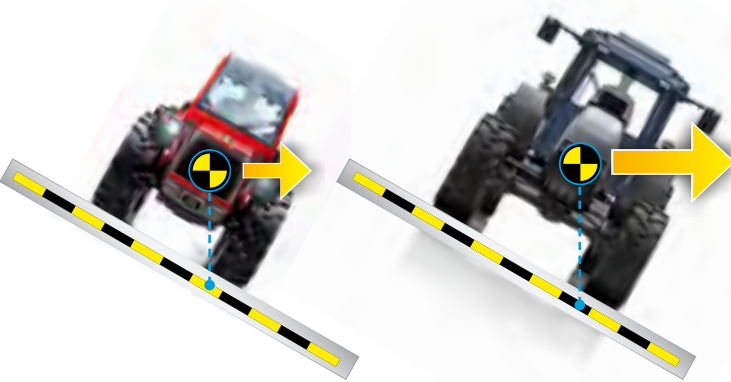
Low center of gravity, constant contact, stability, efficient braking and protected driving position are just some of the “active” safety features not to mention the “passive” features, such as quality of components, design, and eco-friendly engines. The braking system is comprised of 4 hydraulically-controlled, self-adjusting disc brakes in an oil bath which assures emergency braking modularity and reliability even when the front axle is disengaged. The overall safety of the vehicle has allowed it be approved for speeds of up to **40 Km/h (25 mph)**. The rear three-point lift features controlled position and force of the implement, which optimizes adherence of the tractor, such that it always stays “glued to the ground”. The vehicle and its equipment follow the contour of the terrain without lifting, thus assuring maximum efficiency. The hydraulically controlled differentials lock at the rear and the front and rear in order to prevent slippage and assure that the tractor tires always have traction. The driving position is located at the center of the vehicle and features a roll-bar or cab approved to safety standards to ensure maximum operator protection.

40
Km/h



AC TRACTOR

TRADITIONAL TRACTOR



SAFETY: active and passive

ERGONOMICS & COMFORT

The tapered and racy design helps the tractor to maneuver in fields and increases operator visibility of the equipment and the surrounding terrain. The spacious driving position is easy to access and protects the operator. Controls in an ergonomic and handy position, under the steering wheel.



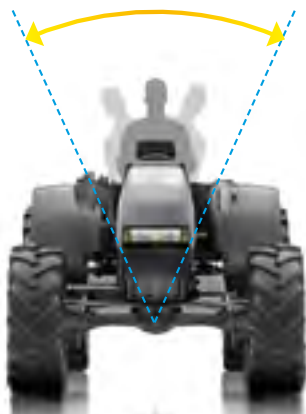
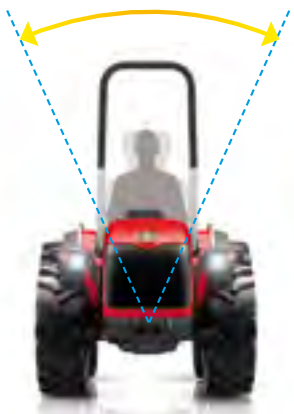
The operating station is suspended on **silent-block**, which absorb vibrations and dampen noise. Thanks to the ACTIO™ Chassis, the driving position coincides with the center of oscillation of the tractor. Sideways jerking and stress are very limited and operator fatigue is reduced, even after many hours. The on-board instrumentation is elegant, functional and intuitive: backlit anti-reflection screen for nighttime use; "on-off" information system;





AC TRACTOR

TRADITIONAL TRACTOR



digital tachometer and PTO rev counter; and electro-hydraulic pushbutton controls. The lighting equipment, integrated into the mudguards, is comprised of reflecting parabolic optical assemblies, which offer a wide range of illumination covering the roadway, the equipment, and the surrounding field. Maintenance is practical and fast thanks to the fact that the bonnet can be fully opened and the side panels and battery cover can be easily removed.



+ *Efficiency: Reduced fatigue & increased tractor performance*



SILENT-BLOCK



MACHINE AND EQUIPMENT: an integrated technological system

The integrated lifting - hydraulic system - PTO assembly can mount a large variety of implements at both the front and rear. The lift is a single group with vertical cylinders, featuring a 3-point hitch, a pump, and an independent hydraulic system. The rear lift controls the equipment precisely and optimizes the stability of the tractor allowing it to follow the contour of the terrain without slipping or sliding sideways.





Vertical hydraulic tie-rod and 3-point hitch* allow adjustments to be made from the driver's seat.



The slider* tow hook with rapid vertical adjustment, is used to optimize the connection height of the towed equipment.



Two speed PTO: 540 rpm, 540 E (750 rpm) and synchronized with gear speeds.



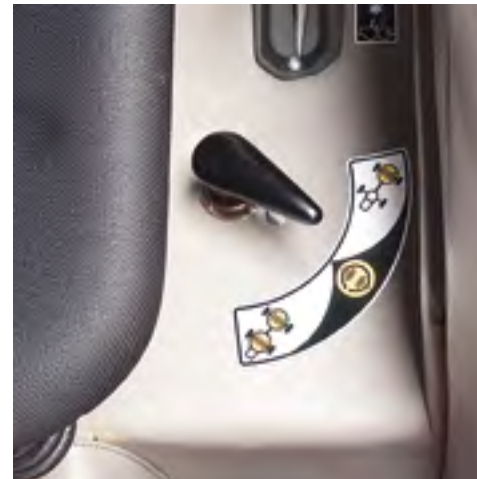
The PTO shaft of the ASAE 1 3/8 type is the same for all speeds.



Hydraulic system with 1 double-acting manifold, 1 double-acting with floating position + 1 oil return tap. Total: 5 rear connectors.



The front lift* optimizes work combined with rear tools.



The rear differential lock prevents slipping and optimizes traction.



The front traction disengagement is useful when travelling along roads and prevents damage from being done to delicate grounds.

*optional

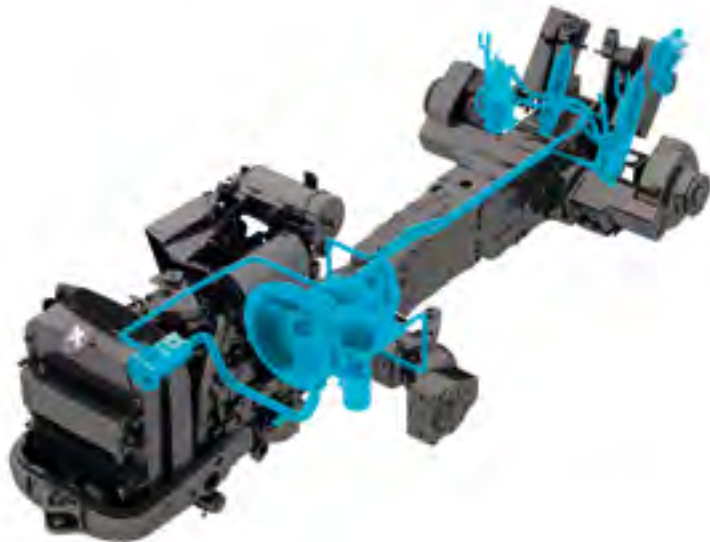
MACHINE AND EQUIPMENT: an integrated technological system

The front lift* optimizes combined processes such as a front grass shredder with a rear between-row mower, a front vine trimmer with a rear side-shoot remover, a front vine trimmer with a rear mulcher, or a front snow blade with a rear salt/sand spreader. The clutch of the PTO features an hydraulic progressive engagement command.

*optional

PLUS

- + **Practicality:** engagement facilitated by the cardan shaft
- + **2 Speed PTO:** fuel saving
- + **Comfort:** the PTO can be engaged while the tractor is moving
- + **Efficiency:** less heat build-up
- + **Functionality:** engagement without stalling the engine
- + **Lifetime:** safeguard of PTO shaft
- + **Comfort:** less operator stress



OPTIONAL



BULLBAR

Tubular steel guard protecting the bodywork; integrates the third-point for the front lift.



FRONT LIFT

Used together with the bullbar, it allows all the frontal equipment to be used with multiple hydraulic connectors.



FRONT BALLAST

Perfectly integrated into the bodywork of the tractor; it does not alter the wheelbase or dimensions of the tractor.



HEADLIGHT GRILLES

Protecting the light assemblies, they also make the bodywork look more appealing.



VERTICAL TIE-ROD AND HYDRAULIC THIRD-POINT

Optimizes the positioning and inclination of the equipment.



HI-LO

HI-LO system which can be electro-hydraulically engaged when loaded thus reducing set speeds by 20% (64 speeds, 32 forward and 32 reverse) (except 10400).



RAPID REAR COUPLINGS

Vertical tie-rods + hydraulic third hitch > 4 rear independent mini couplings



QUICK COUPLERS

Front lift > 5 rear couplings + 2 replicated at the front



REAR CAST IRON WHEEL FLANGES

Flanges that increase the weight of the tractor at the rear.



PNEUMATIC SEAT

Latest generation air-suspension seat.



SLIDER HOOK

Integrated into the rear lift, it gives the operator various options for the practical setting up of the tractor and the rapid alignment of the towed equipment.



ADJUSTABLE BARS

Rear 3-points linkage with adjustable bars and quick couplings.

CAB: "StarLight"

This original and approved AC product features a spherically curved, simple and essential design. The airtight seals and integrated hinges allow the "StarLight"* cabin to enter the narrowest rows without damaging flowering plants or fruit. The front and rear windows offer full visibility of equipment and the roadway. The ventilation system features a rapid front windscreen defogging system.

The acoustic comfort on board the "StarLight" is similar to that of a car due to the internal layer of sound-absorbing material on the cabin walls. "StarLight" features a car radio*, a removable license-plate holder, and adjustable rear-view mirrors.



COMFORT
VISIBILITY
SAFETY



The forced ventilation of the air-conditioning system generates an internal pressurization effect. The incoming air is cleaned by a large filter, with an available activated carbon filter*.



The air-conditioning is achieved by a powerful system running on R134A ecological coolant, which also refreshes the cabin air using a low rev motor. The heating system utilizes a powerful heat-exchanger which is most exceptional even in the coldest weather.

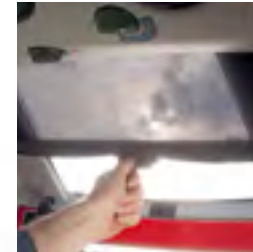
StarLight

Easy access to the driving position with all-around visibility.



Removable license-plate holder.

Cabin controls (windshield wipers, work lights, rotating beacon) in an ergonomic position, even when reversing.



The panoramic roof with sunblind and full glass doors offer full top and side visibility.



*optional



**PROTECTION
DIMENSIONS
HEALTH**



CAB: "Protector100", the pressurized cab

The **AC super-low profile Protector100** cabs (minimum h1740 mm / 68.5 in) were designed to protect operators while working on crops that are difficult to access, such as sloping rows or crops planted on steep slopes, but also to isolate them from the external ambient during treatment with plant protection products. The hermetic seal and controlled pressurization guarantee a healthy workplace free of toxic fumes.

Despite its compact size, Protector100 provides easy and obstacle-free access. All the controls are ergonomically positioned in a logical sequence. All-around visibility is assured by the glass doors and the rear window, which also allows the operator to see the equipment. The "butterfly" profile steel frame with continuous radius of curvature makes for a racy profile with no projecting elements. The two inspection windows in front of the driver's legs make the tires and roadway visible during operation. Protector100 is fitted for a car radio, cigarette lighter, rear lights integrated into the roof, and foldable beaconlight support.

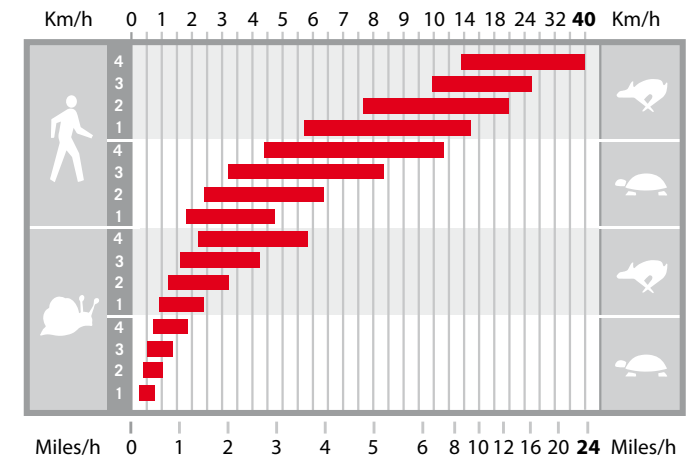


Pressurization is assured by total cab insulation. The suspended controls and pedal units prevent even the smallest harmful infiltration. The digitally controlled AIR CONTROL display on the dashboard provides information on the pressurization, which is guaranteed by two special activated carbon filters which completely absorb and neutralize all kinds of fine particles and fumes, and instantly warns the operator of any faults. The automatic liquid crystal display shows internal pressure values. The air in the Protector 100 cab during treatment with plant protection products is perfectly pure.

"Starlight" and "Protector 100" cabs are approved to Safety Directive 86/298/EEC.



TRANSMISSION AND GEARS: many speeds in a logical sequence



The tractors in the Ergit 100 series utilize large, extraordinarily reliable, smooth engaging clutches that do not require adjustment thanks to the hydraulic control, which recovers the play caused by wear over time. The gear has a helical profile: 32 speeds, 16 FW and 16 RV, with a synchronized inverter that can be engaged even when the tractor is moving. The small gap between one gear and the next assures operative continuity in all circumstances.

The electro-hydraulically controlled HI-LO* system can be engaged while the tractor is moving at any speed and can reduce the selected speed by 20%, thus obtaining a range of 32+32 speeds. It is comprised of two clutches packs, with sintered disks in an oil bath. The electro-hydraulic engagement of one clutch automatically disengages the other, as it is mechanically activated by a series of springs. This technical solution prevents the tractor from going into neutral with the engine off.



- + **Reliability:** long lifetime of the clutch
- + **Efficiency:** wide range of speeds
- + **Comfort:** smooth engagement without jerking the engine
- + **Saving:** lower fuel consumption and reduced running costs

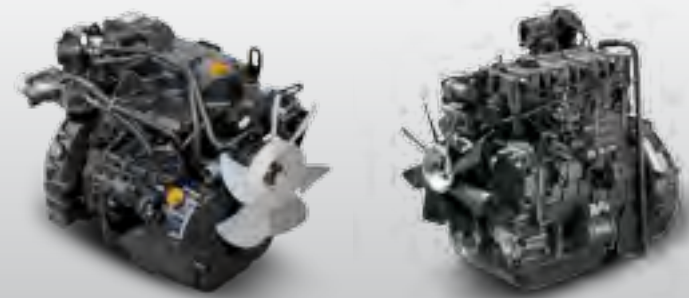
*optional

N.B.: HI-LO not included on model 10400



TGF: 2 versions	
9800**	10400*
87 HP	95 HP
4 cylinders turbo	4 cylinders turbo
3319cc	2970cc
16 valves	intercooler

ENGINE: powerful and quiet



The engines are at the top of their category and offer unbeatable torque and power performance as well as lower fuel consumption, lower noise, and lower carbon emissions. All the engines comply with "STAGE 3A" standards which limit the harmful emissions of diesel engines. Intercoolers, turbos, electronic EGR's, and multivalves, are utilized depending on the model of tractor. Thanks to this new generation of engines, the company has achieved new goals in terms of efficiency and cost-effectiveness.



- + **Reliability:** quality of components
- + **Performance:** maximum efficiency
- + **Comfort:** minimum vibrations, noise, and emissions
- + **Saving:**
 - € less maintenance costs
 - € rapid amortisation
 - € lower fuel consumption

* engines with balance shafts.

** engines featuring balance shafts with injection systems and electronically-controlled EGR's.



TGF: the specialized tractor par excellence

**SPECIALIZATION
COMPACTNESS
RELIABILITY**



SAT: Customer Service Team



RICAMBI ORIGINALI
GENUINE SPARE PARTS

Antonio Carraro® Original Spare Parts and Assistance

The AC dealer network utilizes modern equipment and instruments that have been especially designed and built for maintenance work on AC tractors. The technicians at every authorized dealership periodically attend technical training courses at the Parent Company's facilities. Each authorized workshop employs highly qualified staff and provides an extensive range of services in order to offer its Customers maximum peace of mind and total protection. AC dealers can give their Customers information on all the services related to the care of AC tractors.





24 months of warranty

The experience gained during the years and the investments made in terms of materials and human resources have allowed Antonio Carraro to design and market the Ergit 100 Series with a standard 24 month warranty for the end customer. Customer satisfaction and safety is what counts most for Antonio Carraro. 24 months means giving Customers greater trust in what they have purchased and the certainty that they can count on a constantly available and highly qualified assistance service. A net of authorized centers assure efficient and professional maintenance on tractors.

After-sales service

Thanks to the capillary network of dealers and the competence of the Service Managers, the Parent Company can assure all-around skills. With the right maintenance work, every AC tractor will continue to provide excellent performance throughout its operating lifetime.

Original Antonio Carraro Spare Parts

Original Antonio Carraro Spare Parts is a registered trademark. The elevated standards of design and the stringent tests carried out during the entire production process assure maximum quality levels. With Original AC Spare Parts, Customers can be certain of maintaining tractor performance unaltered over time, thus preserving the safety and the value of the tractor.







**SMARTNESS
PROFITABILITY
UNIQUENESS**



TECHNICAL DATA: TGF



Model	TGF 9800	TGF 10400
Chassis	"ACTIO™" – Full chassis with oscillation • Steering wheels • 4 unequal wheel drive - Front and rear final drive	
Engine Type	Diesel direct injection with counter rotating weight system	
Emissions Regulations	Stage 3A	Stage 3A
N° Cylinders	4 - 16 Valves • Turbo	4 Turbo Intercooler
Displacement (CC)	3319	2970
Power kW/HP (97/68/CE)	64/87	70/95
Maximum engine revs	2500	2600
Torque max (Nm/revs)	286,7/1850	420/1000
Cooling	Water	water
Tank Capacity (litres/gal):	60/15.85	60/15.85
Transmission	Synchronized 32 speed gear box: 16 forward and 16 reverse with synchronized inverter	
PTO	Rear, independent and synchronized at 540/540E rpm with progressive hydraulic engagement	
Shaft	Profile 1" 3/8 with 6 splines with facilitated engagement	
Transmission clutch	Hydraulic control	
Drive disengagement	Hydraulic control on the front	
Rear hydraulic lift	Mixed draft and position control with 3 point hitch	
Operating Pressure (bar/psi)	160/2320	
Capacity (Kg/lbs)	2400/5291	
Steering	Hydraulic with 2 pistons	
Brakes	Standard: hydraulic front and rear disk brakes in oil bath, rear steering brakes Independent emergency and parking brake: band type on transmission	
Platform	Suspended on Silent Block	
Weight in order of speed:		
With roll bar (Kg/lbs)	2230÷2410 / 4916÷5313	2240÷2380 / 4938÷5247
With Protector100 cab (Kg/lbs)	2240÷2510 / 4938÷5534	2360÷2440 / 5203÷5379
With Starlight cab (Kg/lbs)	2300÷2460 / 5071÷5423	2240÷2380 / 4938÷5247

Standard Features

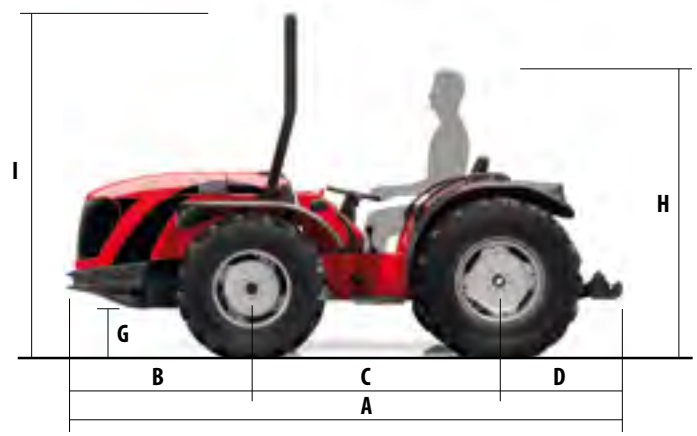
Rear or front/rear differential lock with hydraulic control
 • Hydraulic system with 2 separate hydraulic pumps
 • Adjustable steering wheel • Lifting arms with group 1 and 2 sphere • Adjustable, suspension seat with safety belt
 • Foldable protection roll bar • Adjustable wheel rims
 • 2 lever ancillary rear hydraulic system • Rear adjustable height tow hitch • Front tow hitch • Multifunctional digital instrument Km/h and PTO • Battery • Battery isolation switch
 • Electrical power point • Safety starting device on the inverter and PTO

Optional Features

• HI-LO system which can be electro-hydraulically engaged when loaded thus reducing set speeds by 20% (64 speeds, 32 forward and 32 reverse) (except for 10400)
 • "StarLight" cab suspended on Silent Blocks, soundproof, with heating and air conditioning system and window on the roof; activated carbon filter on request • "PROTECTOR 100" cab suspended on Silent Blocks, soundproof, with heating and air conditioning system; (on request) "Digital Air Control", a digital control of cab pressurization • Support with six front ballast weights • Hydraulic third hitch and vertical tie-rod • Front power lift • 4 front hydraulic outlets
 • Adjustable lifting arms with quick release couplings
 • Pneumatic seat • Slider tow hitch • Pair of front/rear ballasts
 • Cast iron wheel flanges for 20" and 24" rear wheels • Front bullbar • Front lamp guards



DIMENSIONS TGF



Front wheels

	E								
	8.25-16	250/80-16	300/80-15.3	320/65 R18	260/70 R16	300/80-15.3	11.2 R20	320/70 R20	400/55-22.5 Twin
E	230/9.05	250/9.84	300/11.8	320/12.6	260/10.2	300/11.8	275/10.8	320/12.6	400/15.7

Rear wheels

	11.2 R20	320/70 R20	360/70 R20	420/65 R20	340/65 R18	380/70 R20	320/85 R24	360/70 R24	500/60-22.5 Twin
E	275/10.8	320/12.6	360/14.2	420/16.5	340/13.4	380/14.9	320/12.6	360/14.2	500/19.7

Wheels

Dimensions (mm/inch)

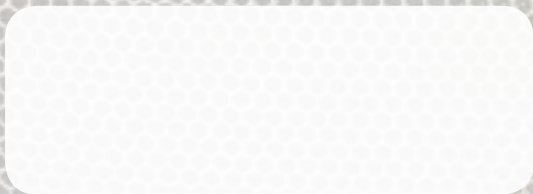
Front	Rear	A	B	C	D	F	G	H**	I	L*	M	N*	O	P
8.25-16	11.2 R20	3385/133.2	1190/46.8	1530/60.2	665/26.2	2055/80.9	255/10.0	1747/68.7	2300/90.5	1330/52.3	1100/43.3	1325/52.1	1050/41.3	1775/69.9
250/80-16	320/70 R20	3385/133.2	1190/46.8	1530/60.2	665/26.2	2055/80.9	255/10.0	1747/68.7	2300/90.5	1385/54.5	1145/45.1	1370/53.9	1050/41.3	1775/69.9
300/80-15.3	360/70 R20	3385/133.2	1190/46.8	1530/60.2	665/26.2	2090/82.3	275/10.8	1767/69.5	2320/91.3	1470/57.9	1170/46.0	1415/55.7	1060/41.7	1800/70.8
320/65 R18	420/65 R20	3385/133.2	1190/46.8	1530/60.2	665/26.2	2090/82.3	275/10.8	1767/69.5	2320/91.3	1460/57.5	1140/44.9	1550/61.0	1130/44.5	1800/70.8
260/70 R16	340/65 R18	3385/133.2	1190/46.8	1530/60.2	665/26.2	1985/78.1	185/7.28	1677/66.0	2230/87.8	1380/54.3	1120/44.1	1595/62.8	1250/49.2	1740/68.5
• 300/80-15.3	380/70 R20	3385/133.2	1190/46.8	1530/60.2	665/26.2	2090/82.3	275/10.8	1767/69.5	2320/91.3	1470/57.9	1170/46.0	1440/56.7	1060/41.7	-
• 11.2 R20	320/85 R24	3385/133.2	1190/46.8	1530/60.2	665/26.2	2145/84.4	330/13.0	1822/71.7	2375/93.5	1415/55.7	1140/44.9	1390/54.7	1070/42.1	-
• 320/70 R20	360/70 R24	3385/133.2	1190/46.8	1530/60.2	665/26.2	2145/84.4	330/13.0	1822/71.7	2375/93.5	1460/57.5	1140/44.9	1475/58.1	1120/44.1	-
• 400/55-22.5	500/60-22.5	3385/133.2	1190/46.8	1530/60.2	665/26.2	2145/84.4	330/13.0	1822/71.7	2375/93.5	1610/63.4	1210/47.6	1660/65.3	1160/45.6	-

• Wheels not available with Protector100 cab *Min. external width **Height calculated with the operator of average height sitting (cm/in 175/68.9)

The description and illustrations in this brochure are provided simply for information purposes; they are not binding and may be varied at any time without notice.



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