



TOP MODELS AT EIMA 2021

1) NEW TORA SERIES

The new Tora Series is equipped with 4-cylinder, Stage V engines with power capacities of 52 and 66 hp. Their defining feature is provided by the upgrade of the hydraulics, mechanics and drive comfort and there are two reversible drive models. There are 5 multi-functional, super compact models which can be isodiametric or with bigger rear wheels in the "orchard" set-up and are offered in different versions such as with the ACTIO™ articulated chassis or with steering wheels, monodirectional or fitted with reversible drive on an RGS™ rotating control tower (new AC patent), with a rollbar or cab. These tractors can be combined with complex equipment such as inter-row machinery, shearers and hydraulic equipment for vineyards, thanks to the increase in hydraulic power with constantly adjustable flow providing maximum control in the management of the equipment.

TOP PLAYER SOLUTIONS FOR THIS POWER RANGE

The AC Research and Development Department has developed this new design by turning the traditional approach to study around in order to be able to integrate new technical solutions into this power range such as the gearbox (16+16) and the PTO, which are the same as the ones on the AC flagship series. The new platform for the driving seat provides the operator with ample living space whilst keeping the external dimensions of the tractors to a minimum. The dimensions have remained almost unchanged compared with previous models fitted with more compact engines as they were not required to use anti-particulate filters in accordance with Stage V legislation.

SRX 5800/6800, HIGHLY DECORATED

The first SRX model, articulated and reversible in the 5800 (52 hp) and 6800 (66 hp) versions made its debut at the Eima Digital Preview last November and was well-received by the jury for the Technical News Competition 2021 which recognised it for having kept its dimensions in line with previous models as well as for its high-performance hydraulic circuit, reversible drive and the possibility of being fitted with a cab.

The compactness of the new SRX Tora Series provides excellent handling with its tight steering and articulated chassis. Another important characteristic and a new feature for this power range is the mechanical transmission with 16 forward and reverse speeds with a synchronized inverter. The reversible drive amplifies its usage, rendering the tractor ideal for vineyards, orchards, nurseries, city centres, crops in greenhouses, particularly fruits of the forest and is fitted with all those features that up till now have been reserved for the AC top range models. Furthermore, the SRX is a particularly narrow tractor (external width up to 99 cm) with a short wheelbase that is extremely agile in narrow spaces. The overhang engine, thanks to the ACTIO™ chassis and the integral traction on four equal-sized wheels guarantee stability in all conditions allowing it to operate safely on slopes with constant traction. The independent PTO set at 540/540E is fitted with Plus and Normal engagement, selected by cluster. The load-sensing hydraulic system, with a 51 l/min oil pump is fitted with five double effect distributers which allow for the tractor to be fitted with various pieces of trailing or push-along equipment, ideal for complete management of inter-row and under-foliage tasks. The rear powerlift has a lifting capacity of around 2200 Kg on the bearings, ideal in combination with seeders used also for green manure activities.

On request, the new Tora Series tractors can be fitted with the new multi-control device, the *Hydraulic Remote Control* for the complete management of the equipment, front powerlift with adjustable lifting arms and quick release catches.





NEW patented Rev-Guide System

An integral part of the multifunctionality belonging to the reversible Toras, the SRX (articulated) and the TRX (with steering wheels), is the new RGSTM Rev-Guide System, the AC reversible drive system on a rotating control tower that, together with its highly ergonomic controls, aids task execution by improving accuracy and quality of execution. The system allows the inversion of the drive direction in a matter of seconds allowing it to operate professionally with trailing or front-fitting equipment. The new RGSTM incorporates the inverter controls and the gears on the dashboard that rotate through 180 degrees together with the control tower to invert the drive direction.

The uniqueness and innovative nature of this technical solution render this new reversibility a special product in the reversible tractor market. Getting the mechanical levers close to the steering wheel and no longer on the central tunnel was a great technical challenge which was widely appreciated by the final customers. The central tunnel is free of levers and aids the operator's access aboard and brings the controls on the steering wheel nearer thus offering a bigger living space. Aware of the potential success of such a solution, Antonio Carraro has protected this innovation by patenting it.

The spacious drive platform fitted on *silent-block*, isolates the cab both thermically and acoustically from the gearbox thus absorbing vibrations and offering optimum comfort. The suspended pedalboard for the reversible drive is sealed leaving no gaps in the direction of the ground thus guaranteeing the protective efficiency of the devices on the driver's seat along with the operator from dust.

REDCAB CAB

On request, the new specialized Tora can come with a joystick and a mechanical draft and position control lift, as well as the *REDCab*, which is soundproofed, fitted with an air-conditioning system and is enhanced with many high level optional extras. The wide windscreen guarantees the operator excellent visibility in all directions, privileging visibility over the equipment and the space around the tractor, which can be appreciated above all in reverse drive when operating amongst very narrow-rowed crops. The LED work headlights also guarantee the right illumination at night and in dark places. The *RedCab* has a streamlined design and a conical shape to assist the tractor's disengagement amongst rowed crops, even on lateral slopes. In the articulated version of the *REDCab* has 4 uprights and full glass doors and a wider opening. Access aboard the tractor and rear visibility are the main strong points of this solution.

2) INFINITY SERIES

SR 7600 INFINITY, THE ARTICULATED REVERSIBLE with a hybrid mechanical hydrostatic transmission.

The latest evolution of the AC compact tractors with a hydrostatic transmission and reversible drive in the Padova company's line-up, highlighted in EIMA 2021, is the highly decorated SR 7600 *Infinity*, an articulated, isodiametric tractor with a narrow track, along with another two specialized models from the same *Infinity* Series: the TR with steering chassis and the TTR with a "wide" steering chassis and low centre of gravity (destined for crops on slopes). These models which represent the AC response to the demands of future precision agriculture that require high performance, digitalized tractors perfect for precision agriculture. With a Stage V, 75 hp, 4-cylinder, 16 valve, direct injection engine with turbo intercooler, the SR 7600 *Infinity* is fitted with great operative comfort despite the compact dimensions provided by the streamlined design in order to guarantee the tractor's disengagement amongst the narrowest rows of crops or where minimum dimensions are necessary.





ELEVATED OPERATIVE FLEXIBILITY

This model has numerous end-uses when combined with hydraulic or PTO activated equipment working on specialized cultivations (terraced vineyards, greenhouses, narrow rows) or when carrying out civil maintenance (urban spaces or sports grounds). The engine operates in synergy with the *Infinity* hybrid mechanical-hydrostatic transmission which allows it to work in both drive directions with the same speeds (each is fitted with three hydraulic ranges) from 0-15 and from 0-40 km/h, that can be inserted manually or automatically without losing traction. The forward motion pedal assists braking on slopes by halting the vehicle as it is released, even without using the brakes. The Cruise Control (or Tempomat), Limit RPM, Intellifix, Drive Mode, Fast Reverse devices together with the Uniflex suspension allow the operator to find the right setting in accordance with the type of activity being carried out.

Furthermore, the operator aboard the tractor with a hydrostatic transmission like the *Infinity* doesn't need to use the clutch, which is a particularly useful feature when performing activities that require rapid backward and forward manoeuvres carried out in quick succession (material movement, crates of fruit, amongst rows) or slow, precise movements or when it is necessary to suddenly accelerate. The electrohydraulic inverter on the steering wheel is useful during forward and backward movement, also if repetitive, without the need to use the clutch. The brakes are not used much, given the accelerator pedal, in addition to controlling forward speed, manages deceleration to the point of bringing the tractor to a halt.

STARLIGHT COMPACT CAB

On request the Infinity can be fitted with the panoramic *Starlight* cabs, air-conditioned and bright capable of offering, along with great comfort, total visibility thanks to the wide windows and porthole with its view over the wheels and the equipment. All of this combined with extremely contained dimensions is highly conducive to working in the most diversified specialized agricultural sectors.

3) CONCEPT TONY

The series of AC tractors known as Tony came from the development of a project aimed at guaranteeing the best possible ratio between performance and fuel consumption, regardless of the activity being carried out, with tractors capable of simplifying and speeding up field activities with the goal of lowering operative costs. It is made up of 5 models with a mechanical-hydrostatic hybrid transmission amongst which the Tony 8900 TTR, an isodiametric with wide track, and the Tony 8700 V, the first AC tractor with a conventional chassis, are the latest to have been developed.

TONY TRANSMISSION

It provides automatic functions run by the ITAC (INTELLIGENT TRACTOR AC) operative system along with *Cruise Control* (or *Tempomat*) and *Tractor Management Control* (TMC) which simplify all the driver's tasks. It is a technical solution that allows the parameters for all kinds of tasks to be set and personalized. Speed is independent of the number of engine revolutions and so both can be programmed separately. The speed range moves from just 100 m/h to 40 km/h. The set parameters can be memorized and recalled at will, depending on whether the task at hand is field work or road transfer. The *Tractor Management Control* (TMC) runs the engine and the transmission so that the tractor always works in optimum conditions in order to maximise productivity and savings. The diagnostic system warns the operator in the case of the tractor's malfunctioning or wearing out so that the tractor is always at the top of its operative efficiency.

3/A > TONY 8900 TTR: FOR HAYING

The new 74 hp model with a wide track and *Tony* hydrostatic transmission was designed to safely manage tasks that are potentially dangerous for vehicles with a traditional mechanical gearbox. The new feature of this tractor lies in the hybrid mechanical-hydrostatic transmission run electronically by the *Tractor*





Management Control (TMC) System software, made up of a hydrostatic unit that operates a mechanical unit with four robotic speeds that can be engaged under load without the clutch and can be selected whilst stationary or in motion. The model can be fitted with a third point and left hydraulic top rod. The standard Uniflex™ suspension increases ground grip by reducing the weight of the equipment discharged to ground and simultaneously increasing the stability of the tractor. It is available with a large, comfortable, closed cab fitted with an automatic air-conditioning system. Access aboard is facilitated by both doors. The ample windscreen provides 360° all round visibility. The fittings include 2 USB outlets, a 3-pole outlet and a 12 V unipolar, a radio and LED working headlights. The multifunctional Joystick is standard. Another new feature is the presence of a passenger seat next to the driver's seat which is homologated for road transfer.

3/B > TONY 8700 V: FINALIST OF TRACTOR OF THE YEAR 2021

Finalist in the prestigious competition Tractor of the Year 2021, it sets itself apart from the rest by its special and innovative features. AC, a well-known world leader in the compact isodiametric market, is offering the Italian market its first tractor with a conventional chassis in order to extend its offer to a wide range of customers offering each one of them a "made to measure" tractor.

It comes with a *Tony* transmission designed to render the agricultural worker's tasks easier, more pleasurable and safer. It is an outsider model compared with the AC isodiametrics as it is categorised as a conventional tractor with frontal oscillating bridge. Designed for narrow-rowed vineyards and for working with ventral equipment, it offers versatility, practicalness and accuracy. The hydraulic system consists of mechanical pumps with gears and a large hydraulic variable pump with pistons. The load-sensing management of the pumps and the large, sectioned pipe circuit have the goal of reducing loss of charge while being able to operate at low engine revolutions and high hydraulic capacity all of which is aimed at reducing fuel consumption and having a low environmental impact. The distributors have CAN-bus control and offer the possibility of customised controls in order to satisfy the demands of all operators and for a perfect combination of all types of hydraulic equipment. Thanks to the extremely compact transmission, the tractor's dimensions are extremely reduced, arriving at a minimum width of just one metre. The monodirectional drive position offers the operator every comfort. It is situated on a spacious platform with isolating and soundproofing systems that reduce vibrations and noise. The smaller front wheels provide a 55° steering angle thus guaranteeing maximum handling precision.

AIR "V" CAB

It is a cab with 4 uprights that offers full visibility in all directions. It has Cat. 4 pressurisation and is ROPS homologated. The automatic air-conditioning system is managed by a digital display on the console. The LED headlights for road circulation are integrated into the cab's roof and their raised position confers maximum visibility over the equipment. The rear mirrors are adjustable electrically. The adjustable steering wheel both in height and angle with assisted return aids the operator's access aboard.

HYDRAULIC PERFORMANCE

- Hydraulic tank capacity dedicated to the distributors is 35 I
- 9 double effect independent electronic distributors (4 rear and 5 lateral)
- 2 ZP (Zero-Pressure) exhausts: one rear and one ventral
- Hydraulic capacity up to 137 l/min (with extra flow)
- Variable capacity pump that activates only when in use
- "Adaptive" rear powerlift for moving equipment in more than one direction
- Standard multifunctional joystick for the running of the transmission's double effect distributors built with CAN-bus technology.
- Colour display for the management of all the tractor's functions and for the personalisation of the joystick controls





4) NEW MULTIFUNCTIONAL ACE

TTR 4800 HST

New engines for the successful TTR 4400 model which has been positively received across all markets. The new TTR 4800 is reversible with a hydrostatic transmission suitable for working in the civil sector carrying out maintenance tasks in parks and gardens, on sports grounds, hippodromes and riding grounds. It is a model greatly appreciated for carrying out new maintenance techniques in urban settings and at roadsides such as fire-weeding.

THE HST HYDROSTATIC TRANSMISSION

The hydrostatic transmission has a mechanical selector on the 3-speed variator: slow, normal and fast. This type of gearbox offers constant variation of the forward motion speed without having to use the clutch or insert the gears in either drive directions, traditional and reverse, from 0-6, 0-12, 0-28 km/h. The hydraulic speed inverter doesn't need to be stopped and can be inserted when in movement. The PTO set at 540 or 1000 rpm is standard. The differential block is on both the forward and rear and traction disengagement is on the rear. The *Speed-Fix* system allows the tractor's ideal speed to be set for each task. Low ground compaction is guaranteed by the perfect distribution of the tractor's weight evenly over all four wheels thanks to the ACTIO™ chassis that makes this model perfect on delicate, turfed ground or on soft, damp or wet terrain without damaging it. In these situations, the vehicle is fitted with smooth "green" tyres with a wide tread that amplify the tractor's "floatation" over the ground whilst keeping traction constant.

RT 1500 HDS MOWER

It is the most requested piece of equipment for the TTR 4800 HST: an AC professional mowing plate with 3 rotating blades with a width of 150 cm and a turbine together with a CT/CS 1000 collecting box.

5) HOLOMAINTENANCE: REMOTE TECHNICAL ASSISTANCE

The EIMA will be the occasion for Antonio Carraro spa to launch new digital initiatives for the aftersales. With the aim to promote and sustain remote diagnostics and repairing by the AC official workshops, the first device to be presented will be the interactive HoloMaintenance glasses, which combine effective with virtual reality.

HoloMaintenance, the new AC service for 7 days out of 7 assistance, is possible by connecting via bluetooth the interactive glasses to a tablet or smartphone. The device uses a platform connected to "intelligent" glasses fitted with HoloLens (special interactive lenses), to carry out assistance remotely in all authorized AC workshops around the world. With this new instrumentation, in addition to removing any distance, it is possible to reduce the need for transport vehicles and therefore fuel consumption and subsequent emissions, thus saving resources in terms of costs and time.

Another advantage of great importance is the satisfaction that the operators interfacing with the Hololens assistance operations feel, as they are catapulted into an incredible but authentic reality with everything convenient, clear and immediate. With the HoloLens, under the careful expertise of the experts in the AC After Sales Service, the AC dealers around the world can carry out even complicated interventions with maximum competency in a very short time.

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