FERRARI









IN ORDER TO BE SUCCESSFUL, A GREAT PROJECT MUST INCLUDE THE GREATEST NUMBER OF POSSIBLE SOLUTIONS: SO FOR THE **VEGA SERIES** WE CREATED THE **VERSION WITH CENTRAL ARTICULATION AR**, DESIGNED FOR THE VARIOUS NEEDS THAT OUR CUSTOMERS

MOTIVATE US TO SATISFY EVERY DAY.

PERFORMANCE, DIMENSIONS, MANOEUVRABILITY, COMFORT AND SAFETY ARE THE QUALITIES OUR TECHNICIANS GAVE EMPHASIS TO IN ORDER TO CREATE THIS PROJECT, WHAT REALLY MAKES THE DIFFERENCE BETWEEN A SPECIALISED FERRARI TRACTOR AND A REGULAR TRACTOR.

VEGA AR

Reversible isodiametric tractors, with central articulation.

The **VEGA AR** is the version that **FERRARI** designed for use in narrow spaces: row cultivations, nurseries and greenhouses.

The structure of the machine together with its maneuverability makes **VEGA AR** extremely suitable for the greens maintenance and municipalities. Maneuverability and reliability are the best qualities of these performing and versatile machines, thanks to

their reversible driving position. Designed and built for heavy duty under maximum stress conditions, the **VEGA AR** have got a comfortable and practical driving position.

Ergonomics, functionality and safety are also combined in an original and exclusive manner.









STRONGER AND MORE PROFITABLE THAN EVER

Like all the products that boast the FERRARI trademark, also the new **AR series** has been designed to offer concrete value to the investment: lower consumption, greater performance, higher versatility and reliability. The inspiring principle of the project was to create tractors giving the most favourable working conditions and offering their owners more competitive financial management.

A RELIABLE COMPANY

With over sixty years of experience to their name, high quality production, remarkable design, production and distribution capability, **FERRARI** is one of the most established companies in the agricultural machinery sector and has been ISO 9001 certified since 1994.

AN EXPERT NETWORK

Competence and experience make every **FERRARI** dealer stand out: professionalism you can rely on, the certainty of being advised and accompanied through the choice of machine that is right for your specific needs.



QUALITY SERVICES

Before and after sales, the quality of their services can make the difference. Choosing a **FERRARI** tractor means:

AFTER-SALES SUPPORT:

the integrated network of authorised dealers and spare parts dealers is at hand for anyone seeking rapid and safe assistance.



• GUARANTEE:

FERRARI provides a two-year guarantee on all AR tractors, included in the price, also covering the engine.







AR SERIES: QUALITY CHOICES BRING YOU FARTHER

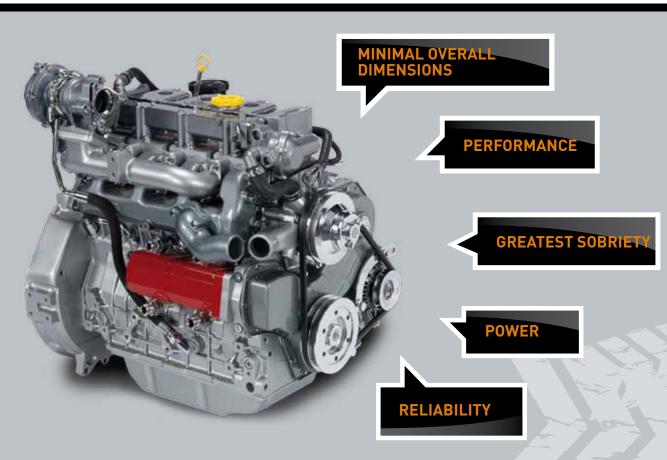
- Cutting-edge technology because, since we have been manufacturing them, we are continuing to redefine the rules of the specialized tractor world.
- Emissions and reduced consumptions thanks to the new technology of the cutting-edge engines.
- Transmissions with "long-life" multidisc wet clutches and axles with epicyclical step-down gears for maximum power transmission.
- Multidisc wet brakes assuring reliability and safety.

- Record dimensions:
 minimum width at 112 cm. and reduced pitch at 150 cm. only, the best in the category.
- Advanced systems to improve the reliability of the machines: the Self-Cleaning System® takes care of the cooling system.
- Hydraulic system with large oil output to the many control valves with oversized hydraulic pumps which guarantee high pressures and maximum performance.
- Driver's seat that can be reversed in just a few seconds to make the machines more versatile and allow the driver to be able to easily operate both the front and rear equipment.
- Active and passive safety guaranteed by the perfect weight distribution on the axles, by the low centre of mass, by the efficient braking system and by the design logic of the controls and of the driving position.
- Compact and comfortable homologated cabins which give a sensation of wellness and safety.



ENGINES: PERFORMANCE IS THE HEART OF EVOLUTION





The reduction of fuel consumption and emissions to a minimum and the maximization of engine performance are the results of the innovative technological approach that distinguishes the propellers supplied with the VEGA AR.

With the new **VM D753 and D754** the VEGA AR are equipped with an even larger and higher performance heart.

The new engines are distinguished by greater efficiency: more powerful thanks to the intercooler, cleaner and quieter thanks to the new technology in full compliance with the continually more restrictive regulations and even simpler in order to further enhance the choice of a VEGA AR tractor, able to give you fantastic response from the start.







70, 79 and 91 HP

There are three VM engines available for the AR series, dedicated to harnessing the power of each individual drop of fuel.

- VM D753 IE3 3 inline cylinder 2,2 liter Diesel turbo engine, 70 HP at 2300 r.p.m. thanks to the intercooler.
- VM D754 TE3 4 inline cylinder 3 liter Diesel turbo engine, 79 HP at 2300 r.p.m.
- VM D754 IE3 4 inline cylinder 3 liter Diesel turbo engine, 91 HP at 2300 r.p.m. thanks to the intercooler.

For these models, VM has developed the new EGR **System** located inside the engine. The system provides for the recycling of the exhaust gases which, properly mixed, return to the combustion chamber, drastically reducing the nitrogen oxide (NOx) emissions and fuel consumption.

The decision to use a lower number of rpms, 2300 rpm/min was conceived to reduce consumption, noise level and vibrations, with the benefit of savings and comfort.



SERIES AR	Туре	Power (kw/hp)	No. of cylinders	Displacement	Aspiration	Cooling system
VEGA 75	VM D753 IE3	51,5 / 70	3	2230	Turbo Intercooler	Liquid
VEGA 85	VM D754 TE3	58 / 79	4	2970	Turbo	Liquid
VEGA 95	VM D754 IE3	67 / 91	4	2970	Turbo Intercooler	Liquid



- THE TUNNEL BORE BASE allows great torsion and flexural rigidity.
- ROTARY MECHANICAL INJECTION PUMPS that make these propellers perform in all conditions, increasing reliability and lifespan.
- GEAR DISTRIBUTION WITH FORCED LUBRICATION. the maximum that you can ask for from a diesel.
- HYDRAULIC TAPPETS to minimize noise and eliminate maintenance.
- LOW-INERTIA TURBOCHARGERS for an immediate response when power is required.
- BALANCING SHAFTS to eliminate vibrations.

Self Cleaning System®

PREVENTION IS BETTER THAN TREATMENT!

Heat disposal, from both the engine and the hydraulic system, is essential to enable compact and powerful tractors to perform the demanding jobs for which they are intended without any problems.

HEAT DISPOSAL

Considering the primary uses for VEGA AR tractors, a special cooling system was designed to allow the engine and the entire hydraulic system to always operate with the maximum safety margin. The engine is protected by a large radiator assisted by the patented **SCS (Self Cleaning System®)**. A heat exchanger stabilizes the hydraulic system temperature while a series of watertight grills on the engine hood also allows the propeller to breathe better and protects the radiator cores from clogs due to dust and debris raised by work equipment.



ALWAYS CLEAN AIR

The special cooling system is assisted by the patented **SCS (Self Cleaning System®)**, characterized by two fans with combined intermittent operation: an electromagnetically controlled intake and an electric blower.

The system prevents dangerous overheating of the engine and hydraulic system, keeping the radiators and ventilation grills always clean, thus preventing continuous stops in order to clean them.

Besides the **SCS (Self Cleaning System®)** function, the cooling system allows, at the operator's discretion, to adjust the radiator fans in order to activate or deactivate them according to the climatic and operational needs.

The system is controlled by a three function button, which activates in order:

- SCS the double fan system
- **ECO** the single intake fan with intermittent function that activates/deactivates upon reaching a certain temperature
- **CMF** the single intake fan which functions constantly

The operator can thus select the most suitable function based on the various uses and needs.



SUPERIOR QUALITY CLUTCH

TRANSMISSION CLUTCH

The LONG-LIFE clutches designed for the VEGA AR are multiple-discs in oil bath and do not need adjusting and maintenance. Modular and progressive, they are inserted in the transmissions in order to reduce motor overhang and consequently the length of the unit. This technologically advanced solution, especially adopted on conventional, high-powered machinery, was preferred to the more economical and less reliable "dry mono-disc" one used by most of the VEGA AR series direct competitors.



The clutch also has a proportional hydraulic control that perfectly modulates coupling and uncoupling, much more powerful than the traditional hydraulic controls that operate dry mechanical clutches.

Operational comfort is also ensured by the PRO-ACT System, a system that allows the drive to operate the clutch in a convenient and efficient manner using a parallelogram-shaped progressive action pedal with adjustable backlash.





ABSOLUTELY UNIQUE TRANSMISSIONS

OS-FRAME

Engine performance would be nothing if it weren't supported by the excellence of the transmissions.

The **VEGA AR** are provided with **OS-Frame transmissions** awarding lots of advantages:

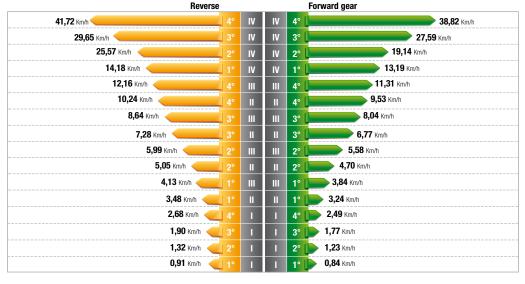
- The double-mass flywheel with long-travel torsional damper is highly capable to eliminate the engine cyclic irregularities and also to give more torque to the engine itself.
- A unique transmission shaft through the central assy moves both the gearbox main clutch and the PTO independent clutch, while assuring the best mechanical output and the highest tractor maneuverability.
- It is a "monolithic" structure in a single cast iron casting The joint in the middle of the machine lets the front axle oscillate up to 15° with respect to the rear axle (maximum slewing angle), stabilizing the machines on steep terrain. This assures the highest stability and constant traction, as the four wheels are always stuck on the ground.



GEARBOXES WITH THE BEST SPEED RANGE



The **new 32-speed Sincro gearboxes** of the VEGA AR with synchronized reverser and helical gears offer the best performance in drivability and comfort. The logical speed sequence, without overlapping for all ranges, allows you to always select the right gear ratio for the requested use, allowing an efficient use of the machines: fuel savings, less stress on the mechanical components, less engine fatigue and, above all, better quality of work.



Graph of the speeds in km/h with 320/70R20 tyres for VEGA AR tractors. Engine speed: 2300 rpm

4WD FOR MAXIMUM TRACTION IN TOTAL SAFETY

The **4-wheel drive** has got an electro-hydraulically controlled disengagement of the front one, which allows you to move efficiently on steep slopes as well as on uneven grounds, while improving the transfer of loads on the road.

The electro-hydraulically controlled front and rear differential lock, simultaneously or rear only, assures the best traction on any type of grounds.





ENHANCE PERFORMANCE

PTO WITH MAXIMUM POWER TO BE TRANSMITTED

The rear PTO is electro-hydraulically controlled, independent from the gearbox and synchronized with all forward speeds. It can be engaged under load, it has the brake in the released position and a safety mechanism that prevents accidental engagement.

The independent PTO is serial at **540/750 r.p.m**. Optional **540/1000 r.p.m**.

BRAKES THAT ALWAYS RISE TO THE OCCASION

The efficiency of the braking system, with **the 4 latest generation multiple disc wet brakes**, ensure completely safe braking in VEGA AR tractors. The brakes are assisted by an hydrostatic control acting as braking distributor which intervenes constantly and simultaneously on the 4 wheels when acting on the pedal.

Exclusive to this category of machines is the independent BRAKE-OFF

parking brake that is automatically inserted when the engine is off. When the unit is operating, on the other hand, it is controlled with a practical button, electrohydraulically controlled on the dashboard and equipped with a safety catch.





SUPERIOR QUALITY AXLES

The decision to employ axles with epicyclic reduction gears is determined by the need to keep the wheel-base of the tractor units to a minimum while increasing maneuverability, besides increasing the prestige and reliability of the machine. In comparison to older and more economical axles with "cascading" gears used by the competition, the fundamental characteristics of epicyclical step-down gears are their nearly unlimited duration and greater transmission of power (they have three gears always engaged in comparison to only one in the more economical version).



HYDRAULIC SYSTEM: NEVER SO EFFICIENT

The hydraulic system of the VEGA AR version is a **double circuit one, but with independent pumps and dedicated heat exchanger**. The hydroguide pump has a flow rate of 31 lt/min, like the one for the attachments. As optional, an oversized pump of 49 lt/min can be also supplied. Hydraulic operating pressure is 180 bar.

For the VEGA, in the version without Joy-Stick, there are up to a maximum of 8 rear hydraulic control valves with oil recovery system which allow you to use equipment that requires a large hydraulic flow rate.



EVERYTHING IN ONE HANDFUL

For our most demanding customers we designed an **electronically controlled Joy-Stick** which allows you to keep the entire hydraulic system under control with a single device.

The **Joy-Stick** controls not only the hydraulic system, powering 11 rear hydraulic control valves, but also the lifts, making every maneuver involving the machine's hydraulics practical and secure. To get the best performance, the Joy-Stick is always supplied with the oversized pump 49 lt/min.

The Joy-stick is positioned on the right of the driver, is fixed on the seat arm and rotates with the driving position when setting the tractor in reversed position.





LIFTING EQUIPMENT

THE FORCE OF THE LEVERS

The VEGA AR are often used with performance equipment set on the lift. The **robust rear lifts** that are supplied with the machine rely on practical and versatile multipurpose attachments, designed to easily and quickly adapt to all equipment on the market. On demand, they can be also supplied with position and draft control for all those attachments requiring it.

The lifting arms are available with: standard couplers and L-shaped quick couplers. It is also foreseen a hydraulically controlled upper link and tie rod for right link arm, which allows adjusting the attachments from the driver's position simply acting on the control valves lever.

In addition to the rear lift, it is also available a performing front lift with 4 hydraulic control valves, which is necessary when using combined attachments.





DRIVER'S SEAT

When the **cabs** for the VEGA AR were designed, we decided to set our expectations higher than anyone else had ever done.

The cabs, in fact, available in the **LUXUS and COMFORT** versions with standard configuration or conical structure studied to be sued in narrow row cultivations on slopes, were carefully designed in every detail to guarantee interior comfort.

Equipped with fabulous, spacious and ergonomic interiors, they have large windows that optimize the driver's view when driving either in the normal position or in reverse.

The structure is mounted on silent-blocks completely independent from the tractor chassis, to cushion noise and vibrations.

Air conditioning and heating are guaranteed by a reliable and efficient system.

RESERVED FOR THE DRIVER

The **VEGA AR** are equipped with reversible driving position that allows for practical and efficient operation with both rear and frontal equipment.

Reverse is achieved in just a few seconds thanks to the rotating console which allows the driving position consisting of steering wheel-instrument panel and brakes-clutch pedals, to rotate by 180°.



The pleasure in driving a FERRARI tractor doesn't come only from the performance of the machine but also from the area reserved for the driver.

The VEGA AR **driving area** was designed to guarantee comfort, ergonomics, functionality and safety in an absolutely original manner.

The **driving position** with platform mounted on shock-absorbers assures the best comfort to the driver.

An **instrument console** with anti-reflective screen gathers all the function in a logical manner in a central display and ensures control over the machinery status.

Instrumentation is available in both the analog and digital version: the latter provides for simultaneous reading of the engine rpms, drive speed and PDF rotation speed.

The **steering wheel**, adjustable according to the operator's physical structure, is assisted by an interactive hydroguide, controls a steering system which assures extremely low turning radii. This, in addition to the machine's structural characteristics, ensures maximum maneuverability in any use conditions.





The **VEGA AR** series tractors are specialized like few others. Built for those who want only the best. Its large range of options and original accessories makes it even more unique.



FRONT LIFT:

with 4 hydraulic couplers, allows to use front and combined attachments.



TOW HITCHES:

approved according to the current rules in various countries.

The towing hitches can also be supported by the frames that quickly adjust their height in order to optimize the use of the various towed equipment.



THREE-POINT HITCH:

available with standard or L-shaped couplings with side adjustment of the hooks.



THREE-POINT TIE BAR:

allows to adjust the attachments directly from the driving position.





WEIGHTS:

available for 18" and 20" wheels (50 kg. each) or front (120 kg.) positioned on the engine cover side not to modify the tractor length.



PREFILTER RANGE:

cyclone prefilter with external air intake to better filter the air in particularly dusty work conditions.



SEAT RANGE:

Bostrom seats or pneumatic to allow the best comfort to the operator.



WHEEL RANGE:

the width and height, the degree of ground compaction, the more or less aggressive "GRIP" are only some of the aspects that give the wheels on specialized tractors a fundamentally important role.

Technical Features **VEGA AR**

















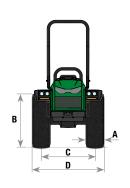


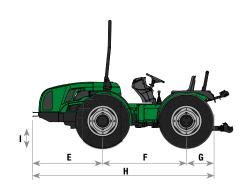






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	250/80-18	11.5/80-15.3	280/70R18	320/65R18	250/85R20	300/70R20	320/70R20	340/65R20	31x15.50-15 XTC	31x15.50-15 STG	33x12.50-15 T413	13.6-16 Garden
	WITH ADJUSTABLE RIM	WITH FIXED RIM	WITH FIXED RIM	WITH FIXED RIM	WITH FIXED RIM							
A Tyre width mm.	240	290	282	320	245	286	316	343	390	390	325	390
B Tyre height mm.	879	888	849	873	937	947	975	958	790	790	846	968
G Wheel track min/max mm.	900/1108	948/972	1020/1108	1020/1108	882/1230	942/1144	996/1144	996/1144	1016	1016	959	1042
D Width min/max mm.	1140/1348	1238/1262	1302/1390	1340/1428	1127/1475	1228/1430	1312/1460	1339/1487	1406	1406	1284	1432











VEGA AR DIMENSIONS (mm):

	E	F	G	Н	 min-max	L min-max	M	N min-max	0	P min-max	Q
VEGA 75 AR	1030	1495	563	3088	237/330	2102/2195	740	2039/2131	1102	2092/2184	850
VEGA 85 AR	11.40	1405	ECO	2200	007/000	0100/0105	740	2020/2121	1100	2002/2104	050
VEGA 95 AR	1142	1495	563	3200	237/330	2102/2195	740	2039/2131	1102	2092/2184	850

STEERING RADIUS VEGA AR WITH THE FORESEEN WHEEL:

Type of tyre	250/80-18	11.5/80-15.3	280/70R18	320/65R18	250/85R20	300/70R20
mm	2680	2710	2700	2770	2670	2740

Type of tyre	320/70R20	340/65R20	31x15.50-15	33x12.50-15	13.6-16
mm	2760	2775	2930	2870	2950

TECHNICAL FEATURES	VEGA 75 AR	VEGA 85 AR	VEGA 95 AR				
CHASSIS		Swinging integral chassis OS-FRAME with central articulation					
DRIVE	Four-w	heel drive. Front-wheel drive disengagement with electro-hydraulic co	ontrol				
ENGINE							
Manufacturer		VM					
Model	D753 IE3	D754 TE3	D754 IE3				
Number of cylinders	3	4	4				
Displacement cm3	2230	2970	2970				
Suction	Turbo Intercooler	Turbo	Turbo Intercooler				
Emission level		Tier 3					
Power KW/HP	51,5 / 70	58 / 79	67 / 91				
Nominal speed (rpm)		2300					
Maximum tractor torque (Nm/rpm)	265 / 1200	274 / 1800	420 / 1000				
Cooling		Water					
Tank capacity (lt.)		55 lt					
TRANSMISSION	Synchr	onized gearbox: 32 speeds (16 FWD and 16 REV) with synchronized reve	erser				
Main clutch		With multiple discs in oil bath with hydraulic control PRO ACT SYSTEM					
DIFFERENTIAL	Front and rear. Dif	ferential lock: front and rear simultaneously or only rear with electro-	nydraulic control				
AXLES		Front and rear with epicycloidal reduction gear	,				
POWER TAKE-OFF	Rear, independent from dear	r and synchronized with forward speed. Engageable under load with br	ake in disengaged position				
PTO clutch	, goar	With multiple discs in oil bath	· J·J··				
Engagement control		Electro-hydraulic					
Independent PTO rotation speed (rpm)		Standard: 540/750 - Optional: 540/1000					
HYDRAULIC SYSTEM		Double circuit with independent pumps and heat exchanger					
Flow rate to hydraulic pump which controls the hydroguide and electro-hydraulic control (l/min.)		31					
Flow rate to the hoist and the distributors (I/min.)		31 (optional 49, standard with Joystick)					
Maximum hydraulic pressure (bar)		180					
DISTRIBUTORS		Mechanical control to max 8 hydraulic couplers					
Rear (standard)		2 double acting with oil recovery					
Rear (optional)	1 cinal	e acting and 1 double acting or 1 double acting and 1 double acting with	float				
		e acting and indouble acting of indouble acting and indouble acting with distributors consisting of: 1 single acting with adjustable flow rate, 5 do:					
Joystick (optional) ELECTRIC SYSTEM	With electronic control of the c	distributors consisting of: T single acting with adjustable flow rate, 5 do	uble acting and 1 free return				
		100					
Battery (Ah) Alternator (A)		100					
	55						
REAR LIFT	Standard: by two external rams - Optional: draft and position control						
Three-point hitches	Standard: standard couplers cat. 1 and 2 and adjustable tie rods. Optional: quick couplings cat. 1 and 2, L-shaped lift arms, lift rods adjustable in length and hooks adjustable in widt						
Three-point tie bar	Standard: With r	manual adjustment - Optional: hydraulically controlled upper link and ti	e rod link arm				
Lifting capacity at the end of the arms kg		2300					
FRONT LIFT (optional)	В	y two external rams with front guard and 2 double acting control valves					
Three-point hitches		Rigid with quick couplings cat. 1					
Lifting capacity kg		800					
DRIVING UNIT	With suspended platform on "Silent-block"						
Driving platform	Reversible with rota	ating platform, suspended brake and clutch pedals mounted on revolving	ng control column				
Steering wheel		Adjustable in height					
Gas spring SEATS with easy adjustment and seat belt		ing seat, adjustable according to the driver's weight - Optional: "Bostro					
SERVICE BRAKES	Oil ir	mmersed, multidisc brakes, acting on the wheels with hydrostatic cont	rol				
Parking brake		Automatic and independent with BRAKE-OFF SYSTEM					
STEERING	W	ith hydrostatic steering by two rams, acting on the central articulation					
SAFETY							
Roll-bar frame (standard)		Front, homologated					
Cabin (optional)	Sound-proof, mounted on 'Silent block'. Versi	ons: Luxus (with heating and ventilation systems) or Comfort (with air cond	ditioning) with standard or conical structure				
CONSOLE							
Analogue type (standard)	With chrono-	-tacho-gyrometer, water thermometer, control warning lights and acou	ustic alarm				
Digital type (optional)	With sim	nultaneous reading of rpm, forward speed and rotation speed of power	takeoff				
TYRES							
Standard		250/80-18					
Optional	11.5/80-15.3 * 280/70R18 * 320/65R18 * 250/	/85R20 * 300/70R20 * 320/70R20 * 340/65R20 * 31x15.50-15 with treat)	(TC or STG * 33x12.50-15 * 13.6-16 Garden				
TOWHOOKS							
Standard		Rear cat. C and front tow hook					
Optional	Rear rotating or rear adjustable	le in height (Slider type) tow hooks, both EC approved or CUNA rear adju	ustable in height (Slider type)				
WEIGHT OPERATIONAL	real rotating of real dujustable						
With chassis (kg)		2010					
With Luxus cabin (kg)		2150					
With Comfort cabin (kg)		2150					
OPTIONAL	Salf Cleaning System oil filter prostection	on, muffler protection, flash light, cyclone prefilter with external air inta	ke Front weight and weights for whools				
OI HORAL	Jen Greaning System, on miler procrection	m, manter protection, itaan ugnt, cyclone preniter with external all illia	inc, i ront weight and weights for wheets				

Foto Studio Giuseppe Drogo

FERRARI guarantees: The design criteria have the support of very modern programs that work in 3D. All the components of our machines are tested before going into production. This guarantees the quality and reliability of our Designing for comfort is one of the essential components of our technical staff's Mission. Tested and guaranteed original spare parts E-parts is the on-line support for fast and easy service. Efficient and valid assistance service with the support of friendly and competent technical staff: E-service is the on-line tool supporting the service. An extensive and efficient sales force guaranteeing service and assistance. FERRARI recommends to use the original PowerLube lubricants. You can pay a visit to your local FERRARI, dealer or visit our website www.ferrariagri.it to discover which novelties are waiting for you!

