

**alkè**  
high performance utility vehicles

ENGLISH



**Electric vehicles**

ATX100E, ATX200E, ATX200E AR, ATX280E

**ATX**electric  
Performance and Quality

## ATX: high performance electric vehicles

A new generation of electric vehicles exists that is able to put in the field performances that are on a par with and in certain contests superior to the conventional diesel or petrol vehicles of the same category. It is the case of the ATX E series, professional electrical vehicles designed to be used in the hardest and most demanding conditions, with loading capacity up to 1.000Kg and towing capacity up to 3.000Kg.

Alkè ATX vehicles are type-approved for road circulation in many European countries. They are professional vehicles designed for people that are not happy with what can already be found on the market and where quality, reliability and functional design are the fruit of years of experience and tests in the field.

Design, prototyping and production of all Alkè vehicles are made entirely in Italy.

**Load capacity up to 1.000 Kg**

**Tow capacity up to 3.000 Kg**

**Products made in Italy**

Alkè electrical vehicles combine silence and zero pollution to a real working capacity. It is not by chance that a growing number of sectors are starting conversion procedures of almost their entire fleet of vehicles to high performance electric vehicles such as the ATX E:

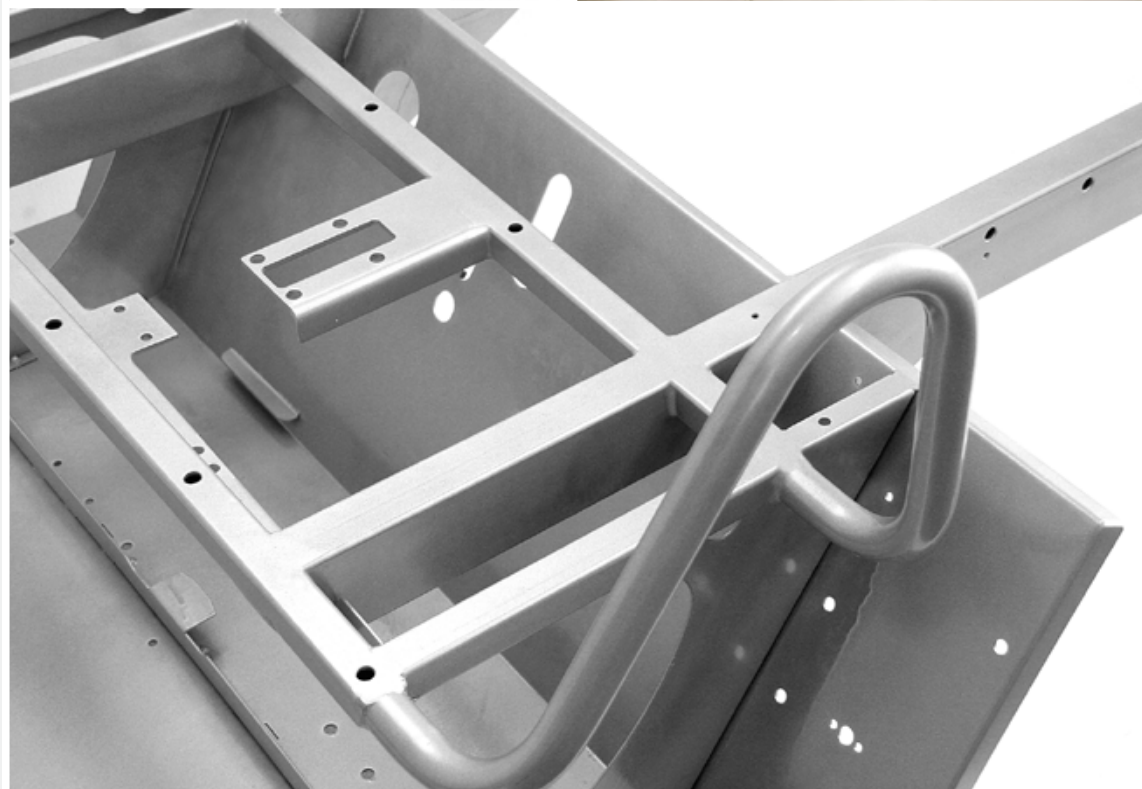
**public sector:** municipalities, historic town centres, public safety, civil protection departments, railway stations, airports, hospitals, universities, communities, cemeteries, waste collection services, ecological and environmental services, postal services and fire department

**private sector and open spaces:** estates on the plains or hillside, parks and villas, maintenance of open spaces, farms, vineyards, woods, nursery gardening, floriculture and greenhouses

**tourist sector:** holiday villages, camping sites, golf courses, parks, tourism-cultural sites, farm-holiday centres, riding schools residences and hotels, beaches, amusement parks, seaside resorts, sports centres, stadiums, ski resorts.

**services and industrial sector:** fair facilities, congress centres, commercial centres, catering services, industrial establishments, shipyards, harbour and airport facilities.

ATX vehicles can be made in special versions for use in areas with risk of explosion such as oil plants, offshore extraction platforms, tunnels, chemical plants, etc (ATEX classes covered: 3G IIB T3 e 2G IIB T3).



## Standard full-optional fittings and an extremely solid construction

All ATX chassis are treated with Cataphoresis anticorrosion process and built using tubular steel sections dimensioned to support any type of exertion and torsion.

The front bodywork of the vehicle, the control panel and coverings and the back of the cab are built in reinforced fibreglass and finished with car paint (fibreglass is flexible, resistant to blows and can be easily repaired in the case of accidents).

The ATX have separate excitation engines with maximum torque at zero revs and smooth distribution, which prevents skidding and loss of grip also on high risk land-types (sand, snow or ice) and guarantee start-up in ascent with hesitation.

Thanks to their special engines and the particular control electronics, the ATXE raise the power, if necessary, by 6kW (8CV) nominal to a peak of 17.5-20kW (24-27CV) to allow operations even in the presence of uneven land and 35% slopes.

**Chassis with anticorrosion treatment**  
**Separate excitation engines**  
**Superable gradients up to 35%**

The autonomy on standard routes for some models can reach up to 130 Km and cover without problems an entire working day even where frequent stops are required for load and unload operations.

The electric ATXs have an energy recovery motor brake system, which in the stopping phase prevents all waste of power and wear of the brakes.

**Up to 130 Km autonomy**  
**Regenerative braking**

The ATXs may have maintenance-free pure lead batteries to raise the performances of the vehicle even at low temperatures (-20° C).

The complete re-charge of the battery set, normally carried out during the night, takes place using the high frequency battery-charger present on the machine, this means it can be connected anywhere there is a common mains socket without being restrained to fixed bases.

The special battery chargers used by the ATXE guarantee a greater number of charges with respect to the technologies commonly used (greater number of charges = longer life of the battery set = saving of management costs). It is not necessary to wait for the battery to be totally flat before re-charging it, the so-called "memory effect" present in other lower sectors is not found here.

**Batteries with high performance even at -20° C**  
**On board battery-charger**

The investment for an ATXE is re-paid in average terms by the maintenance costs, which are must lower if compared with equivalent diesel and petrol vehicles: maintenance is almost inexistent and there are noteworthy savings in fuel consumption. For an entire day's work the cost for the complete charging of the battery sets is less than 1.5 euro.

It is important to know that the technical life, in working hours, of an electrical vehicle of this type is generally double, if not triple, with respect to a conventional fuel vehicle.

**Very low low maintenance costs**  
**Life 3 times than a fuel vehicle**  
**Cost of a complete charging less than 1.5 Euro**

### Unique savings with the ATX electrics

The results of a recent comparative study between ATX electrics and equivalent models diesel and petrol are amazing. This study was based on a temporal period of 4 years (4,000 hours of work). By comparing the main costs the benefits are undoubtedly in favour of the electric versions that can provide up to:

- **70% less in costs for maintenance**
- **80% less in costs for consumptions**
- **10.000 € of total saving for a period of 4 years**

If the activities in which the vehicles are involved necessitate frequent stops these values are greater because in these conditions the traditional diesel and petrol vehicles are affected by a rapid wear of the ignition-clutch-transmission group with additional costs of maintenance on the long term.

## ATX100E

The ATX100E are very compact electric vehicles, 50 cm shorter than ATX200E, that's why they are indicated for usage in places where tight turning radiuses are required (turning radius of only 2.6 metres). This model is used where space is very narrow and there is the necessity of a strong vehicle. It is designed for usage even heavy inside industrial plants, tourist and sport centres and hospitals.

The ATX100E mount a 6kW separate excitation motor with peak of 17.5kW and regenerative braking system. They have a load capacity of about 500 Kg and a towing capacity up to 2.000 Kg, with an autonomy of 70 Km (in optimal conditions of use). The HT power kit and off-road tyres guarantee unique off-road performances compared to traditional electric vehicles of other brands, with the ability to overcome gradients of 35%.

Among the wide range of fittings that can be mounted on ATX models the first aid module (electric ambulance) is realized specifically for the ATX100E model.

***The most compact of the range***

***High power motor***

***Up to 500 Kg load capacity***

***Up to 2.000 Kg tow capacity***

***Superable gradients up to 35%***

***First aid version***





## ATX200E

The ATX200E offer larger loading capacity than the ATX100E. Type approved for road circulation in many European countries these vehicles they can transport 500-600kg on the loading bed and tow up to 2.000kg without problems.

As an alternative to the traditional Lead-Acid batteries, this model can mount also Pure Lead batteries that allow better performance and lower maintenance costs. The ATX200E Rb version in addition mounts roll-off batteries that allow the use of secondary batteries (optional) to double the mean's autonomy.

As the ATX100E also the ATX200E is designed for use in industrial plants, tourist and sport centres and hospitals and finds its best work environment in municipalities, universities and colleges, delivery services or other activities operating in restricted traffic zones, railway stations and airports where bigger loading volumes are important if not essential.

***Up to 2.000 Kg tow capacity***

***Up to 500 Kg load capacity***

***Pure Lead batteries***

***Version Rb with removable batteries***

The HT power kit and off-road tyres guarantee unique off-road performances compared to traditional electric vehicles of other brands, with the ability to overcome gradients of 35%.

## ATX200E AR

The range of Alkè electric vehicles includes the ATX200E AR, a special vehicle with waste collection body designed for use in cities, historical town centres, hospitals, railway stations, camping sites, tourist villages and sport centres.

The AR version has an anti-corrosion aluminium waste collection body, which can be integrated with an optional automatic bin-lifting device for bins measuring from 120 and 240 litres.

This container has a capacity of about 2m<sup>3</sup> and a tipping angle of 90° allowing the waste to be dumped directly into auto-compacting machines and refuse bins.

The plant has dropping-control automatic valves, a dual effect hydraulic cylinders and support feet with lateral stabilising functions during tipping of the container. Tipping operations can be controlled on board the vehicle or using a cable command from the ground.

The ATX 200E AR is used where waste collection must be carried out continuously and easily without disturbance (silence) or pollution.

The ATX200E AR Rb mounts removable batteries that allow to use a set of secondary batteries (optional) in order to double the vehicle's autonomy.

**Aluminum anti-corrosive container**

**2m<sup>3</sup> load capacity**

**Superable gradients up to 35%**

**Version Rb with removable batteries**

**Bin lifting system available**





## ATX280E

The ATX280E represents the top of the electrical ATX range and is addressed at special uses.

On the outside it has the same size of the ATX200E but with a much more high load capacity on the back floor (1,000 Kg instead of 600 Kg), a higher tow capacity (3,000 Kg to the place of 2,000 Kg) and a higher autonomy of the battery pack (with Pure Lead batteries reaches up to 130 Km).

**1.000 Kg load capacity**

**3.000 Kg tow capacity**

**Up to 130 Km autonomy**

**Removable battery set come off the rack**

Differently from the 100E and 200E versions it has a separate excitation engine 6kW with 20kW peak, full floating rear axle (removable semi-axis), second auxiliary cooling electro-fan for working in critical conditions, rear servo brakes and 24x2V removable high performance cells (with an auxiliary battery set the ATX280E can also be used for double shifts). Designed for use in industrial and civil areas (airports, railway stations, logistics centres) it is realised with the latest technical solutions, which derive directly from the forklift sector.

**Perfect for airports and industry**

**The most powerful of ATX range**



**Half-cab**

Half-cab without doors with steel bearing structure, front opening windscreen, wipers, internal cab light, soundproof.

**Doors**

Set of half-cab doors, steel bearing structure, tempered glass and lock with keys on both doors.

**Doors with sliding windows**

Set of half-cab doors, steel bearing structure, tempered glass, encased sliding windows and lock with keys on both doors.

**Door protection grids**

Steel protection grids for the glass doors (lower part).

**Shield washer front wiper \***

Windscreen wiper with washer

**Safety belts**

Two point safety belts with roll back

**Digital speedometer \***

Digital speed indicator  
(Km/h or mph measurement)

**Seats with sensors for the driver's presence \***

Seats with sensors on the driving place.

**Electric heating \***

Electric heating 48V with 2 speed electro-fans, temperature control thermostat and two air-vents in the cabin, power 600-1.200W.

**Webasto heating \***

Diesel Webasto heating with internal electronic control and two air-vents in the cabin, power 2.000W.

**Vehicle's customised colour \***

RAL colour different from red RAL 3002 or white RAL 9010 for bonnet, dashboard, loading bed and cabin (if present).

**Loading bed with electro-hydraulic tipping**

Electro-hydraulic tipping for the loading bed complete with electro-hydraulic control unit with activation from the control dashboard.

(excluding ATX200E AR /Rb)

**Body tarp**

Body tarp mounted on steel structure, height 1050mm with opening on the three sides and rolling belts.

(excluding ATX200E AR /Rb)

**People Carrier module \*\***

Two seats removable module with independent seats, footboard and safety belts

(excluding ATX200E AR /Rb)

**Rear shade canopy**

Shade canopy for cargo area and rear people-carrier module.

(excluding ATX200E AR /Rb)

**Raised side panels**

Steel raised side panels with height 550mm and rear drop side.

(excluding ATX200E AR /Rb)

**Closed cargo box with 2 side rolling doors**

Closed metallic cargo box with two rolling doors on both sides, height 1100mm, internal light and locks.

(excluding ATX200E AR /Rb)

**Shelf for closed cargo box**

Height adjustable shelf for closed cargo box, 100Kg load capacity, depth 500mm.

A shelf covers half the depth of the cargo box

(excluding ATX200E AR /Rb)



#### First aid module \*\*

Module equipped with spine board, rear passenger seat, blue rotating lamp, double bag compartment for medication kits (not included).

(only for ATX100E)



#### Pure Lead battery pack

Pure Lead battery pack with on board specific battery charger (maintenance free batteries with high performance also at low temperature).

(excluding ATX100E)



#### Battery refill system

Automatic refill system for drive batteries with 20L external tank for quick maintenance of the batteries.



#### Auxiliary removable battery pack

Auxiliary removable battery pack with case, external battery charger and 2 steel battery basement for external storage.

(only for Rb and ATX280E versions)



#### Kit HT for higher torque \*

High torque kit (+30% on 100E/200E, +25% on 280E) with maximum speed reduction.



#### Kit HS for higher speed \* \*\*

High speed kit (max speed 40 Km/h). The kit includes more powerful front brakes.

(excluding ATX280E)



#### Bin lifting system \*

Bin lifting device for ATX200E AR, suitable for 120-240 litres bins.

(only for ATX200E AR/Rb)



#### Electric winch

Front electric winch with a tow capacity of 1200 Kg and remote control.



#### Snow blade hydraulic kit \*

Double hydraulic front plug arrangement on the vehicle with electric flow deviator for installing snow blade (to combine with the loading bed electro-hydraulic tipping).



#### Snow blade \*\*

Snow blade L1500mm with hydraulic lifter and rotation, unhooking spring and replaceable rubber runner (to combine with the loading bed electro-hydraulic tipping and to the snow blade hydraulic kit)



#### Double tow hook \*\*

Double tow hook with sphere and normal joint for trailers and caravans. 2.000 kg towing capacity. It requires trailers with repulsion brakes. Maximum vertical weight 75 Kg.

For all the ATX versions.



#### 7 pole connector \*

Rear 7 pole connector for connection to the main light circuit with light cabling on runner/trailer.



#### Rear hydraulic kit \*

Rear hydraulic socket with double effect for auxiliary services with quick joints (pressure 70 Bar). Included switch in cabin and double hydraulic central unit on the ATX vehicle with all connections. Not for continuous use.



#### Trailer with repulsion brakes \*\*

1.000Kg load capacity, 140x200cm cargo dimension, repulsion brakes, parking brake, light set, openable sides, sphere hook, manual tipping.



#### Trailer electro-hydraulic tipping

Rear electro-hydraulic tipping for trailer (to combine to the rear hydraulic kit and the loading bed electro-hydraulic lift).



#### Raised side panels for trailer

Raised side panels for trailer with rear drop side (same construction of ATX raised panels).



#### Off-road tyres

(22x11-10 4PR)

#### Garden/city tyres

(23x8.50-12 6PR)

#### Garden/city large tyres

(23x10.50-12 6PR only rear)

#### Road tyres

(175/65R14 90T)



#### Rear fog light \*

#### Rear reverse light \*

	ATX100E	ATX200E ATX200E Rb	ATX200E AR ATX200E AR Rb	ATX280E	Notes
<b>Engine/Performance</b>					
Type	Electric with separate excitation				SEM excitation on electric vehicles allows high performance and energy saving and therefore lower consumption.
Power in standard conditions	6 kW / 48 V				Available power and torque are really for professional and intensive use.
Maximum power	17.5 kW		20 kW		Max power to face slopes and towing jobs. Best in category.
Maximum speed	30 km/h 12 km/h (reduced mode)		25 km/h 10 km/h (reduced mode)		The reduced mode allows to make the most of the available torque and greater driving control.
Motor kit (opt)	HT kit +30% torque, maximum speed 25 km/h HS kit maximum speed 40 km/h,		HT kit +25% torque, maximum speed 20 km/h		The optional HT kit raises the vehicle's torque, the HS kit raises the maximum speed.
Maximum towing capacity	2.000Kg		3.000Kg		The high towing capacity is guaranteed by the power of the ATX engines. The data provided refer to optimum conditions of use.
Cooling	Coaxial fan air cooling (with HT kit and aux. electro-fan)		Coaxial fan air cooling and aux. electro-fan		In the ATX280E the auxiliary electro-fan mounted on the engine helps to prevent any type of overheating even in critical working conditions.
Controller max output power	600 A				The ATX elaborates controller guarantees Higher output power for higher performance and less overheating of the control electronics.
Autonomy in optimal conditions of use	70 km (lead acid) 75 km (pure lead)		100 km (lead acid) 130 km (pure lead)		Autonomy in optimal conditions of use is an entire working day. Partial or complete charging are possible, there is no "memory effect".
Estimated battery charge time	8 hours (lead acid) 6 hours (pure lead)		12 hours (lead acid) 11 hours (pure lead)		Supply with a 230V 16A standard socket outlet.
Battery-charger	High frequency onboard the vehicle				High frequency charger enables better continuous charging, increases battery life.
Batteries	9.6 kWh - 8x6V Lead acid	9.6 kWh - 8x6V Lead acid 9 kWh - 4x12V Pure lead (opt)		14.4 kWh - 24x2V Lead acid 18 kWh - 8x12V Pure lead (opt)	For the same capacity pure lead batteries provide superior performance compared to lead acid. Pure lead batteries are maintenance free military grade batteries they provide great results even at low temperatures (at -20° C you lose 10% performance when lead acid lose at least 50%).
Removable batteries	No	Only Rb version		Yes	Auxiliary batteries enable non stop working through the day and night.
<b>Transmission</b>					
Type	Electronic speed variation				Equal to the use of automatic gears.
Driving	Rear				
Maximum negotiable slope	30% (std), 35% (HT kit), 25% (HS kit)		25% (std), 30% (HT kit)		The ATX are probably the only electric vehicles in their category to keep up high performance even in the presence of slopes and difficult land-types. The data provided refer to optimum conditions of use.
Electronic motor brake	Yes, with energy recovery				Regenerative brake ensures a lower energy consumption as well as high safety standards and perfect descent manoeuvrability. When the accelerator is released, braking starts and batteries recharge.
Rear differential unit	Semi-floating		With removable semi-axis		The unit with removable semi-axis doubles the dynamic load of the vehicle.
<b>Brakes</b>					
Front hydraulic discs	Yes				The hydraulic brakes are much safer than mechanically-operated brakes.
Rear hydraulic drums	Yes		Yes, with servo brake		They guarantee greater safety when weights are loaded or equipment is towed.
Parking brake	Yes				
Dual circuit cylinders	Yes				System used in the car sector to guarantee greater safety.
Low hydraulic fluid alert	Yes				Immediate warning to the operator as a maintenance reminder.
<b>Suspensions</b>					
Front	MacPherson-type with independent wheels				Mac Pherson suspensions allow higher ride comfort and driving precision.
Rear	With De-Dion bridge + stabilising bar				De-Dion axle permits softer ride, better axle articulation, better traction on all land-types.

	ATX100E	ATX200E ATX200E Rb	ATX200E AR ATX200E AR Rb	ATX280E	Notes
<b>Chassis and protections</b>					
Fibreglass bodywork			Yes		Fibreglass is repairable, durable, more resistant to shocks.
Front and rear towing hook			Yes		Heavy duty front and rear hooks are standard.
Differential guard			Yes		Full protection for differential and other lower parts of vehicle in off road situations.
Front bull-bar protection			Yes		In case of accident prevents damage to the front bonnet, tires and steering system.
<b>Electronics and lighting system</b>					
Hour counter + Battery capacity indicator			Yes		
12V socket on the vehicle			Yes		Enables to plug cell phones, radio, PC and other electric devices (10A/ 120W max).
Display			Yes		Provides information about: head lights, tail lights, indicators, emergency lights, rear fog lights, Webasto fuel shortage (if installed), brake oil shortage, hand brake, electric motor overheating.
Lights		Head lights, tail lights, stop lights, indicators, emergency lights, reverse and rear fog lights, rotating light			
Horn/ Reverse buzzer			Yes		
<b>Trims</b>					
Glove box with lock			Yes		
Wing mirrors			Yes		
<b>Dimensions</b>					
Length	3020 mm			3530 mm	
Wheel base	1820 mm			2120 mm	
Width			1270 mm		The small width allows to operate in restricted areas.
Height with cab (optional)			1850 mm		
Empty weight (without cab)	760Kg	820Kg	950Kg	1150Kg	The strong steel construction is indicative of the long life of the vehicle.
<b>Steering</b>					
Rack and pinion			Yes		
Minimum steering radius (internal)	260 cm			320 cm	
<b>Tyres</b>					
Front			23x8.50-12 6 ply		The 6 ply tyres used by the electric ATX are more resistant to puncturing and other damage and allow greater safety in the case of overloading.
Rear		23x8.50-12 6 ply (std.) - 23x10.50-12 6 ply (opt.)		23x10.50-12 6 ply	
<b>Loading bed</b>					
Loading capacity	490 Kg	530 Kg	400 Kg	1.000 Kg	The high load capacity is guaranteed by a very strong chassis.
Dimensions (L, W, H)	130 x 120 x 26 cm		180 x 120 x 26 cm		Standard measurements for europallet, drop sides that ease loading from the sides.
Loading platform height from the ground		78 cm		78 cm	
3 aluminium drop sides		Yes		Yes	Access is made easier to the entire load bed from all sides also in the presence of the body tarp. The drop sides are in anti-corrosion tubular aluminium.
Load-cab area steel protection		Yes		Yes	Protects the driver if the load falls forwards. Roll-bar function.
Bed tipping		Manual, electro-hydraulic optional		Manual, electro-hydraulic optional	The optional electro-hydraulic tipping device can be controlled from the control board in the cab.

The mentioned technical specifications (like performance, autonomy, dimensions etc.) can or will be depending on temperature, surface, driving style, options, cargo or usage of the vehicle.

## After sales

We deliver spare parts worldwide from our establishment, via express carrier, in 24-48 hours (areas covered by main international carriers). Our after-sales service is in permanent contact with our distributors and dealers to guarantee that any problems are solved quickly (if they should occur) or to suggest the best practices for the programmed maintenance of our vehicles.

## We listen to all of our customers, from the first to the last

We are convinced that the best tests are those carried out by anyone using a machine from the morning to the evening. In spite of the fact that before the release of each new product thousands of hours have tests have already been carried out in the most varied environments, we are not so presumptuous as to say we have had the last word. If a customer suggests improvements, deriving from his experience in the field, we immediately transmit them to our designers and engineers.

## Born to last

It is difficult to find used Alkè vehicles on the market because anyone owning our vehicle doesn't let it go.

Our philosophy is that of building strong vehicles like the ones in years gone by. No photograph, even the best, can transmit the construction quality of a product, and this is valid, above all, for our Alkè vehicles.

Try them yourself, just for five minutes, and you will understand why we have no problem in saying that we are not afraid of comparison. None of our vehicles has ever lost when compared with a competitor in the same class. Just sit in the driver's seat of one of our ATXs, feel the comfort, try the driving agility, verify the compactness and most of all the solidity in order to decide for yourself. It is also the details that make the difference.



### Alkè

via Vigonovese 123  
35127 Padova (Italy)  
tel: +39 049 761208  
fax: +39 049 8709426  
email: info@alke.com  
web: www.alke.com

**Distributor/Dealer Stamp**