

New and Exciting *BREEZE-S*



With the launching of the **BREEZE-S**, a work of three years is completed. During this intensive period we have invested a lot of time and money with the objective of developing a large mobility scooter, technologically advanced with a lot of carrying power and one that would answer the user's needs.

The development work was preceded by a thorough market research through which we have learned our customers expectations of the scooter. We were not satisfied with normal research and went out in the field, gathered feedbacks from end users and questioned our dealers who meet you on a daily basis.

I am proud to tell you that the results of those efforts borne fruit. The **BREEZE-S** is a scooter which gives a unique driving experience. It is comfortable and suitable for many uses and has a friendly and advanced operating interface.

We were awarded with the most important award in the world given for design. This is recognition of the fact that this is a unique vehicle, however, to us the end user's reactions are more important. The first group of customers already uses the vehicle and receives great pleasure from driving it.

I wish to thank all of our customers who took part in this effort and helped us to produce a more advanced, more useful and simply a better vehicle.

Regards,

Sharon Leventer



BREEZE-S an award winning mobility scooter

BREEZE-S's unique design credited it with an international recognition and the most important design award in the world. Success only followed hard work and an unwavering desire to develop an exciting vehicle to drive.

The fact that the Breeze-S design won the prestigious Red Dot design award makes the task of writing these lines much easier. Of course we could praise the captivating design, but naturally we could be suspected with a lack of objectivity. The decision of the meticulous German judges to give Breeze-S the award for 2011 is a seal of approval to what we already knew the moment our product left the factory - this is a unique and desirable vehicle.

**One out of thousands:
from over 4,000 candidates, judges chose **BREEZE-S****

Red Dot is a competition held in Germany every year since 1953, in which products with the best design are chosen. Within the prestigious group of past winners of the Red Dot award you will find the Iphone, Mercedes SLS and Rolls Royce vehicles. This year they were proudly joined by Breeze-S.

Due to of the strictness of the judges and the winners of previous years, it is considered the most important competition in the world of industrial design. Its importance is such that their icon became a quality label that is being displayed by the winning company's advertising campaigns just as an Academy award image is seen on advertisements of the winning film. At the Oscar the competition is between several dozen films, while for the Red Dot Design Award there are more than 4,000 products competing.

The result of 3 years of labor:

The design of the Breeze-S is the result of a long and uncompromising planning process that had lasted for about 3 years. The aspiration of "Afikim Electric Vehicles" to create a unique and desirable vehicle led the company, almost naturally, to "Tamooz" - one of the largest industrial design studios in Israel.

**The secret of success:
Do not compromise on the small details**

Working on such a design is a very long process that requires much attention to the smallest of details. It is not a trivial matter, as the scooter has about 300 parts. We asked the chief designer to describe the process to us.

How do you start a project this size?

"The first step should be characterizing the vehicle; we made it through in-depth market research and survey among users. We formulated the conclusions from this study and created - at the idea level - the "Dream Team".

The initial sketches were designed based on the researcher's findings in compliance with the requirements of the engineering department. These were not the only factors that guided them, for the studio's main task was to create a vehicle that gives the driver a perfect user experience.

Driving a **BREEZE-S
is a life style**

The design of the Breeze-S is special and desirable not only because of appearances. "This is one of the world's most modular vehicles". "To fit everyone's needs it's made in many different configurations - with three wheels or four, with or without a canopy and can be driven by a single driver or a couple."

Thus "Afikim" can better meet the needs of each customer. Besides flexibility and ability to accommodate all needs, what were the other guidelines in designing Breeze-S?

"The user wants basically to move from one point to the other. The question is how they do it. We wanted them to do it with pleasure and to make everyone on the street turn their heads. We changed the experience of mobility from simply a quality of life to a lifestyle. The Breeze-S is a scooter that our customers and colleagues desire to have and not necessarily because they have mobility difficulties."



reddot design award
winner 2011





Advanced electronic system

The system includes programmable drive controller peripheral function and LCD display all microprocessors controlled. The electronic control system allows the user to adjust the system according to his/her needs, such as horn volume level, signaling, reverse driving and different alarms. It is also possible to adjust the maximum driving speed.

Control Information

The control system records certain information (like system faults) this allows technicians to connect a programmer externally and receive this information for a better service.

Digital display board

The user display interface shows information about the Breeze-S: Speed, distance, travel time, hour. It is possible to adjust the digital display in 4 user modes: Full information mode, partial info mode, hour mode and no information mode.



LED lights

All Breeze-S lights are LED based. This gives very long life to the lights with very low energy consumption.

Impact absorbers bumper

The front bumper is assembled with 2 steel energy absorbers which will keep your scooter frame and parts from being damaged when hit.



Canopy

The breeze-S has a polycarbonate canopy to protect the user from weather conditions.

Gas piston for adjusting the handle bar

The gas piston which allows for adjusting the angle of the tiller. This lets the user adjust the distance and height of the handle bar for maximum comfort.



Additional storage compartments

The Breeze-S has two glove compartments making it easy to store your cellular phone, glasses or keys safely. At the rear of each scooter, as standard equipment, each vehicle comes complete with a lockable 30 liter storage box.

Reinforced chassis

The breeze-S frame is built of very accurate and strong steel chassis.

The qualities that make the difference

The **BREEZE-S** has qualities that improve comfort and allow for a joyful driving experience. We present to you the details that make the **BREEZE-S** so great.

The Future is here: *The* **BREEZE-S** Redefines the field of electric mobility

Breeze-S is an electric vehicle which gives the user a lot more than any other vehicle of its kind. After thousands of development hours, thousands of kilometers of driving and hundreds of tests, you can say for certain that this is the electric mobility vehicle of the future. The commercial tells us that being number one is obligating. Afikim Electric Vehicles, which brought the world the news of the electric scooter, lives up to that motto every day. As a leading company in its field it launches an average of one new model every 18 months. Since the goal is to produce an electric vehicle which is up to date and innovative even after five years, the designers must anticipate what is to come and use the technology of the future.

To understand how the company has managed to mark the way for the entire industry for the last thirty years, we spoke with Avner Fishbein, the development manager and the one who also managed the flag project of the following years: the Breeze-S. He says that to lead the market of electric mobility, the company's employees are constantly on the alert. The marketers and development teams are always in close contact with the customers and the dealers in order to learn through them the needs and demands of the market. Through contact with manufactures in the car industry and frequent visits to exhibitions, they learn of the most updated technologies. "Everything is recorded. Based on need, decisions are made to either improve an existing model or to add technology to a new one", Avner explains.

A vehicle with a vision

When developing a new vehicle, the first and most important stage is the vision – the wishes of the customers and the company's employees. These are recorded in a document called 'characterization'. The process takes a few months during which time the development teams describe the new product and all of its aspects – the usage, the design, the mechanism, the control system, the method of assembly and

production, service and more. At the end of this process, you have a large book with a detailed description of your vehicle. As manager of development of the Breeze-S, Avner Fishbein was responsible for its characterization. He did it along with the marketing people. He explains that they were asked to produce a prestigious and leading electrical vehicle, that has unique performances, a unique a design, an excellent carrying ability and the most advanced electronic systems. "We have designed a sophisticated and easy to operate control system. On one hand it has few buttons, which makes it easier for the driver to familiarize himself/herself with the system. On the other hand it is most sophisticated" says Avner. The system collects data on the vehicle itself using highly sensitive microprocessors. When a technician plugs in a computer, he/she can identify and repair problems even the driver was not aware of.

The **BREEZE-S** is for you: Countless Options

The display used by the driver is flexible, smart and rich. It has signs for errors, speed, signaling, the duration of the drive, battery meter and more. At Afikim we decided wisely to allow the driver to remove some of the signs, for those who may find they get confused and distracted. One can choose from the indications available.

During characterization we took careful notice of the Breeze-S's design and its human engineering. According to Avner it was important for them to use advanced and innovative technology of plastic injection, allowing for a perfect finish with a beautiful flow and connections. The painting is also top quality, including three coats of paint and a special polish which prevents scratches.

During the design stage, a special chapter was dedicated for usability and human engineering. From the attempt to answer every need, many storage compartments were designed, each with different capacity. In addition, there are solutions and designated devices for different tasks and needs.

Each vehicle from the Breeze-S series is equipped with a quality



canopy which is an integral part, to which you can attach flexible sheets for protection in case of rain.

This is the first time that the canopy is an integral part of the scooter and does not come as a separate unit. This improves protection tremendously and gives the Breeze-S an elegant and harmonious look.

the **BREEZE-S** Succeeded in All Tests

After the careful design Afikim created the Breeze-S in a computer illustration. This is a very sophisticated 3D program which analyzes data such as the weight of the vehicle, the material from which it is made, the strength of the material, its movements and more. The result is a life-like simulation which allows the development team to carefully examine each separate part and the combination of all parts put together. When this series of tests was assembled, a prototype was built, which allowed testing the new vehicle in practice.

After the Afikim team repaired and improved the prototype, several vehicles were assembled and put through extreme tests. The tester created the most difficult condition.

One example was a driver weighing 160 kilograms, driving down a steep slope or driving in unusual heat. This series of tests took more than three months, during which the vehicles went through thousands of kilometers. The development team watched these tests carefully, check for faults, isolated the component that caused it, and improved it avoiding any future problems.

But that wasn't enough for Afikim, and so they created the Beta series.

At this stage it is important to sell the vehicle to a customer who is not a company employee, because someone who has paid for it will report objectively on every problem. He will not be satisfied with just any solution given to him/her.

The users who bought the new Breeze-S vehicles were asked to drive them as usual. A team from development paid them regular visits, interviewed them, examined the vehicles and adjusted the few little impairments that were discovered.

With the publishing of the magazine you are holding in your hands, the testing is over. Now each and every one of you can enjoy the innovations and advantages of the Breeze-S. The public response to the vehicle, along with the prestigious award it has won, guarantee the perfect driving experience.

BREEZE-S

More than ever before

Offering an enhanced driving experience with special attention to driver comfort



Featuring the most advanced safety system in the world, **BREEZE-S** offers exceptional comfort, easy control, and enhanced style

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|----------------------------|------------------|---------|------------|
| Length | | 155 cm | 61.02 in |
| Width | Without canopy | 68 cm | 26.77 in |
| | With canopy | 110 cm | 43.31 in |
| Height | Without canopy | 118 cm | 46.46 in |
| | With canopy | 170 cm | 66.93 in |
| Seat width | Single seat | 45 cm | 17.72 in |
| | Extra wide seat | 85 cm | 33.46 in |
| Total weight | Without battery | 109 kg | 240.30 lbs |
| Ground clearance | | 12 cm | 4.72 in |
| Turning radius | Breeze-S 3w | 180 cm | 70.87 in |
| | Breeze-S 4w | 220 cm | 86.61 in |
| Max weight capacity | | 160 kg | 352.74 lbs |
| Max speed | Up to: | 15 km/h | 9.32 mph |
| Max reverse speed | Up to: | 5 km/h | 3.1 mph |
| Driving range | Up to: | 45 km | 27.46 mile |
| Dual braking system | Automatic+Manual | | |
| Motor | Rear transaxle | 24V DC | |
| Climbing ability | | 21% | |

MORE COMFORT, MORE SAFETY AND MORE CONTROL IN ONE STYLISH VEHICLE **BREEZE-S**, THE ULTIMATE SCOOTER FOR OUTDOOR DRIVING

AFIKIM 
ELECTRIC VEHICLES