

SCORPION PRECISION INDUSTRY CO. LTD

Your Quality Brushless Power System Provider



THE COMPANY HISTORY

In 1987, the Scorpion Precision Industry Company was founded by Georges Van Gansen, an avid RC enthusiast since his early teens, for the purpose of manufacturing the highest quality glow plugs available for both sport and competitive RC flying. These original Scorpion products received wide acclaim throughout Europe and Asia during the late 1980's, and were frequently found in the winner's circles of many national competitions. Over the years, the Scorpion company grew and diversified, moving into other areas of manufacturing, but through these changes, Georges maintained his love for the RC hobby, and continued flying and competing in RC contests.

As the RC hobby evolved, electric power systems for model aircraft became more popular. During this time, Georges became interested in electric flight, and began competing in electric pattern and pylon racing events. Unfortunately, the electric power systems that were commercially available at that time did not hold up well to the stress of competition, and many flights ended with a trail of smoke coming from the motor, speed controller, or occasionally, both. After searching for several years to find a motor and speed controller that could withstand the rigors of serious competition, Georges realized that there were not many available, and saw this as an opportunity to provide a high quality power systems for electric flyers. In 2005, George set aside a portion of his manufacturing facility, hired a team of design engineers, and set forth the following challenge: "Design a top quality motor and speed controller that will not burn up under the stress of competitive flying. Find the best materials that are available, and use them to make motors and speed controllers that can take the punishment that racing and competition has to offer." The engineers took the challenge, and began work towards this goal.

During extensive testing of other commercially available electric motors, it was determined that the weak link in the chain was the type of magnets that were being used. The Neodymium Iron Boron (NdFeB) magnets that are commonly used in brushless motor construction are the N50 and N48M grades, which can withstand operating temperatures of 80°C (176°F) and 100°C (212°F) respectively. Operation above these temperatures leads to irreversible loss of field strength within the magnets, which causes a runaway current situation that eventually burns out the motor windings. Scorpion engineers determined that the key to developing a true competition grade motor was to use better magnets with a higher temperature rating. To this end, Scorpion sought out the best magnet manufacturers in the world, and eventually had a new style magnet custom made for their motors. These magnets carry an N50EH rating, and can withstand operating temperatures of 200°C (392°F), making them virtually immune to overheating problems. No other motors made use these magnets, and this feature sets Scorpion motors apart from all other brands available today. To compliment these exceptional new magnets, Scorpion winds their motors with wire that is rated for use at 180°C (356°F) to ensure consistent operation in the most demanding applications. Scorpion engineers then selected high quality materials for the stator plates, and special steel alloys for the flux ring, creating a system of components that work together to make Scorpion one of the most advanced brushless motors available for RC use today.

To complete the power systems, Scorpion engineers also set out to develop a series of speed controllers that would not only work well, but would also set new standards for ease of use and attention to detail. The Scorpion Commander Speed Controllers are the result of this commitment to quality and engineering excellence. Scorpion motors and speed controllers not only work great, they look good too! From the beautiful gold anodized aluminum parts and black Electro-coat finish, to the laser engraved part numbers and logos, Scorpion Motors and Speed Controllers set new standards for fit, finish, function and appearance.

In 2006, Scorpion Products were introduced to the general public through a series of Beta test programs, and this feedback further refined the product to produce the finished form that is presented here in this catalog. The first Scorpion production motors and speed controllers were made available to the public in January of 2007. Since then, they have rapidly become the power systems of choice for modelers all over the world, and Scorpion continues to improve the quality and diversity of the product line as new models are released.

Pictured above are the new, state of the art, 377,000 square foot manufacturing facility and engineering centers, where Scorpion Motors and Speed Controllers are designed and assembled. Built in 2005, this complex has a staff of over 1000 factory workers and engineers, and is ISO 9001 certified for quality. The factory is also committed to maintaining ROHS (Reduction Of Hazardous Substances) compliance on all production lines. The manufacturing area includes modern CNC milling machines, both 3-axis and 5-axis, along with a CNC lathe, allowing for in-house manufacturing of critical motor parts to maintain high quality standards. Scorpion's long term business plan, in the RC products division, is to produce the largest selection of brushless motors, speed controllers and accessory products available anywhere, with quality and commitment to customer satisfaction the primary focus.

Scorpion Precision Industry is so committed to the quality of these brushless motors and speed controllers, that they are backed with a full 2-year warranty against defects in materials and workmanship. You have a choice when it comes to purchasing an electric power system for your next model, and when you consider the Quality, Performance and Value that these motors and speed controllers offer, the choice is obvious: **Scorpion Brushless Motors and Speed Controllers.**