

*DC Motors & Motion Control systems
Designed to Meet the Challenge*

Bental Industries, recognized worldwide for high quality, field proven electric motion systems, underscores its hard earned track record of operational success with a comprehensive land systems products offering for AFVs and other ground force platforms. The company has distinguished itself for years as the leading electric power & motion systems supplier for Israel's defense industry, the IDF, and a host of military and civilian clients around the globe.

Bental's land, airborne, and marine solutions share extreme ruggedness, superior high power to low weight ratio, and an impressive reliability track-record, while offering the benefits of simplicity combined with the unique attributes of a customized system. Spotlighting its electric power and motion solutions for land systems, the company presents a range of DC brushless and brush motors as well as blowers. These perform critical tasks that enable the operation of vital, complex systems, and reach new levels of reliability under challenging field conditions.

The company's line of DC Brushless Motors and DC Brush Motors ranges from 28W to 4KW and serves a multitude of roles and a broad range of land applications. These include limited angle torque motors for sight control as well as motors for turret control, tank or AFV commander hatch, overhead weapon stations, active armor systems, air-conditioning & NBC systems door-assist actuators, and more. Bental specializes in low voltage brushless and brush motors, however the company's engineering capabilities enable it to meet specific customer requirements by offering high voltage electric products as well. High voltage has a correspondingly low current demand on the system. This results in overall savings since there is no need for either a thick and heavy harness or for physically large electronic components. Low voltage products offer the advantages of light weight and small size while providing high power and high reliability in the same package. The company meets special customer demands by designing and manufacturing custom feed-back sensors, Tacho generators, specialized electric brakes, reduction gears, and many other customized components. Sensors provide the system with feedback capabilities that include information on shaft angular location, rotation speed, etc.

The company's blowers move large volumes of air in and out of an AFV's protected interior compartment extracting smoke and other types of airborne contaminants, while supplying clean air to personnel onboard, The company's Dust Scavengers prevent dust from entering a tank's or AFV's engine. Bental's blowers and Dust Scavengers are an outgrowth of the company's well known motors. The company has been able to combine its specially designed aerodynamic components with its high performance motors to produce precisely directed, efficient, high capacity air flow entering or leaving a given compartment in a manner specifically required by each platform. This affords the range of performance parameters that have made Bental's proven blowers the choice of leading combat land platform users worldwide.

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Known for their ability to provide uniquely wide ratios of low weight to high power, Bental's systems boast a level of reliability that enables them to withstand particularly punishing conditions including strong vibrations, shock, temperature extremes, dust, humidity, and more. Indeed, the company's vast experience and its track record of providing rugged, light, and powerful motion systems of the highest quality has led to their selection as the systems of choice for the IDF's remarkable Merkava MBT. The Merkava is outfitted throughout with Bental's motors and blowers whose spectacular performance under difficult combat and environmental conditions, has led to their selection for the IDF's new Namer AFV.

Over its years of experience and with a multitude of products, the company has been able to maintain its emphasis on ensuring that its products always meet specific customer and platform requirements. Bental has repeatedly been able to supply specially modified systems for each specific customer while demonstrating the ability to ramp-up production rates to meet any required increase in quantity. The MRAP project highlights this point. For this large scale project, Bental has been able to start supplying the high numbers of its motors within a very short lead time while maintaining its uncompromising quality.