



*Eagle Performance Series* chargers are specially designed for use in the industrial and electric vehicle markets. With over 20 years of experience in manufacturing the legendary Dual Pro™ charging systems, Pro Charging Systems chargers have become known as the name in charging technologies. We pride ourselves on the performance and versatility of our products, our charging profile capabilities and solutions, and our outstanding customer service.

<u>Battery Manufacturers Specifications</u>	<u>PCS Charging Profile Capabilities</u>
Maximum voltage settings and amperage input requirements vary with different battery sizes	Intuitive PCS chargers adjust for battery size, i.e.: 150-400 amp hour battery determination capability
As the battery manufacturer changes the chemistry in the manufacturing process the charger needs to be capable of new charging methodologies	Charging profile code is written internally by PCS engineers and is routinely modified as battery manufacturers update the chemistry
The criticality of the first 25-50 battery charge cycles in determining the overall batteries cycle life and power	PCS employs 5 stage charging algorithms to facilitate the batteries break-in period and cycle life development
Wet Cell, AGM and Gelled Electrolyte (Gel) batteries require different charging profiles for their chemistry differences	PCS has a unique way, with our internally written code, to ensure the charger will not under or over charge these types of batteries

<u>Battery Issue</u>	<u>Problem Created By</u>	<u>PCS Charger Solution</u>
Premature power loss	Sulfated plate residue due to under charging of battery	Profile of our charger provides "equalization" phase after absorption phase during charging cycle
Shortened cycle life	Under charging of battery	PCS's charger profile is capable of reaching the desired current as dictated by battery manufacturer's specifications
Premature failure	Loss of electrolyte due to overcharging	Charging code developed by PCS controls current to the battery based upon the intuitive nature of charger with respect to the amp hour size of the battery
Non-sealed battery excessive water loss condition	Battery being over charged	The intuitive PCS charger recognizes when the battery reaches a 100% charge by monitoring critical voltage and time characteristics
Battery pack bulging or exploding	No circuit protection	Reverse polarity, soft start and zero spark technology employed by all PCS manufactured chargers
One battery in the battery pack fails causing all batteries in the pack to fail	A battery manufacturing defect not detected by the charger during the charging cycle	All PCS chargers are capable of determining an individual battery failure during the bulk stage of the charging profile
Shortened life expectancy	Lack of adequate rest time between end of charge cycle and next use	The high constant amperage output as demanded by the battery from the PCS charger ensures the proper charge profile with the quickest charging cycle time