Quadrant magnetics IS improving automotive vehicle paint quality.

For the last 2 years Quadrant has steadily ramped up with major automotive manufacturers in the USA and Europe to address the ultimate goal of improving vehicle paint quality.

“Paint” and “Magnets”?? You may ask…………… Well the answer is YES!!!!!

One of the most critical elements of vehicle paint quality is eliminating any contaminants caused during the manufacturing process. Paint contaminants are termed “Dirt” by the industry. Dirt is caused by surface rubbing as the car bounces and rocks during the paint manufacturing line process. Surface rubbing happens at the interface of body panels and the temporary retaining tools used to secure the panels.

Due to the hard bump stops, quick line changes, abusive turntables and chain drive systems used on the manufacturing lines, vehicles are subjected to violent starts and stops. A typical process to retain the doors and prevent them from opening was a single use plastic latch. The plastic latch had to be manually threaded into place on the door strike plate location. Unfortunately, due to the described rough conditions, doors were always prone to shaking and opening unexpectedly. The shaking and opening resulted in “Dirt” on painted surfaces, and even worse the doors could open and crash into objects causing dents.

In 2015 Quadrant was tasked by a local automotive manufacturer to design and implement a system that would both eliminate the dirt contamination and allow a simple installation method. The manufacturer wanted to eliminate the need for power tool installation, eliminate employee physical stress, eliminate scrap and ultimately produce large cost savings.

Quadrant provided the manufacturer with an easily installed dual magnetic retention system. Quadrant’s magnetic retention system is responsible for increases in quality and a decrease in repairs and reworks. There are also many savings which are attributed to the elimination of paint re-work costs, scraping doors, and the elimination of waste from recycling single use plastic clips.

It was their innovative mindset that brought us on board, creating a partnership focused on improving quality. With our innovative changes this plant has attained the highest paint quality rating out of all the company’s other manufacturing facilities, approximately 30 worldwide.