### Case Study: Southeastern USA Manufacturer Lawn and Turf Equipment





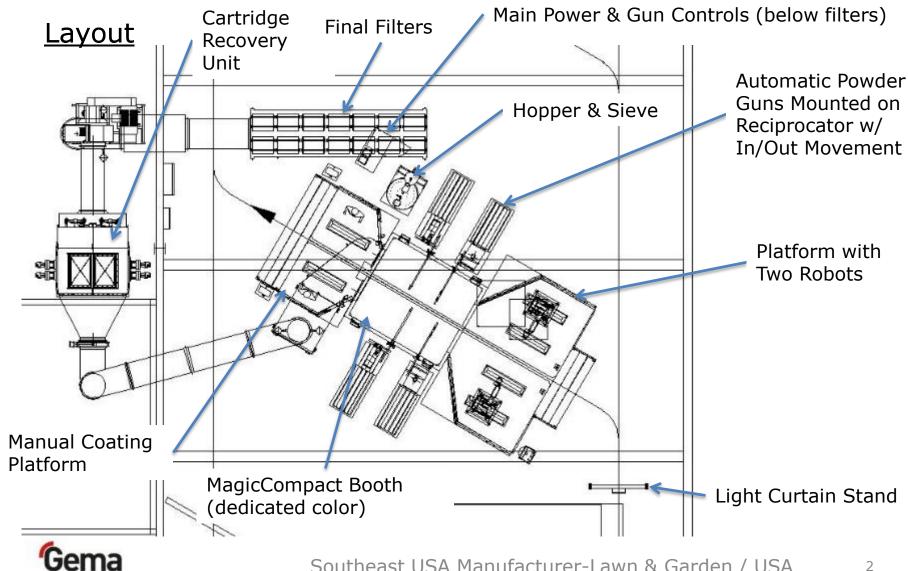


Robotic automation

Improve material utilization

Increase production throughput





#### <u>Installation Key Data</u>

Parts: Lawn and Garden Equipment

Part Size: 48" W X 72" H X 72" L (1220 x 1830 x

1830 mm)

Line Speed: 9 FPM (2,75m/min) Scope of equipment purchased:

#### **Automatic Booth**

1 MagicCompact® EquiFlow® Series Booth, 19,000 CFM

 $(32'000 \text{ Nm}^3/\text{h})$ 

- 2 OptiFlex® 2 Series manual units (touch-up)
- OptiGun® GA03-X Automatic Guns, OptiStar® CG08, and OptiFlow IG06 Injectors
- 2 Reciprocators with Automatic in/out positioning
- 1 MagicControl 4.0 operating controls package
- 2 Robots with one (1) RobotGun GM03-R each
- 1 Reclaim Stand with a Rotary Sieve and 200 pound (90kg) hopper
- 1 Dense Phase Transport System, PP06











#### **Company Profile**

This Manufacturer is located in the southeaster part of the USA. What started out as a small satellite factory is now the highest volume facility within the corporation. This facility manufactures the riding lawn tractors and residential zero-turn mowers that are sold throughout the USA at dealerships and major home improvement retailers.



Although this plant has applied powder coating for many years, they were experiencing a variety of issues that negatively impacted productivity and increased applied costs. These issues ranged from excessive powder waste, inconsistent film thickness and poor coverage, as well as higher rework and scrap rates. Additional attention was needed improving performance and reliability from the robot guns.

#### **Keys to Success**

After a successful in-plant testing, they chose to replace the robot guns with new Gema robot guns. Several months later they chose to replace the existing booth and automatic guns with the Gema MagicCompact® EquiFlow® booth and automatic guns along with incorporating the robot units. The results of the conversion yielded significant results in lower rejects, reduced powder consumption, improved productivity and coating coverage.













