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## Interview With Geoff Moore, Director of Sales, Empire Air and Wheel Blast Equipment Co.

# Advancing Wheel Blast Technology

EMPIRE ABRASIVE EQUIPMENT


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## Proof, Innovation, and Support Beyond the Machine

# Advancing Wheel Blast Technology

***Purchasing abrasive-blast equipment is a significant business decision. The machine must achieve the required surface condition, support production goals, control operating costs, and perform reliably for years. Yet the equipment itself represents only part of the investment. The manufacturer's application knowledge, engineering capabilities, project management, testing, installation support, and commitment after the sale can ultimately determine whether the project succeeds.***

***In this interview, Geoff Moore, Director of Sales, explains what distinguishes Empire Wheel Blast Equipment, how the company is innovating in a mature industry, and why manufacturers can trust it with a critical production investment.***



**Geoff Moore, Director of Sales, Empire Air and Wheel Blast Equipment Co.**

### More Than an Equipment Purchase

**(?) MFN:** When a business owner evaluates wheel-blast equipment, why shouldn't the decision be based primarily on machine specifications and price?

**(!) G. M.:** Specifications and price are important, but neither one tells you whether the machine will reliably produce acceptable parts in the customer's facility.

Our approach is to understand the customer's business objective first. We want to know what the company is processing, what result it needs, how many parts it must produce, how the parts move through the facility, and what problem it is trying to solve. Only then can we recommend the right processing method and equipment platform.

The difference begins with accepting responsibility for the process, not simply supplying a machine.

**(?) MFN:** How does that approach affect your recommendation?

**(!) G. M.:** It allows us to be objective. Sometimes a customer requests automation when a standard machine with practical modifications will accomplish the goal. In other cases, a customer initially asks for a basic batch machine, but the production requirements, labor costs, or quality expectations support an automated system.

Our goal is to specify the most efficient solution that meets the customer's requirements and provides long-term value. The best recommendation is not always the largest, fastest, or most expensive machine.




**Empire's WM27 wire mesh belt wheel blast system delivers consistent surface preparation in a continuous production process, helping customers reduce manual handling and prepare parts for downstream operations**

### Proving Results Before the Investment

**(?) MFN:** Capital-equipment purchases always involve risk. How does Empire Wheel Blast Equipment help reduce it?

**(!) G. M.:** One of our strongest advantages is the ability to test actual customer parts in our Wheel Blast Demonstration Lab. Instead of relying exclusively on calculations or past experience, we can evaluate the part under real operating conditions.

Our laboratory includes tumble, table, spinner-hanger, overhead-hanger, and wire-mesh belt equipment. We can test different media, exposure times, wheel arrangements, part orientations, and processing methods. That helps us determine whether the required finish is achievable and which equipment platform provides the best result.

Every Request for Test is assigned a sample number and reviewed by our demonstration lab team and the Regional Application Manager. We clarify the customer's objective before testing begins, whether that involves surface preparation, cleaning, deburring, peening, coating adhesion, appearance, or production rate. That structure keeps the test tied to the decision the customer must make.



**Empire air and wheel blast equipment undergoes rigorous testing before shipment to verify performance, confirm proper operation, and ensure quality before arriving at the customer's site**

**(?) MFN:** What makes your full-scale wire-mesh belt testing capability different?

**(!) G. M.:** It allows customers to evaluate continuous throughput rather than testing only a few parts in a small batch machine. We can process larger quantities, longer or irregular parts, and mixed-part loads under conditions that more closely resemble production.
After testing, we provide a documented report that can include process parameters, media information, observations, adjustments, photographs, video, and recommendations. We also return the processed parts so the customer can inspect, coat, assemble, measure, or test them internally.
Depending on the application, the report may also include surface-profile measurements, cleanliness results, peening intensity and coverage, cycle times, or estimated production rates. If a manufacturer is considering replacing a manual process or bringing outsourced work back in-house, testing gives it a documented starting point rather than forcing it to recreate the process through trial and error.
If possible, we strongly recommend that customers visit our facility and take part in the testing process. That is often the ideal scenario for collaboration and for determining the best solution moving forward. The customer is not being asked to purchase equipment based solely on our assurance. We provide physical evidence.

## Practical Innovation in a Mature Industry

**(?) MFN:** Wheel blasting is an established technology. What does innovation look like in a mature industry?

**(!) G. M.:** Innovation does not always mean adding technology for its own sake. It means solving a customer problem in a better way.
We focus on practical innovation: changes that improve safety, consistency, productivity, flexibility, maintenance, or total operating cost. The technology must create measurable value for the customer.

**(?) MFN:** What is an example of Empire Wheel Blast Equipment challenging a traditional processing method?

**(!) G. M.:** Our TB120 Series is a good example. Large parts have historically been processed manually in air-blast rooms because of their size and weight. We asked whether some of those applications could be handled in an automated wheel-blast system instead. The TB120XT uses a 120-inch-diameter manganese-steel turntable rated for parts weighing up to 10,000 pounds. It can accommodate workpieces up to approximately 10 feet wide and 12 feet tall. Two direct-drive blast wheels provide controlled abrasive coverage while the table rotates the workpiece. A notched top allows center-crane loading, and the process is managed through an HMI.

## Engineering Around the Customer

**(?) MFN:** What differentiates Empire Wheel Blast Equipment's engineering process?




**The right wheel blast system starts with the customer's parts and production requirements. Empire uses these criteria, together with close collaboration with our customers, to select the platform best suited to the application**




**Empire's full staff of mechanical and electrical engineers brings comprehensive design expertise to wheel blast equipment, developing integrated solutions tailored to each customer's application and production needs**

**(!) G. M.:** We assign a team to engineered projects. That team can include a Regional Application Manager, Project Manager, mechanical and controls engineers, manufacturing personnel, and the local surface-finishing distributor.

**(?) MFN:** How does the customer remain involved after the order is placed?

**(!) G. M.:** Through defined project milestones and regular communication. Customers review drawings and CAD models so they can confirm the machine layout, loading method, access points, controls, interfaces, and other important details.

As the machine moves into manufacturing, our Project Managers communicate progress and manage open items. Before shipment, we conduct factory testing and, when applicable, a formal Factory Acceptance Test using customer parts.

## Built and Supported in the USA

**(?) MFN:** Why should a business owner care where and how the machine is manufactured?

**(!) G. M.:** Domestic manufacturing and in-house capabilities improve control, responsiveness, and long-term support. We fabricate many machine components and build electrical panels and controls internally. We also retain the drawings, bills of materials, programs, and equipment history needed to support the system after it enters production.

## Startup Is Part of the Solution

**(?) MFN:** How does Empire Wheel Blast Equipment help ensure that factory performance transfers to the customer's facility, and what is your Smart Start Service?

**(!) G. M.:** Installation and startup are critical. The machine may have performed well during factory testing, but it still must operate with the customer's utilities, employees, material flow, and production conditions.

During startup, we verify wheel rotation, abrasive flow, recovery and separation, dust collection, part handling, controls, interlocks, and safety functions. We process parts, adjust operating parameters, and optimize the blast pattern.

Training is also essential. Operators need to understand loading, recipes, inspections, and normal machine behavior. Maintenance personnel must know the primary wear points, service intervals, adjustment procedures, and early indicators of a problem.

Our Smart Start Service brings those activities together in a structured startup and production-readiness process. We work with the customer's team at the machine, using actual parts and operating conditions whenever possible. We confirm that the equipment, process settings, material handling, dust collection, safety systems, and employee training are working together as intended.

The objective is not merely to demonstrate that the machine turns on. Before our team leaves the facility, we want the customer prepared to load parts, select or manage the correct settings, recognize normal machine performance, complete routine inspections, and begin production with confidence. That provides peace of mind that the handoff is complete and that the customer is not left alone to translate a successful factory test into a working production process.

## Protecting the Investment

**(?) MFN:** How does Empire Wheel Blast Equipment support customers after startup?

**(!) G. M.:** We provide technical assistance, troubleshooting, OEM replacement parts, preventive-maintenance guidance, and local support through our distributor network.

Wheel-blast equipment operates in an inherently abrasive environment. Wheel components, liners, elevator belts, buckets, seals, bearings, and recovery-system components will even-

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**Geoff Moore, Director of Sales, Empire Air and Wheel Blast Equipment Co.**

tually wear. The key is managing that wear before it affects production quality or creates an unexpected shutdown.

### Trust Through Accountability

**(?) MFN:** Many manufacturers claim quality, service, and innovation. Why should customers trust Empire Wheel Blast Equipment?

**(!) G. M.:** Trust must be demonstrated through the way a company manages the entire relationship.
We begin by asking questions and gathering data. We test parts before the purchase when possible. We provide drawings for approval. We communicate during production. We run the equipment before shipment. We support installation and startup. We train the customers' employees. Then we remain available with technical service, local distributor support, and replacement parts.
Customers are making a substantial investment, and the equipment may support a critical part of their production. They deserve a manufacturer that is accountable for more than steel and components.

**(?) MFN:** How would you summarize the Empire Wheel Blast Equipment difference?

**(!) G. M.:** The Empire Wheel Blast Equipment difference is the combination of proven equipment, application testing, in-house engineering, practical innovation, disciplined project management, domestic manufacturing, and long-term support.
A customer does not have to depend on a promise that the process should work. We can test it. The customer does not have to navigate a custom project alone. We assign a team and manage it through defined milestones. The customer does not lose access to us after installation. We remain involved through service, parts, upgrades, and local support.
We want customers to choose Empire Wheel Blast Equipment because they believe we provide the best solution and because they are confident that we will stand behind it. That confidence is not created by a single feature or sales presentation. It is earned at every stage, from the first part we evaluate to the machine's first production run and throughout the years that follow.

*MFN would like to thank Geoff Moore for this interview!*

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