COAST INDUSTRIAL SYSTEMS, INC.
2223 Verus Street • San Diego, California 92154

November / December 2021

In This Issue

- *Ditching Your Air Compressor*
- *FEATURE: Graco's KING– E Series Industrial Electric Airless Sprayers*

Bye, Felicia

Eliminating The Need For Air Compressors

Coating industry technology evolves every day, finding faster and more efficient means of accomplishing tasks. In the case of sprayers, adding a lower environmental impact is another bonus.

A new product that eliminates the need for costly compressors and offers a direct electric power source for your airless sprayer, providing one unit to more efficiently tackle the job at hand.

Why were air compressors necessary in the first place?

Air compressors are typically needed to power airless sprayers. Painting through a spray gun requires a lot of pressurized flow of paint to attain the right flow of paint from the gun. It atomizes the paint in the gun and sprays with high volume and low pressure.

A Brief History Of Air Compressors [1]

Dating back to the origin of mankind is the first air compressor: the human lung. Since the human body can exhale air, primitive people used their own breath to blow on cinders and create fire. But healthy lungs can only produce .02 to .08 bar of air pressure.

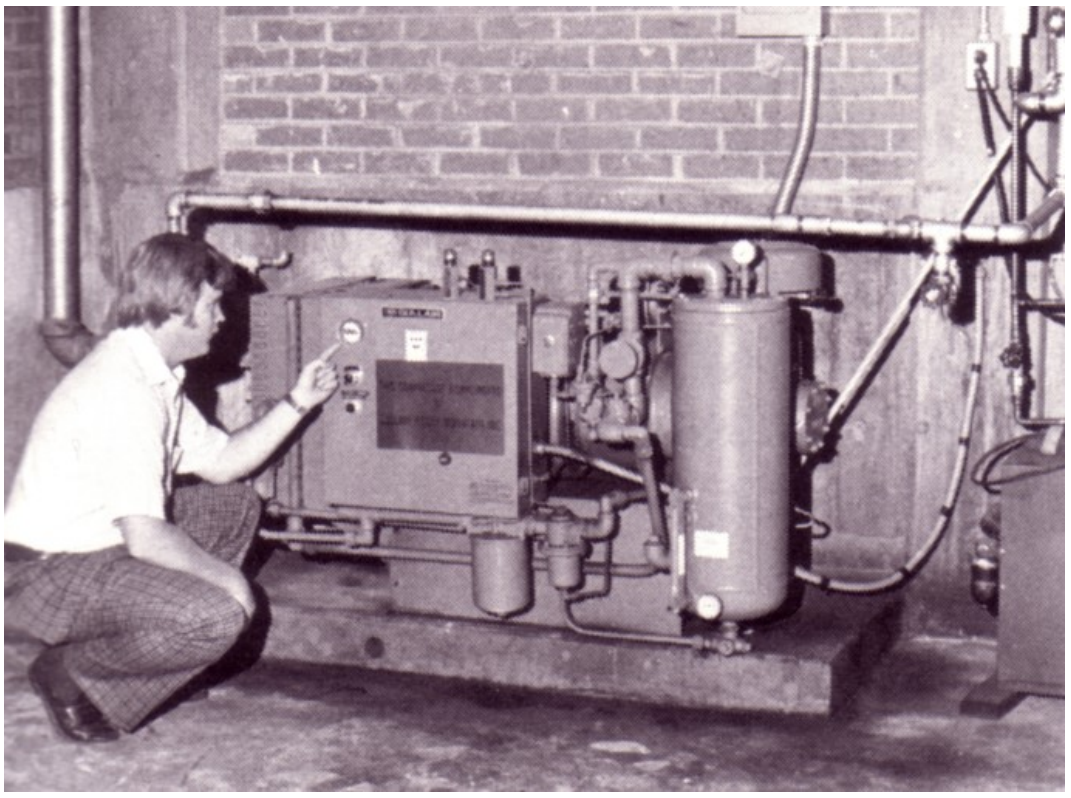
As people began melting metals such as gold, copper and tin, higher temperatures and a more powerful source of air was needed. Here began the evolution of the air compressor, starting with the use of wind and blowpipes by Egyptian and Sumerian metallurgists. This was followed by the invention of the first mechanical compressor – the hand-operated bellows – and then the more efficient foot bellows in 1500 B.C. This device, a flexible bag whose volume could be changed by compression or expansion, produced a concentrated blast of air ideal for achieving higher temperature fires, while allowing its operator to perform tasks hands-free.

In 1650, German physicist Otto Von Guericke designed a vacuum pump that could pull gas through tiny chambers and leave compartments air free.

More than a century later, John Smeaton conceived an even more influential idea. He was the world's first professional engineer, and in 1762, he designed a new type of blowing device driven by water wheels. This was followed in 1776 by English inventor John Wilkinson, who created a high-powered blasting unit that would serve as a precursor to the machine compressor of today.

Over the years these prototypes improved and evolved, and in 1829 the first compound air compressor, a device that compressed air in successive cylinders, was patented.

During the turn of the century, portable compressors on wheels were introduced and by 1910 most commonly had one large, single-stage compression cylinder driven horizontally by a steam or oil engine. Portable compressor development was quickly stimulated by the invention of the lightweight air drill which would aid in the development of city skyscrapers and suburban communities.



With the help of portable compressed air, the Industrial Revolution saw road construction, bridgework, and railroad development open new economic opportunities for farmers, factory owners and various businesses to expand market potential and profitability.

Why ditch the compressor?

Graco recently released a line of all-in-one units for airless spray, their King E-Series Electric Airless Sprayers.

Why choose the King E series?

- *The air compressor that is required to provide the compressed air for your spray gun or airless paint sprayer is typically the largest cost of the overall unit.*
- *Compressors can cause inefficiencies in spray quality. Less pulsation means a more consistent spray pattern.*
- *Less noise- Air compressors are typically loud. With the power source as part of the unit, operation is quieter, allowing for more indoor use.*
- *Eliminating the air compressor reduces energy use by about 80%.*
- *Hazardous locations have been approved as there are no poisonous fumes emitted.*
- *In the presence of harsh winter climates, air compressors can become iced. Eliminating the compressor eliminates this concern.*

If the King E-Series sounds like the right fit for your business needs, contact your CIS representative today!

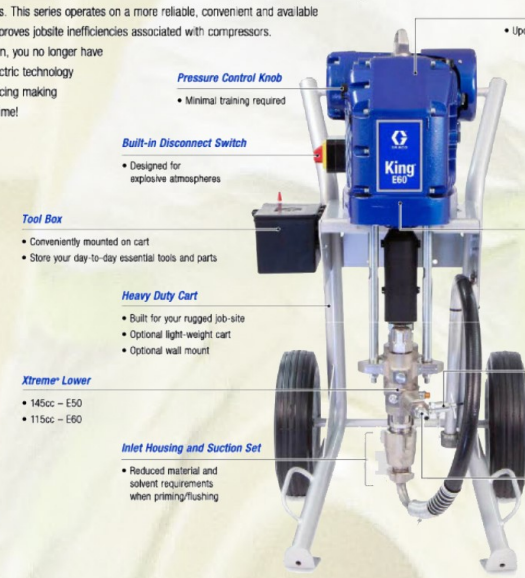
[1]From Bellows to Beyond – A Brief History of the Air Compressor: *Sullair* , October 2020

COAST INDUSTRIAL SYSTEMS, INC.

2223 Verus Street • San Diego, California 92154

King E-Series Electric Sprayer for Hazardous Location

Graco's King E50 and E60 Electric Airless Sprayers are the world's first electric sprayer for protective coatings approved for hazardous locations. This series operates on a more reliable, convenient and available electric power source, which improves jobsite inefficiencies associated with compressors. If your air compressor goes down, you no longer have to stop production. More so, electric technology eliminates pulsation and motor icing making your jobs run smoothly - every time!



Pressure Control Knob
- Minimal training required

Built-in Disconnect Switch
- Designed for explosive atmospheres

Tool Box
- Conveniently mounted on cart
- Store your day-to-day essential tools and parts

Heavy Duty Cart
- Built for your rugged job-site
- Optional light-weight cart
- Optional wall mount

Xtreme® Lower
- 145cc – E50
- 115cc – E60

Inlet Housing and Suction Set
- Reduced material and solvent requirements when priming/flushing

Electric Driver
- Updated driver for complete safety while spraying in hazardous locations
- Minimal service driver
- More up-time, less hassle, reduced maintenance costs
- **E60** - Up to 6000 psi stall (5000 psi dynamic)
- **E50** - Up to 5000 psi stall (4000 psi dynamic)

Electrically Operated
- No compressor maintenance costs
- 220V (15A); or 110V (25A)
- Single Phase 50/60 Hz
- Truly airless spray technology
- 3 year limited warranty

Drain/Purge Valve
- Relieve pressure in the gun and hose quickly

Check Valve
- Maintain consistent fluid pressure

King E-Series Electric Sprayer for Non-Hazardous Location

The King E60 & E70 Electric Sprayers are an electric alternative to air-operated single-leg sprayers. They produce a smooth, consistent, evenly distributed spray pattern – without the need to tow a large compressor.

Dual Cooling Fans
- Sprayer operates in temperatures up to 120°F (50°C)
- Ideal for continuous duty applications

Electrically Operated
- *High / Low amperage mode*
- *220V (15A/20A); or 110V (20A/30A)*
- Single Phase 50/60 Hz
- Truly airless spray technology

Electric Driver
- **E60** - Up to 6000 psi stall (5000 psi dynamic)
- **E70** - Up to 7250 psi stall (6300 psi dynamic)
- 3 year limited warranty

Portable, Light-weight Cart
- Easy to maneuver
- Optional heavy-duty cart
- Optional wall mount

Xtreme Lower
- Quick knock down for easy repairs
- 145cc – E60
- 115cc – E70

Check Valve
- Maintain consistent fluid pressure

Which King Electric System is Right For You?

APPROVALS	Hazardous Locations: ATEX, IECex, FM-US, FM-CAN		Non-Hazardous Locations: Not for use in explosive atmospheres	
MODEL	E50	E60	E60	E70
Maximum Stall Pressure	5000 psi (350 bar, 35.0 MPa)	6000 psi (415 bar, 41.5 MPa)	6000 psi (415 bar, 41.5 MPa)	7250 psi (500 bar, 50.0 MPa)
Maximum Recommended Tip Size	0.021 in (0.53 mm)	0.023 in (0.58 mm)	0.023 in (0.58 mm)	0.023 in (0.58 mm)
Flow Rate @ Spray Pressure	0.6 gpm (2.3 lpm) @ 4000 psi (276 bar, 27.6 MPa)	0.7 gpm (2.7 lpm) @ 5000 psi (350 bar, 35.0 MPa)	0.9 gpm (3.4 lpm) @ 5000 psi (350 bar, 35.0 MPa)	0.7 gpm (2.7 lpm) @ 6300 psi (435 bar, 43.5 MPa)
Pump Lower	145cc	115cc	145cc	115cc
Input Power	Single Phase 50/60Hz: - 100-120V (25A); or - 200-240V (15A)		Single Phase 50/60Hz: - 100-120V (30A); or - 200-240V (20A)	
Operating Temperature Range	23°F to 120°F (-5°C to 50°C)		23°F to 120°F (-5°C to 50°C)	
Sound Pressure	<80 dB (A)		<80 dB (A)	
Operation Manual	3A8126		3A8477	

For more information, visit Graco's website.

Read their product brochure here.

For A Demonstration Video, click here.

COAST INDUSTRIAL SYSTEMS, INC.

2223 Verus Street • San Diego, California 92154

COMPANY OVERVIEW

Coast Industrial Systems, Inc. is the #1 supplier of painting and coating application equipment to the marine and manufacturing industries, and is proud to serve both San Diego and Mexico since 1986.

Coast Industrial Systems, Inc. has always placed the customer first, and strives for business excellence in all ways. Our friendly sales and customer service staff are knowledgeable, experienced and qualified to help meet your painting and coating application requirements, and to exceed your expectations.

Graco Top 20
High-Protective Coatings & Foam
Distributor Award Winner
2010-2020