

## Electrostatic Spray Gun Selection Guide



**ITW RANSBURG  
ELECTROSTATIC SYSTEMS**

PROVEN LEADERSHIP IN  
ELECTROSTATIC FINISHING

# VECTOR Solo™



**Replaceable Cascade...**  
for easy maintenance

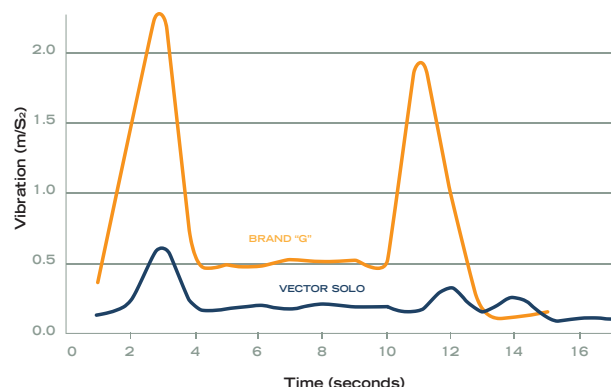
**Lock-in-place air cap positioning system...** locks air cap position in increments of 90°

**Low motor speed...**  
translates to minimal vibration transmitted to the handle. Lower vibration transmission compared to competitive units provides easier handling and less operator fatigue and longer motor life

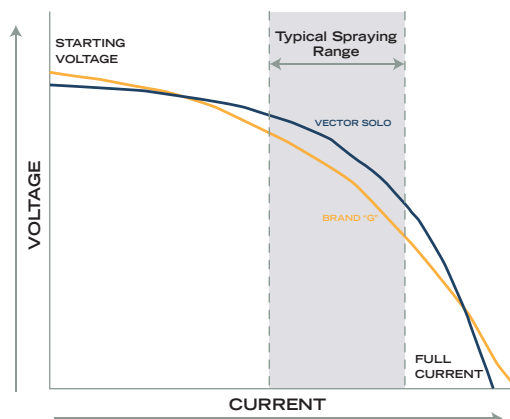
**Easily repaired...** just three metric Allen wrenches, an adjustable wrench, special gun wrench and the jam nut tool are all the service tools required to totally disassemble and re-assemble the unit.

## GUN VIBRATION

The balanced motor, true bearing and slower operating speeds of the Vector Solo, dramatically decrease the torque and vibration felt at the handle compared to other guns, leading to less fatigue and higher output.



In the Typical Spraying Range, the Vector Solo produces higher KV which results in better Transfer Efficiency and less overspray.



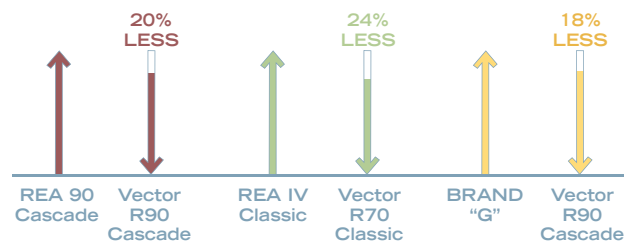
# VECTOR™



**Easily maintained...** modular design and reduced parts make repair or parts replacement easy

**Triple set point control...** puts unparalleled on/off voltage control right at the user's fingertips and provides for flexible movement between three pre-selected voltage levels.

## GUN WEIGHT



We cut the weight 24% over other electrostatic guns! This improves operator comfort and reduces fatigue, both of which add up to improved productivity and job satisfaction.

# NO. 2 PROCESS GUN

The ITW Ransburg No. 2 Gun is the most efficient applicator for on-site finishing. The Gun's high transfer efficiency provides improved productivity, reduced operator fatigue and higher quality finishes. Reduced labor and material costs, as well as reduced clean up are just a few of the money saving benefits at a cost effective price.



**Superior Bell Coating...** durability and design ensures extended life for the equipment.

**Improved Atomization...** gives a higher quality finish.

**Trouble-free Assembly...** the straightforward design makes the unit easy for one person to handle.

# ITW RANSBURG ELECTROSTATIC GUNS:

From The World's Leader In Electrostatic Innovation

Anyone in the coatings business knows the critical advantages of harnessing electrostatic technology for their operations. Since ITW Ransburg invented the process over fifty-five years ago, the industry has embraced the special benefits electrostatic systems have provided their painters and the quality of their parts. Generation after generation of ITW Ransburg guns have yielded improvements that make the case for electrostatic spray technology ever more compelling for companies seeking higher efficiency and quality improvement.



Our full line of electrostatic guns are proof of our commitment to superior technology.

## Ransburg Electrostatic Guns Deliver world class performance

### THE ELECTROSTATIC PROCESS

The aim of the electrostatic process is to get as much coating material on the part as possible and eliminate wasteful overspray. This is achieved by negatively charging atomized paint particles so that they are attracted to the grounded workpiece...opposites attract.

A charging electrode is located at the tip of the electrostatic spray gun. The paint is atomized as it moves past the electrode and its particles become ionized – negatively charged. An electrostatic field is created between the charging electrode and the grounded workpiece, and the spray is concentrated within.

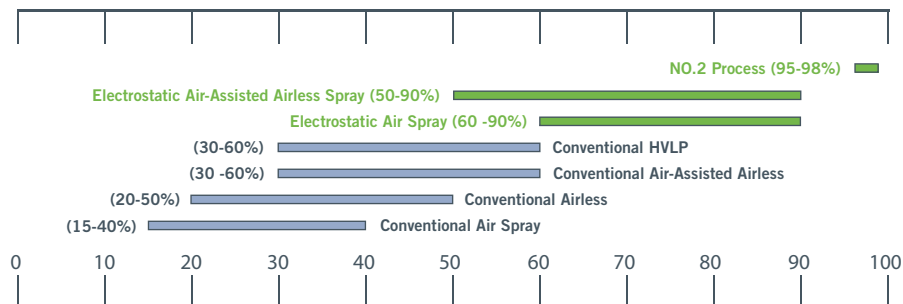
Further atomization is achieved as charged particles repel each other to form a fine cloud. As a result of electrostatic attraction, spray that would normally be lost, ends up on the back and sides of the workpiece to produce “wrap-around” effect.

The electrostatic process offers many benefits over conventional spray:

- Increased transfer efficiency
- Significantly increases quality and production
- Positive environmental impact
- Reduces Overspray, air pollution and VOC emissions
- Decreases paint costs
- More consistent part-to-part quality
- Reduced costs for the disposal of hazardous materials



### TRANSFER EFFICIENCY



This chart represents typical equipment transfer efficiencies, but not every installation. Conditions may vary due to material and application.


**R70 Cascade**

**R70 Classic**

**R90 Cascade**

**R90 Classic**

**AA 90 Classic**
**MODEL NO.**
**79501**
**79504**
**79500-solvent  
79523-water**
**79503-solvent  
79520-water**
**79581**
**CORDED**
**TYPICAL  
APPLICATIONS**

Tier 1, Automotive and  
general industrial

Tier 1, Automotive and  
general industrial

Tier 1, Automotive and  
general industrial

Tier 1, Automotive and  
general industrial

Gen. Ind., heavy equip.,  
farm, and off road

**SPRAY TYPE**

Air Spray

Air Spray

Air Spray

Air Spray

Air Assisted Airless

**TRANSFER  
EFFICIENCY\***

60-90%

60-90%

60-90%

60-90%

50-90%

**WEIGHT**

20.7 oz./586.8g

16 oz./453.6g

22.4 oz./635g

19.5 oz./552.8g

25 oz./708.7g

**LENGTH**

10"/25.4cm

10"/25.4cm

11.5"/29.2cm

11.5"/29.2cm

11.5"/29.2cm

**WATERBORNE**

No

No

Yes

Yes

No

**OPERATING  
VOLTAGE**

65kV

65kV

85kV

85kV

85kV

**NOZZLE/TIP/  
BELL SIZES\*\***

.028", .042", .047",  
.055", .070"/  
.7, 1.0, 1.2, 1.4, 1.8 mm

.028", .042", .047",  
.055", .070"/  
.7, 1.0, 1.2, 1.4, 1.8 mm

.028", .042", .047",  
.055", .070"/  
.7, 1.0, 1.2, 1.4, 1.8 mm

.028", .042", .047",  
.055", .070"/  
.7, 1.0, 1.2, 1.4, 1.8 mm

5", 8", 10", 13", 15", 17"/  
127, 203, 254, 330,  
381, 432mm

**MAXIMUM  
FLUID DELIVERY**

up to 1,000  
cc/min.

up to 1,000  
cc/min.

up to 1,000  
cc/min.

up to 1,000  
cc/min.

up to 1,500  
cc/min.

**MAXIMUM  
FLUID PRESSURE**

100 psi/6.9 bar

100 psi/6.9 bar

100 psi/6.9 bar

100 psi/6.9 bar

2,800 psi/193 bar

**HOSE AND OR  
CABLE LENGTHS**

10, 15, 20, 25, 30m/  
33', 49', 66', 82', 98'

10, 15, 20, 30m/  
33', 49', 66', 98'

10, 15, 20, 25, 30m/  
33', 49', 66', 82', 98'

10, 15, 20, 30m/  
33', 49', 66', 98'

10, 15, 20, 30m/  
33', 49', 66', 98'

**AIR**

0-100 psi/6.9 bar

0-100 psi/6.9 bar

0-100 psi/6.9 bar

0-100 psi/6.9 bar

0-100 psi/6.9 bar


**Apply Any Color Under The Sun**
**RANSBURG MAKES THEM ALL GREEN**

In the coating and finishing industries, electrostatics are synonymous with being the choice process for providing color versatility and environmental stewardship.

Ransburg liquid electrostatic coating equipment provides our end users with a sophisticated blend of technologically advanced tools and process controls designed to deliver the finest finishes while delivering the added benefits of fulfilling progressive companies' environmental program objectives.

## NO. 2 PROCESS GUN



AA 90 Cascade



NO. 2 PROCESS

## VECTOR SOLO™



85kV



65kV



AA

79580

19372

79900-solvent  
79901-water

79965

79698

### CORDLESS

Gen. Ind., heavy equip.,  
farm, and off road

On site, fencing,  
lockers and job shops

Aerospace, Tier 1,  
Automotive and  
general industrial

Aerospace, Tier 1,  
Automotive and  
general industrial

Aerospace, Tier 1,  
Automotive and  
general industrial

Air Assisted Airless

NO.2 Process Electric  
Atomization

Air Spray

Air Spray

Air Assisted Airless

50-90%

95-98%

60-90%

60-90%

50-90%

28 oz./793.8g

56 oz./1587.6g

31 oz./880g (solv)  
33.2oz./941g water

29.4 oz./834g

34 oz./973g

11.5"/29.2cm

20"/58.4cm

11.5"/292 mm

10.1"/257 mm

10.6"/269 mm

No

No

Yes

No

No

85kV

100kV

85kV

65kV

85kV

5", 8", 10", 13", 15", 17"/  
127, 203, 254, 330,  
381, 432mm

2.75", 4", 6"/  
70, 102, 152mm

.028", .042", .047",  
.055", .070"/  
.7, 1.0, 1.2, 1.4, 1.8 mm

.028", .042", .047",  
.055", .070"/  
.7, 1.0, 1.2, 1.4, 1.8 mm

5", 8", 10", 13", 15", 17"/  
127, 203, 254, 330,  
381, 432mm

up to 1,500  
cc/min.

75-180 cc/min.  
dep. on bell size

up to 1,000  
ml/min.

up to 1,000  
ml/min.

up to 1,500  
ml/min.

2,800 psi/193 bar

100 psi/6.9 bar

100 psi/6.9 bar

100 psi/6.9 bar

3,000 psi/206 bar

10, 15, 20, 25, 30m/  
33', 49', 66', 82', 98'

25, 36, 50, 75, 100m/  
82', 118', 164', 246', 328'

10, 15, 20, 30m/  
33', 49', 66', 98'

10, 15, 20, 30m/  
33', 49', 66', 98'

10, 15, 20, 30m/  
33', 49', 66', 98'

0-100 psi/6.9 bar

0-100 psi/6.9 bar

0-100 psi/6.9 bar

0-100 psi/6.9 bar

0-100 psi/6.9 bar

### HERE'S HOW: RANSBURG ELECTROSTATICS...

- Reduced Overspray...which means reduced VOC's and the challenges associated with containing them.
- Reduced VOC's...meaning reduced energy demand on air handling systems and reduced filter usage and their eventual disposal in industrial or community landfills.
- Reduced Cleanup...reducing overspray also reduces the need for cleaning solvents and valuable water usage.
- Reduced Sludge...reducing post-cleanup gunk means there's less material flowing into industrial waste streams or community landfills.

Ransburg Electrostatic Equipment  
helps end users achieve environmental  
guardianship without sacrificing  
finish quality.

## ITW FINISHING SYSTEMS—THE SYNERGY OF LEADERS

Addressing today's industrial and automotive finishing requirements, ITW Ransburg is out to set new standards for quality, innovation and customer service. To maintain the leadership positions we've forged in the markets we serve, we believe it is our role to imagine the future needs of our customers and to be constantly improving our products and processes to meet those needs.

As the global innovator and market leader in finishing equipment, ITW Ransburg is able to offer quality products and a commitment to service. Customers worldwide benefit from our experience and capabilities.

### THE BENEFITS ARE CLEAR

- Innovative Product Design
- Comprehensive Systems
- On-site Technical Representation
- In-house Labs
- Training Center
- 24 Hour Technical Support
- Nationwide Distributor Network

Meets standards of  
FM/CSA/CE/ATEX for safety



For over a century, Ransburg has been at the forefront of technological developments in finishing that have had the greatest positive environmental impact. In fact, many of the improvements we've made have been centered on advancing transfer efficiency. Better efficiency not only results in cost savings and increased productivity, but it's also key to meeting or exceeding stringent environmental codes.

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**CONTACT YOUR AUTHORIZED  
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**ITW Ransburg**

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