



IntelliSpray™

The Next Generation
of Spray Foam
Equipment



Enhance your Most Important Asset — Your Reputation

Whether you are a sole operator, have a small crew, or multiple rigs running daily, our IntelliSpray spray foam solution maximizes your most important asset—your reputation. IntelliSpray reduces the risk of off-ratio jobs, improves the consistency of your installation, and allows you to get jobs done in less time with less material.

The IntelliSpray journey brought together a team with decades of industry experience. We spent more than 5,000 hours in the field, on job sites and personally spraying to understand the issues and experience of installers. Working along-side contractors we began to understand some of the more common complaints:

- We aren't sure we are staying on ratio—it's risking expensive re-do's
- It takes too long to get warmed up—we are wasting time
- We are wasting time on equipment issues—let's focus on the foam, not the hardware
- Operating systems require too much expertise—it should be easier



***“ We need more heat...
we are constantly
slowing down to let
the material heat up ”***

Roger Brown

We Reimagined Spray Foam Equipment

We realized that to address your most important needs, we had to totally re-imagine spray foam equipment. Armed with our extensive knowledge of the material and application, our team leveraged proven technology and the latest innovations in automation to reinvent spray foam application.

The result is IntelliSpray, a truly next-generation spray foam solution.



- 1 **True Ratio Control** that reduces risk and protects your reputation
- 2 Higher performance equipment to **cut labor and material costs**
- 3 **Smarter, more durable rig** that maximizes spray time
- 4 Intuitive design, **built for spray operators** to reduce reliance on experts

The IntelliSpray System

IS40 IntelliSpray Proportioner
QuickHeat Hose
ST1 Air Purge Spray Gun



True Ratio Control

One bad job can destroy your reputation with the general contractor. True ratio control gives your spray foam business an edge over competition by reducing the risk of spraying off ratio jobs. We built a state-of-the-art system to ensure ratio control through the equipment, remote monitoring, and comprehensive reporting systems.



Independent A & B Control

Independent servo driven motors control flow to maintain proper ratio

- Our independent control of A and B pumps and temperature allows IntelliSpray to constantly adjust and keep the material on ratio throughout the day
- It will automatically compensate for worn components, plugged filters/lines to keep the operator spraying materials on-ratio



Remote Monitoring

Our systems can connect to the internet via a cellular modem. This allows you to monitor and troubleshoot the performance of your system from anywhere in the world. Keep track of your crews and their progress to ensure they spray on-spec and on-time



“Wow. Nice pattern... and it stays nice!”

– Matt Offerdahl | Owner Acorn Construction



Greater than 99% Ratio Accuracy

- IntelliSpray’s true ratio control and job reporting ensures the quality of your work and demonstrates that commitment to customers
- The system adjusts to automatically keep ratio, but if that fails it will automatically shut the system down to prevent you from spraying off-ratio material on the job



Built-in Job Reporting

Our built in job reporting allows you to automatically document the job quickly and easily. IntelliSpray can even send an email or be downloaded to a USB thumb drive documenting the entire job.

Spray Foam Daily Job Log						
Job Name: Job No 12345			Start Date: 09/13/20			
Customer: Joe Customer			End Date: 09/24/20			
Address: 777 Heavenly Court			Author: Joe Sprayer			
City: On a Hill		State: GA		Zip: 56789		
Conditions	# of Entries 0 / 20		Minimum	Maximum	Average	
	Air Temp	°F	nan	nan	nan0	
	Relative Humidity	%	nan	nan	nan0	
	Dew Point	°F	nan	nan	nan0	
	Substrate Temp	°F	nan	nan	nan0	
Substrate Moisture	%	nan	nan	nan0		
Parameter		Set Point MIN	Set Point MAX	Actual MIN	Actual MAX	Actual Average
A-ISO Temperature	°F	0	0	0	0	0
B-RES Temperature	%	0	0	0	0	0
Pressure	PSI	0	0	0	0	0
Ratio = (A-ISO/B-RES)		0.00	0.00	0.00	0.00	0.00
Supply		Minimum	Maximum	Average		
A-ISO Inlet Temp	°F	0	0	Fix Me		
B-RES Inlet Temp	°F	0	0	Fix Me		
A-ISO Inlet Pressure	PSI	0	0	Fix Me		
B-RES Inlet Pressure	PSI	0	0	Fix Me		
Material	Material Amount		A-ISO	B-RES	Total	
	Spray	Gal	0.00	0.00	0.00	
	Exchange	Gal	0.00	0.00	0.00	

Cut Labor and Material Costs

We know time is money and details matter. That's why our system works smarter and faster from start to finish. Our unique heating technology means warm up times are in minutes - not hours, while the patent pending QuickHeat Hose technology allows you spray more and finish the job in less time. Meanwhile we've sped up your tracking, monitoring, and reporting with advanced automation to keep you spraying longer.

Reduce Warm-up Time



Average warm up times less than 15 minutes

- Save 20-50 minutes from current technology
- Fluid recirculation and purging can be performed automatically, set volume, temperature, or time duration
- Higher DeltaT eliminates need to re-circulate material in the morning, saving you time

Get Job Done Faster



Reduce spray time by up to 1-1.5 hrs/day

- Maintain temperature while spraying at higher pressures to get the job done faster
- IntelliSense Remote Control – When conditions change, adjust settings from the spray area, no need to go back to the rig to make adjustments
- Automated Tasks: Built in comprehensive job reporting eliminates manual reporting, while automatic startup and shut down allow you to multitask

Improve Yields



IntelliSpray can improve yields by as much as 5-15%

- A combination of precise ratio, temperature and pressure control drives yield improvement
- Patented IntelliSense Technology controls entire process from the end of the hose, improving accuracy and yields

Save Time and Money

Before the first part was designed, we started with our owner’s hat on and laid out the ROI we would want. Here is the math, as it remained one of the guiding principles throughout our development process. The average scenario from our field testing is laid out below, so you can compare your situation.

	Average Commercial Sprayer	Carlisle IntelliSpray System	Savings / Job
Set-Up	50 Minutes	8 Minutes Setup Time	32 Minutes Saved/Job
	\$65 Labor/Hour	\$65 Labor/Hour	\$41 Per Sprayer/Job
Run-Time	290 Minutes Runtime/Job	228 Minutes Runtime/Job	63 Minutes Saved/Job
	\$65 Labor/Hour	\$65 Labor/Hour	\$68 Per Sprayer/Job
Job Documentation	32 Minutes/Job	20 Minutes/Job	12 Min Saved/Job
	(\$65 Labor)	(\$65 Labor)	(\$13/Job)
Fuel Costs	15 Gallons Fuel/Job	12 Gallons Fuel/Job	3 Gallons Saved/Job
	\$2.54 Dollars/Gallon	\$3.54 Dollars/Gallon	\$7.50 Saved/Job
Material Costs	\$3,340 Avg. Materials Cost/Job	\$3,006 Avg. Materials Cost/Job	\$334 Materials Savings/Job
Assumptions	Total Savings		\$464 Savings/Job
<ul style="list-style-type: none"> • 10% Avg. Yield Improvement • 1.67 Average Sets/Job 	<ul style="list-style-type: none"> • 30-45 Min. Faster Spray Time • 27% Less Fuel 		\$69,572 Savings for 150 Jobs/Year*

These estimates are based on field trial results with closed cell material. Actual savings will vary based on materials, application conditions and operators.

*150 Jobs/Year Industry Average

Additional Savings

Apart from the savings we can calculate, the IntelliSpray system gives your business an advantage over competition protecting your reputation



NO REWORK

Ratio Control Eliminates Off-Ratio Rework



MORE JOBS PER SEASON

More DeltaT, Operate in Lower Temps



MINIMIZE PAPERWORK

Automation of Processes to Eliminate Paperwork

Smarter, More Durable Rig

Spraying polyurethane foam is hard work. The last thing you need are constant equipment issues that keep you from getting the job done. IntelliSpray eliminates some of the most common maintenance issues with guns, hoses and proportioners so you can spend more time spraying and less time maintaining equipment.

Eliminate job shutdowns



**NO
CROSSOVERS**



Independent, metered A & B materials reduce the risk of crossovers in the ST-1 Gun. The system will automatically shut down if it detects excessive flow of one material over the other.



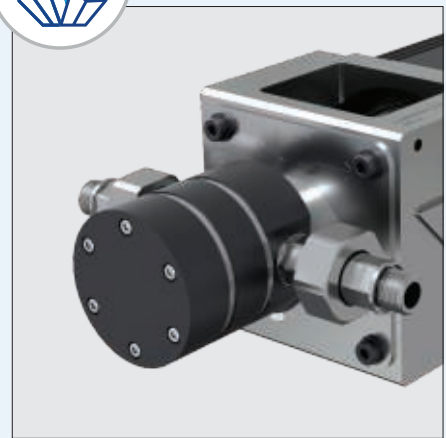
**REDUCTION OF
TIP BUILDUP**



Minimize the build-up of material on the ST-1 tip that distorts patterns and plugs the gun. Spray longer without having to clean the tip and mix chamber.



**NO ISO
CRYSTALLIZATION**



Totally enclosed gear pumps in the IS40 Proportioner pressurize and pump the material to the gun. This eliminates the risk of damaging throat seals from crystallized ISO on the piston rod.

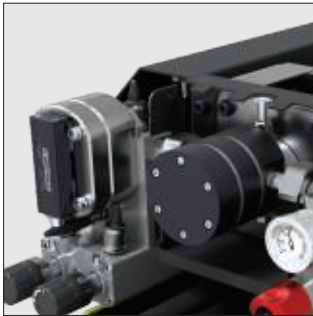


“The machine told us exactly where the problem was. I knew right where to start looking and I’ve never used it before.”

– Stephan Cummings, Texas Foam Insulators

Stay up and running longer

If the system does require service, IntelliSpray has been designed so that it can be performed quickly and easily. Proven, industrial grade hardware, built-in advanced diagnostics, and a simple easy to use design means you keep your rig up and running every single day.



Truly Durable Rig

- Industrial Grade hardware
- Motor bearing life – 20,000 hours
- Extended warranty on major components
- Engineered to reduce fittings/connectors that can fail



Faster, Modular Service

- Easy Access to all components from front of machine
- Major components replaced in minutes—not hours
- Maintain spare parts at component, sub-assembly or module level.



Advanced diagnostics

- Locate problems quickly with double the competitors embedded temperature, pressure, and flow sensors
- Spend less time troubleshooting a problem, get right to the repair

Built for Spray Operators

Whether it is finding someone with sufficient equipment knowledge or dealing with a team member's repetitive stress disorders, finding and keeping qualified operators is a challenge. That's why the IntelliSpray equipment reduces your dependency on system experts with an interface that any sprayer can use. We also built it with better ergonomics to help operators spray longer and more consistently.

Reduce fatigue



LIGHTER WEIGHT



Lighter, more flexible hose and gun



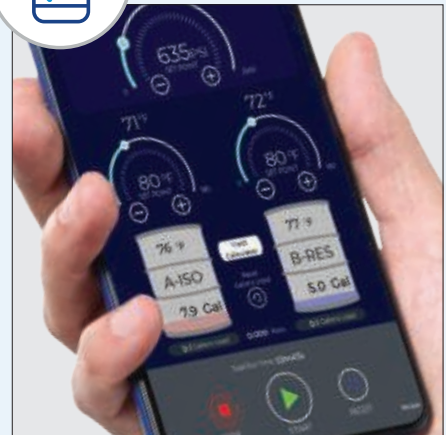
LESS STRESS



Patent Pending design and strap to reduce operator fatigue



IntelliSense Control



No more running back to the rig to change settings

Consistent Spray

Stop fighting the foam. Our system provides consistent foam and pattern every time you pull the trigger—our improved control allows operators to spray faster than ever before.



“The pattern this gun holds is amazing!”

– Chris Park, All Florida Insulation

Equipment training in under a day

TRAINING ON DEMAND

Operator training is easy to access on the screen of the proportioner, so sprayers can quickly answer questions in the field

INTUITIVE, INTERACTIVE DISPLAYS

The brilliant 15” touch screen display with simple pull down menus puts all the operations on one screen

AUTOMATED PROCESSES

Built in Start-up, maintenance, job tracking, recipe management, automatic yield calculator, spray efficiency metrics and advanced diagnostics and troubleshooting. Its all been automated so the sprayer can keep spraying.



BETTER CONTROL WHERE YOU NEED IT

Our app provides better control at the point of application. This allows you to adjust your settings without having to go back to the rig which keeps your foam is consistent even as conditions change on the job.



AUTOMATED CONTROL WHEN YOU NEED IT

Don't worry about changing settings to keep foam consistent as you spray, because the system is fully automated. Sensors monitor temperature, pressure, and flow all the way to the gun. This keeps the ratio control greater than 99% accuracy and removes the need for the sprayer to manipulate settings. Just set it, and forget it.

Job Savings Calculator

Average Commercial Sprayer	IntelliSpray System	Savings / Job	Savings
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Warm Up Savings

$$\begin{array}{ccccccc}
 \boxed{} & \text{Mins. of Setup Time} & - & \text{8 Mins. of Setup Time} & = & \boxed{} & \text{Mins. of Saved/Job} & \times & \boxed{} & \text{\$ Labor/Hour} & = & \boxed{} & \text{\$ Per Sprayer/Job} \\
 & \text{Avg. 40-60 Mins.} & & & & & \text{Avg. 30-45 Mins.} & & & \text{Avg. \$65/Sprayer} & & & \text{Avg. \$41/Sprayer}
 \end{array}$$

Run-time Labor Saved

$$\begin{array}{ccccccc}
 \boxed{} & \text{Mins. of Run-time/Job} & - & \text{228 Mins. of Run-time/ 1.67 Set Job} & = & \boxed{} & \text{Mins. of Saved/Job} & \times & \boxed{} & \text{\$ Labor/Hour} & = & \boxed{} & \text{\$ Saved/ Sprayer/Job} \\
 & \text{Avg. 174 Mins./Set} & & & & & \text{Avg. 30-45 Mins./Set} & & & \text{Avg. \$65/Hour} & & & \text{Avg. \$68/Sprayer}
 \end{array}$$

Job Documentation

$$\begin{array}{ccccccc}
 \boxed{} & \text{Mins. /Job} & - & \text{Mins. /Job} & = & \boxed{} & \text{12 Mins. Saved/Job} & \times & \boxed{} & \text{\$ Labor/Hour} & = & \boxed{} & \text{\$ Saved/Job} \\
 & \text{Avg. 20-45 Mins.} & & \text{Avg. 20 Mins.} & & & \text{Avg. 10-30 Mins./Job} & & & \text{Avg. \$65/Hour} & & & \text{Avg. \$13/Hour}
 \end{array}$$

Fuel Savings

$$\begin{array}{ccccccc}
 \boxed{} & \text{Gal. Fuel/Job} & - & \text{12 Gal. Fuel/Job} & = & \boxed{} & \text{Gal. Saved/Job} & \times & \boxed{} & \text{\$ Per Gal.} & = & \boxed{} & \text{\$ Saved/Job} \\
 & \text{Avg. 15 Gal.} & & & & & \text{1-2 Gal./Set} & & & \text{Avg. \$2.54/Hour} & & & \text{Avg. \$7/Job}
 \end{array}$$

Material Savings

$$\begin{array}{ccccccc}
 \boxed{} & \text{Avg. Materials Cost/1.67 Sets} & - & \text{\$3,006 Avg. Materials Cost/1.67 Sets} & = & \boxed{} & \text{\$ Saved/Job} \\
 & \text{Avg. \$2,000/Set} & & & & & \text{Avg. \$200-600 Bdft/Set}
 \end{array}$$

$$\boxed{} \text{ Total Savings/Job } \times \boxed{} \text{ No. Jobs/Year } = \boxed{} \text{ Estimated Savings/Year }$$

Add all Blue Boxes
Avg. 150 Job/Year

These estimates are based on field trial results with closed cell material. Actual savings will vary based on materials, application conditions and operators.

Seeing Is Believing

- 1



Schedule a 30-minute Needs Analysis

Go to www.intellispraysystem.com
- 2



See the Equipment for Yourself in an On-site Demo
- 3



Set Yourself Apart from Competitors with Your New Equipment



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