



**LUCID
BOTS**

PRODUCTIVE ROBOTS, EMPOWERING PEOPLE.

Robots for labor-intensive jobs



FAST 50 
CHARLOTTE'S FAST-GROWING COMPANIES
TOP 3 WINNER





LUCID
BOTS

Sherpa

LAVO



Lavo Bot



COMPANY VISION

Our vision is a world where responsible robotics enables people to live better lives.

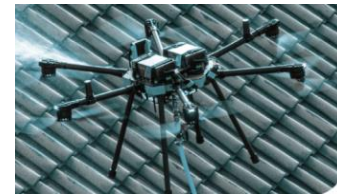
Product Vision

To elevate efficiency and safety
for labor intensive jobs with
robotic technology .



Who Is Lucid Bots?

- Founded in 2018
- Based in Charlotte, NC
- 20,000 sq. ft. manufacturing facility
- Design, engineer and build productive robots for labor intensive jobs



- 1. Do you believe we will use more or less robots in this industry in 5 years?**
- 2. Do you believe those robots will be smarter and more productive than they are today?**
- 3. Would you rather be on the frontend or backend of the adoption curve in a highly competitive market?**



200%

Average annual turnover rate in the cleaning industry.

Since 1990, the cost of employee labor has risen by over 190%. Meanwhile, the cost of robots has dropped by over 50%.

Cleaning companies struggle to find and retain employees.

228%

Turnover Rate

\$2,800

Recruiting cost
per employee

\$2,100

Training cost per
employee

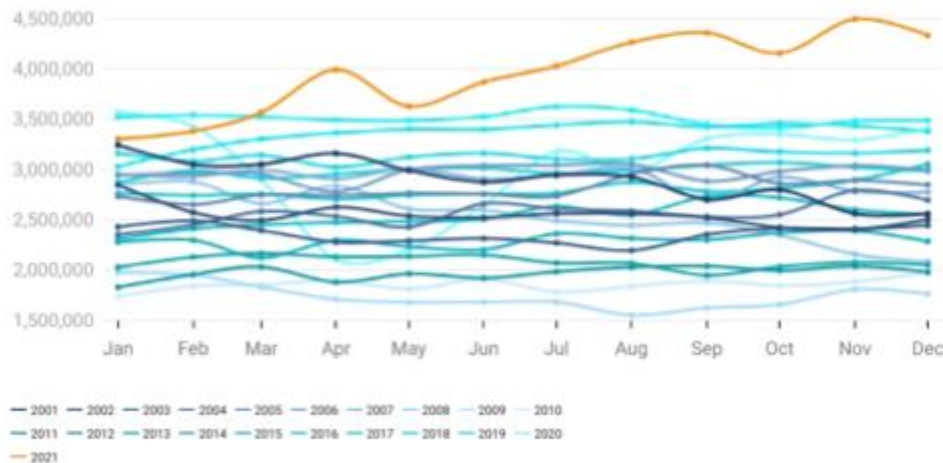
Employees	10	50	100	250	1,000
New Hires/Yr	23	114	228	570	2,280
Recruiting Cost/Yr	\$63,840	\$319,200	\$638,400	\$1,596,000	\$6,384,000
Training Cost/Yr	\$47,880	\$239,400	\$478,800	\$1,197,000	\$4,788,000
Total Cost	\$111,720	\$558,600	\$1,117,200	\$2,793,000	\$11,172,000

Minimizing turnover will maximize profits.

No one wants to do dull, dirty, and dangerous jobs.

Quitter's Market

Many factors have led to the historic quits levels — the ongoing pandemic, new vaccine mandates and a strong candidate's market are just some considerations that may be leading more workers to put in their notice. The last nine reported months (April through December) have seen the largest exodus of employees on record.



2020 Labor Stats

62,076

Nonfatal Cleaning Cases for Days
Away From Work

645

Fatalities from Workers Falling to
a Lower Level

61

Fatalities in Building Cleaning
Services

Note: December 2021 data is preliminary

Chart: Mauro Whiteman | Source: Bureau of Labor Statistics, Job Openings and Labor Turnover Survey, December 2021 | Created with Datawrapper





INDUSTRY TRENDS

Facility decision makers are searching for ways to:

- Reduce costs
- Increase safety, Limit liability & risk
- Tackle regulatory restrictions/issues
- Labor issues, shortage & retention
- Improve the quality & consistency of work or vendor

Service providers are dealing with:

- Rising costs
- Labor issues, shortage & retention
- Safety concerns
- Need for increased revenue
- Need for diversification

Lucid Bots Value Prop - Solving Customers Needs

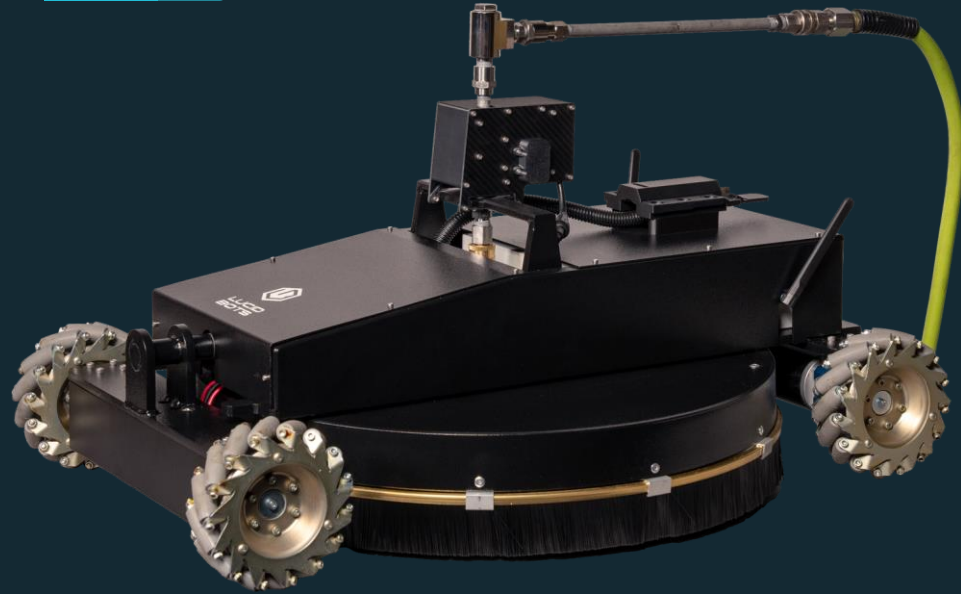
1. Offer high tech products designed for a low tech world
2. Make products easy to operate and implement into any business
3. Solve the labor issues - Shortage, attraction and retention
4. Provide products that produce a high quality & consistent clean
5. Give our customers the ability to reduce costs, drive greater revenue and expand their offerings

THE LAVO BOT PRESSURE WASHING ROBOT

Revolutionize the pressure-washing industry with our Lavo Bot, our groundbreaking surface-cleaning rover!

Remote controlled and battery powered and capable of taking on the toughest cleaning jobs.

The Lavo Bot is designed to work with existing pressure washing equipment, be more efficient and allow the user to be more productive and provide a high quality, consistent clean throughout the the job.



LAVO

What is the Target Market for the Lavo Bot?

Lavo Bot works well on large square areas where appearance matters, or where safety is a priority.

College/University

Municipalities

Property Management Companies

Pressure Washing Service Providers

Hospitals/Hospital Systems

Hospitality/Hotels/Resorts

Industrial

Casinos

Schools Systems

Convenience Stores

Retail - Malls/outdoor shopping

Government Agencies

Sports/Entertainment Venues

Indoor Processing Plants

Parking Garages/Decks

Convention Centers

LavoBot – The Ultimate Surface Cleaning Robot



Driveways



Gas Stations



Parking Garages/Ramps



Stadiums & More!

PROBLEMS THE LAVO BOT SOLVES

Increased Efficiency

Lavo Bot operates up to 30% faster than traditional methods over time. Covers 800 sq. ft. in 6 minutes. Efficiency gains increase over time.

Ease of Work

The Lavo Bot works hard so the operator doesn't have to. Capable of dragging 200+ feet of hose so you don't have to.

Endurance & Quality

Lavo Bot provides a consistent speed and cleaning capability. It boosts operational efficiency for better results.

Labor Retention

Robots are the future of work. People want to use technology today and the Lavo Bot solves the labor issues. The Lavo Bot will help recruit workers and attract talent.

Workers Health

Lavo Bot reduces the the health risk related to exposure to chemicals and long term pressure washer use. Workers can work longer without operator fatigue.

Stay Dry, Stay Clean

Lavo Bot keeps the operator out of spray radius meaning the stay dry and debris free. No more need for waterproof boots and clothing!

LAVO BOT: INTELLIGENT SURFACE CLEANING FOR THE 21ST CENTURY



LAVO BOT FEATURES



Core Construction

24" Whisper Wash cleaning deck with mecanum wheels used for maneuverability. 360 Swivel connection keep hose out of the way.

Long Battery Life

56 volt, 7.5 amp battery with 2.5 hrs. of continuous operation; 45 min. Quick recharge. Ego Batteries readily available.

Easy to Use

Ready to use with simple set up; Intuitive R/C Remote-like controls for easy operations. Train an operator is minutes.

No Need for Extra Equipment

Lavo Bot plugs into existing pressure washing equipment up to 4000 PSI and up to 10 GPM

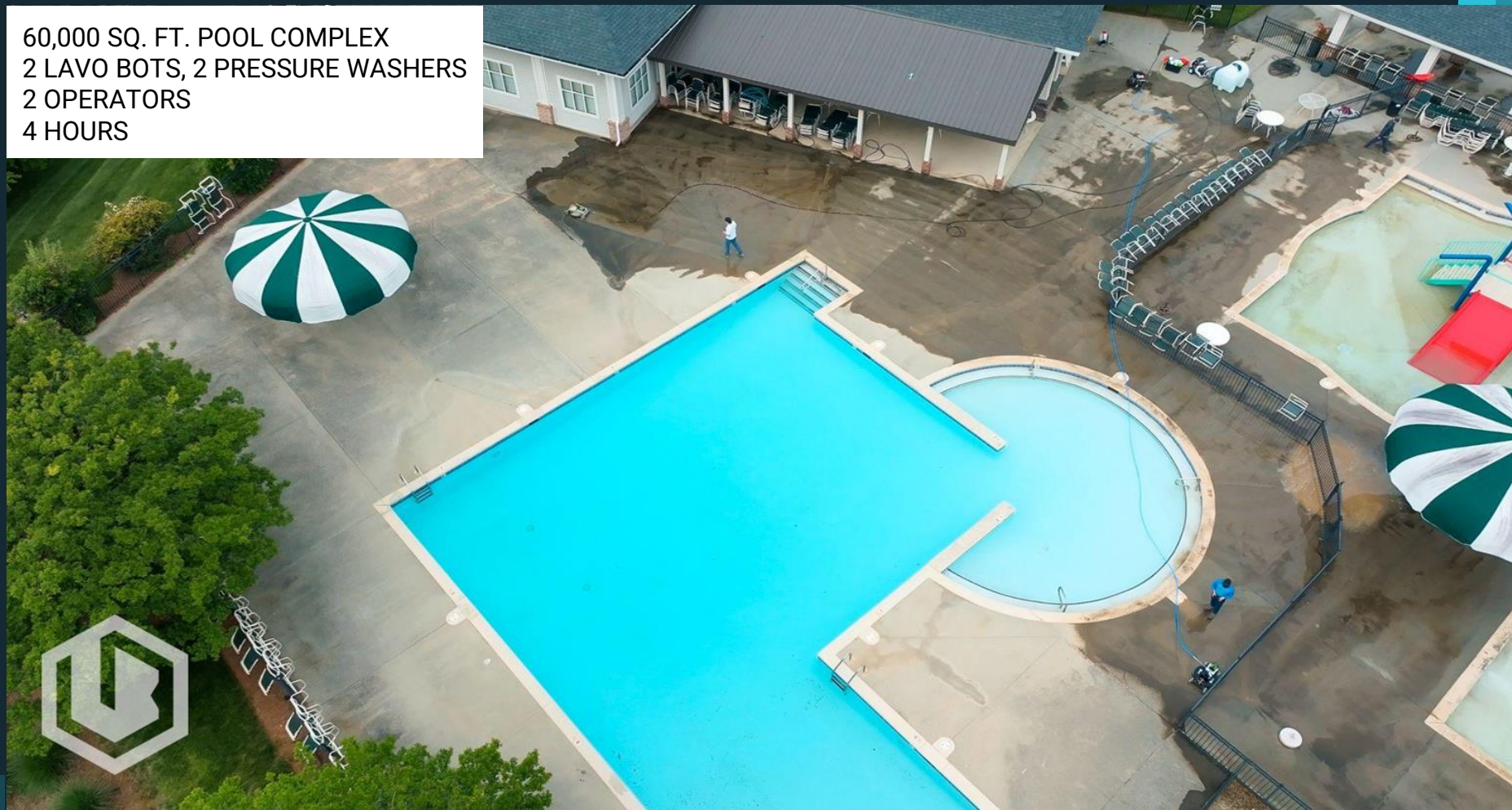
Field Repairable

All parts are easily repaired or replaced in the field or service center.

Work Horse

Rugged waterproof Construction built for endurance, use and abuse. Powder coated aluminum for durability.

60,000 SQ. FT. POOL COMPLEX
2 LAVO BOTS, 2 PRESSURE WASHERS
2 OPERATORS
4 HOURS







University of North Carolina at Charlotte (UNCC)

LAVO BOT CASE STUDY

The UNCC facilities team was looking to streamline their walkway cleaning process and improve safety, consistency, quality, and efficiency while addressing labor shortages and enhancing employee well-being.

What They Wanted:

- Clean High-Traffic Areas Efficiently & More Frequently.
- Transition From Seasonal Student Workers To A Single Full-Time Worker.

CHALLENGES

To get the results they wanted, UNCC kept coming back to four challenges they needed a solution for:

- **Labor Shortage:** Finding someone who wants to do dull and dirty tasks isn't easy. This resulted in UNCC relying on seasonal-only student labor.
- **Infrequent & Inconsistent Results:** Even with student employees performing the tasks, the areas were only getting cleaned in the summer and only using pressure washers and wands to clean. Leaving inconsistent results in areas that also need cleanings at other times of the year.
- **Safety & Well Being Concerns:** Surface cleaning for extended periods can be exhausting for everyone, ranging from seasonal employees to full-time staff. What UNCC didn't want is to put that heavy strain on their workers.
- **Budget:** Their solution to these other challenges was to contract out the work as needed, but with over 1,000 acres of property, contracting just surface cleaning walkways comes with a high price tag.

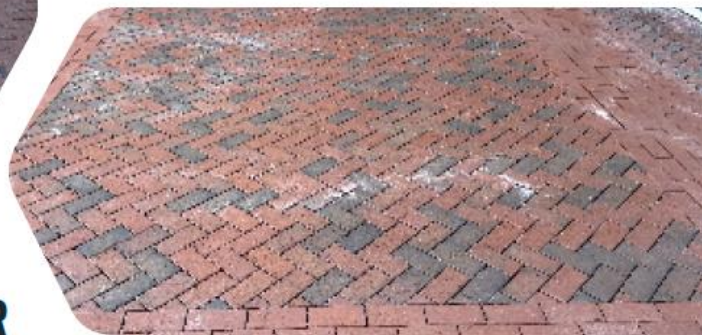


RESULTS

- Implementing the Lavo Bot at UNC Charlotte results in a transition from a manual, student-based model to a single-operator system, significantly decreasing labor costs.
- The Lavo Bot reduces physically demanding tasks, enhances staff well-being, and improves the quality and consistency of walkway cleanliness.
- Increased safety and ease of maintenance with the Lavo Bot allow for more frequent cleaning without extra costs, ensuring walkways remain safe and inviting all year round.



BEFORE



AFTER

TESTIMONIAL

"The Lavo Bot is a game-changer – it's safe, easy to use, and the results are amazing! With Lavo, I don't have to watch a crew of students bust their backs anymore, and I know I'll be able to always find someone willing to do the job with this, which is a big relief."

Matt Rutkowski | HRL Project Manager
UNC Charlotte | Housing and Residence Life



TESTIMONIAL

"The Lavo Bot is going to change exterior cleaning. It's going to change how we maintain properties. I know I can put this out in front of the buildings and it will get the job done without putting strain on my team."

Dave Greco | SR. Manager Corporate Services
ACN Concord, NC



“Mr. Scott, you have changed my life! Pressure washing is the job I look forward to the least. With the Lavo Bot, I can easily get the work done and actually enjoy it!”

- Tre - Maintenance Worker, Spaces Property Management

“I have seen a lots of different innovative equipment, and the Lavo Bot is one of the best I have seen!”

- Alex G. Director, US Federal Reserve

“This will save us a ton of time and I will be able to get my guys to use this. Heck, I get out there and do the work with this thing!”

- Maintenance Supervisor, Gwinett County Schools

“I won’t even need to change out of my Air Jordans to run this robot!”

- End user, Atlanta School District



Lucid Bots Strategic Partners



renova.energy



Appalachian
STATE UNIVERSITY.

UC DAVIS
UNIVERSITY OF CALIFORNIA



Encompass





Thank you!

Questions?

For more information, please email VP of Distribution
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