

Since 1982, we've provided laboratory and production equipment to organizations spanning material science and engineering, mechanical and chemical engineering, extraction and processing, biotechnology, heavy industry, education, government, and healthcare.

Case Study

THE RIGHT STERILIZER

SH Scientific Autoclave or
All-American Pressure Cooker

VS.

**What's Right
for Your Business**

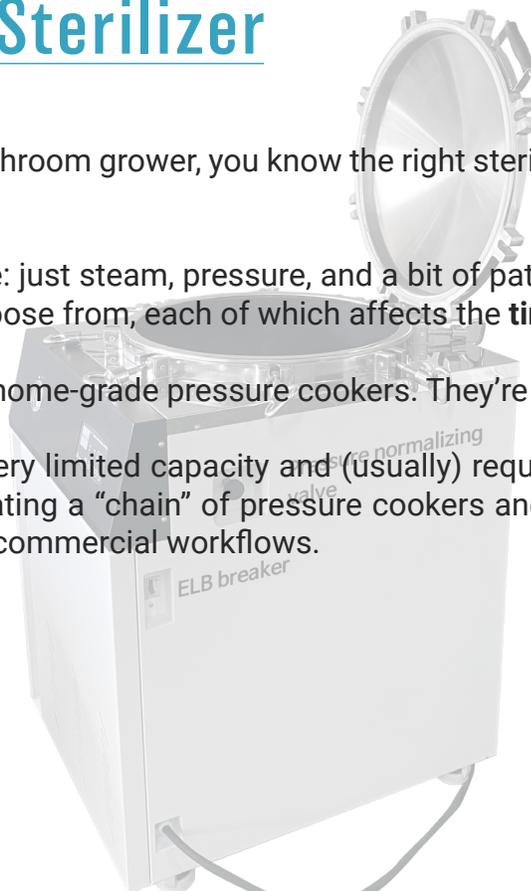
The Right Sterilizer

As a commercial mushroom grower, you know the right sterilizer means more consistent results with less fuss.

It's not rocket science: just steam, pressure, and a bit of patience. But there are several types of sterilization equipment to choose from, each of which affects the **time, cost, and output** you can expect.

At the entry-level are home-grade pressure cookers. They're perfectly capable, at least as a starting point.

However, they have very limited capacity and (usually) require external heat sources. Many growers find themselves accumulating a "chain" of pressure cookers and portable burners. At some point, it's simply too cumbersome for commercial workflows.



All American Steam Sterilizers

For mushroom growers, one commercially viable alternative is a general-purpose sterilizer. The formidable, 25-quart All American 50X-120V is one of the most popular.

Its larger capacity means fewer runs throughout the day, and its self-contained heating element is generally faster and more precise than a burner.



However, All American sterilizers still require some babysitting. For instance, with each run of each device, someone needs to:

- Manually position the safety release
- Lower the temperature upon hitting your target pressure
- Occasionally check pressure as it runs, adjusting heat as needed to avoid serious danger
- Manually turn off the sterilizer when your timer goes off, and ensure pressure has dissipated before opening it

None of that is difficult. But it adds responsibilities to your already busy day, and pulls whoever's on "sterilizer duty" away from any number of more productive tasks. And with divided attention, it's all too easy to jeopardize a batch by over- or under-heating the unit.

For these reasons, many larger cultivators turn to autoclaves.

SH Scientific Autoclaves for Mushroom Cultivation

Autoclaves work on the same principles as all the above. However, they sterilize several times more substrate in a single, fully automated cycle.

It's a literally set-and-forget process:

- Fill the chamber
- Enter your settings via the digital controller
- Care of other to-do's as it quietly sterilizes in the background
- Open it when the automatic, pressure-sensitive door lock releases itself

Our own line of autoclaves goes up to 150 L—six times the capacity of an All American 50X-120V. If you're at the point of needing a "fleet" of sterilizers to keep up with production, then a single autoclave is generally cheaper on a per-liter basis, and far more space- and energy-efficient as well.

But why 150 L, and not even larger? We find that's the sweet spot between efficient sterilization and easy set-up and management.

Industrial-sized autoclaves (and bulk atmospheric sterilizers) do offer even more capacity, but most require a dedicated water hook-up. Our autoclaves are manually filled, so they only need electricity and a drain. No complex installation, and no sweat repositioning them to suit your workflow!

In addition, some ultra-large-volume autoclaves yield unacceptable failure rates. Greater volume makes it exponentially harder to manage temperature and pressure, which introduces variability in the effective cycle. By sacrificing control for industrial scale, it can be unexpectedly hard to replicate your sterilization process.



Choosing Your Autoclave

If you're ready to trade endless cycles of babysitting for more efficient, hands-off sterilization, then consider an SH autoclave.

Whether you're upgrading your facility or just venturing into commercial cultivation, our line saves time from day one and saves money over the long haul.

Pricing & Customization

Our standard autoclave configurations suit most facilities without modification. However, several power and control customizations are possible.

We encourage you to explore the line, or to contact us directly for technical inquiries or customization requests.



Call Us

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Email

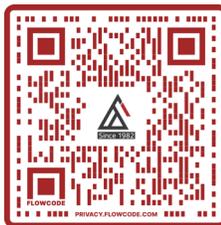
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SCAN ME



Our Clients

- Smithereens Mushroom (Canada)
- Clover Field Farm
- 69339 BC Ltd (Canada)
- Valley Girls Mushroom
- Pacific Substrates
- Insight Plant Health (Canada)
- Savage Extracts
- Indian Iron Farms
- Apollo Sciences
- Grow Liv Biz (Canada)
- Myco Journey
- Mushroom Town
- The Fungi Connection (Canada)
- Mossy Creek Mishroom
- Myco Cycle
- Mid Night Mushroom
- Mushroom Media Online
- Myco Technology

Serving North America Since 2013

In 2018, after particularly rapid growth in the American education and public sectors, we founded a US head office in Portland, Oregon.

Whether you're visiting us on behalf of a major institution, a small lab, or anything in between, we're honored that you're considering SH Scientific as a potential partner.

We look forward to a lasting relationship in support of your innovation and discovery.