CS Series
Control Systems

sLOC Local Control Panels for Blowers

sMAC Master Controllers for Process Control

Your ONE Solution for Blower Systems
CS Series  
Blower Control Systems

**Lone Star knows Control**

Efficient operation of any blower system is only as good as its control and integration to the process. Operating a very efficient blower inefficiently is very common when using 3rd party integrators. Lone Star offers a One Source Solution by offering not only local panels, but also including the process integration and a guaranteed pre-engineered and automated system.

Lone Star can retrofit your existing blowers and process no matter the brand or technology!

**sLOC Local Control**

Automating your blower with a local control panel saves money through improved control functionality and protects your investment by monitoring critical inputs such as surge, vibration, or temperature. Local control panels can also be provided with an integrated motor starter or variable frequency drive to save on installation and avoid integration issues. Systems are fully tested and warranted.

**sMAC Master Control**

There are two levels of master control that an sMAC system can provide. The first provides organizational control of the blowers through sequencing. Sequencing automates which blowers turn on and off, modulates them to provide the total desired output, balances run hours between units, and can automatically restart a system after a power outage or unplanned shutdown. Many systems have difficulty operating multiple blowers on a common header and a master control panel can solve this through active control.

The second level can provide complete automation of your blower process. Process control provides blower sequencing, combined with the automation of process valves and instrumentation, and results in maximized energy savings.
**sLOC Local Control**

sLOC local control panels are designed to monitor, protect, and automate the operation of a blower. They also have a unique ability to calculate mass flow more reliably and more accurately than by using a flow meter. By calculating enthalpy across the blower, and measuring speed and power, the controller can dynamically calculate a mass flow rate, even as temperature, humidity and pressure changes. This maximizes the blowers flow range and provides an accurate and consistent flow rate on demand.

**sMAC Sequencing Control**

Efficiency Optimization: sMAC sequencing can optimize your efficiency as blowers are not equally efficient throughout their operating range. A smart sequencer does not move all blowers up and down together, but will operate blowers in their most efficient “sweet spot” and allow only one blower to be a variable trim unit.

**Auto Start/Stop Multiple Blowers**

Balance Run Hours • Blend Multiple Technologies • Time Programmable
Lone Star offers single point responsibility for the complete automation of your process including all hardware and on-site integration. The sMAC Process Controller can operate the blowers to a set point such as flow or pressure, but also to process control variables such as off-gas, ammonia or dissolved oxygen at many points of use.

sMAC utilizes FOV – Fully Open Valve control uses flow set points to lower your header pressure to only what is required. Lower header pressure means lower power consumption! However, we can also provide traditional MOV – Mostly Open Valve type control using pressure set points.

We can control any blower technology or a mix of technologies. Let Lone Star upgrade your existing system to save on efficiency.
sLOC and sMAC Controllers
Use cascading PID loop control to operate with any control variable. Offer automatic adjustment of the blower and the entire system giving piece of mind any set point is reached and keeping the system stable.

Think Smart, Very Smart!

<table>
<thead>
<tr>
<th>Standard Controller Capabilities</th>
<th>sLOC-LS</th>
<th>sLOC-GP</th>
<th>sLOC-GL</th>
<th>sMAC</th>
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<tbody>
<tr>
<td><strong>Functions/Options</strong></td>
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<tr>
<td><strong>Blower Technology</strong></td>
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<tr>
<td>Multistage Turbo</td>
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© standard  ◯ optional  (custom designed controls available)
Lone Star Blower

GL -TURBO Houston
8883 West Monroe Road
Houston, Texas 77061 USA
Tel: +1 832-532-3112
Fax: +1 832-532-3115
Email: info@lonestarblower.com

Lone Star is part of the GL-TURBO Global Network
We have locations around the world to serve you.

We manufacture the most advanced line of turbo blowers in the world.

Please visit our website at www.lonestarblower.com or call us today regarding your next application.

GL  LS  DT  CS  PS
Geared Turbo  Multistage Turbo  Gearless Turbo  Control Systems  Packaged Systems

Lone Star Blower
GL-TURBO Houston
8883 West Monroe Road
Houston, Texas 77061 USA
Tel: +1 832-532-3112
Fax: +1 832-532-3115
Email: info@lonestarblower.com