FEEL THE **CHILL**

**CONTROL YOUR CLIMATE. JUST ADD WATER.™**

Cool Boss™ | Industry Leader
Since its debut, Cool Boss has provided high-quality cooling solutions in compact, cost-effective packages. As a part of BendPak’s expansive catalog, Cool Boss is able to take advantage of BendPak’s manufacturing efficiencies to move coolers quickly, control costs, and process orders faster than the competition. In addition, Cool Boss air coolers undergo rigorous testing before reaching you. Our COOLBREEZE™ and COOLBLAST™ portable air coolers put us on the map, and now it’s time to take cooling to a higher level — literally.

Looking for a quote, onsite survey, or have questions about our products? Give us a call at 1-855-223-2665 or visit www.coolboss.com. Our climate engineers are ready to serve you.

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Introducing All-New Cool Boss™ HVLS Fans

The all-new TEMPEST™ and WINDSTORM™ Series gives you the variety to find the perfect HVLS fan. Much like Cool Boss evaporative air coolers, the TEMPEST and WINDSTORM Series have been designed to deliver temperature optimizing experiences while drastically reducing energy costs.

TEMPEST SERIES

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter</th>
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<tbody>
<tr>
<td>CB-11HVLS</td>
<td>11.5 ft.</td>
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<td>Tempest Series</td>
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<tr>
<td>CB-16HVLS</td>
<td>16 ft.</td>
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WINDSTORM SERIES

<table>
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<tr>
<th>Model</th>
<th>Diameter</th>
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<tr>
<td>CB-20HVLS</td>
<td>20 ft.</td>
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<td>CB-24HVLS</td>
<td>24 ft.</td>
</tr>
<tr>
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</tbody>
</table>

Features

- Durable Construction
- Energy-Efficient
- Low Noise Levels
- Enhance Productivity
- Permanent Magnet Motor

Our Mission

As part of the BendPak family, our Cool Boss division shares the mission of delivering the highest quality products with the best service possible. That’s why every Cool Boss HVLS fan receives the same focused treatment as the rest of BendPak’s diverse products. With over 60 years of experience, BendPak’s manufacturing processes have been centralized to deliver cutting-edge technology and unprecedented quality-control. Cool Boss continues to provide higher-performing, next-generation air cooling solutions to markets around the world faster and more efficiently than ever. From the products and services we create, right down to the production efficiencies and quality-control measures we employ throughout our supply chain, we are committed to helping people lead healthier lives. We do this by efficiently cooling spaces and maintaining higher levels of air quality.
**Quiet, Sleek, and Cool**  
The Sustainable Benefits of HVLS

Cool Boss HVLS fans generate industry-leading performance with maximum airflow while maintaining the lowest energy consumption possible. Apart from energy efficiency and cost savings benefits, every Cool Boss fan provides instant area comfort more efficiently and effectively than any other air movement solution. Our fans deliver a huge volume of air at any speed, so you’ll rarely need to run them at max capacity, which is one of the many advantages and benefits of HVLS technology.

**Huge Coverage and Whisper Quiet**  
The smallest fan is roughly eleven and a half feet in diameter, with the largest reaching almost twenty-four! All Cool Boss HVLS models deliver unmatched power and reliability. These have been expertly crafted with high-grade materials to ensure you get that refreshing breeze that Cool Boss is known for!

**The Modern Spin**  
The State of HVLS Fan Technology

**The Science Behind Cool Boss HVLS Fans**

There is a common misconception that increased blade count means better performance, but even two, three, or four blade fans can be extremely efficient at moving air. Achieving maximum airflow with less blade (weight) is the optimum objective, because when HVLS fans are running, the motor and drive systems bear the weight of the rotating components. Cool Boss blades are made of lightweight reinforced aviation aluminum and have an advanced contoured shape that produces consistent airflow across the entire length of the blade. To maximize efficiency, every Cool Boss blade features a glossy powder coat finish that delivers less drag, smoother airflow acceleration, and lower operating noise.

**Winglets**

Each Cool Boss HVLS fan incorporates winglets, those small extensions you’ll find on the end of the blades. Why do we have them? These angled structures actually improve the aerodynamic performance of the fan. They’re built to reduce turbulence which means you won’t experience energy losses or a drop in the overall efficiency of the fan.

Winglets help reduce the vortices, or swirling currents, that are generated at the blade tips. These vortices can create drag and will lead to an increase in energy consumption. Another advantage of the winglets is that they’ll increase the effective span of the fan blades. The effective span is the portion of the blade that is effective in moving the air. By extending the length with winglets, the fan blades generate even more airflow without having to increase the physical length of the blades.

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**No Gears Required**

Permanent magnet synchronous motor technology provides better torque characteristics, very precise speed control and high efficiency without the need for gearboxes, pulse encoders and auxiliary components.

**Superior Design**

**Next Level Performance**

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**GEARLESS PMSM**

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**Model | Diameter | Air Volume (CFM) | Decibels**

| CB-11HVLS | 11.5 ft. | 148,321 | ≤ 40 |
| CB-16HVLS | 16.5 ft. | 360,210 | ≤ 40 |
| CB-20HVLS | 20 ft. | 448,496 | ≤ 40 |
| CB-24HVLS | 24 ft. | 524,422 | ≤ 40 |
**High Torque + High Efficiency**

**Advanced PMSM Speed Control**

Our user-friendly console and motor controller manages the speed and other parameters of the fan. The console includes a control panel which allows users to set the desired speed, direction, and other motor parameters. It also includes displays to show the current motor speed, temperature, and other operating parameters. Motor RPM control is achieved using a variable frequency drive (VFD), which adjusts the frequency of the electrical power supplied to the fan motor. By varying the frequency, the VFD can change the speed of the motor and thus the speed of the fan.

**Direct Drive Permanent Magnet Synchronous Motor**

All Cool Boss HVLS fans use brushless direct drive Permanent Magnet Synchronous Motors (PMSM) that are inherently more energy efficient than traditional AC motors and have a higher power-to-weight ratio. They’re smaller in size and lighter in weight, but still deliver output torque much higher than traditional AC motors. Permanent magnets reduce the power necessary to operate the motor, and without the need to rectify the current to DC for speed control, further energy efficiency is realized. Elimination of the rectifying electronics also decreases the motor complexity while increasing the reliability and service life of the motor. PMSM driven fans have been shown to reduce energy consumption by at least 50%.

**How it Works**

The operation principle of our PMSM is based on the interaction of the rotating magnetic field of the stator, and the constant magnetic field of the rotor. The stator is the fixed part, the rotor is the rotating part. Instead of using copper windings for the rotor, permanent magnets are mounted to generate a rotating magnetic field. This interaction causes the rotor to spin in sync with the stator’s magnetic field, which allows for efficient and reliable conversion of electrical energy into mechanical energy. The advantages of a PMSM motor are better efficiency, more precise speed control, higher power density, and reduced operating temperature (resulting in longer bearing and insulation life).

**Built-in Air Purification**

**Cleaner Air Through Ionization**

The Ion Generator Air Purification System is a state-of-the-art air purifier that uses advanced ionization technology to remove harmful pollutants and particles from the air you breathe, providing you with clean, fresh, and healthy air that is free from allergens, bacteria, viruses, and other harmful contaminants. The ion generator produces negative ions, which attach to airborne particles such as dust, pollen, and bacteria. These particles become heavier and eventually fall to the ground, allowing you to breathe cleaner air. It also neutralizes odors and eliminates harmful pollutants, making it ideal for those who suffer from allergies or respiratory issues.

Ion Generator comes standard on CB-20HVLS and CB-24HVLS models.

**Zero Ozone Emissions – Measured Ozone Emissions from Ion generator (Model# TFB-YA152) during use phase does not exceed 0.005 ppm as tested by UL 867.**
Optimize HVAC Systems
HVLS Fans Make HVAC Systems More Efficient

Evaporative Cooler + HVLS
When it comes to energy-efficient cooling, it doesn't get much better than a Cool Boss evaporative air cooler and a Cool Boss HVLS overhead fan working together. Comfort is a mix of temperature, humidity, and air movement, so this combination of the two can complement each other. Unlike traditional HVAC air conditioning systems that recirculate the same air, evaporative coolers provide a steady stream of fresh air into the space. Combine that with the added draft created by an overhead fan that moves hot air away from your skin, it helps with natural evaporative cooling. So, while the ceiling fan won't exactly help the cooling that an evaporative cooler delivers, it can be used in ways that still help you feel cooler and save you money.

HVAC + HVLS
By moving large volumes of air in a controlled manner, Cool Boss HVLS fans make HVAC systems more efficient, while significantly improving the comfort and health of workers. They also help reduce energy consumption, combat air quality issues, and can even be integrated into building management systems. Cool Boss HVLS fans on their own use relatively little energy and provide a gentle, quiet breeze that provides little distraction in an environment. In fact, various studies have estimated that a 2 to 3 MPH air speed creates a cooling sensation of 7 to 11°F. To put this in perspective, the effective temperature of an 83°F environment can be dropped to 72°F by adding fan-moving air at 3 MPH.
Health Benefit – Thermal Comfort
Wherever you’re utilizing your Cool Boss HVLS fan, you’re still going to receive the same health benefits. Air can get stale in large, enclosed spaces, and our fans keep that from happening. By constantly circulating air, the risk of airborne illness and allergies becomes reduced, meaning you and your workers stay nice and healthy. Stale air can have many negative health effects, and this is a cost-effective way to keep everyone feeling great! The health benefits go a lot deeper than that. Are you familiar with Thermal Comfort? It’s when you’re feeling neutral about the temperature in whatever environment you’re in. It’s not hot, but it’s also not cold. It’s just right.

Working while experiencing Thermal Comfort is a huge plus because it means that productivity and morale are likely to see a boost. You’re also ensuring that employees will behave more safely. When people work in cold environments, they’ll do what they can to get out of those conditions as soon as possible, which could mean taking shortcuts. It’s also possible that in hotter environments workers will purposely avoid wearing protective equipment so that they can feel more comfortable. Mixing hot and cold air creates a work environment ideal for getting some serious work done.

Health Benefit - Sick Building Syndrome
Assuming there’s a facility out there with owners that think they don’t need HVLS fans, here are just a few of the issues that they’re likely to come across. IAQ, or Indoor Air Quality, is sure to take a hit in buildings with insufficient air circulation. It can be affected by the presence of air pollutants, allergens, and volatile organic compounds, or VOCs. You’ll come across VOCs if your facility is working with solvents, paints, or other chemicals that emit gas when used. Needless to say, you don’t want you, your employees, or anyone visiting to be inhaling VOCs. Staying in that kind of environment for a long enough time can have you experiencing what’s known as “Sick Building Syndrome”.

Sick Building Syndrome is when various nonspecific symptoms occur in anyone who spends an extended amount of time within the building. It can be health-related or simply comfort related. Some common symptoms include headache, dizziness, nausea, throat irritation, dry cough, and a whole lot more. Aside from productivity taking a turn, you run the risk of seriously harming your employees. Cool Boss HVLS fans make sure you have the air circulation you need to keep everyone healthy.
Create a Better Work Environment
Why You Need an HVLS Fan

Eco-Friendly
Cool Boss is all about saving you money, while providing eco-friendly solutions, whether you’re using our evaporative air coolers or our HVLS fans. The amount of chemicals that are released into the air every day because of traditional air conditioning is astounding. There’s a better way to cool off, and this is it.

Productivity Boost
When people work in hot environments, there’s a high potential for things to go wrong. At best, they make a little mistake which costs you time (and as we all know time is money), and at worst an employee suffers a heat-related illness, which just isn’t the ideal situation. Providing comfortable working conditions doesn’t just make your employees happier, which is a worthy goal, it also makes them more productive. It also makes them more productive. A comfortable environment keeps their mind focused on the task at hand.

Cost-Efficient
If you’ve ever run AC for extended periods, understand how expensive that can get. With a Cool Boss HVLS fan in the mix, AC will be able to more effectively travel throughout the workplace in a significantly shorter amount of time.

Factories
When factories need to cool off, traditional AC alone isn’t the ideal choice for a few reasons. For one, to effectively cool down such large areas will cost a fortune in electric bills. It’s also possible that some older buildings may not be outfitted with AC systems, and that cost is daunting, to say the least.

Cool Boss HVLS fans provide a low-noise solution to keeping you and your workers in comfortable conditions and will keep you from running the AC non-stop. The silence will keep them from being distracted, and the massive fan blades will be able to distribute gigantic amounts of air around, keeping the air feeling fresh. For factory managers trying to find the right balance between comfortable employees and affordable heating and cooling, pairing Cool Boss HVLS fans with an HVAC system is a win-win.

The Cool Boss Advantage
Versatility Meets Dependability

Agricultural
Agricultural environments and HVLS fans go together perfectly. Cool Boss fans are more than enough when it comes to providing excellent airflow. As they operate, you’ll notice reduced humidity, improved ventilation, and an overall better environment for people, animals, and plants. Improved air circulation reduces heat stress in both workers and animals, meaning workers will experience increased productivity, animals will be healthier, and there will be higher yields.

Gyms
Aside from creating a more pleasant workout environment for gym goers, you’re also improving the air circulation when you use an HVLS fan. By improving air circulation in gyms, you’re reducing stagnant air, you’re controlling humidity, and you can keep the air feeling fresh. You can imagine why that would be valuable in a gym. Since Cool Boss fans feature noise reduction, gym goers can stay focused on their workouts. Proper air circulation enhances the air quality which will keep your customers healthy.

Warehouses
Large structures can get expensive to cool effectively. It’s also likely that there will be a large opening to the outside, like with big shutter doors, which will make it more difficult to regulate temperature with traditional AC. That’s where Cool Boss HVLS fans come in. They’re there to make sure that your employees can do their jobs to the best of their abilities without heat bringing them down.
The CB-11HVLS turns rough working conditions into a breeze. Install energy-efficient HVLS fan and you'll immediately notice the difference.

Specifications:
- **Fan Diameter**: 11.5 ft. / 3.5 m
- **Motor and Mount**: 10.25 in. / 260 mm
- **Motor Diameter**: 13 in. / 330 mm
- **Blade to Motor**: 7 in. / 180 mm
- **RPM (Variable)**: 90 RPM Max.
- **Number of Blades**: 6
- **Air Volume**: 148,321 cfm / 4,200 cmm
- **Fan Hanging Weight**: 152 lbs. / 69 kg
- **Voltage/Current***: 208-240VAC, 50/60 Hz, 1 Ph., 5A
- **Frequency/Phase**: 50/60 Hz., 1 Ph.
- **UL Certification**: Yes
- **Intertek ETL Listed**: Yes
- **OPT. Ceiling Height**: 17 ft. / 5,258 mm
- **Control Cable Length**: ≈ 80 ft. / 25 m
- **Operating Temperature**: -13° to +140° F / -10.5° to +60° C
- **Operating Humidity**: <95% Non-Condensing

Features:
- Energy-efficient
- Enhance productivity
- User-friendly operation
- Permanent Magnet Synchronous Motor extends life
- Low noise levels
- Durable construction

Dimensions:  
- **11.5 ft. Diameter**
- **42.5 in.* 1,080 mm 49.2 in. 1,250 mm**

Control Panel
- **Height**: 15.75 in. / 400.05mm
- **Width**: 12 in. / 304.8 mm
- **Depth**: 8 in. / 203.2 mm

Standard guy wire kit keeps the fan stable without excessive oscillation during operation.

*Other voltages available upon request.

*Custom down rod lengths available upon request.
CB-16HVLS
Tempest Series

16.5’ Diameter
Industrial Overhead Fan

360,210 cfm
208-240VAC, 50/60 Hz,
1-Ph., 5 Amp

Don’t let hot temperatures keep you down. With the CB-16HVLS from Cool Boss, you’re able to provide energy-efficient cooling solutions to exceptionally large areas.

Features
• Energy-efficient
• Enhance productivity
• User-friendly operation
• Permanent Magnet Synchronous Motor extends life
• Low noise levels
• Durable construction

Specifications
Fan Diameter 16.5 ft. / 5 m
Motor and Mount 11 in. / 280 mm
Motor Diameter 13 in. / 330 mm
Blade to Motor 8.25 in. / 210 mm
RPM (Variable) 78 RPM Max.
Number of Blades 6
Air Volume 360,210 cfm / 10,200 cmm
Fan Hanging Weight 209.5 lbs. / 95 kg
Voltage/Current* 208-240VAC, 50/60Hz, 1Ph., 5A
Frequency/Phase 50/60 Hz., 1 Ph.
UL Certification Yes
Intertek ETL Listed Yes
OPT. Ceiling Height 25 ft. / 7,544 mm
Control Cable Length≈80 ft. / 25 m
Operating Temperature -13° to +140° F / -10.5° to +60° C
Operating Humidity <95% Non-Condensing

Dimensions
Standard guy wire kit keeps the fan stable without excessive oscillation during operation.

Control Panel
Height: 15.75 in. / 400.05mm
Width: 12 in. / 304.8 mm
Depth: 8 in. / 203.2 mm

Overview
The CB-16HVLS provides year-round cooling solutions. Keeping you and your team in comfortable conditions ensures many benefits, like increasing overall productivity. Not only will your team be able to work at maximum efficiency when they’re not overheated, but they will also be far more likely not to make small mistakes that could end up costing you big. The CB-16HVLS has been expertly crafted with high-grade materials to ensure you get that refreshing breeze that Cool Boss is known for! Our blades are built using a sturdy aluminum alloy to ensure a long service life! The beauty of Cool Boss HVLS fans is the fact that it’s not just for hot days. Once winter rolls around odds are that you’ll be using a heater more and more frequently. Since heat rises, multi-floor facilities will find the upper floors significantly hotter than the lower ones. Rather than continuing to blast the heater, you can simply push the hot air down with the CB-16HVLS! Mixing the warm air and cold air is a process known as Destratification, and it creates an overall better working environment, not to mention it’s the far more cost-effective solution.

*Other voltages available upon request.
*Custom down rod lengths available upon request.
Ready to ditch that huge electric bill? The CB-20HVLS delivers energy-efficient cooling to your place of business. Boost productivity and proficiency with Cool Boss.

Features
- Energy-efficient
- Enhance productivity
- User-friendly operation
- Permanent Magnet Synchronous Motor extends life
- Low noise levels
- Durable construction
- Ion Generator Air Purification System

Specifications
- Fan Diameter: 20 ft. / 6.1 m
- Motor and Mount: 11.75 in. / 320 mm
- Motor Diameter: 13 in. / 330 mm
- Blade to Motor: 8.75 in. / 220 mm
- RPM (Variable): 60 RPM Max.
- Number of Blades: 5
- Air Volume: 448,496 cfm / 12,700 cmm
- Fan Hanging Weight: 282 lbs. / 128 kg
- Voltage/Current*: 208-240VAC, 50/60Hz, 1Ph., 7A
- Frequency/Phase: 50/60 Hz., 1 Ph.
- UL Certification: Yes
- Intertek ETL Listed: Yes
- OPT. Ceiling Height: 30 ft. / 9,144 mm
- Control Cable Length: 80 ft. / 25 m
- Operating Temperature: -13° to +140° F / -10.5° to +60° C
- Operating Humidity: <95% Non-Condensing

*Other voltages available upon request.

Get a cool, comfortable airflow with the CB-20HVLS. Cool Boss HVLS fans are the perfect addition to large areas such as warehouses, factories, gyms, agricultural facilities, and more. Their massive size makes them the ideal choice for keeping large spaces nice and comfortable. The CB-20HVLS provides excellent air circulation while reducing energy costs, meaning your energy bills just got lower. Invest in a superior work environment with Cool Boss! Cool Boss HVLS fans provide a low-noise solution to keeping you and your workers in comfortable conditions and will keep you from needing the AC to be running non-stop. The silence will keep them from being distracted, and the massive fan blades keep the air feeling fresh. By providing superior airflow, the CB-20HVLS is able to reduce humidity in the workplace and improve air circulation, meaning heat stress will be minimized and productivity will be improved.

Standard guy wire kit keeps the fan stable without excessive oscillation during operation.

Dimensions

*Custom down rod lengths available upon request.
The CB-24HVLS provides the ultimate airflow. With a superior design, Cool Boss delivers the unmatched cooling potential to large spaces.

**Specifications**

- **Fan Diameter**: 24 ft. / 7.3 m
- **Motor and Mount**: 11.75 in. / 320 mm
- **Motor Diameter**: 17.25 in. / 440 mm
- **Blade to Motor**: 8.75 in. / 220 mm
- **RPM (Variable)**: 55 RPM Max.
- **Number of Blades**: 5
- **Air Volume**: 524,422 cfm / 14,850 cmm
- **Fan Hanging Weight**: 295.5 lb. / 134 kg
- **Voltage/Current**: 208-240VAC, 50/60Hz, 1Ph., 7A
- **Frequency/Phase**: 50/60 Hz., 1 Ph.
- **UL Certification**: Yes
- **Intertek ETL Listed**: Yes
- **OPT. Ceiling Height**: 36 ft. / 10,973 mm
- **Control Cable Length**: ≈80 ft. / 25 m
- **Operating Temperature**: -13° to +140° F / -10.5° to +60° C
- **Operating Humidity**: <95% Non-Condensing

*Other voltages available upon request.*

**Features**

- Energy-efficient
- Enhance productivity
- Improves air ventilation
- User-friendly operation
- Permanent Magnet Synchronous Motor extends life
- Low noise levels
- Durable construction
- Ion Generator Air Purification System

**Dimensions**

- **24 ft. Diameter**
- **Control Panel**
  - **Height**: 15.75 in. / 400.05 mm
  - **Width**: 12 in. / 304.8 mm
  - **Depth**: 8 in. / 203.2 mm

*Custom down rod lengths available upon request.*

Looking for a quote, onsite survey, or have questions about our products? Give us a call at 1-855-223-2665 or visit www.coolboss.com. Our climate engineers are ready to serve you.