



THE WORLD'S PREMIER PROVIDER OF
OFF-HIGHWAY THERMAL MANAGEMENT SOLUTIONS.



COMMITTED TO ADVANCING
INDUSTRY WHILE QUIETLY
REDUCING ITS IMPACT.



As a global leader in thermal control for power systems, Horton offers a variety of technologies for transportation and industrial applications to operate at the optimal temperature – even in the most demanding conditions.

RUN QUIETER. RUN LONGER. USE LESS FUEL.

INCREASE UPTIME

We understand that keeping your customers' machines operating at peak capacity affects your bottom line. Horton's engine-cooling technology offers proven reliability, built on decades of trust by the largest brands in the industry.

IMPROVE FUEL EFFICIENCY, WHILE REDUCING ENGINE NOISE

Any fan and fan drive is going to put a load on your vehicle's engine – and that consumes fuel. Innovation is optimizing when and how often that fan spins, and at what speed. Horton drives provide precise fan speeds, maintaining the balance between optimized temperature and operational efficiency, while helping minimize noise emissions.

ENVIRONMENTALLY RESPONSIBLE

Helping our customers save money while being more efficient is part of our foundation – so is being sustainable. In the age of zero-emissions vehicles, having the right thermal management solutions is essential. That's why Horton developed a high-voltage cooling system to cool the power systems for battery-and fuel cell-electric vehicles (EV) and equipment. This effort is a timely solution to support industry leaders who are looking for a more all-around effective way to power their fleets without sacrificing performance.



OFF-HIGHWAY: MORE UPTIME. MORE EFFICIENT DIESEL OPERATION IN THE HARSHTEST ENVIRONMENTS.

Horton's on-highway experience has made it a pioneer in off-highway applications. We offer the industry's broadest fan and fan drive product portfolio, capable of supporting engines up to 4,500 kW. Applications include agricultural and construction equipment, mining trucks and equipment, industrial compressors, generators and material handling. Horton engineers its products to endure heat and cold, frequent starts and stops, dust, grit and chemicals. We work with customers to help them optimize fuel efficiency, reduce noise and improve engine reliability. And no one is better at engineering custom thermal management solutions to optimize engine temperatures, whether it's sweltering or freezing outside.

Variable-speed fan drives in off-highway applications help control temperatures in extreme conditions and optimize efficiency in equipment subject to frequent idling.

BROWSE & BUILD

With Horton's eRev™ System Configuration Tool you can browse fan and fan drive solutions for your on-highway or off-highway application. Select "Tools and Resources" at hortonwww.com

IT'S WHAT DRIVES EFFICIENCY. AND CONTROL.

Fan drives and fan designs are paired to maintain engine temperatures within the OEM's operating parameters in even the most demanding conditions. When the integrated sensor indicates no cooling is needed, the drive and fan "freewheel", saving fuel, reducing noise and providing more available horsepower. As the engine temperature increases, the fan automatically engages to provide necessary cooling. As one of the world's largest producers of fans and fan drives, Horton has the industry's most comprehensive product technology portfolio, and the expertise to apply it.



VARIABLE-SPEED FAN DRIVES

Fully-variable viscous fan drives are designed to function precisely according to the cooling demands required. When less cooling is needed, it operates at a low off-speed, significantly reducing noise and fuel consumption. When more cooling is necessary, it ramps up quickly, smoothly and with reduced stress on the drive, engine and adjacent components.



LCX Series

Variable-speed fan drive with low off-speed, Cold-Start Disengagement and best-in-class controllability.

Maximum Torque	300 N-m
Typical Engine HP	150-600 kW [200-800 HP]



RCX Series

All the benefits of Horton's latest variable-speed technology, plus an integrated drive hub for easy compatibility and assembly.

Maximum Torque	300 N-m
Typical Engine HP	150-600 kW [200-800 HP]



LCV Series

A variable-speed fan drive in a light, compact design that saves fuel and reduces fan noise.

Maximum Torque	250 N-m
Typical Engine HP	40-600 kW [50-800 HP]



RCV250

Best-in-class variable-speed fan drive with an integrated drive hub and electronics wiring protection.

Maximum Torque	250 N-m
Typical Engine HP	260-600 kW [350-800 HP]



RCV High-Horsepower

Fully-variable fan drive for high-horsepower applications with 30-50 liter and 50 liters and larger engines.

Maximum Torque	2,500 N-m
Typical Engine HP	500-3,000 kW [700-4,000 HP]



VS Series

Variable-speed fan drive using pulse-width-modulation (PWM) signals to provide just the cooling needed.

Maximum Torque	20-150 N-m
Typical Engine HP	40-300 kW [50-400 HP]

DRIVE CONTROL

Di+ Controller

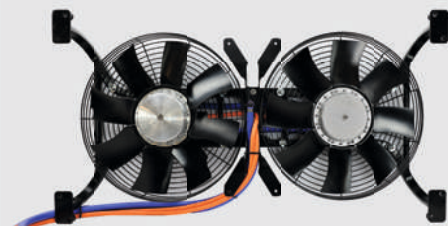
A J1939-compatible plug-and-play controller designed for precision fan control, offering improved cooling performance on off-highway equipment, including skid steers, truck cranes, on-road trucks, ag equipment and generators.



HIGH-VOLTAGE ELECTRIC COOLING

e-Fan Assembly

Batteries, fuel cells, motors, and power electronics all require aggressive cooling while trying to keep the fan noise as low as possible. Horton's high-voltage cooling solution (400-850 VDC) provides maximum inverter flexibility and can be either radiator or bracket mounted.



VS Series Air

Viscous fan drive utilizing a bi-metal sensor that modulates fan speed based on ambient air temperature.

Maximum Torque	17-100 N-m
Typical Engine HP	40-300 kW [50-400 HP]

FANS

Because no demands are the same, Horton offers the widest range of fan types, designed to deliver maximum cooling, ruggedness and efficiency. Fan types include light and quiet nylon molded fans, modular fan styles offering increased customization, or our advanced HTEC (thermoset composite) and customizable metal fans in steel or aluminum.



LS Series

Nylon-molded with compact design for smaller applications to provide optimal airflow with less noise.

Diameters	330-600 mm [13-24 in.]
Blade Configurations	5-blade, 11-blade



MS Series

Nylon-molded fans engineered for lower-power engines with designs focused on increased airflow and efficiency.

Diameters	560-813 mm [22-32 in.]
Blade Configurations	8-blade, 9-blade



HS Series

Nylon-molded and designed for applications that require more flow while maintaining high efficiency.

Diameters	610-864 mm [24-34 in.]
Blade Configurations	9-blade, 11-blade



RS Series

Higher cooling performance at lower fan speeds with 8-, 9-, 11-, and 13-blade ring designs that reduce fan-tip turbulence.

Diameters	550-813 mm [22-32 in.]
Blade Configurations	7-, 8-, 9-, 11-, 13-blade



HTEC Series

Metal-like strength and corrosion resistance with the efficiency of a molded fan, made for the harshest environments.

Diameters	1,194-2,438 mm [47-96 in.]
Blade Configurations	5-17 blades



Windshift Series

Choose from high-pressure, airfoil or swept blade designs and a flexible pitch angle for optimized performance.

Diameters	610-1,320 mm [24-52 in.]
Blade Configurations	3-16 blades, equally spaced or staggered



Shogun Series

Ideal for reduced-emission engines with flexibility in blade counts and bolt circles riveted to a durable center disk.

Diameters	406-559 mm [16-22 in.]
Blade Configurations	6-10 blades, equally spaced



Composite Modular Fans

Nylon blades attached to metal spiders for lighter weight and added efficiency.

Diameters	864-1,194 mm [34-47 in.]
Blade Configurations	6-blade, 8-blade



HM Series

Utilizes the optimized HTEC blade design while providing the reduced weight of our proven molded blade.

Diameters	890-1,422 mm [35-56 in.]
Blade Configurations	5-15 blades, equally or unequally spaced



Customizable Metal Fans

The widest range of customizable options, with multiple blade configurations in steel or aluminum.

Diameters	254-2,438 mm [10-96 in.]
Blade Configurations	4-, 6-, 7-, 8-, and 11-blade

FRONT-ENGINE ACCESSORIES

Hubs & Tensioners

Horton fan drive hubs feature double-row angular contact bearings that are greased and sealed for life to last longer and deliver a higher load capacity. Horton belt tensioners can be integrated as a standalone component or adhered to virtually any existing engine bracket.



BETTER LISTENING.
BETTER UNDERSTANDING.
BETTER CUSTOMER SOLUTIONS.

Horton listens. It's our cornerstone quality and why, for decades, brand leaders in the on- and off-highway markets have come to us to exceed their most challenging engine cooling requirements. The result is a keen understanding of your cooling needs. Your engineering challenges. And your specifications.

AGILE ENGINEERING

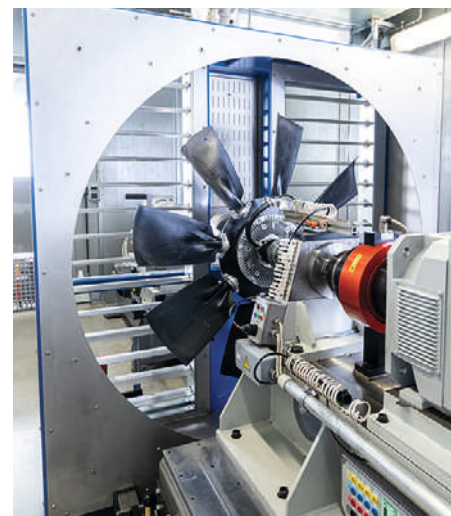
Horton has the IATF- and ISO-certified manufacturing scale to build to precise OEM spec worldwide, but also the agility and technical resources to modify, custom-engineer or co-develop the most advanced airflow and cooling solutions. We engineer the cooling solutions that other providers can't, or won't.

MANUFACTURING TO OEM SPEC

Horton is uniquely qualified to produce OEM-specified thermal management with the highest quality, durability and added value. After all, we've been doing just that for the largest brands in the world for decades. A unique history of manufacturing performance makes Horton the smart choice for OEMs who demand quality worthy of their brands.

CUSTOM ENGINEERED SOLUTIONS

Tough technical challenges from our customers are a leading catalyst for Horton's engine cooling innovations and leadership. Horton employs one of the industry's largest teams of engineers, designers and technicians devoted strictly to application research and development. Not limited to a custom build of one component, we will collaboratively develop an integrated airflow solution.



LEADING CAPABILITIES

EXPERTISE – Horton offers particular expertise in materials, precision machining, assembly and remanufacturing.

MANUFACTURING AUTOMATION – We employ computerized inspection, line-sequenced production and automated test equipment.

GLOBAL CERTIFICATIONS – Horton's manufacturing plants in the U.S. and Germany are IATF 16949 certified, and all our plants and licensee manufacturing facilities are ISO 9001 certified.

ENGINEERING – Horton has the industry's most technically-advanced wind tunnels and engine cooling systems simulator, dynamometers and testing labs.

AVAILABILITY AND SUPPORT. WHEN AND WHERE YOU NEED IT.

HORTON WORLDWIDE.

Horton is a global company with manufacturing plants in Britton (South Dakota), Westminster (South Carolina), Schweinfurt (Germany), Wuxi (China) and a licensed manufacturing facility in Australia. Across 15 facilities worldwide, Horton operates in over 70 countries and has a global network of over 900 distributor locations, plus several QuickShip warehouses in the US and Canada – an unmatched advantage for our customers.

SUPPORT. ANYWHERE. ANYTIME.

Notwithstanding its global presence, Horton steadfastly maintains the personal touch and customer-first commitment of a family-owned company. Questions are answered, technical challenges solved, emergencies mitigated, and promises kept.

Horton offers service that's second to none, with the most significant customer support commitment in the industry. Horton has an agile team of sales and service representatives and one of the best-trained distributor and dealer networks, worldwide.

Horton's engineering leadership lets us design, develop, test and validate engine cooling systems based upon vehicle usage requirements and operating environments.



HORTON GLOBAL NETWORK



USA – HEADQUARTERS

2565 Walnut Street
Roseville, MN 55113, USA
T: +1 651 361 6400
TF: 1 (800) 621 1320
E: info@hortonww.com

CANADA

Quebec, Canada
T: +1 514 250 8970
TF: 1 (800) 621 1320
E: info@hortonww.com

CHINA

T: +86 186 2174 7803
E: yiming.huang@hortonww.com

MEXICO

Av. Jesus del Monte 41,
A-F, OF 1001
Col. Jesus del Monte
Huixquilucan, 52764
México
T: +52 (55) 5360 1506
E: contacto@hortonww.com

EUROPE

Brüsselstraße 1
97424 Schweinfurt
Germany

T: +49 (0) 9721 475 0
E: contact@hortonww.com

HEADQUARTERS + TECHNICAL CENTER

ROSEVILLE, MINNESOTA
Certifications: 1, 3

FACTORIES + TECHNICAL CENTERS

SCHWEINFURT, GERMANY
Certifications: 1, 2, 3

BRITTON, SOUTH DAKOTA
Certifications: 1, 2, 3

OCONEE COUNTY, SOUTH CAROLINA
Certifications: 1, 2, 3

WUXI, CHINA
Opening in 2022

LICENSES

MELBOURNE, AUSTRALIA

CERTIFICATIONS:
1 | ISO 9001 2 | IATF 16949 3 | ISO 14001

SALES OFFICES

MONTREAL, CANADA
LOS VILOS, CHILE
BOGOTÁ, COLOMBIA
SCHWEINFURT, GERMANY
TOKYO, JAPAN
SEOUL, KOREA
MEXICO CITY, MEXICO
MOSCOW, RUSSIA
ROSEVILLE, USA

SEE HORTONWWW.COM FOR LOCATIONS

THEMAL MANAGEMENT SOLUTIONS FOR POWER SYSTEMS.

