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

HORTON

WORLD-CLASS COOLING

COMMITTED TO ADVANCING INDUSTRY WHILE QUIETLY REDUCING ITS IMPACT.

Leading OEM brands manufacturing heavy- and medium-duty trucks and fleet operations specify Horton airflow solutions.

As a global leader in thermal control for power systems, Horton offers a variety of technologies for transportation 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-emission 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.

ON-HIGHWAY: PROVEN QUALITY OVER BILLIONS OF MILES. THE #1 OEM SOLUTION TRUSTED BY LEADING TRUCK BRANDS.

No manufacturer knows on-highway engine cooling fan design like Horton. For decades, Horton fan drives have been standard equipment on the premier brands of heavy-duty, long-haul trucks including Peterbilt, Kenworth, Freightliner, Navistar, and Volvo. This proven experience makes Horton the optimal choice in applications ranging from refuse trucks and concrete haulers, panel and utility trucks to buses and motor coaches.

Horton offers the industry's broadest range of thermal management solutions – from pneumatic fan drives and variable-speed viscous drives to electrified high-voltage cooling solutions. Our portfolio of molded fan designs integrate component materials and complex geometries to meet the cooling requirements of new reduced-emission engines, regardless of the equipment and the environment in which they operate.

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 **hortonww.com**

GET WHAT YOU NEED, FAST

For unmatched delivery speed, Horton offers several QuickShip warehouses across the US and Canada. Identify parts, view available inventory and order online at **hortonww.com/quickship**

IT'S WHAT DRIVES EFFICIENCY. AND CONTROL.

Fan drives and fan designs are paired to maintain engine temperatures within the OEM's operating parameters during 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, they operate 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]

RCV Series

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]

VS Series

Pulse-width-modulation (PWM) signals from the engine management system respond to cooling requirements.

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

VS Series Air

Viscous fan drive utilizing a bi-metal sensor to modulate fan speed based on air temperature.

Maximum Torque	100 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 vehicles including buses, cement mixers, refuse trucks and medium-duty trucks.

TWO-SPEED FAN DRIVES

Two-speed fan drives are ideal for applications frequently at idle where no ram air is flowing across the engine. These applications benefit from constant airflow from an elevated, lower-speed eddy-current mode. The elevated fan speed reduces the number of full fan engagements required to keep your truck operating efficiently.

DM Advantage Two-Speed®

Reduces the number of full fan engagements required due to its elevated disengaged fan speed.

Maximum Torque	271 N-m
Typical Engine HP	180–600 kW [250–800 HP]

REMAN

DM Advantage On/Off & Two-Speed

Fan clutch utilizing re-manufactured components assembled back to OEM standards. A quality repair option without the cost.

HT/S & S Series On/Off

Avoid the hassle of rebuilding; just replace a damaged fan drive with a more cost-effective option rebuilt to OEM specifications.

ON / OFF FAN DRIVES

On/off fan drives engage when engine temperature reaches a set point and remain engaged until the temperature lowers back to optimum operating range. The simplest of the three fan drive types, these are often the least expensive and generally specified for over-the-road and long-haul Class 5-8 trucks, buses and some off-highway applications.

DM Advantage On/Off

A superior solution for some of the highest-heat under-hood applications.

Maximum Torque	271 N-m
Typical Engine HP	250–800 HP

EC450®/EC600™ Electromagnetic

Electromagnetically-engaged, offers no-slip on-off operation for quick response to cooling requirements.

Maximum Torque	170 N-m
Typical Engine HP	50–275 HP

MOLDED FANS

Horton's molded fans give you maximum cooling performance and efficiency. Lighter and quieter, nylon fans are available in several open-blade and ring fan models that feature blade-connecting rings to reduce turbulence and enhance cooling. Design characteristics such as noise, weight, strength, airflow and deflection can be modified to achieve desired performance.

LS Series

Fully-molded open blade fans in a variety of blade configurations and geometries designed for light-service applications.

Diameters	500–600 mm [20–24 in.]
Blade Configurations	5–11 blades

MS Series

Fully-molded open blade fans in a variety of blade configurations and geometries designed for medium-power applications.

Diameters	560–762 mm [22–30 in.]
Blade Configurations	6–9 blades

HS Series

Fully-molded open blade fans in a variety of blade configurations and geometries designed for high-power applications.

Diameters	711–864 mm [28–34 in.]
Blade Configurations	6–11 blades

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.

RS Series

Designed to reduce fan tip turbulence, these fully-molded ring fans come in a variety of blade configurations and geometries.

Diameters	550–813 mm [22–32 in.]
Blade Configurations	7–13 blades

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

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.

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Form #23328-D-0422