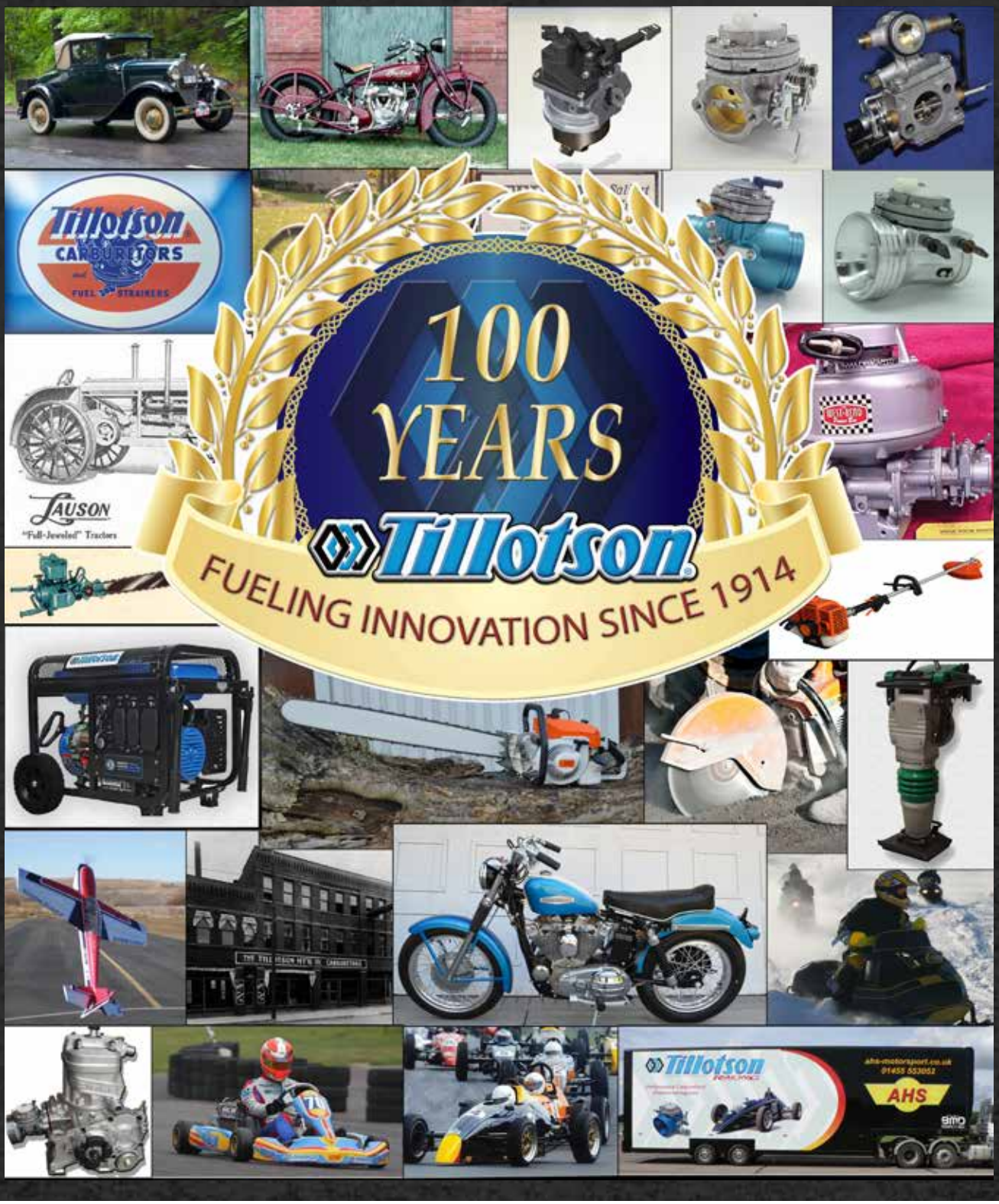


Clash Industrial Estate | Tralee, Co. Kerry | Ireland | +353 66 716 2500 p | +353 66 712 7168 f

225 North Water Street | Suite 300 | Decatur, Illinois 62523 | USA | +1 217-421-7580 p | +1 217-475-2894 f

Ningbo TCCI Manufacturing Co. Ltd. | 1226 Juxian Road | Ningbo Zhejiang Province China 315040

tillotson-racing.com | tillotsonPower.com | tillotson.ie

Tillotson RACING Tillotson POWER PRODUCTS Tillotson XCHANGE

Tillotson®

OUR COMPANY

Over the past 100+ years, we have provided fuel systems for nearly every major engine manufacturer. In the early part of the 1900's, we pioneered new technologies for the burgeoning automobile and motorcycle industries. In the 1940's, we invented the diaphragm carburetor, which allowed engines to operate in virtually any position and spawned the lawn and garden industry as it's known today. In the 1970's, our HR and HL carburetors helped usher in the new wave of recreational vehicles, including snowmobiles, jet skis and unmanned air vehicles. At the turn of the 21st century, we introduced high performance racing carburetors, which have helped the greatest drivers in the world win US, European and international titles. As we enter our next 100 years, we continue to innovate. Our new TillotsonTCT fuel system is set to revolutionize the low-emission world, offering engine manufacturers the ability to reduce emissions by more than 35% while increasing power, overall engine performance and fuel economy. Meanwhile, our Tillotson Power Products affiliate is taking our 100 years of experience in fuel systems to the complete consumer product.

We back our quality with worldwide manufacturing and support. We have facilities in the United States, Ireland and China and affiliates in Argentina and Germany to enable us to provide our customers with the best carburetors, the best value and the most convenient manufacturing locations. That's the Tillotson Advantage.

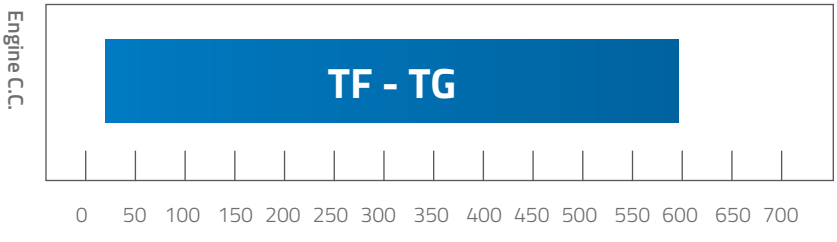
Our mission is to deliver the world innovative fuel systems and power products. We strive to create superior value and satisfaction through Innovation, Performance and Design. We identify and develop new and meaningful products and services to meet the changing needs of our customers, consumers and communities.

TOTAL COMBUSTION TECHNOLOGY

INTRODUCING THE NEXT GENERATION IN FUEL SYSTEM TECHNOLOGY....

TillotsonTCT - "Total Combustion Technology" - is our newest patented fuel system for small off road engines (SORE).

This new technology allows most Phase 2 SORE engines to meet EPA Phase 3 legislation and most Phase 3 engines to further improve their emissions while at the same time improving torque, startability and acceleration.



TillotsonTCT combines a high velocity, single point metering system with a full-range, non-linear calibration system to improve atomization and optimize engine performance. The result is:

- Lower emissions
- Lower fuel consumption
- Improved acceleration
- Enhanced engine life
- Easier starting
- Stable power, even under load

	Engine	Loncin G200F 2010	Honda GX160 2010	ZS 173 2011	MTD 170COA 2012	GX160 (Orbital) 2008
Baseline (g/k Wh)	HC	5,52	8,31	6,84	7,00	5,21
	NOX	7,08	5,65	2,52	4,19	3,80
	HC+NOx	12,6	13,96	9,35	11,19	9,01
	CO	236	334,57	435,1	495,36	291,31
TCT (g/k Wh)	HC	5,23	6,44	4,44	5,08	3,27
	NOX	2,07	1,89	2,59	1,94	2,79
	HC+NOx	7,3	8,33	7,03	7,02	6,05
	CO	333,3	340	323,8	382,1	211,00
Reduction (g/k Wh)	HC	-5,35	-22,5%	-35,1%	-27,4%	-37%
	NOX	-70,8%	-66,5%	+2,8%	-53,7%	-27%
	HC+NOx	-42,1%	-40,3%	-24,8%	-37,3%	-33%
	CO	-41,2%	-1,6%	-25,6%	-22,9%	-28%

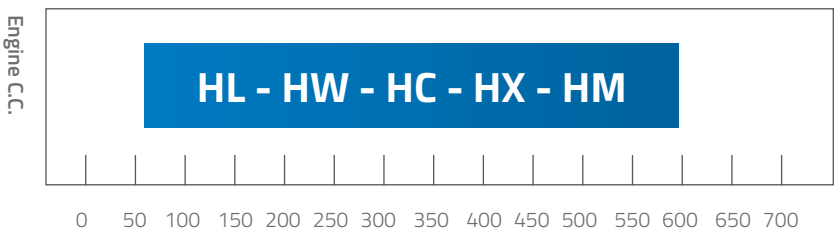
SAE J1088 A cycle results on various Class 1 engines typically show 30-40% reduction in HC+NOx and CO

Tillotson RACING

From the very beginning, Tillotson carburetors have fueled the passion for racing.

Our racing carburetors are the best in the world. We've helped drivers win U.S., European and World championships and can help you do the same. Our carburetors set up and adjust easily for changing conditions and provide optimum performance at top, middle and bottom ranges. We work with engine manufacturers, tuners, associations and even local clubs to provide the best racing experience possible.

We also offer a range of adjustment and calibration tools to make setting up your carburetors quick and easy. Visit us at tillotson-racing.com to see our full line of racing carburetors and products.



X30 by IAME

MSA BRITISH JUNIOR KART CHAMPIONSHIP

WKA WORLD KARTING ASSOCIATION

Tillotson FORMULA V CHAMPIONSHIP

GazelleGOccUK

CIK-FiA

British Karting Championship SuperOne S1 FI

Club Racing

ROTAX CR125 open racing

POWER PRODUCTS

Our new line of power products are designed for the serious user looking for advanced features and reliability. For the past 100 years, we've been creating and standing behind the best fuel systems for the biggest companies in virtually every power segment and now we're taking that expertise to the complete engine and power product. Our current offerings include generators for the U.S. market and chainsaws for the South American and Asian markets, and that line up will continue to expand in the coming years.

GENERATORS

Our new line of portable generators include three peak/rated wattage levels – 4500W/3000W, 7500W/6000W and 10,000W/7500W. The 4500W and 7500W generators are also available with a dual fuel (gasoline and propane) option. The engines are rated at 2000+ hours and feature long-life racing technology developed with the help of our championship Tillotson Racing division. All units feature a full square steel frame for enhance stability and durability; heavy duty drop down handles and large run-flat tires for easy mobility; electronic run time meter for monitoring engine service life; covered electric outlets to protect against moisture; low oil

automatic shut off to protect against moisture and easy-on keyed electric start with recoil option to make starting safe and easy. The three gasoline models also offer the additional convenience of a remote control that allows you to turn the generator on or off from up to 300 feet away.

Our generators are also a true work of art. The roll-cage design featuring our trademark diamond grate not only looks great, but lets you stack boxes, tools and other items on top when not in use for efficient storage. The generators can also be upgraded with our low-emission, high-performance Tillotson TCT carburetors.

CHAINSAWS

Our new line of chainsaws is ideal for the professional and semi-professional user. They offer quality, durability and performance at an affordable price. They are engineered from over 150 years of combined experience in fuel systems and engine development and designed to outperform all other brands in their class. The current range includes 45cc, 72cc and 91cc saws to handle everything from firewood to big timber. Available now in South America and Asia and coming soon to the rest of the world.

LAWN & GARDEN / CONSTRUCTION

HU Series
Diaphragm Carburetor

HE Series
Diaphragm Carburetor

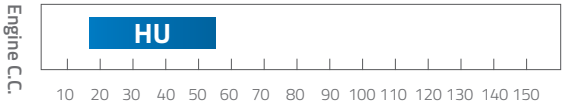
HS Series
Diaphragm Carburetor

HL Series
Diaphragm Carburetor

In the late 1940's we revolutionized the handheld engine industry with the invention of the diaphragm carburetor, enabling small engines to operate in any position. That invention led to the creation of an entirely new market segment in the lawn and garden industry that rapidly grew to include chainsaws, brush cutters, trimmers, pole cutters and leaf blowers and expanded to the construction market with concrete cutters and cut-off saws. Our customer list includes nearly every major brand and in some cases we license our technology to engine manufacturers who want to do their own manufacturing. Chances are, if you pick up any piece of handheld power equipment, its carburetor either is or is based on one of ours.

With our world-wide manufacturing capability, we serve customers on every continent. Our four main lines of diaphragm carburetors – HU, HE, HS and HL – cover the full range of handheld engines, from smaller consumer engines to heavy-duty professional engines. Our new Tillotson TCT technology is available in both diaphragm and float models for every power equipment category.

HU Series Diaphragm Carburetor

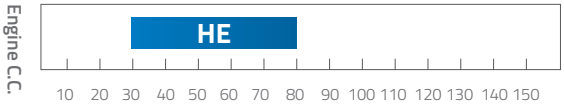


Applications
- Chainsaws (hobby/farmer)
- Brush cutters
- Weed eaters
- Hedge trimmers
- Tillers
- Rock drills
- Generators
- Augers
- Model aircraft/cars

Feature Options
- Speed governor valve
- Internal/external pulse
- Independent/dependent fuel system
- Injection/butterfly choke
- Nickel-plated inlet seat
- Reverse idle system
- Side adjust speed screw
- Purge primer

Miniature
All Position
Integral Pump
Light Weight
Few Parts
Easy Service

HE Series Diaphragm Carburetor

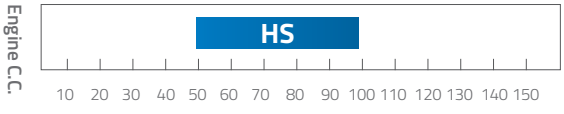


Applications
- Chainsaws
- Clearing saws

Feature Options
- Internal/external pulse
- Side adjust screws
- Nickel-plated brass inlet seat
- Anti-vapor system
- Emulsion idle
- Filter compensation system

All Position
Integral Pump
Light Weight
Few Parts
Easy Service

HS Series Diaphragm Carburetor

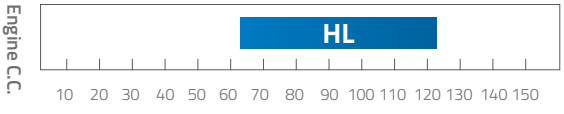


Applications
- Chainsaws (professional)
- Clearing saws, cut-off saws
- Pumps, generators
- Earth compactors, rock drills

Feature Options
- Speed governor valve
- Internal/external pulse
- Independent/dependent fuel adjustment
- Butterfly/injection choke
- Nickel-plated inlet seat
- Remote fixed jet
- Part throttle jet
- Side adjust/wing adjust speed screw
- Reverse idle system
- Emulsion idle
- Filter compensation system

All Position
Integral Pump
Efficient Air Flow
Easy Service

HL Series Diaphragm Carburetor



Applications
- Chainsaws (professional)
- Cut-off saws
- Fire pumps
- Generators
- Marine applications
- Golf carts

Feature Options
- Speed governor valve
- Double pump module
- Internal/external pulse
- Independent/dependent system
- Replaceable nickel-plated inlet seat
- Racing Venturi profile

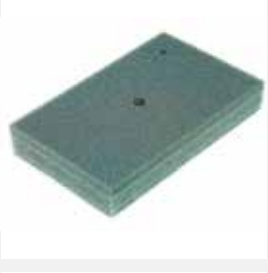
All Position
Optimum Air Flow
Large Pump Capacity

OEM

OEM REPLACEMENT PRODUCTS

We make it possible to improve the quality and performance of existing equipment through our Tillotson Xchange line of replacement products. These products enable customers to replace non-Tillotson carburetors, repair kits and filters with Tillotson® brand drop-in replacements. All Tillotson Xchange product are supported by our legendary warranties and technical support.

We make it easy to improve the quality and performance of your existing equipment



SPECIALTY CARBURETORS

UNMANNED AERIAL VEHICLES

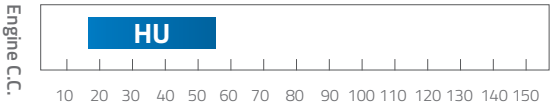
We provide the most reliable carburetors for unmanned and experimental aircraft. Our carburetors power engines for small hobby aircraft, mid-size competition and acrobatic aircraft and large industrial drones. When performance and reliability matter most, there is only one choice – Tillotson.

Applications
- Unmanned aerial vehicles (UAV)
- Recreational vehicles

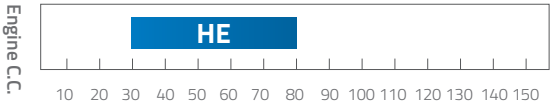
Feature Options
- Internal/external pulse
- Reverse shutter rotation
- Double pump module
- Air filter adaptation
- 3 System fuel adjustment

All position integral pump boost venturi

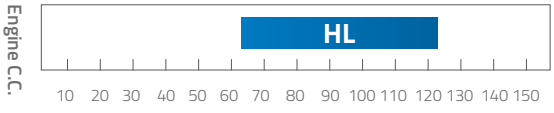
HU Series Diaphragm Carburetor



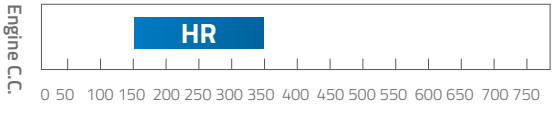
HE Series Diaphragm Carburetor



HL Series Diaphragm Carburetor



HR Series Diaphragm Carburetor



100 YEARS

Tillotson

FUELING INNOVATION SINCE 1914

With a 100+ year history and millions of memories tied to our products, it's not uncommon for our customers to want to restore carburetors no longer in production. We do our best to help, whether it's a factory refurbish or information on vintage repair specialists closer to home. Most carburetors can be repaired or refurbished to like-new condition as long as the body is in good shape. Visit our website at tillotson.ie for more information.

Photos courtesy VROOM Magazine

DESIGN & ENGINEERING CENTER

We provide expert calibration and design services with flexible manufacturing options to create the exacting tolerances required by our customers. We offer customers the option to rely on our expert manufacturing capabilities or to license our technology for their own manufacturing sources. We also partner with manufacturers and developers to create the latest fuel system technology.

Our philosophy of continual product improvement and our environmental sensitivity create new technology and features which quickly become industry standards.

Tillotson® engineering is the best in the world. Our innovations continue to change the carburetor marketplace. Our engineering center offers world-class product development to OE's as well as to other carburetor manufacturers. We offer a variety of services, including engine calibration, carburetor and throttle-body development consulting, data logging, and prototype development.

Our services are available either as part of a manufacturing package or on a for-hire basis.