

Marmon Holdings, Inc.

A Berkshire Hathaway Company

Marmon Holdings, a Berkshire Hathaway company, comprises more than 100 autonomous businesses in eleven groups, serving diverse industries and markets worldwide.





























Rail & Leasing

Retail Solutions

Transportation Products

Water Technologies



BERKSHIRE HATHAWAY INC.

"Marmon is our kind of company."

- Warren Buffett































Marmon History

- 1953: Brothers Bob and Jay Pritzker of Chicago buy their first manufacturing company.
- 1964: Marmon name is adopted for the group of companies, which the Pritzkers would build into one of the largest private conglomerates in U.S.
- 2008: Berkshire Hathaway acquires Marmon from Pritzker family.

MARMON WASP





Marmon By the Numbers



Marmon in The House!

Cerro Linesets supplies copper linesets for heating and air-conditioning installations. A typical application connects the inside and outside portions of the system.

Tenn-Tex makes plastic injection molded parts for kitchen and bath cabinetry including mounting brackets for drawer slides, shelf supports, corner braces, and other related products.

Cerro Plumbing Tube makes a broad range of copper tube used in residential plumbing.

Anderson Fittings

manufactures brass and copper components for plumbing and appliance applications.

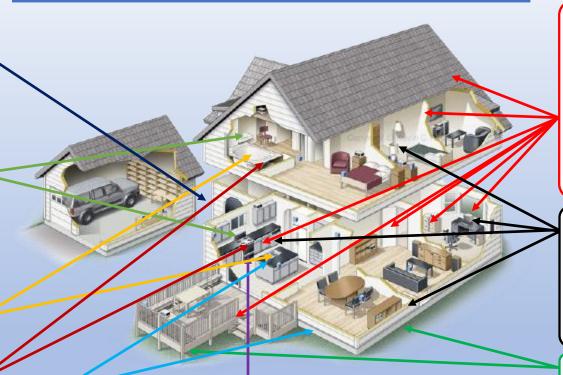
EcoWater makes water softeners and filtration systems for both whole home and under counter applications.

Harbour Canada designs and manufactures specialty high temperature wire used in applications including ovens. Pan American Screw offers a wide range of fasteners used in the home including in furniture assembly, cabinets, dry wall, decking, windows, doors and roofing. You can build an entire house using Pan American Screws. Robertson sells similar products in Canada while Atlas Bolt & Screw makes screws for metal roofs.

Cerro Wire manufactures copper wire for interior wiring in homes. The Retail division sells through retail home improvement stores, while the Electrical Distribution division sells through wholesale electrical distributors.

Western Builders Supply

provides a wide variety of construction screws including those used in masonry and composite decking.





Marmon products are sold and used at Wal-Mart





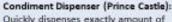
Marmon makes many products used at McDonald's



Fry Baskets (Prince Castle):

Suspends cold fries in oil during frying process





Quickly dispenses exactly amount of condiments for each sandwich type



Fry Scoop and Bagger (Prince Castle):

Portions and scoops the cooked fries into packaging



Bun Toaster (Prince Castle):

Toasts sandwich buns on a conveyer system prior to assembly





Pie Merchandiser (Prince Castle):

Holds pies to keep



Tomato Saber (Saber King):

Efficiently slices fresh tomatoes with concealed blades for safety. Lettuce Kutlett, does the same for lettuce



fresh and warm. and serves as dispenser

UHC Holding Cabinet (Prince Castle):

Keeps cooked food warm and fresh for a set time prior to assembly of sandwich

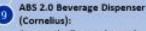


Cold Condiment Refrigeration Rail (Silver King):

Keeps cold toppings cool and fresh before they are added to the sandwich







Automatically puts ice and drink into cups, primarily used for drive through







Marmon has a long history of providing defense products





The only armoured car available to British forces during the North African campaign of 1941, the Mark II was made in South Africa and named after its advanced four wheel drive system supplied by Marmon-Herrington in the United States. It was considered reliable if somewhat under gunned. The Mark II was often fitted with captured German and Italian weapons by British crews in the field. It was used into the 1990's by the Greek Army. Today Marmon-Herrington and sister company Sisu Axles supply \$10 MM of axles and drive train components to the military.



Marmon Aerospace and Defense Surprenant EMZ Cable

Surprenant EMZ is a new cable designed to protect military circuits from electro-magnetic pulse (EMP). The inner conductor is encased by four alternating layers of copper foil and braided tin plated copper, all covered by a polymer coating. It allows EMP proof cable to be run without being encased in armored conduits. It is being used on the Navy's LPD 17 class ships. Surprenant. EMZ is just one of the almost \$50 MM in wire and cable products sold by Marmon companies Harbour, Cable USA, Gendon, Kitco, as well as Marmon Aerospace and Defense into the military.



Fontaine Military Products Centurion C-RAM

Raytheon's Centurion C-RAM is a Counter Rocket and Mortar system based on the Vulcan Phalanx CIWS. It fires up to 4,500 20 mm shells per minute to shoot down rockets and mortars targeting US bases. It sits on a heavy duty trailer made in Alabama by Fontaine Military Products, Since the C-RAM was developed from a Navy system it was originally painted grey before the Army went with tan. Fontaine sells about \$5 MM of different trailers to the military each year including line haul, tank transporters, as well as the trailers for the THAAD and Patriot missile systems.



Future Metals Aircraft Tubing

Future Metals sells a variety of stainless steel, titanium, aluminum, and high temperature alloy tubing for use in aerospace applications such as hydraulic lines. Aircraft using the tubing include the F-35 Lightning and the P-8 Poseidon. Product specifications are demanding given the potential severity of failures during high performance flight operations. Future Metals also supplies metal in sheet and bar form for fabrication and machining of parts. Sales to the military exceed \$6 MM per year.



Marmon on the Big Rig



Nylok

 Coatings on more than 35 specialty fasteners prevent everything from the bumper, doors, seats, mirrors and engine from vibrating loose

Fontaine Trailer

Platform trailers

Webb Wheel

- Brake drums
- Brake rotors
- Wheel hubs
- Air disc brake calipers



Marmon-Herrington

- Axles
- Transfer cases and hydro-mechanical transmissions
- · AWD conversions

SISU

Heavy duty axles

Fontaine Modification

- Cab modifications
- Chassis modifications

Fontaine Fifth Wheel

 Fifth wheels including top plates and mounting brackets

TSE Brakes

 Brake actuators and slack adjusters

Fontaine Spray Suppression

- Fenders
- Mud flap hangers

Triangle

 Leaf springs and air springs



Ford versus Chevy – Marmon Wins!



Prism Plastics

- Air and fluid quick connectors
- Latch rings
- Pump impellers
- Retractor gears
- Spring case covers
- Sensor covers and housings
- Shock dampers
- Steering pulleys
- Thrust washers
- Webbing guides

Penn Aluminum

- AC lines
- Aluminum mounts for emergency vehicle lights
- Flectrical wire harness tubes
- Engine cooling lines
- **Engine Mounts**
- Heater core lines
- Oil filter coolant tubes
- Rear view mirror post
- Transmission oil cooler lines

Sonnax and Rostra

- Remanufactured valve bodies
- Torque converter upgrades
- Transmission bushings
- Transmission rebuild kits
- Transmission shafts
- Transmission solenoids
- Transmission valves





Sonnax Smart-Tech **Forward Clutch** Drum for Ford 4R70 series transmission on F-150



Rostra Automatic Transmission Wiring Harness for Silverado 1500 with 6.2L V8 and 8L90 **Transmission**

Nylok

Nylon Patch, Precote, Nystay, Nyseal, Nycote Plus, Nyplate, and Nyplas coat fasteners for:

- Axle assemblies
- **Engines and transmissions**
- Grounding and headlights
- Instrument panels
- Seat to floor attachment
- Sunroofs and tailgates
- Wheel attachment



Marmon products get millions of views on YouTube...





Perfection on YouTube Statistics Vs. YouTube Statistics

About 53% of YouTube's videos have fewer than 500 views. About 30% have less than 100 views.

Auto and vehicle videos get on average get 5.673 views per video. How-to videos get on average 8,332.

Just 0.33% of videos have more than one million views.

All but one of Perfection's videos have over 500

views.

Perfection gets two to three times that amount with an average of 19,5652 view per video.

4% of Perfection's videos have over one million views.

> Click on us, we're links!



Removal and Servicing of Clutch Master Cylinder

1.4M views • 9 years ago



Clutch Master and Slave Cylinder Replacement

1M views · 8 years ago



2000 Honda Civic Si. 1.6L Clutch Install

DONE VIEWS . O YEARS AND



Bleeding a Clutch by **Blocking the Slave** Cylinder



Ford Ranger & Mazda B-Series Pickup Clutch 636K views · 8 years ago

Servicing Quick Connect / **Ouick Disconnect Pull** Type



Ford Ranger & Mazda B-Series Pickup Clutch

413K views • 9 years ago



Bleeding External Clutch **Hvdraulic Release Systems**

223K views • 9 years ago



Dodge Pre Filled Clutch **Hydraulic System**

219K views • 7 years ago



Pull Type Clutch Installation - 1999 Hyundai Elantra 2.0L



2004 Dodge Ram Pickup w/ 5.9L Cummins & NV5600

200K views · 8 years ago



Clutch Hydraulic System Air **Bubble and Hydraulic Tips**

183K views • 5 years ago



Bleeding External Clutch Hydraulic Release Systems

178K views • 9 years ago



2003 Hyundai Tiburon GT 2.7L Clutch

167K views • 5 years ago



Dodge Ram 1997 5.9L NV4500 5 Speed Clutch

164K views · 8 years ago



Ford F-150 4 2L Self **Adjusting Clutch**

127K views • 4 years ago



2003 Kia Rio Clutch and **Clutch Cable Installation**

121K views • 8 years ago



Clutch Start Switch Removal and Replacement

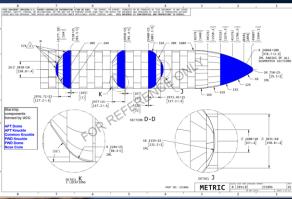


Uniform Components makes several pieces for the SpaceX Starship including the nose cone, the domes, and the knuckles. The precision forming from Uniform allows SpaceX to achieve extreme strength in its designs – an important consideration for Falcon X, the world's most powerful launch vehicle.

TE Wire & Cable manufactures a line of cables that are used on the rocket test stands at the McGregor Rocket Test Facility. Prior to launch all SpaceX engines are test fired on these stands.



Harbour Industries provides special coaxial cable that transmits video from the capsule and the outside of the rockets. Harbour also supplies data cables for flight control.



Uniform Components on SpaceX Starship

Marmon in the Sky









Harbour's newest product is M25038/3 cable used in aircraft engines.



Nylok provides coatings for fasteners used to secure lighting, seats, and storage bins on Boeing aircraft.



Aero-Hose makes hose assemblies and distributes hoses and connectors used for fluid systems.





Orkal distributes fluid fittings used for fluid systems in aircraft and jet engines. Products fly on Airbus, Boeing, and Bombardier planes.



Future Metals distributes aircraft grade aluminum, nickel, stainless steel, and titanium alloys in bar, extrusion, sheet, and tube formats. It is used to make both new and repair parts for planes.



Harbour also provides USB, power, and data cables for in-flight entertainment systems.



Marmon produces water softeners and filters

Water Softeners



 Water that contains high concentrations of dissolved minerals, specifically calcium and magnesium

Why use a water softener?

- Hard water can cause problems at home including hard to remove white film or scaling on your shower, bath or sink; as well as mineral buildup in your water heater and pipes
- Hard water can also cause scalp problems like dandruff and tangled hair while also changing the color of your laundry
- In industrial settings hard water can ruin boilers and coffee makers!

Who is affected?

 Water hardness affects more than 85% of Americans (See Map)

Marmon Water softener technology

- Marmon Water softeners use a process called ion exchange where NaCl is used to replace the calcium ions in hard water. The NaCl moves through pipes and reduces the buildup.
- Marmon Water softeners use microprocessor controls and algorithms that learn consumers' water use behavior in order to optimize salt usage. Marmon Water softeners have the lowest salt usage on the market!
- Sold under many brands including Morton and Whirlpool

A Eff Ah ab

A portion of the Roman Eifel aqueduct in Germany. After being in service for about 180 years, the aqueduct had mineral deposits of up to 20 cm thick along the walls. —



Water Filter

What can be found in water from the home tap?

- · Microorganisms such as cryptosporidium which can cause gastrointestinal illnesses
- · Disinfectants such as chlorine which can cause stomach discomfort
- · Disinfection byproducts such as chlorite which can cause anemia
- Inorganic chemicals such as lead which can cause kidney problems
- · Organic chemicals such as carbon tetrachloride which can cause an increased risk of cancer
- Learn more here on the EPA website

Why use a water filter?

- Filters use a variety of mechanical and chemical processes to remove contaminants
- Filters need to be replaced or cleaned regularly in order to stay efficient
- It is more environmentally friendly to have water filters than use water bottles or tankered water brought by truck

Who is affected?

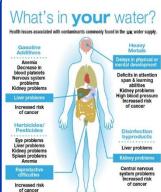
- 15% of people in the US have dangerous tap water in their homes –see your water quality here
- All 50 states have water systems that violate the EPA's Safe Drinking Water Act (See Map)

Marmon Water filter technology

- Filters for almost every contaminant
- FACT media provides high filtration at low pressure such as in Brita pitcher filters
- · Carbon block technologies incorporate other filtering materials
- First WiFi connected operating systems
- Found in many hope refrigerators such as Frigidaire and Whirlpool

Drinking Water Violations Reported to EPA (2017)









Marmon even helps others bring their products to market



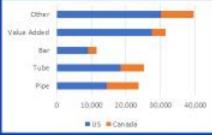








2019 Marmon Keystone Sales (131,369 Total Tons)















Bush Hog - Rotary Cutter



















The Sun Never Sets on Marmon and its Products

