Introducing Two New Technologies at AISTech 2014

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Quaker expands its portfolio with Water Glycol Hydraulic Fluids and Greases

CONSHOHOCKEN, Pa., May 2, 2014 /PRNewswire/ -- Quaker Chemical Corporation (NYSE:KWR) develops products that help customers adjust to the latest industry challenges and bring value to their processes. Quaker has expanded its product offering in the Steel industry with the addition of QUINTOLUBRIC® 702-46 RD Water Glycol Hydraulic Fluid to its line of QUINTOLUBRIC Fire Resistant Hydraulic Fluids and QUAKERTEK™ Greases.

QUINTOLUBRIC® 702-46 RD is a premium water glycol fire-resistant fluid that has FM Approval as a less hazardous fluid. QUINTOLUBRIC® 702-46 RD is designed to provide optimum performance in hydraulic systems where fire-resistant fluids are required. Specific additives formulated into the fire-resistant water glycol hydraulic fluid support water hydraulic equipment by preventing corrosion in components and piping, inhibiting bacterial growth in the fluid and extending component life. Key benefits include excellent fire-resistance, minimal foaming, high viscosity index and extended pump life in systems operating under high pressure or in overloaded hydraulic systems.

The Quaker portfolio of QUAKERTEK™ Specialty Greases includes a range of aluminum complex, lithium complex, polyurea and calcium sulfonate thickened greases that can be used for coke making, casting, the blast and basic oxygen furnace, melt shop, hot mill, cold mill temper mill, pickle line mobile equipment, motor bearings, as well as other extreme temperature applications. QUAKERTEK™ Specialty Greases withstand extreme temperatures; have excellent resistance to water washout, water resistance, superior rust and corrosion protection, extreme pressure lubrication, protection against shock loading and excellent film strength.

Around the same time Quaker started developing its grease product line, they also formed a partnership with Sarah Fisher Hartman Racing (SFHR), a Verizon IndyCar Series team. The goal of the partnership was to develop new greases that would reduce mechanical loss of energy and extend the life of the bearings. SFHR was hoping for a better technology that, during a close race, means the difference between a first and third place finish. Quaker, on the other hand, was hoping to leverage SFHR's data and advance its understanding of grease under extreme stress conditions to gain market advantage in a wide range of industries.

The SFHR engineers found that the new greases provided a 10% gain on power consumption over the standard grease that they used. Further, the new greases allowed SFHR to use 55% less grease than the usual, prescribed, amount of grease. Additionally, when drivers tested the setup on the racetrack, the reduction in the amount of grease provided them with an extra 4% gain on power consumption, and a reduction in mechanical loss resulting in an improved race time of 0.5 to 200ths of a second over the results of the standard greases.

Quaker will be showcasing these new product lines, along with a Sarah Fisher Hartman Racing IndyCar, and also have appearances from the team's owner Sarah Fisher and driver Josef Newgarden at the Association of Iron and Steel Technology Show, AISTech May 5th – 7th, 2014 in Indianapolis IN – Booth 913. In addition, two Quaker Associates will present papers at the AISTech Show:

- Bas Smeulders, Research Scientist will present *Novel Laboratory Lubrication Tests for Cold Rolling Emulsions on* Tuesday, May 6 at 2:00 pm – Room 111/112
- Amy Beard, Key Account Business Analyst Primary Metals, and Qiulin Yu (Nucor Steel Tuscaloosa Inc) will present Proven Benefits of Roll Bite Lubrication on a Reversing Steckel Mill on Wednesday, May 7 at 2:00 pm – Room 110

Additionally, the Association of Iron and Steel Technology released *The Making, Shaping and Treating of Steel,* Flat Products Volume. This new volume's chapter on Descaling, Cooling and Rolling Lubrication Systems included sections written by Quaker Associates. James Murphy, Steel Rolling Product Manager - North America contributed a section titled, *Roll Cooling and Lubrication in Hot Rolling,* and Bas Smeulders, Research Scientist - The Netherlands contributed a section titled *Roll Cooling and Lubrication in Cold Rolling*.

For more information on Quaker Chemical, and its full product line offerings, including Chemical Management Services, please visit quakerchem.com.

About Quaker Chemical Corporation:
Quaker Chemical Corporation is a leading global provider of process fluids, chemical specialties, and technical expertise to a wide range of industries, including steel, aluminum, automotive, mining, aerospace, tube and pipe, cans, and others. For nearly 100 years, Quaker has helped customers around the world achieve production efficiency, improve product quality, and lower costs through a combination of innovative technology, process knowledge, and customized services. Headquartered in Conshohocken, Pennsylvania, USA, Quaker serves businesses worldwide with a network of

dedicated and experienced professionals whose mission is to make a difference. Visit www.quakerchem.com to learn more.

About Sarah Fisher Hartman Racing:
Sarah Fisher Hartman Racing (SFHR) was established in 2008 and is owned by former driver Sarah Fisher, the youngest woman ever to compete in the Indianapolis 500 and the first woman to run a full IndyCar Series schedule, and businessman Wink Hartman. SFHR has competed in the IndyCar Series since 2008, earning its first victory in 2011 at Kentucky Speedway.

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SOURCE Quaker Chemical Corporation

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