

NEWS RELEASE

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Boeing Approves TRIM[®] MicroSol[®] 590XT for Aerospace Manufacturing

TRIM[®] *MicroSol*[®] 590XT, an advanced-technology, aerospace, semisynthetic microemulsion, has received Boeing process spec number BAC5008 approval for areas 1 through 6.

Perrysburg, Ohio, December 20, 2017 – Master Fluid Solutions[™] is pleased to report that TRIM[®] MicroSol[®] 590XT, an advanced-technology, aerospace, semisynthetic microemulsion, now has full Boeing approval for usage areas 1 through 6 as described in BAC5008 and BAC5440. Usage area 1 is used for parts or assemblies subsequently to be applied with paint or sealant. Usage area 1 also includes areas where fluid may contact cured sealant and/or paint. Usage area 2 includes machining heat-treated steels in accordance with BAC5440. Usage area 3 is used for drilling, reaming, or machining dissimilar metal stackups containing high strength (180 ksi) alloy steel. Usage area 4 is used for machining airplane aluminum exterior surface assemblies without requiring disassembly for cleaning after use. Boeing usage area 5 includes machining of non-sealant and non-paint parts not described in BAC5008 specification areas 1 through 4; while area 6 includes machining, grinding, or cutting detail parts and assemblies made of titanium alloys. MicroSol 590XT approval can be found in Boeing document PSD 6-141.

Sealants, paints, heat-treated steels, dissimilar metal stackups, exterior aluminum surfaces, titanium, and titanium alloys are commonly used in the aerospace industry, including Boeing and their subcontractors. These approvals allow Boeing and their subcontractors to use MicroSol 590XT to machine these high-tech aerospace alloys to make parts for all space and aircraft including the 737, 767, 777, and 787 families of airplanes.

"MicroSol 590XT not only meets the demands of specific aerospace customers, but it is also environmentally and regulatory compliant for the foreseeable future. The expanding Boeing area approvals allows Boeing and its subcontractors to utilize MicroSol 590XT in many more manufacturing operations." stated Master Fluid Solutions' Director of Global Aerospace Strategic Business Unit, Monte Dhatt.

MicroSol 590XT improves on the validated performance of previous generations with a robust stability package using environmentally safe ingredients. The formula is a favorite of production mangers, environmental advocates, and safety professionals. MicroSol 590XT is free of chlorine, triazine, formaldehyde releasers, phenols, boron, DCHA, and secondary amines. It dramatically extends useful life without the need for tank-side



biocides or fungicides. MicroSol 590XT provides superior corrosion inhibition on all ferrous and nonferrous metals and keeps parts and machines very clean to reduce maintenance and production time.

MicroSol 590XT is low foaming for today's demanding high-pressure, high-volume applications and it provides an optimized combination of cooling and lubricity to titanium, aluminum, steel, stainless steel, and Inconel[®] machining applications.

About Boeing

Boeing is the world's leading aerospace company and the largest manufacturer of commercial jetliners and military aircraft combined. Additionally, Boeing designs and manufactures rotorcraft, electronic and defense systems, missiles, satellites, launch vehicles, and advanced information and communication systems. As a major service provider to NASA, Boeing operates the Space Shuttle and International Space Station. The company also provides numerous military and commercial airline support services. Boeing has customers in more than 90 countries around the world and is one of the largest U.S. exporters in terms of sales.

About Master Fluid Solutions — Master Fluid Solutions, working closely with the worldwide metalworking community, develops and markets a full line of environmentally sound, extremely durable and stable cutting and grinding fluids, straight oils, parts cleaners, and rust preventives under the TRIM[®] and Master STAGES[™] brands. Master Fluid Solutions' XYBEX[®] fluid management systems lower their customer's total cost of operations. Master Fluid Solutions is committed to the safety of the people who use our products, the protection of our planet, and the overall impact on our customers' profitability. Master Fluid Solutions is proud to have been named #1 in "Top Workplaces" in the Toledo, OH area for 2017. For further information, contact a local distributor, who can be found at https://www.2trim.us/distributors.php, call +1 800-537-3365, or visit https://www.masterfluidsolutions.com.

Photo: TRIM[®] MicroSol[®] 590XT – Milling, https://pdocs.masterchemical.com/mcc/docs/db-i/app1024-T/MicroSol-590XT-milling.jpg

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