

FOR IMMEDIATE RELEASE

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**HEADLINE:**

**EMTEC and IQ Technologies To Develop Improved Materials for U.S. Department of Defense**

*Dayton, Ohio* – The Edison Materials Technology Center (EMTEC) in conjunction with IQ Technologies Inc of Akron, Ohio, have signed a cooperative agreement with the U.S. Army Benet Laboratories to further develop and implement a highly advanced heat treatment technology for hardening steel weapon system components for the Department of Defense. The funding will expand the technology developed by IQ Technologies and apply this advanced processing treatment to steel components of small and medium arms, helicopter gears, and cannon barrels. The agreement, under the heading of Development of Intensive Quenching Technology for Advanced Weapon Systems, will focus on developing improved materials, lower costs, and enhance properties of steels that go into selected weapons systems and aviation vehicles.

This program will utilize a process called intensive quenching (IQ) to achieve improved properties in the heat treated steel. IQ is an environmentally friendly process that improves steel's mechanical properties such as strength, toughness, and ductility. These improved performance characteristics can allow for weight reduction of steel parts while providing greater strength and service life in weapon systems. In this technology steel parts are quenched in powerfully agitated water with a cooling rate that is significantly faster than quenching in oil, quenching with high-pressure gas in vacuum furnaces, or quenching in the air. In addition to IQ Technologies developing this process for use in Department of Defense applications, EMTEC will provide support and stimulate other applied research to benefit industrial preparedness activities.

IQ Technologies Inc located in Akron, OH is a materials processing company with technology that specializes in heat treating of metals, process engineering, research and development. Their prime objective is to commercialize the environmentally friendly, resultant enhanced performance IQ process through in-house utilization on steel parts on behalf of its customers or through licensing opportunities to others interested in utilizing this advanced heat treatment process. The Edison Materials Technology Center (EMTEC) in Dayton, OH, is a non-profit, member-based organization serving Ohio. EMTEC provides technical coordination and commercialization assistance to Ohio's industry, universities, and government labs to strengthen Ohio's industrial competitiveness in automotive, metal casting, nanomaterials, polymers, composites, biomaterials, and alternative energy markets.

For additional information please contact David Swenson by telephone at 937-259-1302 or by email at [dswenson@emtec.org](mailto:dswenson@emtec.org) or visit EMTEC's website at [www.emtec.org](http://www.emtec.org) for additional information.

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