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**FOR IMMEDIATE RELEASE**

**HSLA-V Steel Shown to Enhance Soldier Protection and Mobility**

-- Research demonstrates the use of HSLA-V Steel rebar results in enhanced mobile and fixed barrier fortifications --

**June 3, 2009** – Recent studies using high-strength, low-alloy steel microalloyed with vanadium (HSLA-V Steel) as an alternative to traditional low-carbon manganese steel may result in enhanced soldier safety through improved blast-resistance of structures and buildings.

According to Robert Glodowski, Director of Technical Services at Stratcor, a member of the Vanadium Technology Partnership (VTP), to "In study after study of HSLA-V Steel related military applications, results demonstrate that the use of HSLA-V Steel versus traditional low-carbon manganese steel can benefit our soldiers through better mobility and blast resistance by reducing weight while increasing strength"

Glodowski points to studies that indicate improved blast-resistance of barriers and buildings by up to 30 percent when vanadium rebar is used to strengthen the concrete.

In addition to fortification applications, military efforts that focus on infrastructure projects such as bridge building indicate the use of HSLA-V Steel increased non-standard fixed bridge lengths from the typical 60 ft. single span to 200 ft single span at approximately the same weight per linear foot per lane of traffic. This outcome improves soldiers' handling of lightweight structures due to ease of mobility and ease of construction.

In the private sector, HSLA-V Steels are already being used in girders and plates for highway bridges as they offer stronger, yet lighter weight structures.

"With generally less than 0.12% of vanadium added to the chemistry of the steel, the strength is enhanced to meet or exceed requirements for ductility, weldability and elongation," said Glodowski.

Steel-manufacturing facilities that produce HSLA-V Steel experience lower operating costs compared with producing conventional carbon manganese steel, due to the unique metallurgical characteristics of vanadium in the microstructure and metalworking technology. These technologies can be readily incorporated into existing steel manufacturing plants and are applicable to current steel fabrication processes.

For more information on HSLA-V Steel case studies for military applications, visit [www.hsla-v.org](http://www.hsla-v.org). The VTP recently launched the website [www.hsla-v.org](http://www.hsla-v.org) to meet industry demand and interest in HSLA-V Steel.

### **About the Vanadium Technology Partnership**

The Vanadium Technology Partnership (VTP) is fostering a cooperative relationship in the vanadium microalloyed steel industry. The VTP is comprised of representatives from the Advanced Technology Institute, Bear Metallurgical Company, Gulf Chemical & Metallurgical Corporation, Metallurg Vanadium Corporation, Stratcor, Vanadium Producers & Reclaimers Association, and Vanitec. Carnegie Mellon University, the Colorado School of Mines, Lehigh University, the University of South Carolina, and the University of Washington also contribute to the research process. These teams of representatives along with key industry members are guiding the program through the stages of investigation and deployment through projects funded by the U.S. Army Research Laboratory and the U.S. Army Corp of Engineers. HSLA-V.org is hosted by the Vanadium Producers & Reclaimers Association (VPRA). The VPRA focuses on the environment, trade, technology, and health and safety in the vanadium industry.

For more information on HSLA-V Steel, visit [www.hsla-v.org](http://www.hsla-v.org).

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