

Stress Engineering Develops New S1 Skeleton Sled for USA Bobsled and Skeleton

Stress Engineering is proud to announce the delivery of four new skeleton sleds to USA Bobsled and Skeleton (USABS). Over its years of development, the Skeleton Sled has gone through many incremental changes, both big and small. The latest change is what makes the S1 Skeleton Sled a truly innovative product: the overall curved shape of the sled allows the USABS to look for a dramatic reduction in aerodynamic drag, and allows for a vast difference in performance for the USABS athletes. The sleds will be raced by the top athletes of the USABS in the World Cup circuit this year and beyond, and are expected to be used by USA athletes at the Olympic Games in PyeongChang, in 2018.



The Stress Engineering team worked in collaboration with three other industry partners to develop this one-of-a-kind product. Stress Engineering had the lead role for the sled development effort, with the responsibility of designing computer models of the sled and producing fabrication drawings in the early stages of the project. The drawings were shared with Machintek Corporation, who fabricated the metal parts, and deBotech, Inc. to produce the carbon fiber cowling. Carpenter Technology donated a special high performance steel alloy for critical high-stress parts. After all parts for the Skeleton Sled were fabricated, Stress Engineering led the assembly of the sleds, together with USABS and Machintek personnel.

USA Bobsled and Skeleton is supported by the U.S. Olympic Committee and is the national governing body that manages training and competitions for the Bobsled and Skeleton athletes competing on the World Cup circuit and other national and international competitions. The USABS also manages U.S. participation in the Winter Olympic Games for Bobsled and Skeleton. The USABS Head Coach for Skeleton, Tuffield Latour, is deeply involved in the sled development project. He provides both keen insight into how sled performance can be improved and helps in securing financial support for the sled technology program. Skeleton team athletes Matt Antoine, Kyle Brown, Annie O'Shea and Katie Uhlaender, who competed on the World Cup and Intercontinental Cup circuits last season, have also played a very active role in the development of the S1 Skeleton sled by testing sled hardware during pre-season and post-season periods and providing valuable feedback and suggestions.



Stress Engineering is well versed in developing innovative products such as the S1 Skeleton Sled. Says Grant Schaffner, Staff Consultant at Stress Engineering and the chief designer for the S1 sled, “we do product developing in partnership with our clients to solve unique problems that require a high level of engineering, analysis, and testing.” This is one of our strongest skills. Manufacturers are increasingly challenged to create products that work smarter and faster while still maintaining profitability. At Stress Engineering, our staff specializes in the development and improvement of products like these.

For further reading on the S1 Skeleton Sled, visit teamusa.org. To learn more about Stress Engineering and company services, visit stress.com or [contact us](#) today.