



World Headquarters Victrex plc Hillhouse International

Thornton Cleveleys Lancashire FY5 4QD **United Kingdom**

TEL + (44) 1253 897700 FAX + (44) 1253 897701 MAIL victrexplc@victrex.com

Americas Victrex USA Inc

300 Conshohocken State Road Suite 120 West Conshohocken, PA 19428 USA

TEL + (1) 800-VICTREX

TEL + (1) 484-342-6001 FAX + (1) 484-342-6002 MAIL americas@victrex.com

Victrex Europa GmbH Langgasse 16

65719 Hofheim/Ts. Germany

TEL + (49) 6192 96490 FAX + (49) 6192 964948

Victrex Japan, Inc. Mita Kokusai Building Annex 4-28, Mita 1-chome Minato-ku

Tokyo 108-0073

TEL + 81 (0)3 5427 4650 FAX + 81 (0)3 5427 4651 MAIL customerservice@victrex.com MAIL japansales@victrex.com

Victrex High Performance Materials (Shanghai) Co Ltd

Part B Building G No. 1688 Zhuanxing Road Xinzhuang Industry Park Shanghai 201108

TEL + (86) 21-6113 6900 FAX + (86) 21-6113 6901 MAIL scsales@victrex.com

Victrex, headquartered in the UK, is an innovative world leader in high performance polymer solutions focused on the Aerospace, Automotive, Electronics, Energy and Medical markets. Every day, millions of people rely on products or applications which contain our polymers, from smartphones, aeroplanes and cars to oil & gas operations and medical devices. With over 35 years' experience, we are investing in technical excellence to deliver leading edge solutions to our customers and our markets, and to drive value for our shareholders. Find out more at www.victrex.com

©Victrex plc September 2015

VICTREX PLC BELIEVES THAT THE INFORMATION CONTAINED IN THIS BROCHURE IS AN ACCURATE DESCRIPTION OF THE TYPICAL CHARACTERISTICS AND/OR USES OF THE PRODUCT OR PRODUCTS, BUT IT IS THE CUSTOMER'S RESPONSIBILITY TO THOROUGHLY TEST THE PRODUCT IN EACH SPECIFIC APPLICATION TO DETERMINE ITS PERFORMANCE, EFFICACY AND SAFETY FOR EACH END-USE PRODUCT, DEVICE OR OTHER APPLICATION. SUGGESTIONS OF USES SHOULD NOT BE TAKEN AS INDUCEMENTS TO INFRINGE ANY PARTICULAR PATENT. THE INFORMATION AND DATA CONTAINED HEREIN ARE BASED ON INFORMATION WE BELIEVE RELIABLE. MENTION OF A PRODUCT IN THIS DOCUMENTATION IS NOT A GUARANTEE OF AVAILABILITY VICTREX PLC RESERVES THE RIGHT TO MODIFY PRODUCTS, SPECIFICATIONS AND/OR PACKAGING AS PART OF A CONTINUOUS PROGRAM OF PRODUCT DEVELOPMENT. VICTREX® IS A REGISTERED TRADEMARK OF VICTREX MANUFAC-TURING LIMITED. VICTREX PIPES™ IS A TRADEMARK OF VICTREX MANUFACTURING LIMITED. PEEK-ESDTM, HTTM, STTM AND WGTM ARE TRADEMARKS OF VICTREX PLC. VICOTE® AND APTIV® ARE REGISTERED TRADEMARKS OF VICTREX PLC. VICTREX PLC MAKES NO WARRANTIES. EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF INTELLECTUAL PROPERTY NON-INFRINGEMENT, INCLUDING, BUT NOT LIMITED TO PATENT NON-INFRINGEMENT, WHICH ARE EXPRESSLY DISCLAIMED, WHETHER EXPRESS OR IMPLIED, IN FACT OR BY LAW. FURTHER, VICTREX PLC MAKES NO WARRANTY TO YOUR CUSTOMERS OR AGENTS, AND HAS NOT AUTHORIZED ANYONE TO MAKE ANY REPRESENTATION OR WARRANTY OTHER THAN AS PROVIDED ABOVE. VICTREX PLC SHALL IN NO EVENT BE LIA-BLE FOR ANY GENERAL, INDIRECT, SPECIAL, CONSEQUENTIAL, PUNITIVE, INCIDENTAL OR SIMILAR DAMAGES, INCLUDING WITHOUT LIMITATION, DAMAGES FOR HARM TO BUSINESS, LOST PROFITS OR LOST SAVINGS, EVEN IF VICTREX HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, REGARDLESS OF THE FORM OF ACTION.





FUTURE PERFORMANCE (4) IN HOME APPLIANCE

Consumers today require their appliances to be energy efficient, quiet, and compact as well as be accompanied by longer warranties. This is pushing industry-leading companies to innovate to meet the ever more demanding needs of the consumer. Victrex has more than 13 years of experience in delivering innovative polymeric solutions for home appliances ranging from refrigerators to vacuum cleaners. Lightweight VICTREX® PEEK components delivering

an unmatched combination of efficiency, reliability,noise reductions and more effective use of spacethat's future performance.

POTENTIAL BENEFITS (9)

Replacing metal with VICTREX® PEEK components enables potential efficiency improvements, noise reductions, longer service life and more effective use of available space in refrigerator compressors.

TO 20/0
ENERGY EFFICIENCY

IMPROVEMENT

40%

WEIGHT REDUCTION



#50%

NOISE REDUCTIONS

PROVEN RELIABILITY









Potential to achieve twice the operating lifetime of steel bushings.



REFRIGERATOR/AC COMPRESSOR DISCHARGE VALVE

Improve efficiency by up to 2% by reducing weight and enabling more effective use of available space.

Help the environment by reducing CO2 emissions by 148 kg/year: The same effect as planting 38 trees.



VACUUM CLEANER SUCTION/BLOWER UNIT IMPELLERS

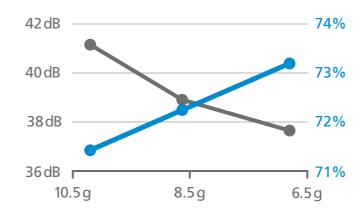
Potential to reduce overall system costs by moving from machined stainless steel impellers to VICTREX® PEEK impellers.

Enhanced durability at high-speed 120,000 rpm operation and 3db noise reduction.

Minimize energy consumption
Replacing steel with VICTREX®
PEEK in compressor valves helped reduce weight by up to 40%

- from 10 grams to 6 grams.

LIGHTWEIGHT AND EFFICIENT



VICTREX® PEEK DISCHARGE VALVES DRIVE EFFICIENCY AND NOISE REDUCTIONS IN LINEAR COMPRESSORS.

Noise (dB)Efficiency (%)

PROVEN SUCCESSES TODAY...
ACTIVE DEVELOPMENT FOR TOMORROW

IMPELLER THRUST WASHER BUSHING ROD GUIDE DISCHARGE VALVE TIP SEAL BEARING PISTON CONNECTING ROD GEAR

