Surface Transforms

www.surfacetransforms.com

ST's Technology

- Unique continuous fibre construction not chopped fibre like OEM discs
- 3D carbon-fibre matrix structure for increased strength and durability
- Proprietary processes and patents for ST's unique XD material

Advantages of ST 's Technology

- Higher thermal conductivity – allows for lightweight design and /or improved performance
- Lower wear rate and oxidation rate giving increased product life
- Strong, lightweight material - weight savings of up to 70% compared to steel brake systems
- ST is competitive with OEM ceramic pricing, & has no tooling costs so ideal for low-volumes
- ST discs can be refurbished up to 5 times – reducing running costs

Heat Management

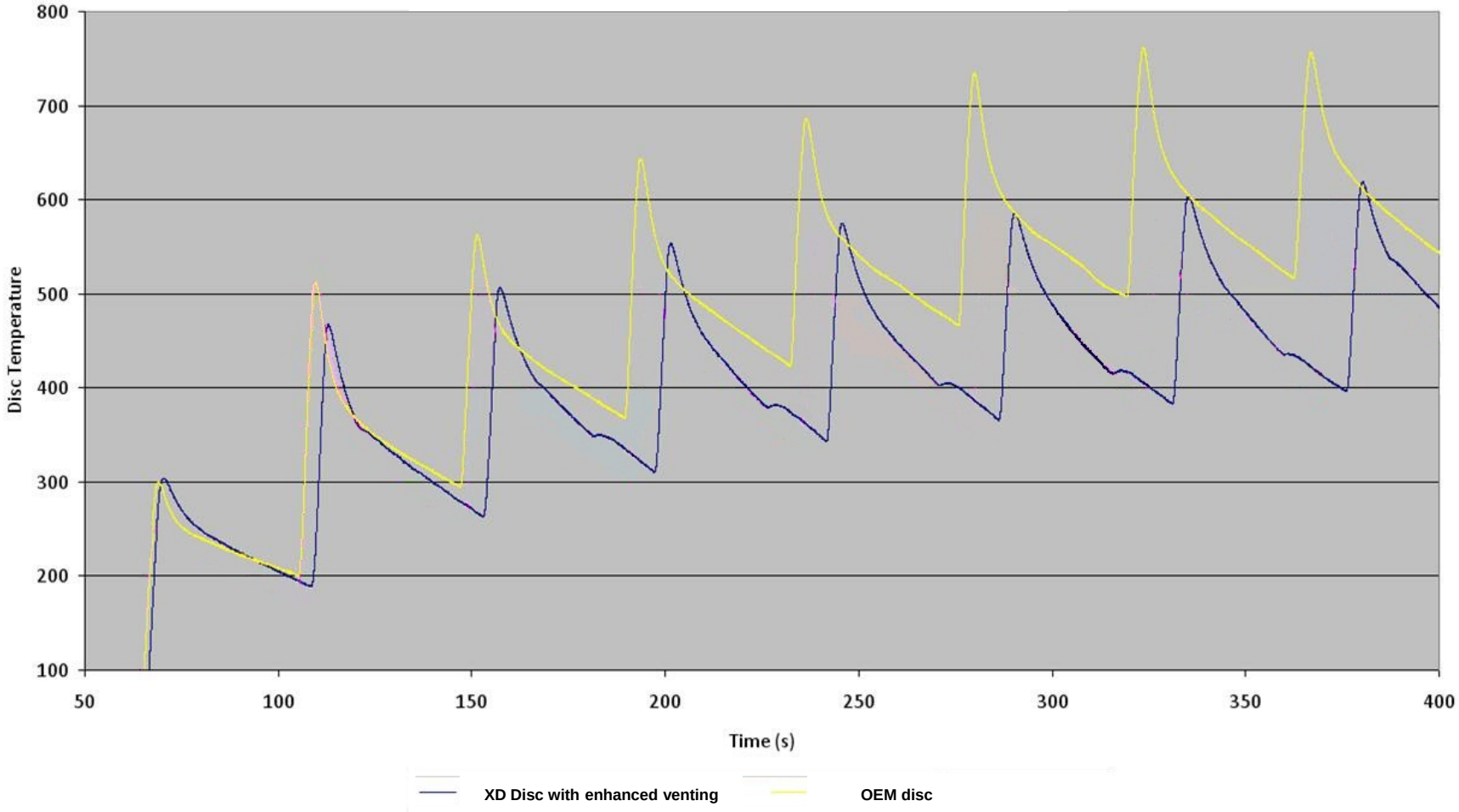
- ST XD Material has ~3 x thermal conductivity of OEM material –

➢ OEM material	30-35	W/mK
➢ Grey Cast Iron	75	W/mK
➢ ST XD Material	100 -120	W/mK

- Our enhanced venting pattern also aids heat management through increased cooling.

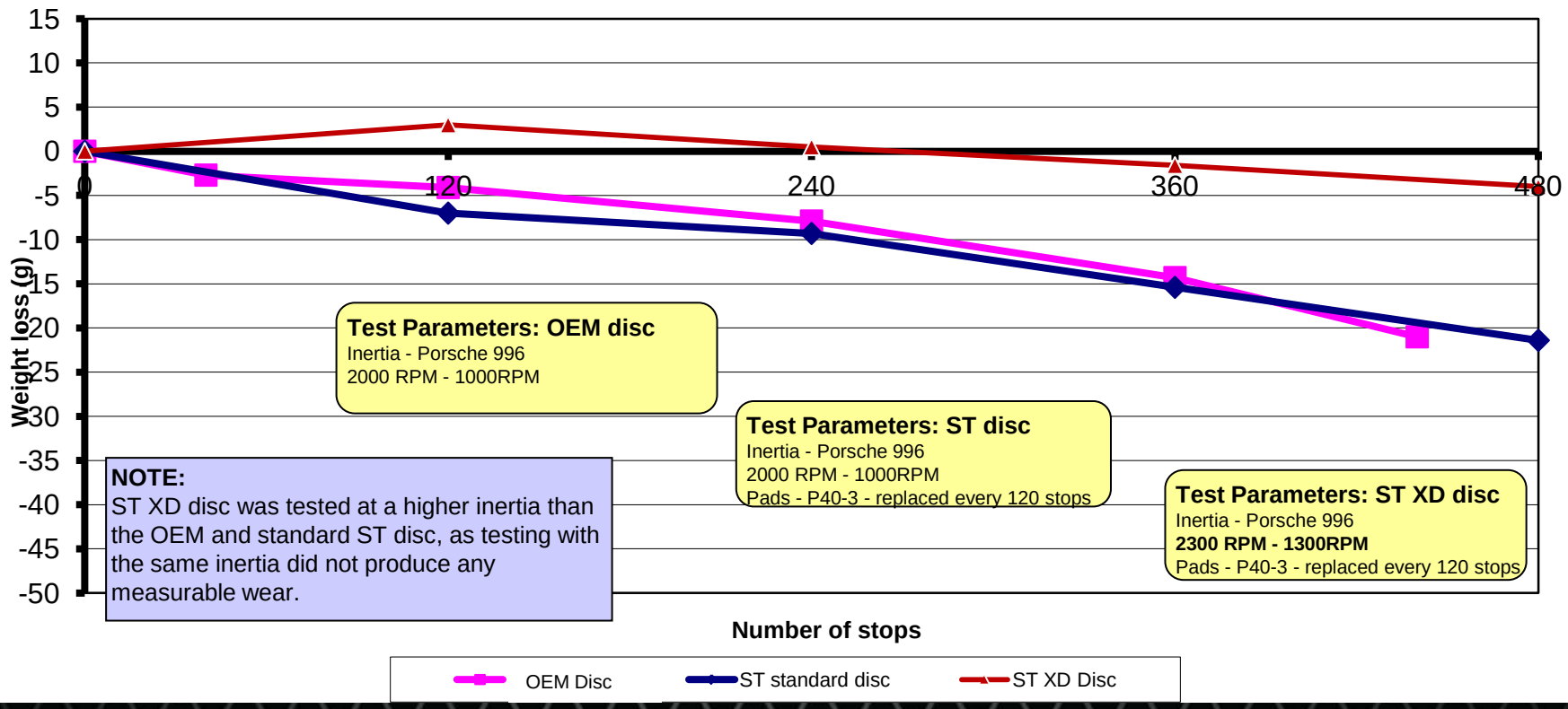
- The following graph shows that an ST XD disc operates approx. 100C less than the OEM disc.

Heat Management



Reduced wear

Our testing shows that ST XD discs have significantly less wear and less oxidation than OEM discs.



Summary

- ST Carbon-Ceramic discs are a cost-effective alternative to OEM parts with longer life and improved performance
- The reduced operating temperature provides consistent performance and increased life particularly even in extreme track conditions
- ST discs can be refurbished up to 5 times at minimal cost – reducing running costs for the customer