Brake Pads

Extensive Range of ECE R90 Approved brake pads.

E11 tested in the UK.

Quality

Our brake pads are manufactured to exacting European standards.

All component production is carried out in facilities with full TS16949 quality accreditation (OE standard) with Regulation 90 approvals (E1, E4 and E11).

MATERIAL OPTIONS

3 Premium friction formulations

FORMULA CODE	CHARACTERISTICS	MATERIAL	COPPER LEVEL	R90 APPROVAL CC	PERFORMANCE EXPECTATIONS
Standard LCV	Low Metal	SF601	B	E11 UK	> 50,000KM
Standard Premium	Wear Resistant, Low Metal, Low Copper	SF811	B	E11 UK	> 80,000KM
Heavy Duty Stage 2	Super Wear Resistant, Low Metal, Low Copper	SF8288	A	E1 GERMANY	>100,000KM

LEVEL A

Designates compliance with requirements concerning cadmium, chromium, lead, mercury and asbestos.

LEVEL B

Designates compliance with each of the level "A" metals as well as copper, which must be reduced to less than 5 percent of material content by weight. Level "B" compliance is required by 2021.

LEVEL N

We also have copper free options SF805 & SF863

Two Materials options

SF811

Standard material suitable for most applications. Excellent performance in temperatures up to 600° C with increased operating parameters, smooth torque and reduced fade and wear characteristics

SF8288

Heavy Duty material suitable for high load applications and city buses. Excellent performance in temperatures around and over 600° C, specifically recommended for the DAF CF and XF range along with the Volvo FH and FM's. The material is optimised for superb torque with very low wear characteristics.

Both materials have bedding-in coatings and most include fitting kits.

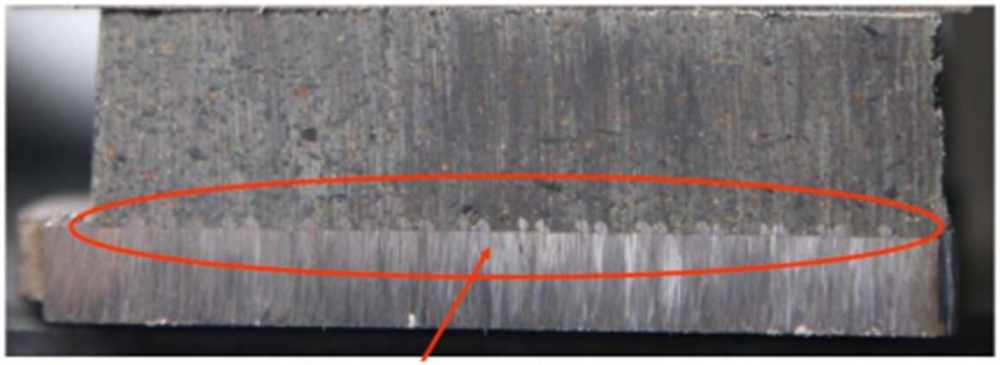
FRICTION MATERIAL RETENTION

Welded Grid Mesh back plate

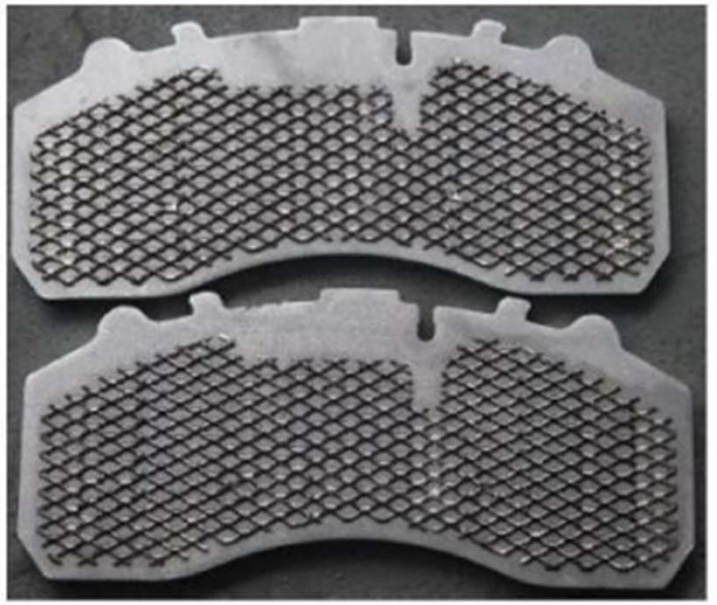
Provides a secure surface for the adhesive interlayer to bond with.

Adhesive Interlayer

Adhesive layer provides a perfect material to bond the friction material.



Fully bonded, shear strength in excess of 5.0 Mpa



WINNARD

Product Branding

SF811 Material

Audited & Approved
by the VCA

WINNARD

Product Branding

SF8288 Heavy Duty Material

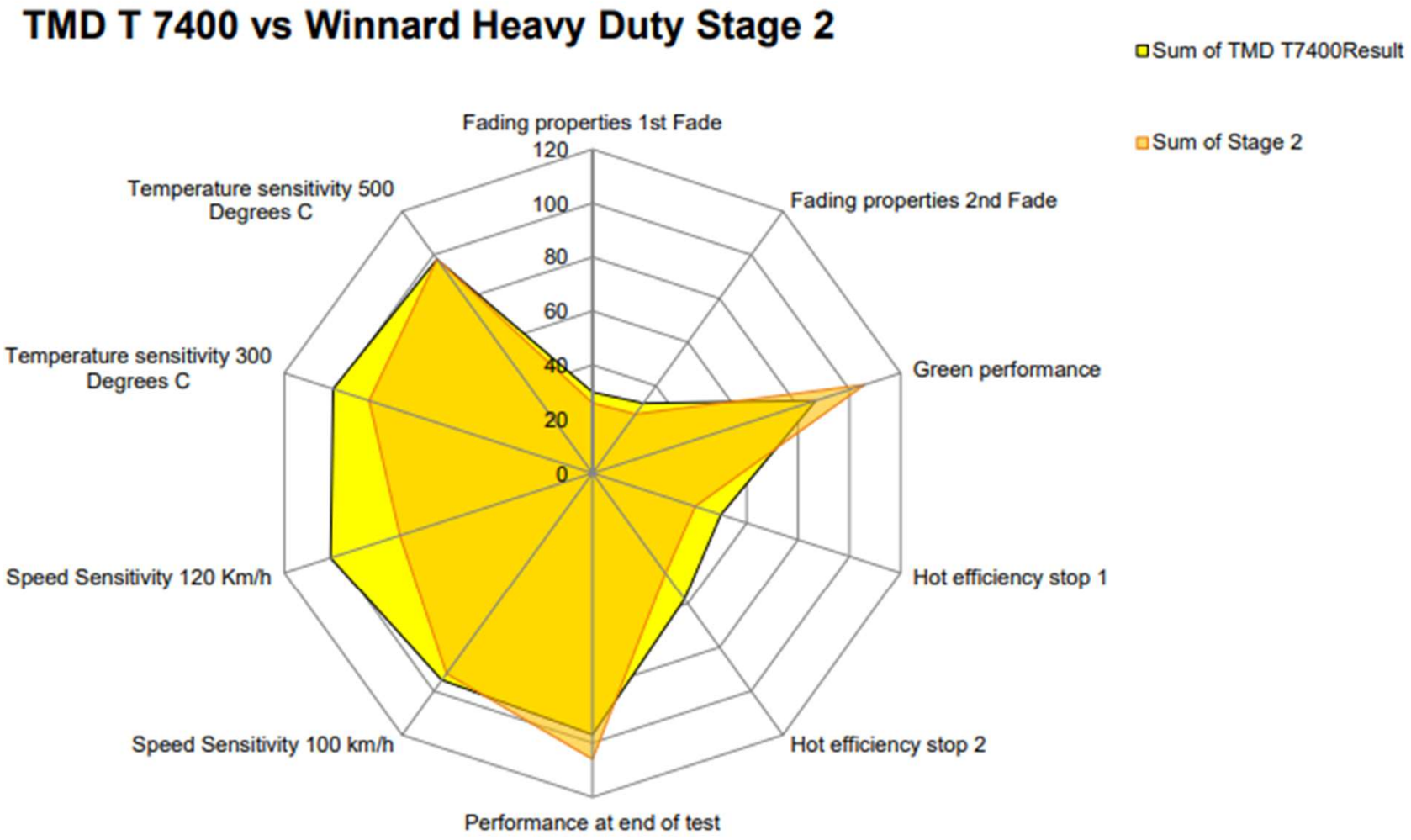
Audited & Approved
by the VCA

Back Plate Marking

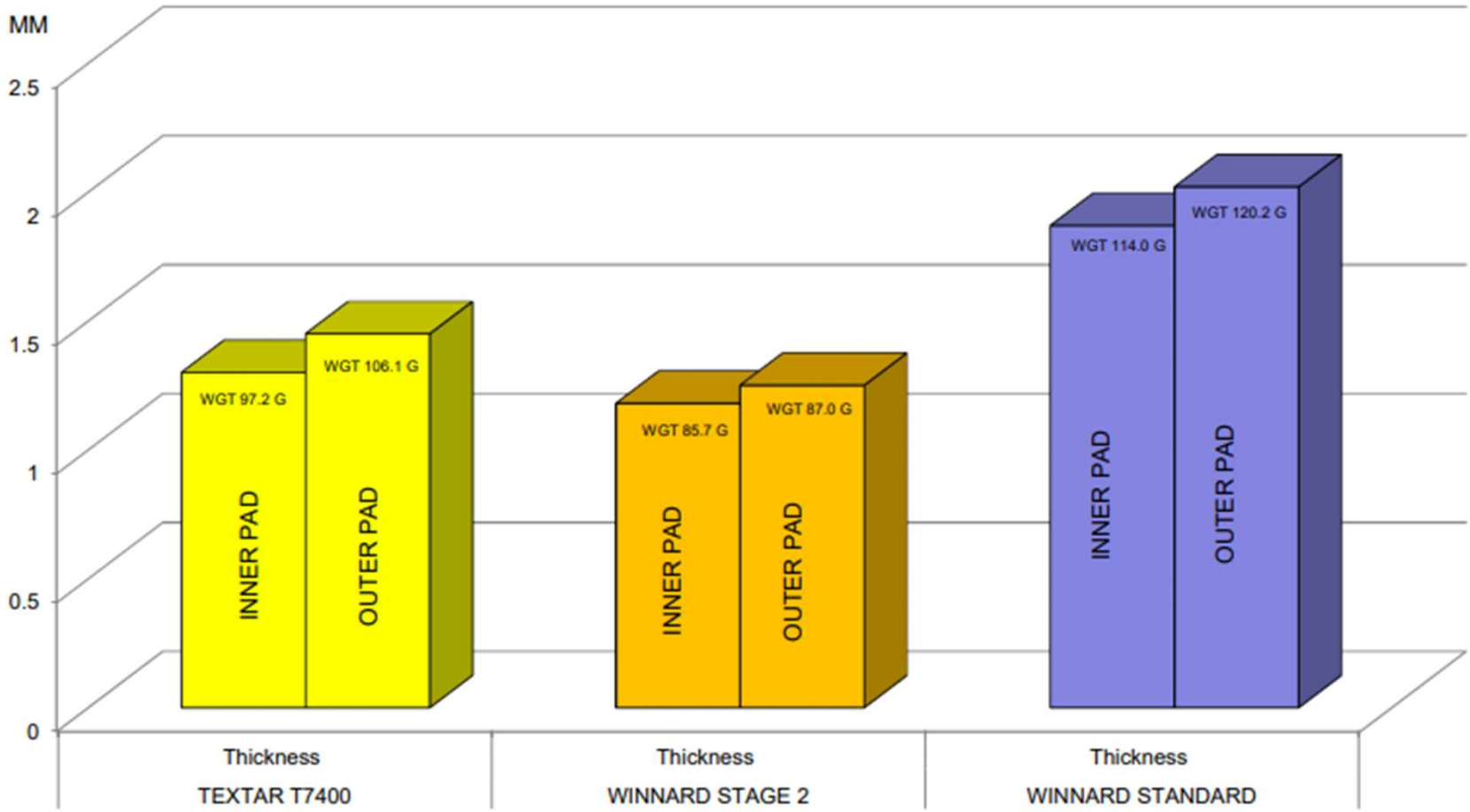
Friction Performance, Capability & Comparison

Friction Performance Comparison

Braking Feature	Target	Demand	TMD T7400	Winnard Stage 2	Winnard Standard
Green performance	70-110%	65-110%	87	106	88
Speed Sensitivity 100 km/h	80-100%	90-100%	95	92	91
Speed Sensitivity 120 Km/h	75-100%	85-100%	102	75	84
Temperature sensitivity 300 Degrees C	75-110%	80-110%	101	87	91
Temperature sensitivity 500 Degrees C	70-100%	75-100%	98	98	85
Fading properties 1st Fade	>25% of g	>27% of g	30	26	28
Fading properties 2nd Fade	>25% of g	>27% of g	32	27	27
Hot efficiency stop 1	>45% of g	>50% of g	50	45	45
Hot efficiency stop 2	>45% of g	>50% of g	58	46	53
Performance at end of test	>75%	>80%	97	106	92

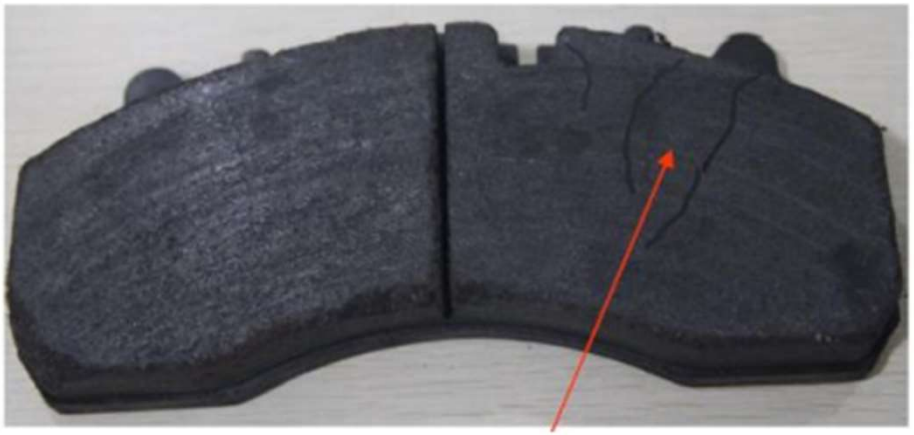

TMD T 7400 vs Winnard Heavy Duty Stage 2
Sum of TMD T7400Result
Sum of Stage 2
Fading properties 1st Fade
120
100
80
60
40
20
0
Fading properties 2nd Fade
Green performance
Hot efficiency stop 1
Hot efficiency stop 2
Performance at end of test
Speed Sensitivity 100 km/h
Speed Sensitivity 120 Km/h
Temperature sensitivity 300 Degrees C
Temperature sensitivity 500 Degrees C

COMPARISONS | Wear

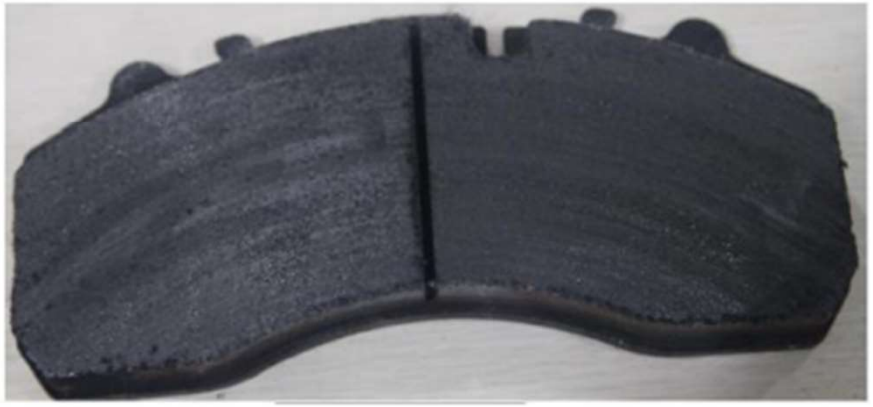


POST TEST VISUAL COMPARISONS

Winnard Stage 2 Material



Textar T7400



Winnard Standard Material

Post test it was noted that the surface of the friction material on the T7400 brake pads had three small cracks as highlighted in the image.

SF8288 & SF811 Material not showing any signs of cracking

Performance conclusion

/Formulation	/Performance	Wear	/Appearance after test	/General evaluation
TMD T7400	98	95	95	A+
Stage 2	92	95	98	A
Standard	98	85	100	B+