

Road vehicles - Brake linings friction materials - Visual inspection

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Characteristic features for friction materials	1
4.1	Characteristic features for disc brake pads	1
4.1.1	Gapping between material and plate	1
4.1.2	Edge chipping	2
4.1.3	Splits	2
4.1.4	Minor splits	3
4.1.5	Plucked and indented spigots	3
4.1.6	Poor consolidated spigot holes	3
4.1.7	Excess adhesive on plate	4
4.1.8	Material flash on plate	4
4.1.9	Abrasive coating	5
4.1.10	Anti-noise coating runs	5
4.1.11	Skin crazing	6
4.1.12	Underlayer distribution	6
4.1.13	Marking	7
4.1.14	Unground material surface	7
4.1.15	Paint on friction material surface	7
4.1.16	Surface blisters	8
4.1.17	Surface indentations	8
4.1.18	Grinding marks on friction surface	9
4.1.19	High porosity area	9
4.1.20	Poorly consolidated friction material	10
4.1.21	Surface contamination with foreign matters	10
4.1.22	Surface contamination with similar friction materials	11
4.1.23	Friction surface structure	11
4.1.24	Plate scratched and dents	12
4.1.25	Blanking burrs	12
4.1.26	Deformation by blanking and edge chipping at functional area	13
4.1.27	Edge shipping at pin area	13
4.1.28	Pinholes (Side-cut cavity)	14
4.1.29	Grinding marks on the carrier	14
4.1.30	Spring holder defects	15
4.1.31	Surface deepening	15
4.1.32	Cold laps	16
4.2	Characteristic features for drum brake linings	16
4.2.1	Chipped edges/corners	16
4.2.2	Edge splits	17
4.2.3	Drill hole chipping at lining ends	18
4.2.4	Drill hole burrs inside the surface	18
4.2.5	Drill hole burrs outside the surface	18
4.2.6	Cracks radiating from the rivet hole	19
4.2.7	Paint on surface - Lining for riveting and bonding	19

4.2.8	Surface cracks	20
4.2.9	Marking	20
4.2.10	Moulding skin on inside radius surface - linings for bonding and riveting	21
4.2.11	Moulding skin on outside radius surface - linings for riveting or bonding	21
4.2.12	Surface blisters	22
4.2.13	Surface grind marks	22
4.2.14	Pitted surface (plucked surface)	23
4.2.15	Surface structure	23
4.2.16	Poor consolidated friction material	24
4.2.17	Inside surface indentations	24
4.2.18	Outside surface indentations	25
4.2.19	Concentration of self-contained ingredients unless typical of the formulation	26
4.2.20	High porosity area	27
4.2.21	Metal wire or plastic reinforcement	27
4.2.22	Foreign matter friction surface inclusion	28
4.3	Characteristic features for bonded lined shoes	28
4.3.1	Lining overhang on shoe platform edge	28
4.3.2	Faulty shoes	29
4.3.3	Restricted lever movement	29
4.3.4	Stencilled information	30
4.3.5	Excess adhesive exudation over shoe platform edges	31
4.3.6	Excess adhesive exudation from lining ends	31
4.3.7	Excess primer	32
4.3.8	Lining surface condition	32
4.3.9	Gaps between linings and shoe platform	34