

تست رپورت (Test Report)

تاریخ : 398.03.26

صفحه : ۱ از ۱

شماره فنی : 30366 & 30096

نام محصول : کفشک لکوموتیو دیزل باری DF&BI

نام مشتری : شرکت راه آهن کث

ردیف	پارامتر کنترلی	استاندارد مرتبط	محدوده پذیرش	تعداد نمونه گیری	میانگین نتایج اندازه گیری	وضعیت پذیرش		توضیحات
						OK	NOK	
1	دانسیته	ISIRI 3100	$2.4 \pm 0.1 \text{ gr/cm}^3$	1	2.48 gr/cm ³	✓		
2	سایش ویژه	ISIRI 586-2	$\leq 4.56 \text{ E-07 } \frac{\text{gr}}{\text{Nm}}$	1	9.338E-08	✓		JT 98 SB 009
3	میانگین ضریب اصطکاک		$0.25 \leq \mu \leq 0.60$		0.462	✓		
4	سختی لنت	JIS D4421	100±10 HRR	1	102 HRR	✓		
5	مقاومت برشی	ISIRI 2798	$\leq 2.5 \text{ N/mm}^2$	2	4.2 N/mm ²	✓		
6	وضعیت ظاهری	ISIRI 586-2	عدم وجود ترک، پلیسه، کنده شدگی، ناهمواری، بادکردگی	8	مورد تأیید می باشد	✓		

کد فرم : F/10-00-32

Brake Lining Quality Control Test Procedure

Test Name : JT 98 SB 009
Date : 2019/04/24 -- 1398/ 2/ 4 -- 06:24:58
Client : J.T
Description : PK MIX:98.02.02

Work Order No. : J.T
Tester : H.M
Sample : BRAKE PAD

Summary Report

First Base Line

Pedal	Temp.	Fric.
1	97.2	0.381
5	110.6	0.465
10	93.8	0.417
15	94.4	0.448
20	94.2	0.425
Ave.		0.429
Max.	114.7	0.498 (16.0%)
Min.	97.2	0.381 (-11.2%)

First Fade

Time	Temp.	Fric.
52	92.9	0.433
80	121.0	0.501
108	149.4	0.510
136	176.4	0.503
164	204.8	0.479
195	231.6	0.439
230	260.3	0.394
268	287.1	0.357
Ave.		0.457 (6.7%) *
Max.	154.3	0.521 (13.9%)
Min.	287.1	0.357 (-22.0%)

3.93 min at 288 oC.

First Recovery

Time	Temp.	Fric.
42	260	0.440
104	204	0.470 H
188	149	0.484 H
346	93	0.464
Ave.		0.465 (8.3%) *
Max.	149.0	0.484 (4.3%)
Min.	260.0	0.440 (-5.3%)

Note1: Fric. = Friction Coefficient or μ
Temp. = Temperature [oC]
Note2: N = Selected For Normal μ .
H = Selected For Hot μ .

Friction Classification

	Sum	Mean	Class
Normal μ	2.214	0.553	H
Hot μ	4.438	0.444	F

Final Parameters

Group Code	Vehicle upper than 5 tone
Ave. Fric. Coeff.	0.462
Specific Wear	9.338E-8
m1-m2 [gr]	0.53
T1-T2 [mm]	0.28
Rotation	20927

Wear Test

Pedal	Temp.	Fric.
5	198.5	0.478
10	204.1	0.450
15	202.5	0.426
20	200.8	0.459
25	203.4	0.471
30	202.4	0.476
35	204.0	0.497
40	203.1	0.495
45	203.4	0.497
50	203.9	0.484
55	203.2	0.489
60	203.6	0.490
65	202.9	0.505
70	203.3	0.501
75	203.0	0.519
80	203.0	0.500
85	203.0	0.511
90	202.7	0.507
95	204.1	0.502
100	202.0	0.528
Ave.		0.486 (13.3%) *
Max.	201.0	0.531 (9.3%)
Min.	202.6	0.424 (-12.7%)

Second Fade

Time	Temp.	Fric.
1173	93.1	0.583 N
1196	120.3	0.538 N
1223	148.8	0.553 N
1248	176.8	0.557
1276	203.1	0.540 N
1305	232.1	0.493 H
1335	259.5	0.438 H
1370	287.9	0.388 H
1413	315.3	0.381 H
1457	343.0	0.371 H
Ave.		0.469 (9.4%) *
Max.	93.1	0.583 (24.3%)
Min.	335.3	0.371 (-20.9%)

5.03 min at 343 oC.

Second Recovery

Time	Temp.	Fric.
38	316	0.360
90	260	0.416 H
154	204	0.474 H
248	149	0.523 H
436	93	0.513
Ave.		0.457 (6.6%) *
Max.	149.0	0.523 (14.3%)
Min.	316.0	0.360 (-21.2%)

Second Base Line

Pedal	Temp.	Fric.
1	93.8	0.490
5	98.3	0.470
10	95.4	0.470
15	94.4	0.476
20	93.9	0.467
Ave.		0.473 (10.2%) *
Max.	93.8	0.490 (3.7%)
Min.	93.3	0.462 (-2.2%)

Brake Lining Quality Control Test Procedure

Test Name : JT 98 SB 009

Date : 2019/04/24 -- 1398/ 2/ 4 -- 06:24:58

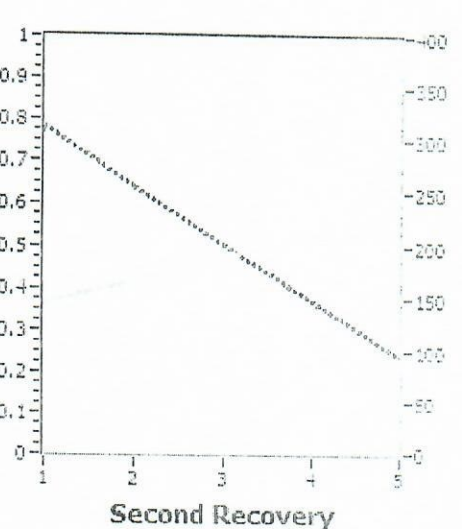
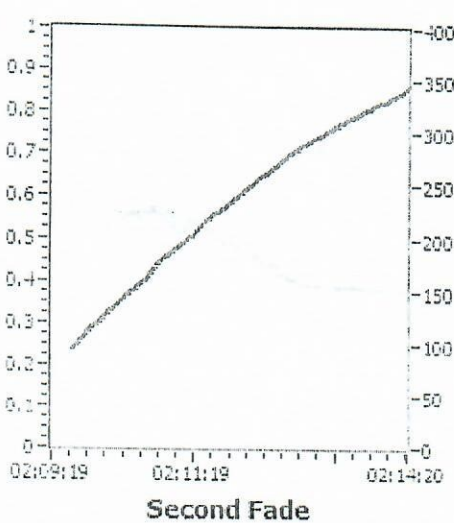
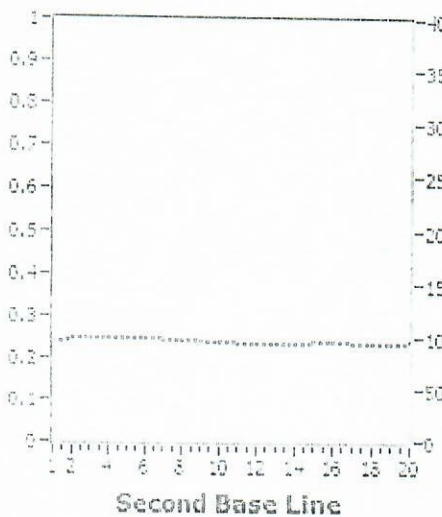
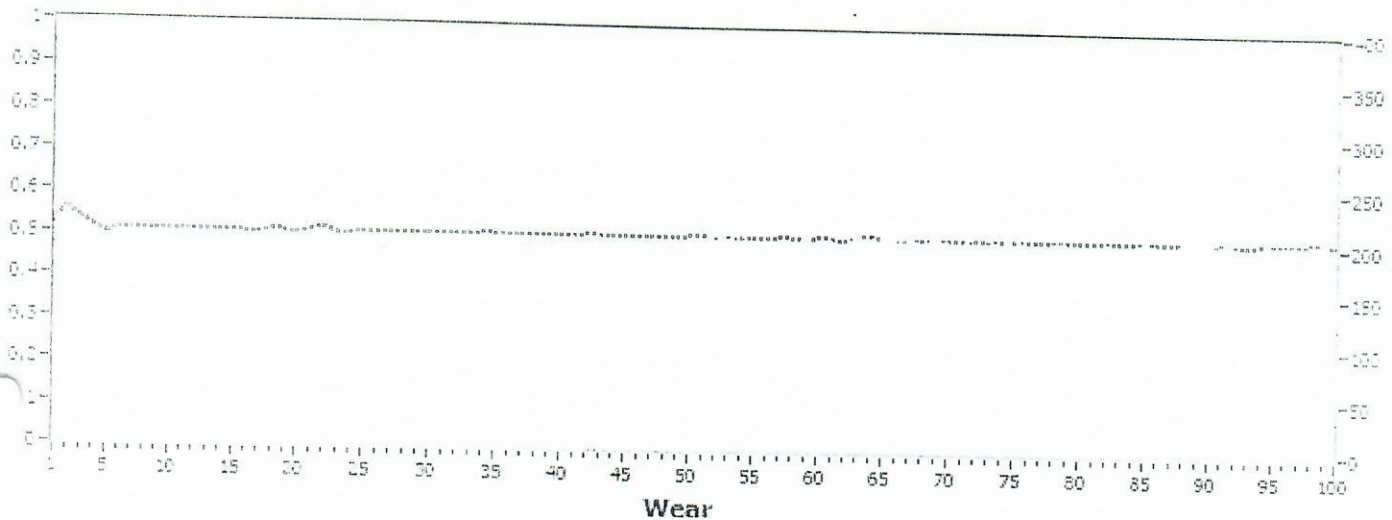
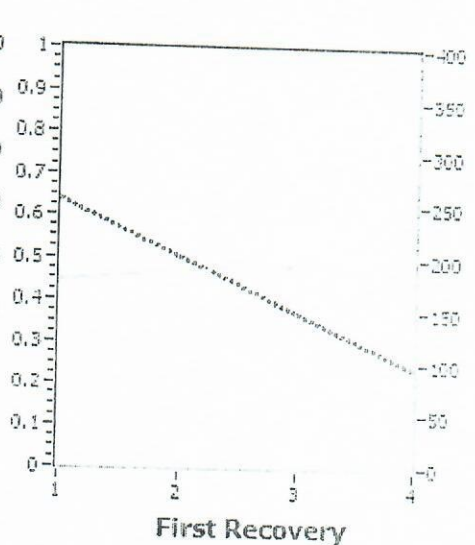
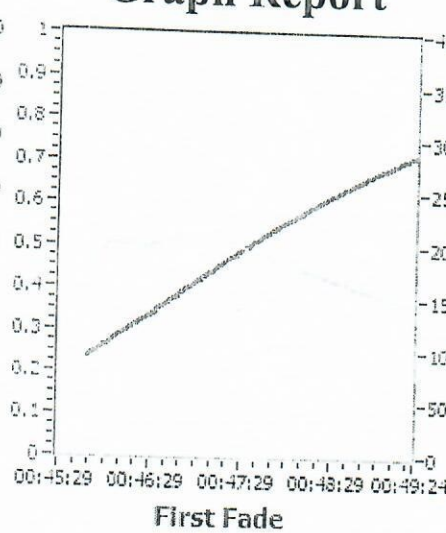
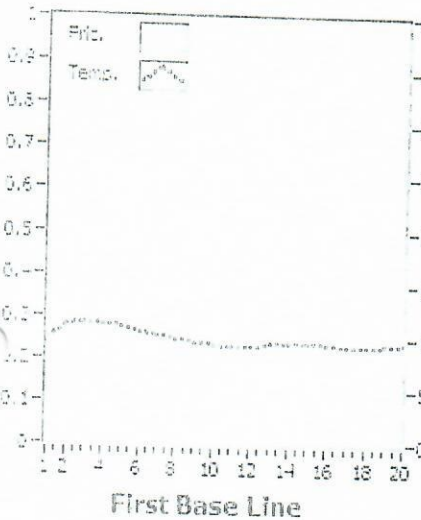
Client : J.T

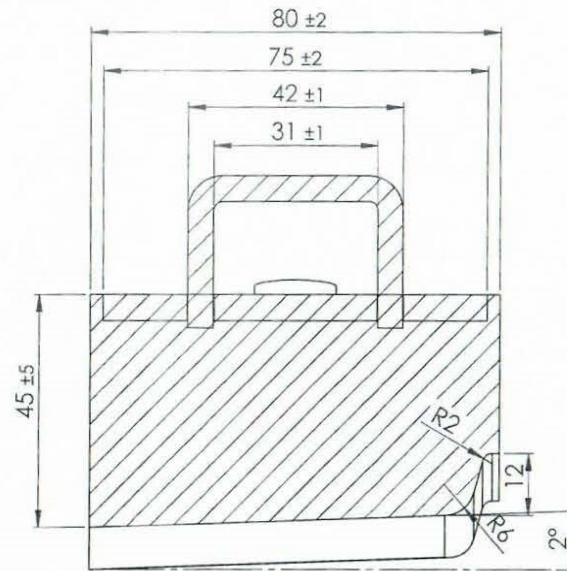
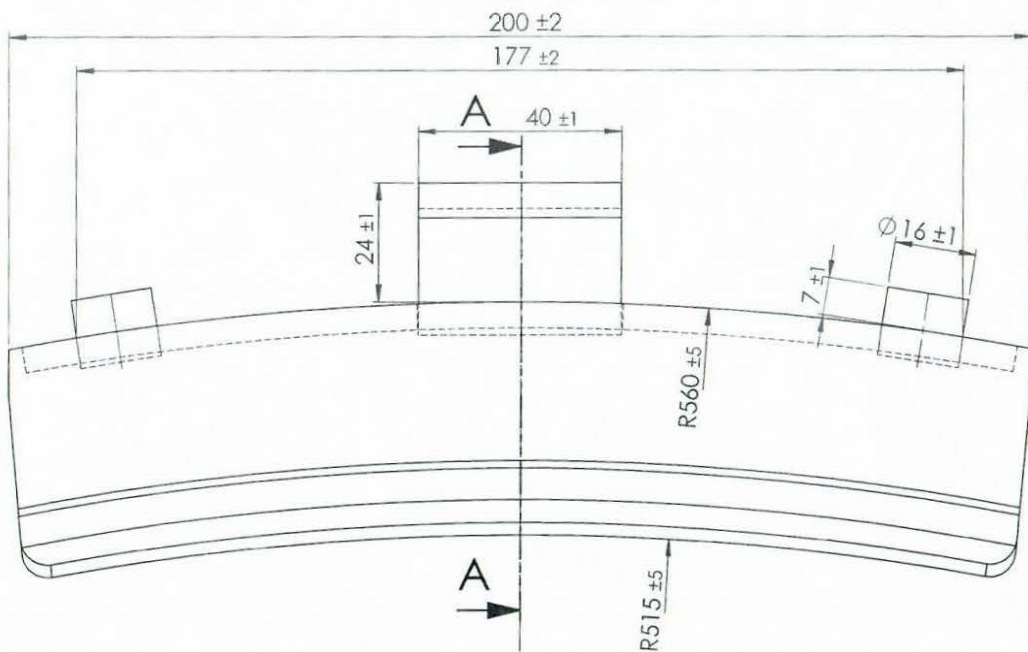
Work Order No. : J.T

Tester : H.M

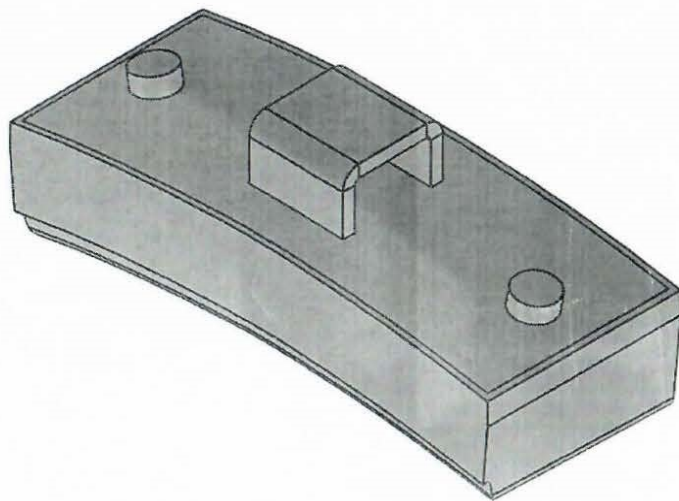
Sample : BRAKE PAD

Graph Report





SECTION A-A
SCALE 1:1



NOTE: DIMENSION WITHOUT TOLERANCE ACC. TO DIN 7168		Par Name: Locomotive DF&BI	
		Part No.: 30096	
		APP: :	
SIZE: A3 SCALE:	Material: P.K	Client:	Design By: name Date
	SHEET: 1	Draw No: 30096	DRAWN
	SHEETS: 1	REV:	CHK'D
			APPVD