

ROYAL ENFIELD										Format No:- AP04:460:10R																								
MATERIAL LABORATORY REPORT																																		
Report No : IF21806091																																		
Part No/Part ID:		2417 / 550007				Part Name		LAYSHAFT HIGH GEAR				Date:		2018-06-25																				
Qty		2490				Customer:		REML				Batch Code		E2F18768																				
1) Raw Material: 16MnCr5																																		
2) Heat Treatment:-Case carburised, hardened & tempered																																		
HARDNESS TRAVERSE GRAPH 										2.1 Hardness <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Location</th> <th>Specification</th> <th>Observation</th> </tr> </thead> <tbody> <tr> <td>FACE</td> <td>58~62 HRC</td> <td>58-59</td> </tr> <tr> <td>NR</td> <td>HRC</td> <td>-</td> </tr> <tr> <td>RCD</td> <td>30~42 HRC</td> <td>33</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>										Location	Specification	Observation	FACE	58~62 HRC	58-59	NR	HRC	-	RCD	30~42 HRC	33			
Location	Specification	Observation																																
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2.2 Effective Case Depth @ HV1 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Location</th> <th>Specification (mm)</th> <th>Observation (mm)</th> </tr> </thead> <tbody> <tr> <td>PCD</td> <td>0.50~0.80</td> <td>0.60</td> </tr> <tr> <td></td> <td></td> <td>-</td> </tr> <tr> <td>NR</td> <td></td> <td>-</td> </tr> </tbody> </table>										Location	Specification (mm)	Observation (mm)	PCD	0.50~0.80	0.60			-	NR		-	Thread Hardness <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>NR</td> <td></td> <td>-</td> </tr> </tbody> </table>										NR		-
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2.3 Hardness traverse report																																		
Distance from surface in mm	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0														
PCD	728	698			571	513																												
RCD																																		
2.4 Microstructure:																																		
Location					Specification										Observation																			
CASE					T.M.+R.A.<10%										T.M+R.A.5-10%																			
CORE					L.C.M.+Bainite										L.C.M+Bainite																			
Disposition :- ACCEPTED																																		
Remarks :- OK																																		
Checked by :-		Dharmendra Rathore				Verified by :-		Aditya mishra				Approved by :-		Ravindra kale																				