
	RAMKRISHNA FORGING LTD.										Record No. : RF/36/R-MTR																																																																								
	Plant 3 & 4 , Adityapur, Jamshedpur										Page : 01 of 1																																																																								
<p align="center">METALLURGICAL TEST REPORT OF RAW MATERIAL</p> <p> Test Certificate No. : RKFL/MTR/VEC/2018 Customer : V.E.COMMERCIAL LTD. Part Name : Part No. : Date : 11.04.2018 Qty. : </p>																																																																																			
Material Spec. : 20MnCr5 H,										Material Used : 20MnCr5 H,																																																																									
Heat No.		Name of Main Producer						RKFL - Lot No.				RKFL - Heat Code																																																																							
C43360		USHA MARTIN LTD						M-5859				GES																																																																							
<p align="center">Chemical Composition & Visual</p> <table border="1"> <tr> <th>Element</th> <th></th> <th>%C</th> <th>%Mn</th> <th>%Si</th> <th>%S</th> <th>%P</th> <th>%Al</th> <th>%Cr</th> <th>%Mo</th> <th>Others</th> <th>Visual</th> <th>Remarks</th> </tr> <tr> <td rowspan="2">Specified</td> <td>Min</td> <td>0.17-</td> <td>1.00-</td> <td rowspan="2">0.15-0.35</td> <td rowspan="2">0.02-0.035</td> <td rowspan="2">0.035</td> <td rowspan="2">0.020-</td> <td rowspan="2">1.00-1.30</td> <td rowspan="2">....</td> <td rowspan="2"></td> <td rowspan="2">No Porosity/ Internal Defects</td> <td rowspan="2">Acceptable</td> </tr> <tr> <td>Max</td> <td>0.22</td> <td>1.40</td> <td>0.035</td> <td>0.035</td> </tr> <tr> <td colspan="2">Observed</td> <td>0.193</td> <td>1.25</td> <td>0.205</td> <td>0.026</td> <td>0.012</td> <td>0.029</td> <td>1.26</td> <td>....</td> <td></td> <td></td> <td></td> </tr> </table>																		Element		%C	%Mn	%Si	%S	%P	%Al	%Cr	%Mo	Others	Visual	Remarks	Specified	Min	0.17-	1.00-	0.15-0.35	0.02-0.035	0.035	0.020-	1.00-1.30		No Porosity/ Internal Defects	Acceptable	Max	0.22	1.40	0.035	0.035	Observed		0.193	1.25	0.205	0.026	0.012	0.029	1.26																									
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J5		J11						Spec.		Obs																																																																									
Spec.	Obs	Spec.	Obs					NA		NA																																																																									
38-43	42	32-35	35																																																																																

Remarks : Above said components are found to be metallurgically ok.

For RAMKRISHNA FORGING LIMITED

Niraj singh
Prepared By



RK Singh
Approved By