

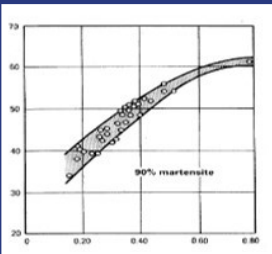
Learn how our Material Support & Solutions team solved this customer material issue:

HEAT TREATING



THE PROBLEM:

The customer was experiencing a heat treating problem causing parts to consistently not meet hardness requirements on special alloys.



THE ANALYSIS:

When parts fail to meet hardness requirement post heat-treatment, it can lead to rejected parts, loss of scrap and increased manufacturing costs.

JRoll 0620, .168" x 4.100"						
Calculated Jominy End-Quench Hardenability						
Jominy Distance	1	2	3	4	5	
HRC Hardness						
Criteria (Req)	41-48	37-47	32-44	27-41	23-37	21
Test: 562256	44	42	38	30	24	
Test: 562257	44	42	37	28	23	
Test: 567309	44	42	38	30	24	
Test: 449735	43	40	35	26	22	
Test: 564774	45	44	40	31	26	
Test: 564209	44	43	39	31	25	
Test: 563053	44	42	38	30	24	
Test: 562078	44	43	39	31	25	

THE SOLUTION:

By reviewing the properties/grade and the heat treatment process, our metallurgists were able to advise on improvements, as well as offer an alternate grade that would be beneficial for the post heat treatment consistency.

THE ACTION:

If your material isn't meeting required hardness levels or you notice part warping/heat treatment issues, contact the Material Support & Solutions team at Worthington.

CALL US AT 1-800-944-2255

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