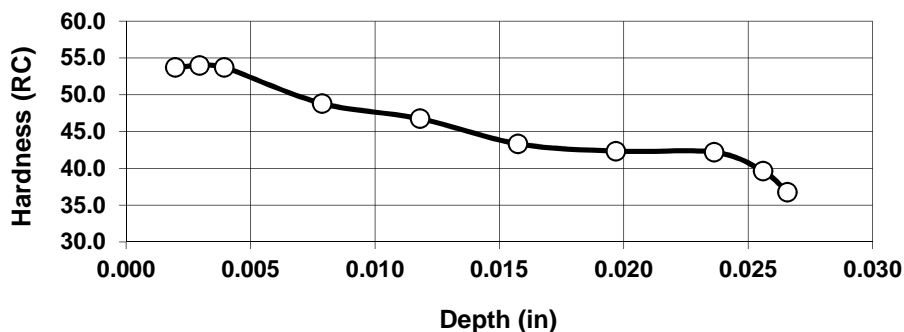


CASE DEPTH SURVEY REPORT

Date Run: February 5, 2017 Client: XXX P.O No: XXX Thermex Job No: XXX Material: AISI 4140 Sample No: XXX- 02/05/17-48 hr Case Aim: Process: Gas Nitriding	Test Method: ASTM E384/Vickers Load on Indenter: 200g Cal. Test Block S/N: 12298 Cal. Block Range: 507±19.7 HV Calibration: 507/513/503 HV Tester Name: Buehler Tester Model: Micromet 2003 Tester S/N: MX7090X
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Depth (mm)	Depth (in)	HV ₂₀₀	HRC as per ASTM E140
0.050	0.002	573	53.7
0.075	0.003	577	54.0
0.100	0.004	573	53.7
0.200	0.008	498	48.8
0.300	0.012	470	46.7
0.400	0.016	428	43.3
0.500	0.020	416	42.3
0.600	0.024	415	42.2
0.650	0.026	387	39.6
0.675	0.027	359	36.8
Substrate		320	32.3
3-Average			

Case Depth vs. Hardness



Comments: The test coupon was made of AISI 4140HT. The compound layer is about 20 µm. The total case depth (to +50HV above the substrate) is about 0.650 mm (0.026"). 48 hr process. (172818)

TESTED BY: _____
P.Petkov

Date Tested: **February 10, 2017**