Corrigenda

Corrigenda to “A new accelerated zero-failure test model for rolling bearings under elevated temperature conditions” [JMST 27 (6) (2013) 1801-1807][†]

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The authors wish to make some corrections to this article. Corrections are as follows:

1. Page 1805: The last two equations in Step 1 should read

$$Y = 0.434e^{-1.0114} = 0.434(0.39531)^{-1.0114} = 1.109549$$

$$F_e = 0.56VF_r + F_a = 0.56 \times 1 \times 2,700 + 1.109549 \times 1,350 = 3,009.891$$

2. Page 1805: Table 6 should read

F_{ei}	% $t_i \times n_i$	f_i	$f_i (\alpha_i F_{ei})^3$
3009.89	200	0.076923	2791817391
2253.89	300	0.115385	2580338450
3387.89	900	0.346154	17915771072
2443.17	1200	0.461538	13146178696

3. Page 1805: The last equation in Step 2 should read

$$P_e = \left[\sum f_i (\alpha_i F_{ei})^3 \right]^{1/3} = 3,315 N$$

4. Page 1806: The last two equations in Step 5 should read

$$H_{AT} = \left(\frac{3315}{10000} \right)^3 \left(\frac{2600}{3000} \right) \left(\frac{318105}{327319} \right) e^{0.0369(90-110)} \\ \times (30000) \left[\frac{\ln(1-0.9)}{10 \ln 0.9} \right]^{1/2} = 650.55 \text{ hours}$$

5. Page 1806: The paragraph above Conclusion should read

This concludes that assuming no failures, a testing time of 650.55 hours is required for the accelerated test with 10 samples to demonstrate 90% reliability at L_{10} service life of 30,000 hours at a confidence level of 90% under the service conditions.

The authors much regret the error.

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