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Erratum

"Analytical Performance Models for Closed-Loop Flexible Assembly Systems" by M. Kamath, R. Suri, and J. L. Sanders

This note is to correct three typographical mistakes in the above paper.

On page 64, the formulas for EW_i were published as

$$EW_i = g(\rho_i, c^2_{di-1}, c^2_{si}) \left(\frac{c^2_{di-1} + c^2_{si}}{2} \right) \left(\frac{c_i \rho_i}{1 - \rho_i} \right), \quad i = 2, 3, \ldots M$$

$$EW_1 = g(\rho_1, c^2_{dM}, c^2_{s1}) \left(\frac{c^2_{dM} + c^2_{s1}}{2} \right) \left(\frac{c_1 \rho_1}{1 - \rho_i} \right)$$

These should be, instead,

$$EW_i = g(\rho_i, c^2_{di-1}, c^2_{si}) \left(\frac{c^2_{di-1} + c^2_{si}}{2} \right) \left(\frac{\tau_i \rho_i}{1 - \rho_i} \right), \quad i = 2, 3, \ldots M$$

$$EW_1 = g(\rho_1, c^2_{dM}, c^2_{s1}) \left(\frac{c^2_{dM} + c^2_{s1}}{2} \right) \left(\frac{\tau_1 \rho_1}{1 - \rho_l} \right)$$

On page 78, the title of Table 10 reads
Balanced CL-FAS examples with uniformly distributed clear times.

Instead, this title should read
Unbalanced CL-FAS examples with uniformly distributed clear times.

Table 8. Balanced CL-FAS examples with uniformly distributed clear times

				Simulation estimates		Analytic estimates: No corrections			Analytic estimates: Using Modified *EW*		
CL-FAS example	Percent defective	Number of pallets	Squared coefficient of variation of service times	Station utilization	Throughput rate	Station utilization	Throughput rate	Percent error in throughput	Station utilization	Throughput rate	Percent error in throughput
6-station balanced	0.5	6	0.2081	0.882 ±0.007	0.1432 ±0.0013	0.726	0.1175	−17.95	0.747	0.1209	−15.57
	0.5	12	0.2081	0.924 ±0.005	0.1500 ±0.0009	0.876	0.1418	− 5.47	0.892	0.1444	− 3.73
	3.0	6	0.9319	0.637 ±0.010	0.0903 ±0.0011	0.509	0.0719	−20.38	0.554	0.0782	−13.40
	3.0	12	0.9319	0.753 ±0.009	0.1068 ±0.0001	0.677	0.0957	−10.39	0.715	0.1010	− 5.43
4-station balanced	0.5	4	0.2081	0.920 ±0.008	0.1490 ±0.0015	0.726	0.1175	−21.14	0.759	0.1228	−17.58
	0.5	8	0.2081	0.941 ±0.007	0.1525 ±0.0014	0.876	0.1418	− 7.02	0.901	0.1457	− 4.46
	3.0	4	0.9319	0.715 ±0.012	0.1010 ±0.0018	0.509	0.0719	−28.81	0.579	0.0818	−19.00
	3.0	8	0.9319	0.792 ±0.011	0.1119 ±0.0018	0.677	0.0957	−14.48	0.736	0.1040	− 7.06

Minimum clear time = 6 Maximum clear time = 66