Online Supplement to
“A practical method for evaluating worker-allocations in large-scale dual
resource constrained job shops”

by

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In this Online Supplement to the main article titled “A practical method for evaluating worker-allocations in large-scale dual resource constrained job shops,” we provide the full set of results from the large scale simulation experiment performed in Section 5.

A. All empirical c.d.f. plots

This section contains the empirical c.d.f. plots corresponding to the 179 designated DRC job shop scheduling problems that required fitting. For each designated DRC job shop scheduling problem the random sample Δ_{VFB} and the random sample Δ_{HSP2} were both constructed from the same set of $Q = 500$ simulation replications. Thus $Q'_1 = Q'_2 = Q'$. Each page of this section contains the empirical c.d.f. plots corresponding to designated problems from a particular job shop size, job shop type, and staffing level combination. Each empirical c.d.f. plot contains Q' , the number of simulation replications in which allocation ϑ^* did not satisfy the optimality criteria (Theorem 1 and Theorem 2 of Lobo *et al.* (2013b)).

Figure A.1: Small asymmetric job shop, 60% staffing.

Figure A.2: Small asymmetric job shop, 70% staffing.

Figure A.3: Small asymmetric job shop, 80% staffing.

Figure A.4: Small asymmetric job shop, 90% staffing.

Figure A.5: Small symmetric job shop, 60% staffing.

Figure A.6: Small symmetric job shop, 70% staffing.

Figure A.7: Small symmetric job shop, 80% staffing.

Figure A.8: Small symmetric job shop, 90% staffing.

Figure A.9: Medium asymmetric job shop, 60% staffing.

Figure A.10: Medium asymmetric job shop, 70% staffing.

Figure A.11: Medium asymmetric job shop, 80% staffing.

Figure A.12: Medium asymmetric job shop, 90% staffing.

Figure A.13: Medium symmetric job shop, 60% staffing.

Figure A.14: Medium symmetric job shop, 70% staffing.

Figure A.15: Medium symmetric job shop, 80% staffing.

Figure A.16: Medium symmetric job shop, 90% staffing.

Figure A.17: Large asymmetric job shop, 60% staffing.

Figure A.18: Large asymmetric job shop, 70% staffing.

Figure A.19: Large asymmetric job shop, 80% staffing.

Figure A.20: Large asymmetric job shop, 90% staffing.

Figure A.21: Large symmetric job shop, 60% staffing.

Figure A.22: Large symmetric job shop, 70% staffing.

Figure A.23: Large symmetric job shop, 80% staffing.

Figure A.24: Large symmetric job shop, 90% staffing.