

Using all vehicles

Quantum

Tour	Vehicle model	Total order	Total items	Total weight	Total volume	Total working time	Total Transaction time	Total Travel time	Total Distance
tour-1	CDE	58	1475	1584.60118	3.062904258	424	152	272	165.35
tour-2	CDD	70	1051	1389.46726	2.380410181	453	229	224	134.5
tour-3	CDD	55	1295	1944.86096	8.2794873	437	200	237	148.67
tour-4	CDD	38	977	557.31611	0.9628207	393	153	240	156.49
TOTAL		221	4798	5476.24551	14.68562244	1707	734	973	605.01

Locus

Tour	Vehicle model	Total order	Total items	Total weight	Total volume	Total working time	Total Transaction time	Total Travel time	Total Distance
tour-1	CDD	52	584	1447.42994	6.67261	464	212	252	121.06
tour-2	CDD	56	1350	1211.852911	5.02817	549	170	379	189.5
tour-3	CDD	71	1585	1870.824563	5.47004	430	185	245	124.52
tour-4	CDE	42	1279	946.13811	3.74269	478	164	314	158.19
TOTAL		221	4798	5476.245523	20.91351	1921	731	1190	593.27

Comparison

Metric	Quantum	Locus	Difference	Quantum vs Locus (%)	Performance	Description
Total order	221	221	0	0.0%	Same	Higher is better - Closer to input amount
Total items	4798	4798	0	0.0%	Same	Higher is better - Closer to input amount
Total weight	5476.25	5476.25	0	0.0%	Same	Higher is better - Closer to input weight
Total volume	14.69	20.91	-6.22	29.75%	29.75% better	Lower is better - Less volume indicates better packing efficiency.
Total working time	1707	1921	-214	11.14%	11.14% better	Lower is better - Less time spent working is more efficient.
Total transaction time	734	731	3	-0.41%	0.41% difference	Lower is better - Shorter transaction time is better, but this is a given metric, so slight differences may occur.
Total travel time (engine on)	973	1190	-217	18.24%	18.24% better	Lower is better - Less travel time is more efficient.
Total distance	605.01	593.27	11.74	-1.98%	1.98% difference	Lower is better - Shorter distance is more efficient.

Not using all vehicles

Quantum

Tour	Vehicle model	Total order	Total items	Total weight	Total volume	Total working time	Total Transaction time	Total Travel time	Total Distance
tour-1	CDE	72	1557	1721.30458	3.703805458	518	215	303	185.15
tour-2	CDD	54	942	1227.24386	1.734013481	289	135	154	92.86
tour-3	CDD	75	1951	1403.35033	4.66745805	549	244	305	195.41
tour-4	CDD	20	348	1124.34674	4.61402195	280	140	140	86.67
TOTAL		221	4798	5476.24551	14.71929894	1636	734	902	560.09

Locus

Tour	Vehicle model	Total order	Total items	Total weight	Total volume	Total working time	Total Transaction time	Total Travel time	Total Distance
tour-1	CDD	22	375	1245.93994	6.3585	334	145	189	91.02
tour-2	CDD	72	1555	1824.424084	6.59252	594	224	370	184.34
tour-3	CDD	54	1014	1244.24466	3.83503	367	135	232	117.99
tour-4	CDE	71	1829	1153.74084	4.10585	582	221	361	182.37
TOTAL		219	4773	5468.349523	20.8919	1877	725	1152	575.72

Comparison

Metric	Quantum	Locus	Difference	Quantum vs Locus (%)	Performance	Description
Total order	221	219	2	0.91%	0.91% better	Higher is better - Closer to input amount
Total items	4798	4773	25	0.52%	0.52% better	Higher is better - Closer to input amount
Total weight	5476.25	5468.35	7.9	0.14%	0.14% better	Higher is better - Closer to input weight
Total volume	14.72	20.89	-6.17	29.54%	29.54% better	Lower is better - Less volume indicates better packing efficiency.
Total working time	1636	1877	-241	12.84%	12.84% better	Lower is better - Less time spent working is more efficient.
Total transaction time	734	725	9	-1.24%	1.24% difference	Lower is better - Shorter transaction time is better, but this is a given metric, so slight differences may occur.
Total travel time (engine on)	902	1152	-250	21.7%	21.7% better	Lower is better - Less travel time is more efficient.
Total distance	560.09	575.72	-15.63	2.71%	2.71% better	Lower is better - Shorter distance is more efficient.

Metric	Units	Notes
Total order	count	number of delivery orders
Total items	count / pieces	number of individual items
Total weight	kilograms (kg)	
Total volume	cubic meters (m ³)	
Total working time	minutes	calculated from start to end of the tour
Total transaction time	minutes	
Total travel time (engine on)	minutes	
Total distance	kilometers (km)	