

Tables for the Lucas DFA Method

Lucas DFA method - Manual Handling Analysis

Handling Index = A+B+C+D		B. Handling difficulties <i>All that apply</i>	
A. Size & Weight of Part <i>One of the following</i>		Delicate	0.4
Very small - requires tools	1.5	Flexible	0.6
Convenient - hands only	1	Sticky	0.5
Large and/or heavy	1.5	Tangible	0.8
requires more than 1 hand		Severely nest	0.7
Large and/or heavy	3	Sharp/Abrasive	0.3
requires hoist or 2 people		Untouchable	0.5
		Gripping problem / slippery	0.2
		No handling difficulties	0
C. Orientation of Part <i>One of the following:</i>		D. Rotational Orientation of Part <i>One of the following</i>	
Symmetrical, no orientation req'd	0	Rotational Symmetry	0
End to end, easy to see	0.1	Rotational Orientation, easy to see	0.2
End to end, not visible	0.5	Rotational Orientation, hard to see	0.4

Lucas DFA method - Manual Fitting Analysis

Fitting Index = A+B+C+D+E+F			
A. Part Placing and Fastening <i>One of the following</i>		D. Access and/or Vision <i>One of the following</i>	
Self-holding orientation	1.0	Direct	0
Requires holding	2.0	Restricted	1.5
<i>Plus 1 of the following</i>			
Self-securing (i.e. snaps)	1.3		
Screwing	4.0		
Riveting	4.0		
Bending	4.0		
B. Process Direction <i>One of the following</i>		E. Alignment <i>One of the following</i>	
Straight line from above	0	Easy to align	0
Straight line not from above	0.1	Difficult to align	0.7
Not a straight line	1.6		
C. Insertion <i>One of the following</i>		F. Insertion Force <i>One of the following</i>	
Single	0	No resistance to insertion	0
Multiple insertions	0.7	Resistance to insertion	0.6
Simultaneous multiple insertions	1.2		