

MTM-2 METHODS ANALYSIS CHECKLIST

GETs (G)	Yes	No
1. Can GETs be performed simultaneously with other GETs or PUTs without penalty?	"	"
2. Can GETs be performed during a machine cycle?	"	"
3. Can jigs/fixtures, gravity-feed devices, or bins be used to simplify GETs (i.e., from GC to GB or to GA)?	"	"
4. Can GAs be used and objects slid into position?	"	"
5. Can the transfer of objects from one hand to another be avoided?	"	"
6. Can tools be prepositioned to simplify GETs?	"	"
7. Can tools be palmed while performing other work (instead of being set down and later retrieved)?	"	"
8. Can more than one object be grasped at the same time?	"	"
9. Can travel distances be reduced (i.e., to lower motion classification levels)?	"	"
10. Are hand motions balanced in terms of case and distance?	"	"

PUTs (P)	Yes	No
1. Can PUTs be performed simultaneously with other GETs or PUTs, without penalty?	"	"
2. Can tight tolerances or the accurate location of an object be avoided?	"	"
3. Can the delivery point of an object be chamfered or funneled?	"	"
4. Can fixed guides or stops be utilized?	"	"
5. Can the object be made symmetrical?	"	"
6. Can the depth of insertion be reduced?	"	"
7. Can the other hand assist in complex PUTs?	"	"
8. Can objects be PUT together mechanically?	"	"
9. Can drop deliveries be utilized to simplify PUTs (i.e., from PC to PB or to PA)?	"	"
10. Can objects be slid to a location (i.e., use a PA)?	"	"
11. Are destination points in the normal area of vision?	"	"

Apply Pressure (A)	Yes	No
1. Can As be avoided by improved design or better processing (e.g., eliminate burrs or tight spots)?	"	"
2. Can unnecessary tightening from previous operations be avoided?	"	"
3. Can tight tolerances be avoided?	"	"
4. Can the contamination of parts due to filings, dust, dirt, etc., causing As be avoided?	"	"
5. Can momentum be used to eliminate As?	"	"
6. Are the largest muscle groups used to best advantage in applying pressure?	"	"
7. Can clamping devices or mechanical actions be used to eliminate As?	"	"

Regrasp (R)	Yes	No
1. Can Rs be avoided during PUTs?	"	"
2. Can tools be prepositioned in the desired orientation?	"	"
3. Can magazine feeds, stacking devices, vibratory feeders, etc., be used to present the part properly?	"	"
4. Can parts be made symmetrical to avoid the need for Rs?	"	"
5. Can parts be pre-positioned during a machine cycle?	"	"

Eye Action (E)	Yes	No
1. Can objects and displays be placed in the normal area of vision to avoid Es?	"	"
2. Is there sufficient illumination to avoid Es?	"	"
3. Are bins and parts correctly identified, perhaps by use of color?	"	"
4. Can parts be made symmetrical and positioned properly to avoid Es?	"	"
5. Can visual checks of assembly parts be avoided (i.e., use detents and tactile feel)?	"	"
6. Can visual interpretation of dial settings be avoided (i.e., use ON/OFF or status indicators)?	"	"
7. Can Es be performed during preceding manual motions without penalty?	"	"
Crank (C)	Yes	No
1. Can the wheel or crank be spun?	"	"
2. Can the number of revolutions be reduced (i.e., larger thread size used)?	"	"
3. Can resistance during cranking be eliminated?	"	"
4. Can the crank be power driven?	"	"
Step (S)	Yes	No
1. Is the shortest route or best layout being utilized?	"	"
2. Are floor surfaces even and clear of obstructions?	"	"
3. Are the most commonly used parts located close by?	"	"
4. Is any necessary information and tooling located at the workstation (i.e., avoid unnecessary Ss)?	"	"
5. Can materials and parts be brought mechanically (via conveyors) to and from the workstation?	"	"
6. Can vehicular transport (carts) be used?	"	"
Foot Motion (F)	Yes	No
1. Can Fs be performed simultaneously with other motions?	"	"
2. Can the foot rest comfortably on the switch or pedal during the operation?	"	"
3. Is the body weight supported by a stool (weight off the load-bearing leg)?	"	"
4. Can either foot operate the pedal alternately?	"	"
Bend and Arise (B)	Yes	No
1. Can drop deliveries be utilized to avoid Bs?	"	"
2. Are materials and products located between elbow and knuckle height to minimize Bs?	"	"
3. Are proper lifting procedures (squat lifting, etc.) being utilized?	"	"
4. Can the too frequent entry and exit of a seated workstation be avoided?	"	"

(Adapted from A.D. Brown 1976, Apply Pressure, *Journal of the Methods-Time-Measurement Association-UK*, 14)