

# MACHINEMATE

## Machine Tool Builder's Panel (MTBP)



The **MACHINEMATE** Machine Tool Builder's Panel (MTBP) can make the operator's panel design and implementation easier. The width of the MTBP is identical to that of the **MACHINEMATE** control for a simple layout of an operator's station. This panel includes:

- Emergency stop pushbutton (push in to lock, twist out to release)
- Feed rate and spindle speed override switches
- Cycle start & stop pushbuttons
- Machine start pushbutton
- Jog + and – pushbuttons
- Six general-purpose pushbuttons
- Molded 2-meter cable (with a 50-pin D-shell on both ends)



All of the pushbuttons except the emergency stop can be illuminated. All eight of the small pushbuttons can have a different label engraved for a nominal charge. Important dimensions are shown below.

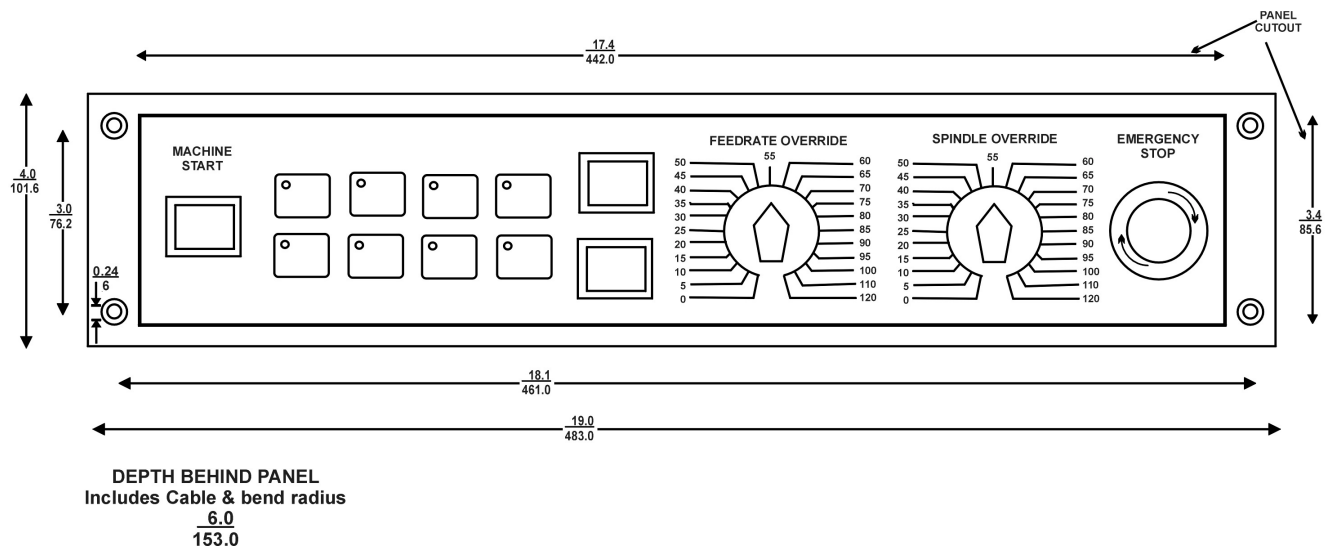
**MACHINEMATE** INC has prepared a PLC application template that includes the processing of all the MTBP inputs and outputs. It is also available for download from our web site.

When using the **MACHINEMATE** SERCOS interface, the included 2-meter cable is pin-compatible with the SERCOS PCI IO connector (X9) for an easy installation. It takes just a few moments for a SERCOS control to be running with the MTBP.

For analog systems, a breakout card can be obtained from **MACHINEMATE** (several vendors have one for the 50-pin D-shell) to convert the 50-pin connector to terminal strip connections.

The MTBP is available at the list price of \$695. Quantity discounts are available.

### MachineMate, Inc. MTBP



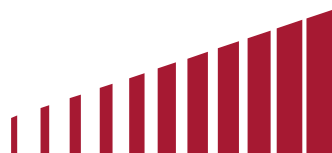
## MachineMate MTBP CONNECTION INFORMATION

The MTBP connector is a male 50-pin D-sub, screw thread 4-40 UNC. The signal arrangement allows the cable to be pin-compatible with the SERCOS PCI IO connector. The connector pin assignments:

| Description          | Pin | Description         | Pin |
|----------------------|-----|---------------------|-----|
| Feed Override bit 1  | 22  | F2 Light            | 49  |
| Feed Override bit 2  | 5   | F3 Light            | 32  |
| Feed Override bit 3  | 37  | F4 Light            | 15  |
| Feed Override bit 4  | 20  | Machine Start Light | 47  |
| Feed Override bit 5  | 3   | Jog- Light          | 30  |
| F1                   | 35  | Jog+ Light          | 13  |
| Jog -                | 18  | Cycle Stop Light    | 45  |
| Jog +                | 1   | Cycle Start Light   | 29  |
| Speed Override bit 1 | 6   | F5 Light            | 46  |
| Speed Override bit 2 | 38  | F6 Light            | 14  |
| Speed Override bit 3 | 21  | Not used            | 31  |
| Speed Override bit 4 | 4   | Not used            | 48  |
| Speed Override bit 5 | 36  | Not used            | 16  |
| F2                   | 19  | Not used            | 33  |
| Cycle Stop (NC)      | 2   | Not used            | 50  |
| Cycle Start          | 34  | 0V IN               | 9   |
| F3                   | 25  | 0V IN               | 42  |
| F4                   | 8   | +24V IN             | 26  |
| Emergency Stop (NC)  | 40  | +24V IN             | 10  |
| Machine Start        | 23  | +24V IN             | 43  |
| F5                   | 41  | +24V IN             | 27  |
| F6                   | 24  | +24V IN             | 11  |
| Not used             | 7   | +24V IN             | 44  |
| Not used             | 39  | +24V IN             | 28  |
| F1 Light             | 17  | +24V IN             | 12  |

The MTBP Terminal Strip pin assignments:

| Description           | Lug |
|-----------------------|-----|
| +24V                  | 1   |
| 0V                    | 2   |
| Emergency Stop (NC)   | 3   |
| Emergency Stop (+24V) | 4   |



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