Teslnik's ITMS V3.0- Intelligent Torque monitoring System

Features Explanations

1. RFID Based Various Level Setting access authorization
2. OK/NG Judgement based on no. of Screw thread fastened.
3. OK/NG judgement based on Screw Fastening/Tightening/Runtime Time.
4. OK/NG Judgement based on Max and Min Torque Limit.
5. Auto Program Selection- 3 Different Methods
6. Digital Enable/use or Disable/not use IO settings for PLC integration for Proximity, Clamp and Barcode.
7. Multicolor RGB LED for Forward, Reverse, STOP, OK, and NG Judgement.
8. Enable/Disable Screwdriver Reverse Run and Reverse Count digitally through settings.
9. Data output through WIFI for Traceability . (Optional)
10. Barcode Integration for Traceability (Optional).
11. Warranty for Teslnik's ITMS.
12. Important Remarks

1. RFID Based Various Level Setting access authorization

Teslnik's ITMS

With Smart RFID Card Based Setting access, now no one can change/tamper production settings without authorized RFID card.
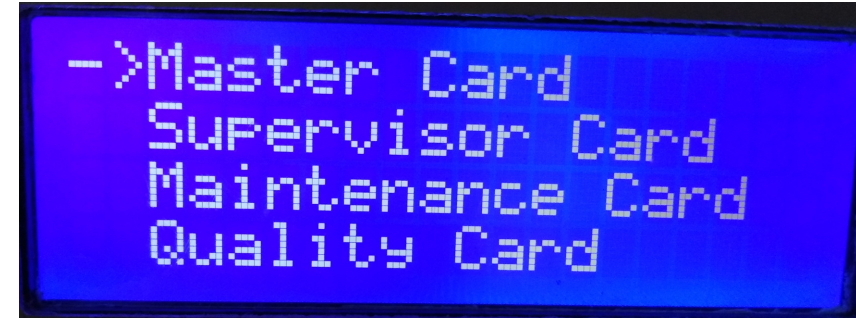

Step 1- For setting access

Step 3 - Use Exclusive assigned Master Card on Top panel.

Step 3- Access Granted.

No more Mechanical Locks for setting accesses. Teslnik's RFID based Setting access will keep user worry Free from unauthorized Settings change as only authorized Person can have RFID card access. *Any card access get recorded in the Connected Laptop/Desktop through Data output WIFI system

Note:* WIFI Data output is optional with additional Charges.

2. OK/NG Judgement based on no. of Screw thread fastened.

Teslnik's ITMS

OK/Ng judgement based on Thread Count of Screw Tightening

Illustration image of teslnik's Counter LCD

No worries if your SOP says to make OK/NG judgement of Tightening/fastening of Screw based on no. of Thread Fastened.
*With Teslnik's Intelligent controller you can easily configure your assembly requirements.

Note: Precision Screw's Thread Count is subject to Standard Condition of Screw and Thread available in parts. Ask Installation Engineer to show how to measure its accuracy.

Teslnik's ITMS

OK/NG judgement on the basis of Runtime

Illustration image of teslnik's Counter LCD

With Precision of Plus minus 5 Milliseconds, *Teslnik's Screw Tightening/Fastening time provides utmost accuracy for all your Screw tightening needs.

Screw tightening Runtime Display helps user to identify Assembly defects and capture Part/Screw variations in real time.

Note: *Precision Screw's Fastening/Tightening time is subjected to Standard Condition of Screw and Thread available in parts. Ask Installation Engineer to show how to measure its accuracy.

Capture difference in part variation with Precise Runtime shown on LCD in millisecond.

4. OK/NG Judgement based on Max and Min Torque Limit

Teslnik's ITMS

OK/NG judgement based on Maximum and Minimum Torque Limit
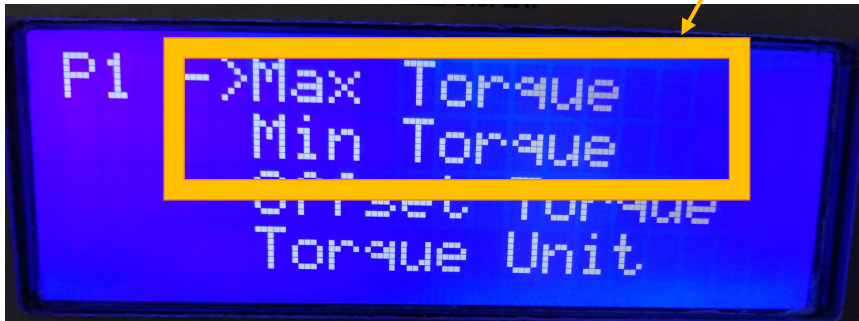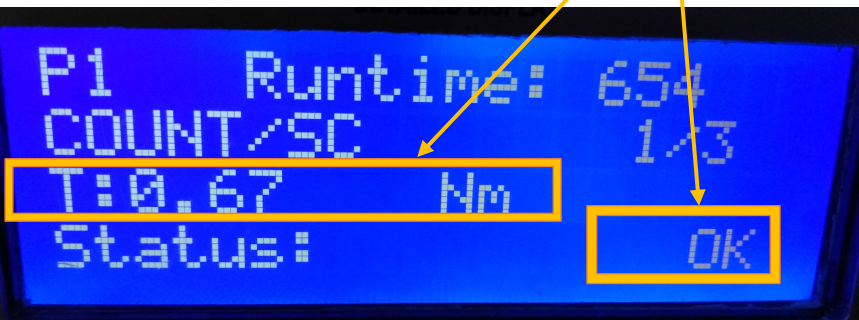

Illustration image of teslnik's ITMS LCD

Screw tightening Judgement based on Torque set by user.

Now user can set maximum and Minimum Torque limit for Making OK and NG Judgement as per SOP. *Teslnik's Intelligent "ITMS " Ensures every screw is tightened with correct Torque.

Note: *Torque display is subject to various variable parameter involved in a Screw Tightening Assembly operation, for better understanding, please ask Installation Engineer .

5. Auto Program Selection- 3 Different Methods

Teslnik's ITMS

For Production line with various models running in same line: Automatic Program change 3 options are available:

1. Batch Count- 15 Programs
2. RFID Card Based Program Change. - 15 programs
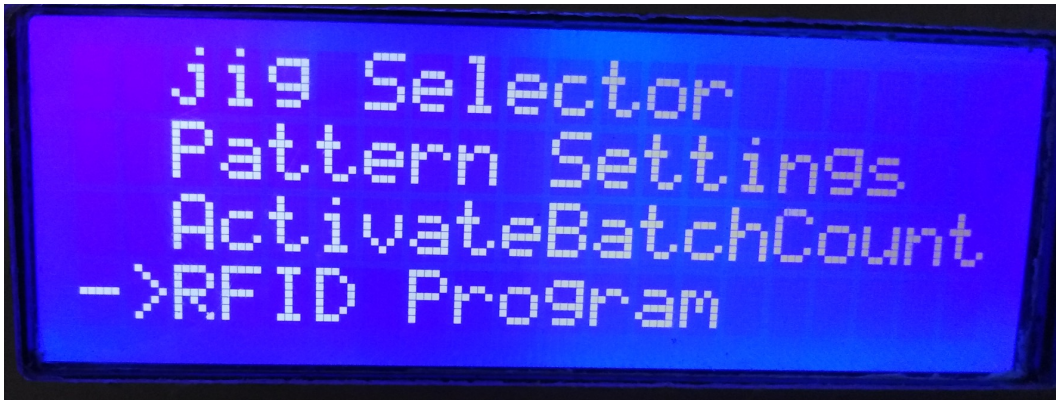3. *Jig ID based Program change – 15 Programs. (Optional)

Illustration image of teslnik's Counter LCD.

For Multi - model Line where Different length screw are used for different parts. This feature is must to have.

Same assembly line and Multiple Production Model's, Worry no more because Now user can use 15 different Program for configuring MULTIMODEL LINE as per Assembly Line.

Note: *JIG ID based program change feature is Optional and available at extra charges.

6. Digital Enable/use or Disable/not use IO settings for PLC integration for Proximity, Clamp and Barcode.
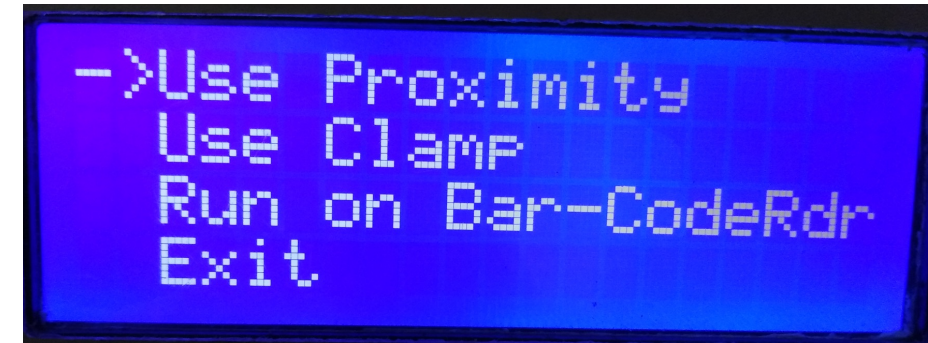
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Controlling Counter's External IO's just made easy-
Enable or Disable with easy Setting access on LCD.

Disable/Enable
External IO's Switch
with just press of a
button by selecting
ON/OFF on LCD

Disable/Enable External
IO's Sensor option with
just press of a button by
selection ON/OFF on
LCD.

Digitally control all your IO configuration
with External PLC with just press of a
button. Enable or Disable as you like
whenever you like for your Assembly
Operations.

*Easiest way of configuring External IO's for
industrial Automation.*

7. Multicolor RGB LED for Forward, Reverse, STOP, OK, and NG Judgement.

Teslnik's ITMS

5 Different Colour for indicating different operation status

 Yellow For Setting Access

 Green for OK Status

 Blue for Forward Screwdriver Run

 Purple for reverse Screwdriver Run

 Red for NG Status

RGB LED integration enables user to immediately capture status of Controller as to what what Operation is going on and what Operator is doing during production. Smartest way to Monitor Assembly stations Operations.
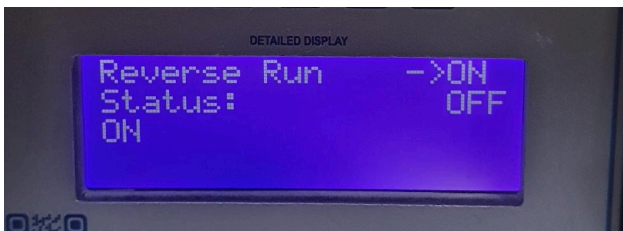
8. Enable/Disable Screwdriver Reverse Run and Reverse Count digitally through settings.

Teslnik's ITMS

Controlling Reverse Run/Rotation of Screwdriver is just easy as On and OFF switch. Control Minus Count during Reverse rotation as per production need by just ON and OFF setting access.

Minus Count can be enabled or Disabled as per Production/Audit requirement in easiest possible way

Screw Driver's Reverse Run/Rotation can be Disabled as per Production requirement with any tampering of Screwdriver.

Special requirements such as Enabling/ Disabling the Reverse Run of Screwdriver or Enabling/Disabling Reverse Count can be easily done now in Teslnik's Intelligent ITMS Controller.

Easiest way of controlling Screwdriver's Reverse Rotation and Counter's Minus Count in case of Reverse Operation of Screwdriver.

9. Data output through WIFI for Traceability . (*Optional)

Teslnik's ITMS

Record data of Assembly operation in DAS Software on your system with our Advance Industry 4.0 WIFI data output feature.

Now traceability of Screw tightening/fastening data is made as simple as possible. With Teslnik's Intelligent ITMS Controller, you can get fastening and Card access data on your Laptops/Desktops through WIFI.
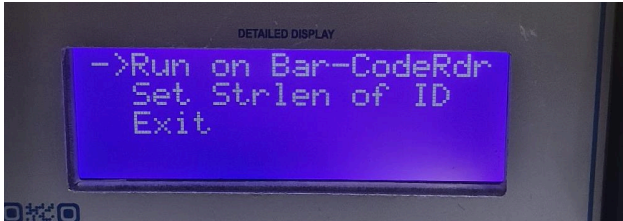
*Note: * This feature is modular/optional with additional Charges.*

For Traceability and data recording of Screw tightening in assembly operation .

10. Barcode Integration for Traceability (*Optional).

Teslnik's ITMS.

Without Part Barcode Scanned, Screwdriver will not start/run. For Complete Poke-Yoke and traceability option.

STEP 1- Enable Run on Barcode in Setting.

STEP 2- Scan Barcode to Enable Screwdriver Start/Run

Screwdriver Switched ON

STEP 3 – Start Screw Tightening as per Set Count.

For Barcode based Screwdriver assembly line

If you want to ensure that the barcode is scanned before the Screwdriver starts, then this feature is must to have. Teslnik's Intelligent "ITMS " Controller can enable user to Prevent Screwdriver run if Barcode is not scanned. The scanned barcode data can be viewed Through DAS Software for Data output Configured ITMS Controller Box only.

*Note: *This feature is modular/optional with additional Charges.*

11. Warranty for Teslnik's ITMS

Warranty – 2 Years Subjected to manufacturing defects.
Any damage caused due to mis handling, ESD or improper Grounding or Earthing issues, is not covered in warranty.

12. Important remarks for user

1. ITMS V3.0 includes all features by default Inbuilt, except OPTIONAL Features Mentioned in above slides.
2. OPTIONAL Features are WIFI Data Output, Barcode and Jig ID.
3. For Ordering Optional features, user must exclusively mention the same and accordingly separate Quotation will be shared .
4. Optional features are charged extra as per user requirement.

Thank you

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