Cleco®

Electronic Counter
Tool Usage and Life Management

- Kevin Myhill
- kevin.myhill@apextoolgroup.com

Agenda

- Product Overview
- Example Solutions
- Design Features
- Competitive Comparison
- Applications
- Value

Product Overview

TULMan Electronic Counter

- What is it?
  - Tracks small pneumatic power tools usage in time and cycles

Product Analogies

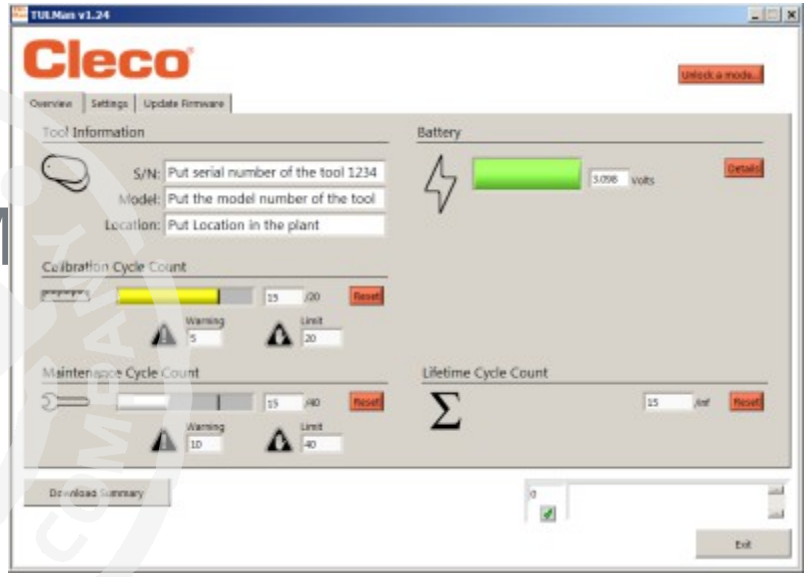
"An odometer/tripometer for your small pneumatic power tools"

"A fitbit TM for your small pneumatic power tools"

Product Overview

Product Overview

TULMan Electronic Counter Software



- Free WEB download
- Multiple Password Access M
  - BASIC to view and file download only
  - TOOL ROOM to reset only
  - PROGRAMMING to set parameters
  - PASSWORD MANAGER
- PROGRAMMING
  - By cycles or run time
  - Minimum time for a cycle can be set

Example Solution

- Used on 19 series pistol and angle assembly tools
- Tracking usage between calibrations - system is currently calendar based
- Will know when some tools are used more than others and can balance their usage
- Data being gathered to review implementing a usage based calibration and extend the calibration period

Major Aerospace OEM

Click icon to add picture

Example Solution

Major Aerospace OEM

- Using on competitor pistol drill
- Tracking usage
- Use to monitor time between failure
- Evaluate tool life over time

Click icon to add picture

Design Features

- Rugged Polymer construction drop tested and crush-resistant
- Low weight 2.8oz/80g

- LED's turn YELLOW Warning when Cycle or Run Time Limits are being reached

- LED's turn RED when Cycle or Run Time Limits are reached

- 1/4" NPT Outlet and Inlet making in Easy to Install on ANY Small Pneumatic Tool *

- Micro USB connection for Program Set Up and Data Download

- Tamper proof cover for micro usb access requires T10 torx driver

- Electronics isolated from air to prevent contamination

Small pneumatic tools based on airflow min 5cfm/145 lpm – Max 20cfm/570lpm – If tool requires greater air flow tool performance will be affected

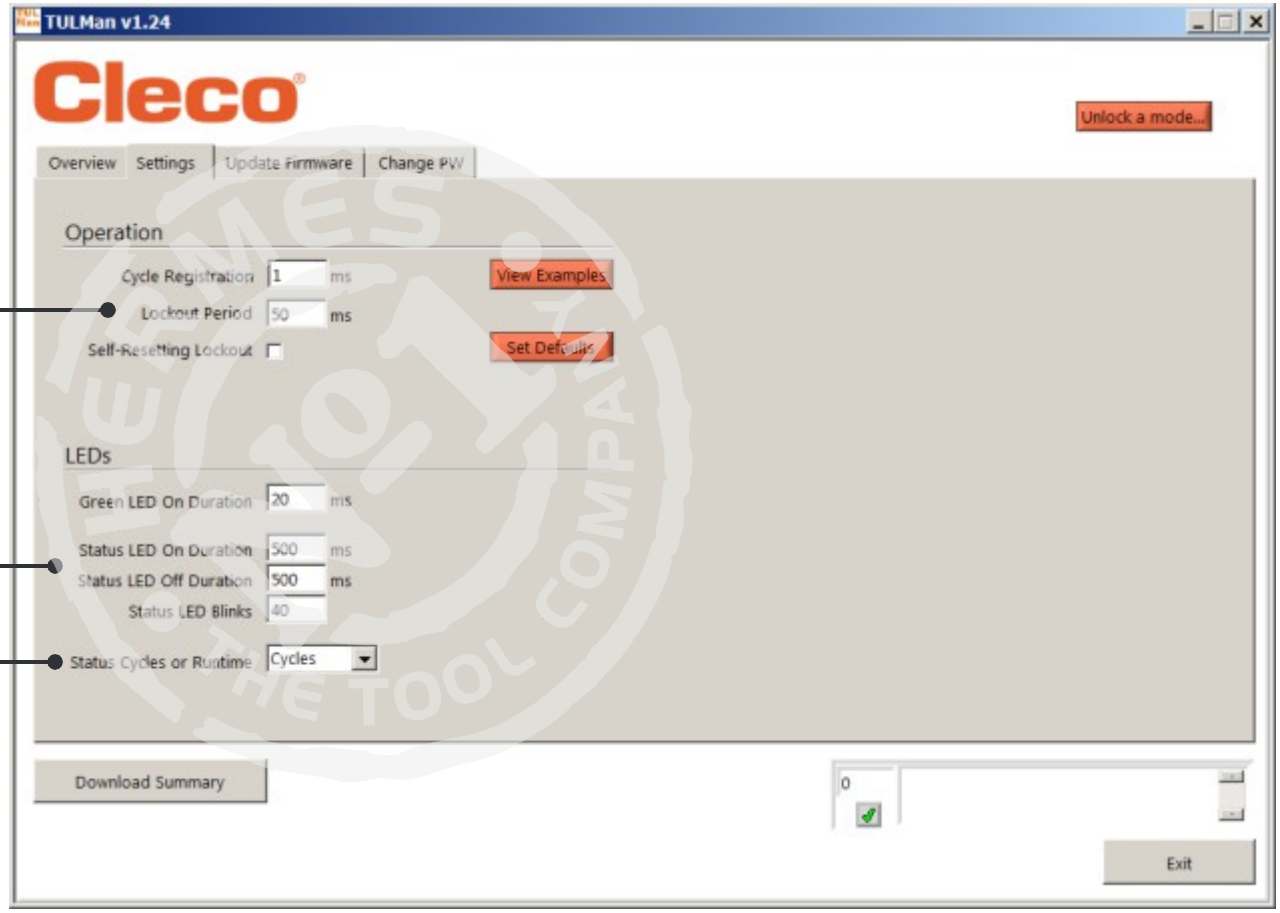
Design Features

- Associate with tool and Plant Location
- Password Management
- Password protected Access to Tool Room, Programming and Password Admin

- Set count warnings and limits for LED warning actuation
- Download results file in csv format
- Life can be reset to zero to move to a new tool

Design Features

- Define cycle parameters e.g. minimum time to be a cycle, time between cycles
- Define LED on/off and number of blinks – can conserve battery life
- Set count to be either cycles or run time



Applications

- Pneumatic Assembly Tools

Reduce Incidence of Calibration for Torque Tools	Estimated annual value $170* per tool
PM vs Repair when failed	Estimated annual value $300** per tool
Knowing tool has not completed too may cycles and is producing correct quality	Priceless

*Based on saving 2 hrs at $85 per hour

** Based on More Uptime (10%), less parts cost (10%), less time to PM vs Repair

Applications

- ## Material Removal – Hand Drills

PM vs Repair when failed

Estimated annual value $300** per tool

* Based on More Uptime (10%), less parts cost (10%), less time to PM vs Repair

Applications

- Material Removal – Sanders, Grinders Polishers

PM vs Repair when failed

Estimated annual value $300** per tool

* Based on More Uptime (10%), less parts cost (10%), less time to PM vs Repair

Competitive Comparison

Click icon to add table

- There is currently NO product like this on the market.
- There are counters for “process” control e.g. Torque Verifier – TVP but these are NOT targeted at Tool Usage and Life Management. They are larger and more expensive.
- This product can be used on Competitive small pneumatic tools.

What if you knew?

How long, where, when tools were actually used over time?

The Power of Data

Cleco

HERMES
THE TOOL COMPANY

Kompania Narzędziowa "HERMES" Sp. z o.o.
ul. Sarni Stok 73 a, 43-300 Bielsko-Biała, Polska; tel: +48 33 821 41 90-91
e-mail: biuro@hermestools.eu www.hermestools.eu