World's First Cordless Tools

Cleco®

LIVEWIRE™

For Safety Critical Fastening

Cordless Freedom

COOPER Power Tools

- ✓ Eliminate cables and cable management
- ✓ Increase operator efficiency for higher productivity
- ✓ Reduce in-system damage costs

LIVEWIRE™

Flexibility Meets Productivity!

Wireless Intelligence

COOPER Power Tools

All the **Brains.** All the **Power.** And its **Wireless.**

Traceability For Safety Critical Fastening

Integrated Controller& Servo

LIVEWIRE™

Corded Functionality in Cordless

Wireless Intelligence

COOPER Power Tools

All the **Brains.** All the **Power.** And its **Wireless.**

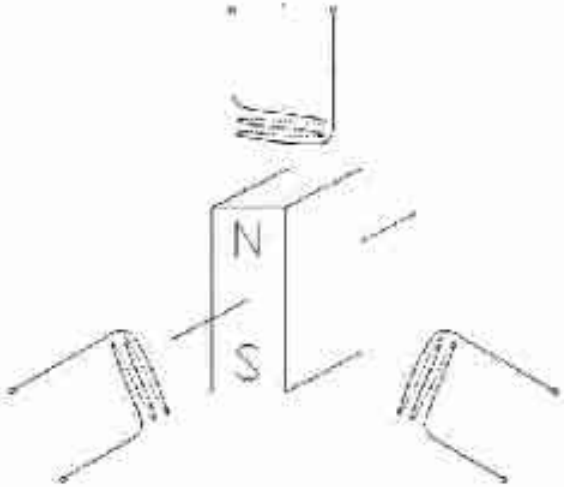
Corded Functionality in Cordless

Motor Technology

COOPER Power Tools

- Increased Motor Efficiency for Longer Life
- Low Rotor Inertia for High Torque Accuracy
- Superior Performance over Brush Type

Livewire™

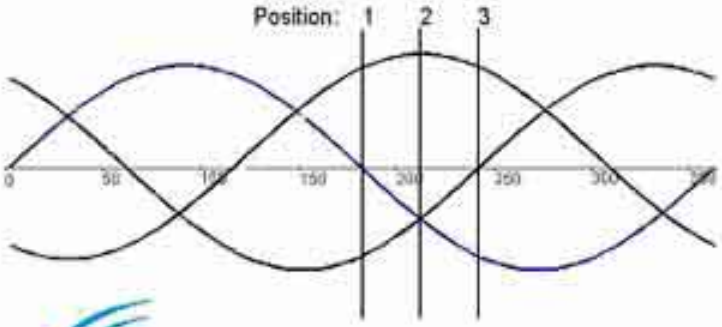


High Performance Brushless Motor

Resolver Technology

COOPER Power Tools

- Superior Durability Over Encoder
- Full Range Speed Control for Operator Ergonomics
- Angle Control / Monitoring for Quality Assurance



LIVEwire™

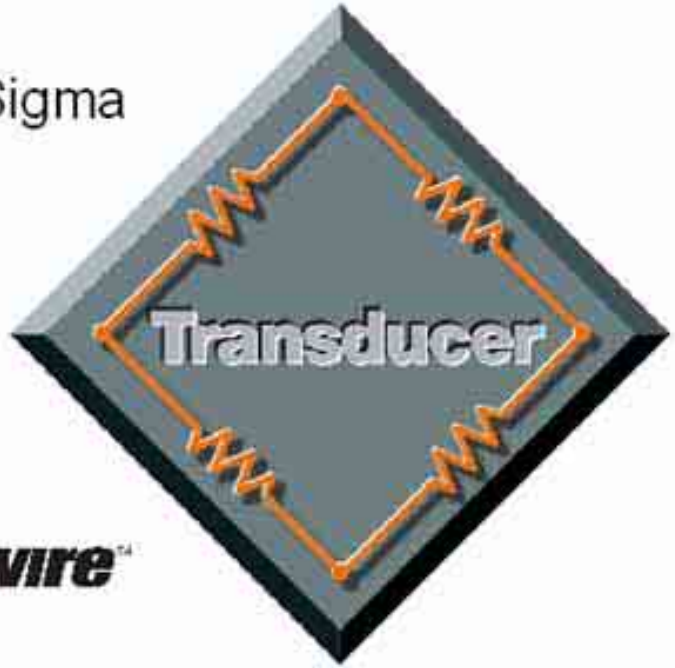
High Resolution Rotor Position Detection

Transducer Technology

COOPER Power Tools

- Reaction Transducer for Torque Traceability
- Multiple Torque Targets On the Fly
- High Torque Repeatability
  - Cmk >1.67 @ +/- 10% over 6 Sigma

LIVEWIRE™



Safety Critical Application Friendly

Live Operator Display

Benefits:

- Configurable
- Real-time Interface
- Green LCD = OK
- Red LCD = NOK / Errors
- Application Select
- High Visibility Status LED's

LIVEWIRE™

Information at the "Touch of a Button"

LED Illumination

COOPER Power Tools

Benefits:

- Increased Application Visibility
- Illumination Distance ~ 500mm (20") Maximum
- Programmable On/Off Control

Programmable Application Illumination

Battery Technology

COOPER Power Tools

LIVEWIRE™

Benefits:

- 26V, 1.6Ah Li-Ion
- Up to 1,000 Cycles per Charge (Hard Joint)
- >500 Charge Cycles
- Tool power management conserves battery power

Typical Production:

- 60JPH * 8 Hours = 480 Cycles
- Two Complete Shifts on a Single Charge
- Average Battery Life >500,000 Cycles

High Power-to-Weight Ratio

Charger Technology

COOPER Power Tools

Benefits:

- **One Hour Charge Time**
- **(100-240)VAC, 50-60Hz Auto Sensing Input**
- **Two LED Indicators**
  - Green = Power On
  - Red Solid = Charging
  - Red Blinking = Battery Defect
  - Red Off = Fully Charged / No Battery

LIVEwire™

Intelligent Diagnostics

Bar Code Scanner

COOPER Power Tools

Optional Benefit:

- No Additional Hardware
- Scan on the Fly
- Auto Program Select
- Enable / Disable Tool

Auto Select Programs & Error Proofing

Wireless Communication

COOPER Power Tools

- **Infra-Red – Standard**
- **Real-time Wireless (Optional):**
  - 2.4 GHz WLAN – Range (30-50)Meters
  - (868/915)MHz RF – Range (10-30)Meters

LIVEWIRE™

WLAN is "Wi-Fi" Certified with FCC License

*** Multiple WLAN Access Points can be used to expand range

10 Tools - 1 Controller

COOPER Power Tools

Corded System:

- 10 Controllers
- 10 Cables
- 10 Tools
- ~$152k

New LiveWire System:

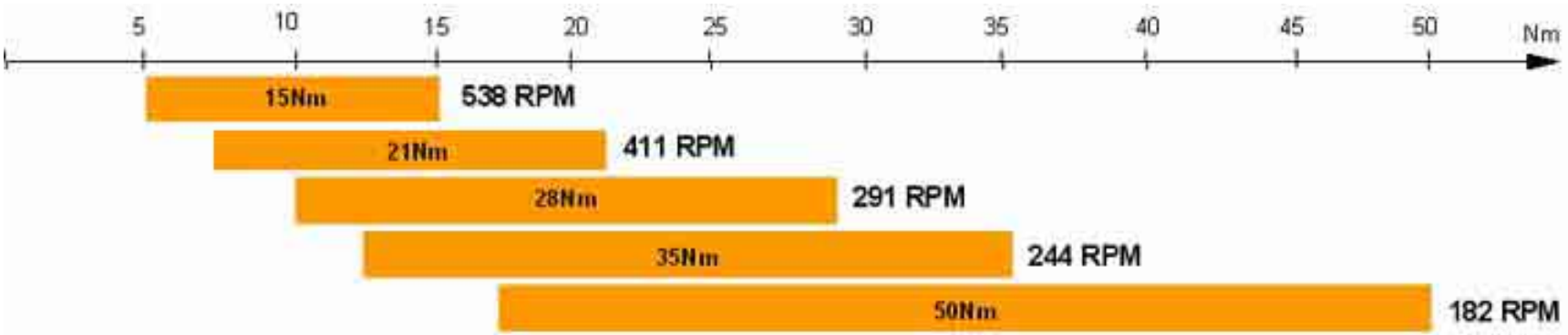
- **1 Controller**
- 1 Wireless Module
- 10 Tools
- **~$104k**

31% Savings

The most "Cost Effective Safety Critical Solution" available!

Angle Tool Series

COOPER Power Tools



Angle Ergonomic Range = 5 - 50Nm

Pistol Tool Series

COOPER Power Tools

Pistol Ergonomic Range = 3 - 13Nm

Line Controller

COOPER Power Tools

Benefits:

- Wide Angle Color LCD
- Full Programming Keypad
- 1-10 Channel Configuration
- Configurable 24V I/O
- Ethernet TCP/IP
- Serial / USB Ports
- Local Data Storage / Troubleshooting
- Removable Mounting Plate

TMEB-200 Installation Flexibility

TMEB-COM Software

Applications without Error Proofing

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All the **Brains.**

All the **Power.**

And it's **Wireless.**

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WLAN Module

961323 – EU
543995 - NA

D-Link (DWL-3200AP) Features:

- Reliable/Secure Wireless LAN
- IEEE802.11b/g, 54Mbps Wireless Connectivity
- 1-11 Channel Coverage
- Range up to 50 m (164 ft)
- Extensive Security Levels
- Industrial Grade Plenum Rated Metal Chassis (Fire Code)
- Two High-gain Antennas for Optimal Coverage
- FCC Class B, CE, Wi-Fi Certified

2.4 GHz Wireless Access Point

RF Modules

Cleco RF Features:

- 868 MHz (961300) – EU
- 915 MHz (961301) – NA
- Up to 4 Tool ID Channels
- Range up to 30 m (98.4 ft)
- Serial/Ethernet Connectivity
- 10-100 Mbps Ethernet
- 38.4 kbps Serial
- Industrial Grade Metal Chassis

868/915 MHz Wireless Base Station