

World's first patented Hybrid torque driver.
Affordable, flexible system that can replace
up to 8 conventional screwdrivers.

HD-Series

Hybrid Torque Control System

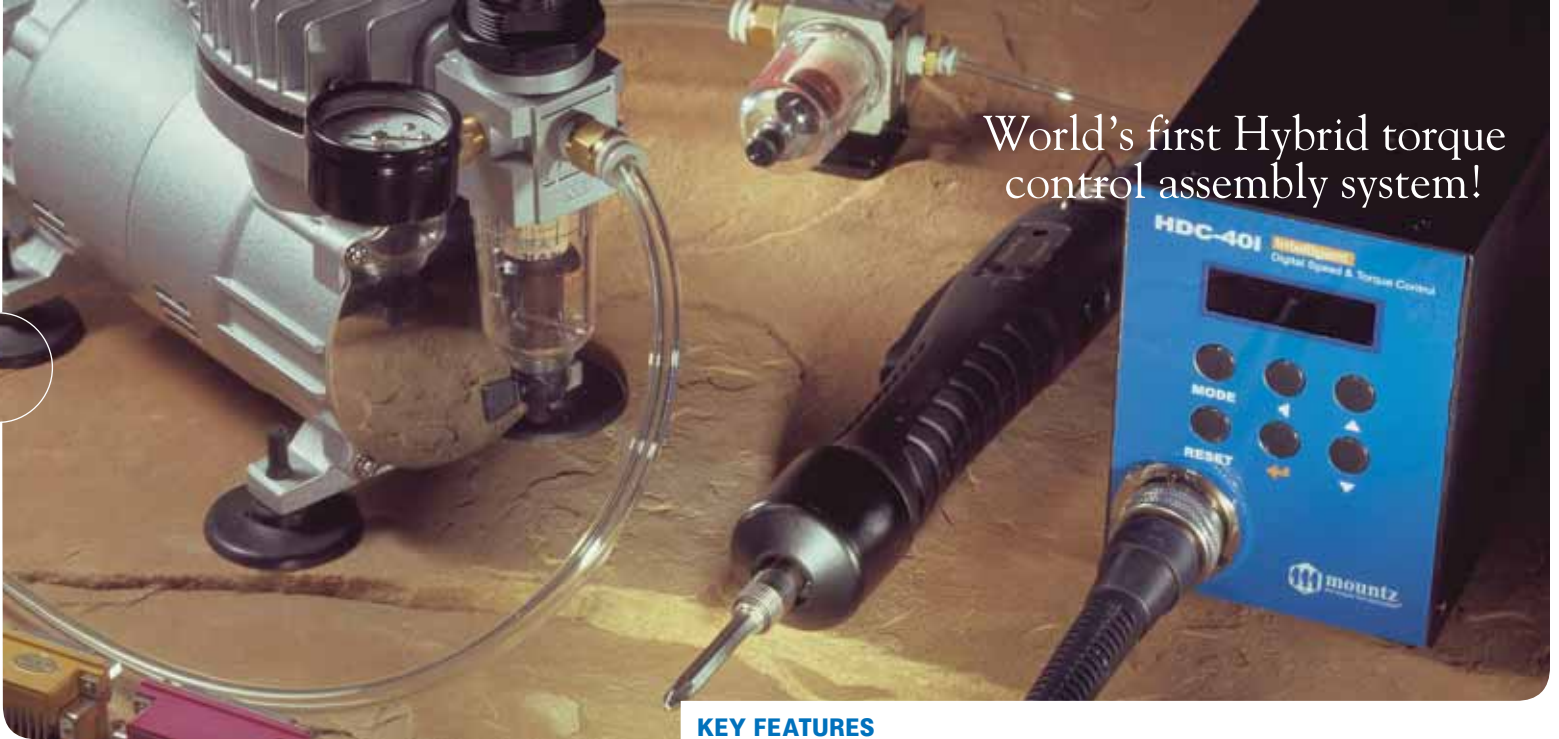


Innovation from the torque tool specialists® **NEW**



1080 North 11th Street, San Jose CA 95112
t 408.292.2214 / t 800.456.1828
f 408.292.2733
e-mail: sales@etorque.com
www.etorque.com

World's first Hybrid torque control assembly system!



KEY FEATURES

Controller

Programmable digital torque setting with memory for 8 preset torque settings.
 Real-time monitoring and torque control of the tightening process.
 Selectable speed up to 1,700 rpm.
 Programming and monitoring with PC software.
 Programmable multi-sequence operation.

Brushless Electric Screwdrivers

Various models that range from 0.3 - 39 lbf.in
 Electric Screwdrivers feature a high performance brushless motor design that provides durability and reduces the standard maintenance costs for electric screwdrivers.
 ESD housing and bit tip control to 1 ohm, (cable not ESD).
 Low inertial force provides smooth reaction-less operation with little G force to assembled parts.
 Low noise, vibration and maintenance.

I/O Interface & Settings

25P I/O interface to a PLC or 8 direct sensor ports.
 Hybrid systems can be "Daisy Chained" together for screw counting in a master/slave scenario.
 Sensor ports for preset selection and screw counting.
 Input via sensor ports for presets.
 Input / Output for PLC (Excludes Run, Forward/Reverse).

Built-in Screw Counter

Detection of fastening error and displays error condition.
 Visual assembly fastener count (count up or down), including total count.
 Real time monitoring by PC program.
 Detects - cross threading, omissions, unfinished rundowns and cycle complete.
 0 to 99 screws.

Screw Counting Selections

Auto.
 Start (Continuous on).
 Start Pulse with time limit.
 Start Pulse and Finish pulse.

Preset Parameter Settings

Three selectable units of measure: Lbf.in, N.m, Kgf.cm
 Selectable settings for Torque, Speed, Min & Max Angle, and Soft Start time.
 Maximum angle control and verification
 Minimum angle control and error reporting

Motor Run Time Limits

Motor run time limits, forward and reverse.
 Motor stall time limit.
 Sleep time.
 Motor acceleration for soft start.

LED Display selections

Preset and Speed.
 Preset and Torque.
 Count setting and remaining screw count.
 Count setting and remaining screw count (Idle) + Preset and Torque (Running).
 Count setting and remaining screw count + Preset and Torque (Alternating).

Output signal types

Count complete
 Torque up and Count complete.
 Alarm, screw missing.

HD-Series

Hybrid Torque Control System

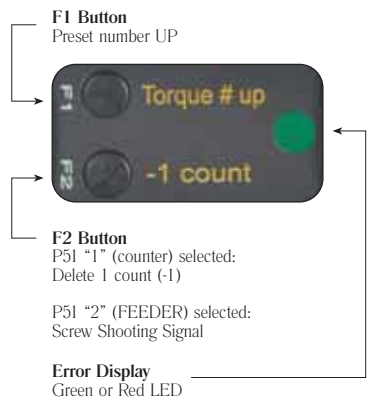
Mountz introduces the Hybrid Torque Control System, a revolutionary change in repeatable screw fastening technology. The patented HD-Series Torque Control System is the world's first torque control tool using both air and electric power to set and control torque. The HD's precise pneumatic pressure sensor and patented algorithm allow for precision digital torque selection. It provides real-time monitoring and torque control of the tightening process. It provides repeatability of the torque applied to screws, regardless of joint characteristics and frictional differences in actual applications.

Key Benefits

Productivity/ Flexibility	Increase productivity with one tool instead of 2 - 8 tools. Perfect for cell based manufacturing environments, change torque via front panel, PLC or direct connection to I/O on controller.
Quality	Visual digital torque & speed control. Built in screw counter, error detection, fastening strategy setting and customized software package provide documented fastening and control.
Cost	Less than half the cost of conventional DC control tools - state of the art technology at a fraction of the price. Replace 2 - 4 tools with 1 Hybrid system.



800.456.1828



**BRUSHLESS ELECTRIC SCREWDRIVER
(use with HDC40i Controller)**

Model	Driver Type	Item #	Torque Ranges		RPM		Grip Dia.	Length	Drive Size	Weight
			lbf.in	cN.m	High	Low				
HD150-A	Lever Start	145741	4.4 - 13	49.1 - 147	1700	500	1 1/4"	9 2/3"	1/4" F/Hex	15.5 oz.
HD150P-A	Push-to-Start	145742	4.4 - 13	49.1 - 147	1700	500	1 1/4"	9 2/3"	1/4" F/Hex	15.5 oz.
HD220-A	Lever Start	145743	6.1 - 19.1	68.7 - 215.8	1250	400	1 1/4"	9 2/3"	1/4" F/Hex	16.2 oz.
HD220P-A	Push-to-Start	145744	6.1 - 19.1	68.7 - 215.8	1250	400	1 1/4"	9 2/3"	1/4" F/Hex	16.2 oz.
HD450-A	Lever Start	145745	8.7 - 39	98.1 - 441.4	600	300	1 1/4"	9 2/3"	1/4" F/Hex	18 oz.
HD450P-A	Push-to-Start	145746	8.7 - 39	98.1 - 441.4	600	300	1 1/4"	9 2/3"	1/4" F/Hex	18 oz.

**BRUSHLESS ELECTRIC SCREWDRIVER
(use with HDC30i Controller)**

Model	Driver Type	Item #	Torque Ranges		RPM		Grip Dia.	Length	Drive Size	Weight
			lbf.in	cN.m	High	Low				
HD012-E	Lever Start	145747	0.3 - 1	3 - 11.7	1100	500	1 1/8"	7 7/8"	4mm HIOS	7.8 oz.
HD025-E	Lever Start	145748	0.7 - 2.1	7.8 - 24.5	1100	500	1 1/8"	7 7/8"	4mm HIOS	7.8 oz.
HD035-E	Lever Start	145749	0.9 - 3	9.8 - 34.3	1100	500	1 1/8"	7 7/8"	4mm HIOS	7.8 oz.



HDC40i CONTROLLER

Model: HDC40i Hybrid Controller
Item # 145740
For driver models: HD150, HD220 & HD450

HDC30i CONTROLLER

Model: HDC30i Hybrid Controller
Item # 145739
For driver models: HD012, HD025, & HD035



Increase productivity with one tool instead of 3-4 tools. The convenience of selecting the control settings with the touch of a button and offering built-in error proofing systems, adds value to the quality control process.



USB cable for connecting Controller to PC.
Item # 770320

GENERAL SPECIFICATIONS (Both Models)

Input (Air Pressure):
Min 4.5 Bar (62.26 PSI) / Max 6 Bar (87 PSI)

Angle Control: 0.1 - 10 turns

Preset Parameters:
Torque, Speed, Soft Start & Angle in 8 preset numbers

Auto detection of the connected driver: Auto detection of the offset value from the EEPROM on the driver

Error display: Error display by code no. in system, communication & pattern error group

Fastening Quality Control: OK/NG monitoring of screw fastening by preset pattern of angles, times

Screw Counter: Save the total screw number, and monitoring the number of OK fastening screws. The controllers can be "Daisy Chained" together for screw counting in a master/slave scenario.

PC based program for parameter settings, monitoring and real time output

HDC40i SPECIFICATIONS

Input (Electric): AC120VC ~ 220V, 50-60Hz

Output (Electric): DC40V, 3A

Fuse: AC250V 10A

Dimension (WxLxH): 3 3/4" x 8 3/4" x 5"

Weight: 4.6 lbs

Preset selection capability:
Front panel, direct sensor ports or 25P I/O

HDC30i SPECIFICATIONS

Input (Electric): AC120VC 220V, free voltage

Output (Electric): DC30V, 2A

Fuse: AC250V 3.15A

Dimension (WxLxH): 3 1/2" x 7 1/8" x 5"

Weight: 3.5 lbs

Preset selection capability: Front panel or 25P I/O



Display Window

Control Buttons

Connection to Driver



*Switch/Sensor ports

USB Port

25P I/O

Count Start Signal (IN)

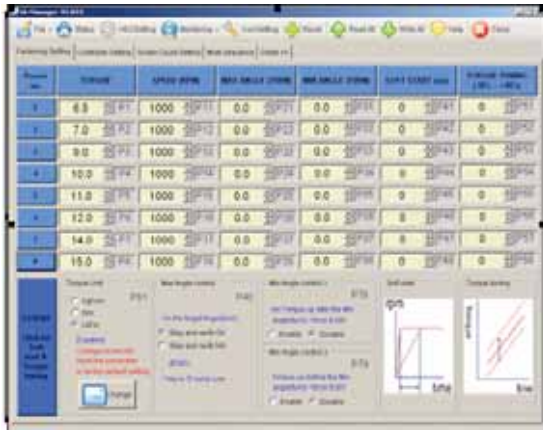
Count complete OUT or screw shooting signal.

Air Pressure Inlet (Out dia 4mm)

HDC40i Controller



NOTE!
*Switch/Sensor ports only available with HDC40i Controller.



THE HDC Controller enables an ability to define various fastening parameters.

Units of measure, Lbf.in, Kgf.cm and Nm
 6 preset parameter settings & 8 preset torque settings
 Maximum angle control and verification
 Minimum angle control and error reporting



Screw count monitoring in real time.

Using a screw counter is like putting the eyes and ears of a quality control manager where they are needed most - right on the assembly area. Screw counters verify that all fasteners have been installed and were seated to the tools preset torque setting. These units take the control of the assembly process out of the operator's hands.



MINI AIR COMPRESSOR

Oil free mini air compressor with auto pressure switch with one-touch male connector (for tube OD 8mm), unit can support 1 - 4 Hybrid Controller Systems
 1/8HP, Start at 70PSI, Stop at 90PSI
 Flow: 20LPM
 Weight: 9.5 lbs.
 120V

Model: MAC-20
Item # 145737



NOTE!

The HDC40i & HDC30i Hybrid Controllers require a constant PSI regulation. Should be used with MAC-20.

ACCESSORIES

Item #	Model
773816	One-Touch Male Connector (1/4 RPT, Tube OD 4mm)
773817	One-Touch Male Connector (1/4 RPT, Tube OD 8mm)
773818	One-Touch Union Tee (Tube OD 8mm)
773819	One-Touch Straight Union (Tube OD 8mm)
773820	One-Touch Plug-in-Reducer, (8mm Plug to 4mm Tube)
773821	Tubing - Polyurethane Clear (4mm OD X 2.5mm ID, 20 Meter Roll)
773822	Tubing - Polyurethane Clear (4mm OD X 2.5mm ID, 33 Meter Roll)
773823	Tubing - Polyurethane Clear (8mm OD X 5mm ID, 20 Meter Roll)
773824	Tubing - Polyurethane Clear (8mm OD X 5mm ID, 33 Meter Roll)

PISTOL GRIP

Converts inline drivers to pistol grip.
 Fits driver models:
 HD150, HD220 & HD450
 (driver not included)

Item # 145738



CABLE

The driver cable connects the driver to the HDC controller. This cable provides both air and current to the driver, as well as signals back to the controller.

