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Akku - gesteuerte Schraubsysteme, messend
Serie BM T

WIRELESS ADVANCED
TRANSDUCERIZED TOOLS
BMT serie



www.dogatec.de

SUMMARY

WIRELESS ADVANCED TRANSDUCERIZED TOOLS BMT serie

▶ A RANGE OF POWERFUL AND CONNECTED WIRELESS TRANSDUCERIZED SCREWDRIVERS	4
The range	5
Dimensions.....	7
Specifications.....	7
Features	8
Built-in digital display.....	8
Interconnections	9
Technical specifications	10
▶ ACCESSORIES	12
Battery.....	12
Battery charger	12
Protections	12
USB cable programmation.....	12
Communication modules	13
Rotating suspension ring	13
Fixed suspension rings	13
Side handle	13
Supports.....	14
Crowfoots	14
Wireless bit tray BST-8W LCD Wi-Fi	14
▶ PARAMON-PRO X INTERFACE CONTROLLER (OPTIONAL)	15
Features	15
Specifications.....	15
Operation mode with job versus multi-screwdrivers mode.....	16
Sample job	16
Assembly process visualization in a Job	17
▶ RELATED PRODUCTS	18
▶ OUR SERVICES	19

A RANGE OF POWERFUL AND CONNECTED WIRELESS TRANSDUCERIZED SCREWDRIVERS

BMT serie battery-powered torque and angle screwdrivers are designed to meet your requirements for productivity, quality and traceability, while giving you great mobility.

Thanks to state-of-the-art on-board technologies, they can be directly connected to your network and 100% communicating. With no intermediate controller, they are resolutely geared to your Industry 4.0 projects.

These screwdrivers combine ergonomics, autonomy, multi-torque, multi-strategy and connectivity.

Their great versatility will meet your most demanding needs as well as classic screwing applications.

These «plug and play» screwdrivers are ready to produce in 1 minute!

Available in pistol version, with angle gear, barcode scanner and torque range from 0,4 à 50 Nm, are all equipped with color display and navigation buttons.



Ergonomy

- 2 models available: pistol and angle gear
- Wireless for greater mobility
- Lightweight, well-balanced tool
- 4 multi-function buttons: navigation, selection and interaction,...
- On-board AMOLED color display for fast visualization of results
- Easy setup and programming



Quality

- Torque and angle current control for optimum precision
- 15 screwdriving programs + 2 multi-sequences
- Advanced features (self-tapping, screwing at an angle,...)
- Precise speed control
- Torque-optimized free speed
- Optional integrated barcode reader (cycle selection and traceability)
- Traceability



Industry 4.0

- Integrated Web server for easy remote parameterization
- Real-time monitoring of tightening data and display of tightening curves
- Wi-Fi communication
- Modbus, Profinet, Ethernet IP communication protocols,...



Wireless transducerized pistol screwdrivers BMT serie

Ideal for horizontal screwing, our Li-ion wireless pistol-operated screwdrivers combine autonomy, multi-torque, multi-strategy, connectivity and optimal one-handed dexterity.

With their on-board color digital display, you can easily program and view results directly on the tool.

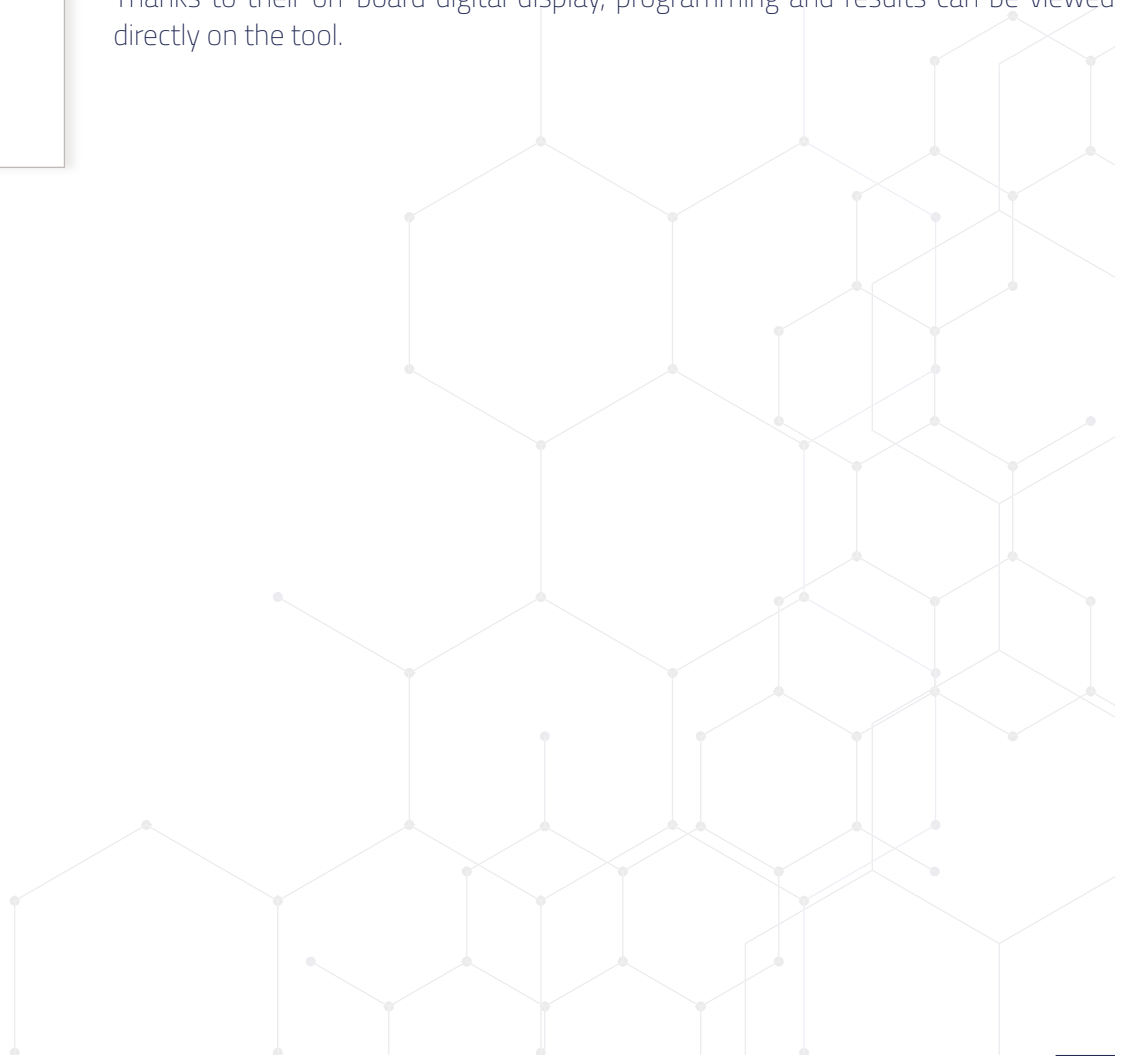


Wireless transducerized angle head screwdrivers BMT series

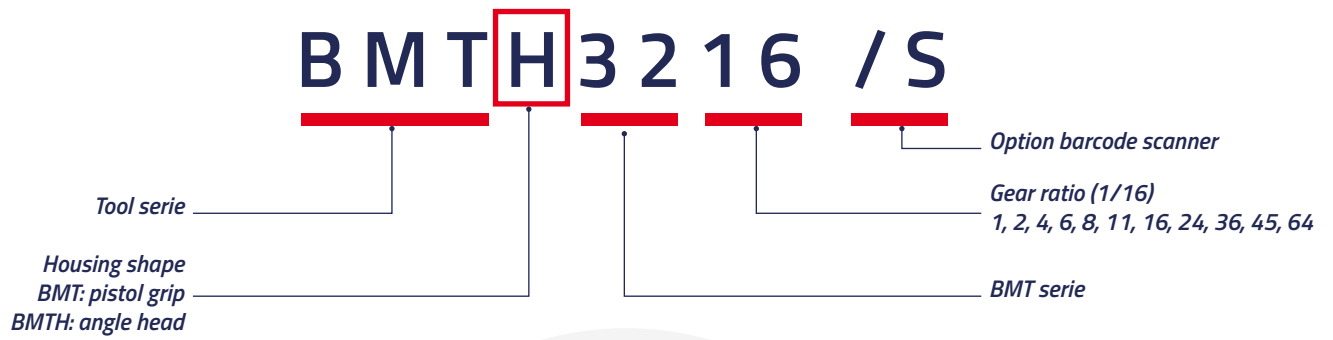
Wireless transducerized angle head screwdrivers with 360° angle drive can be used independently in hard-to-reach areas.

Their excellent ergonomics and two-handed operation enable them to be used over extender torque ranges.

Thanks to their on-board digital display, programming and results can be viewed directly on the tool.



Model designation



Ergonomy



Option 1D and 2D barcode scanner



Dimensions

BMT & BMTH : unit in mm



Specifications

Electric power	DC25.2V, lithium-ion battery
Motor	Swiss DC servo motor
Wi-Fi	IEEE 802.11a/b/g/n 2.4 GHz & 5 GHz dual band
Speed	Auto speed by torque setting
Data memory	65 000 data
USB	Micro USB port
Display	1.29" AMOLED color display
Number of presets	15 presets programming by USB or Wi-Fi 2 multi-sequences programs

Features

- ▶ Connected screwdrivers, Wi-Fi wireless communication, no need for box or additional accessories.
- ▶ « Plug & Play » stand-alone screwdrivers, ready to use in 1 minute.
- ▶ Torque and angle control guarantees precision over the entire torque range of screwdrivers.
- ▶ Precise closed-loop speed control with integrated digital angle sensor.
- ▶ Auto-speed setting by torque.
- ▶ Digital torque and angle program in 15 presets and 2 multi step sequence programs.
- ▶ Programming directly on the machine, via ParaMon software or web server (PC, tablet or smartphone).
- ▶ Quality monitoring of your product assembly with tightening strategies, batch counting, assembly visualization and logical input / output management (Job Manager function with ParaMon-Pro X controller).
- ▶ Detailed display of events.
- ▶ Real-time torque data and curve displayed via ParaMon software or web server.
- ▶ Real-time fastening data output by USB and Wi-Fi.
- ▶ Modbus TCP protocol.
- ▶ Protocol Profinet, TCP / Ethernet IP... (available as option).
- ▶ Integrated 1D and 2D barcode scanner (optional) for automatic program selection and traceability of screwdriving results.
- ▶ Compatible with crowfoots.

Built-in digital display



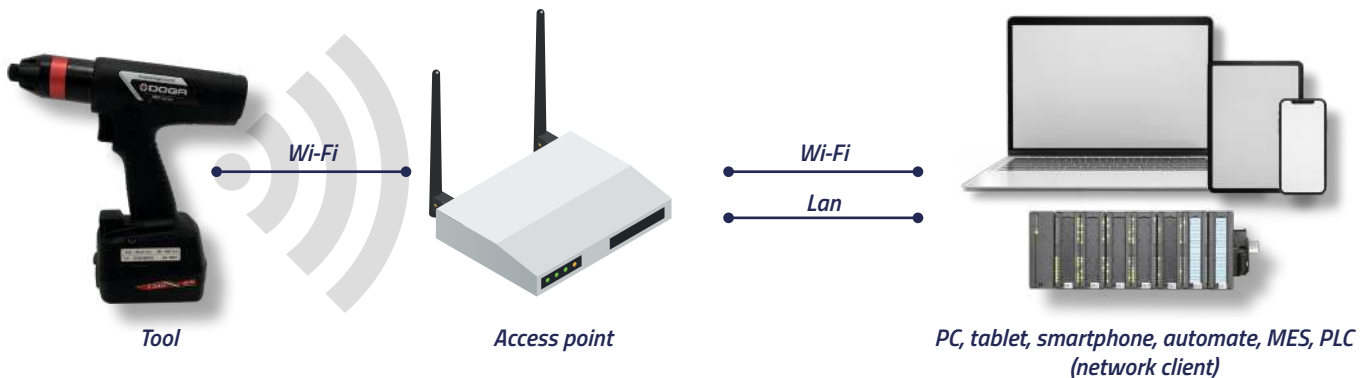
Interconnections

USB connection



- ▶ Initial network and parameter settings, data monitoring.
- ▶ Data download from the internal memory (max 65 000).
- ▶ Easy screwdriver firmware update.

Wi-Fi connection to a PC, smartphone, tablet, automate or MES via an access point



- ▶ Parameter settings, data monitoring on PC.
- ▶ Free communication protocol (Modbus TCP) for client application communication (PLC, PC,...).
- ▶ Profinet, TCP / Ethernet IP protocol... (available as option).

Wi-fi connection to ParaMon-Pro X controller (optional)



- ▶ Connect up to 8 BMT tools.
- ▶ Job Manager : product assembly quality control with tightening strategies, batch counting, assembly visualization, I/O logic management and operator assistance.
- ▶ Simple and user friendly sequence programming interface.
- ▶ 4 USB 2.0 ports - 1D and 2D barcode scanner (optional) - HDMI port for display extension.



Pistol wireless DC Tools BMT serie - Standard models

Designation	Torque (min. Nm)	Torque (max. Nm)	Speed (tr / min.)	Weight* (kg)	Lenght L (mm)	Drive	Code
BMT3203-A	0,2	2,7	150 ~ 1 800	1	212	Hex 1/4"	P207967
BMT3204-A	0,4	4,5	100 ~ 1 800	1	212	Hex 1/4"	P116810
BMT3206-A	0,6	6,5	100 ~ 1 250	1,1	212	Hex 1/4"	P109225
BMT3211-A	1,5	11,5	50 ~ 690	1,1	227	Hex 1/4"	P113433
BMT3216-A	2	16	50 ~ 470	1,1	227	Hex 1/4"	P116811
BMT3224-A	4	24	50 ~ 310	1,1	227	Hex 1/4"	P137327
BMT3224-Q 3/8	4	24	50 ~ 310	1,1	227	SQ 3/8"	P137328

**Weight without battery.*

Square drive with pin socket retainer, square drive with ball available on request for quick change socket.

Pistol wireless DC Tools BMT serie - Models with 1D and 2D barcode scanners



Designation	Torque (min. Nm)	Torque (max. Nm)	Speed (tr / min.)	Weight* (kg)	Lenght L (mm)	Drive	Code
BMT3203-A/S	0,2	2,7	150 ~ 1 800	1	212	Hex 1/4"	P207976
BMT3204-A/S	0,4	4,5	100 ~ 1 800	1	212	Hex 1/4"	P113453
BMT3206-A/S	0,6	6,5	100 ~ 1 250	1,1	212	Hex 1/4"	P107152
BMT3211-A/S	1,5	11,5	50 ~ 690	1,1	227	Hex 1/4"	P113457
BMT3216-A/S	2	16	50 ~ 470	1,1	227	Hex 1/4"	P116812
BMT3224-A/S	4	24	50 ~ 310	1,1	227	Hex 1/4"	P137335
BMT3224-Q/S 3/8	4	24	50 ~ 310	1,1	227	SQ 3/8"	P137336

**Weight without battery.*

Square drive with pin socket retainer, square drive with ball available on request for quick change socket.



Angle head wireless DC tools BMT serie - Standard models

Designation	Torque (min. Nm)	Torque (max. Nm)	Speed (tr / min.)	Weight* (kg)	Dimensions			Drive	Code
					L (mm)	R (mm)	h (mm)		
BMTH3204-A	0,4	4,5	100 ~ 1 800	1,4	465	13,5	62	Hex 1/4"	P113435
BMTH3204-Q 3/8	0,4	4,5	100 ~ 1 800	1,4	465	13,5	57	SQ 3/8"	P137329
BMTH3206-A	0,8	6,5	100 ~ 1 250	1,4	465	13,5	62	Hex 1/4"	P137330
BMTH3206-Q 3/8	0,8	6,5	100 ~ 1 250	1,4	465	13,5	57	SQ 3/8"	P137331
BMTH3211-A	1,5	11,5	50 ~ 690	1,6	479	13,5	62	Hex 1/4"	P113437
BMTH3211-Q 3/8	1,5	11,5	50 ~ 690	1,6	479	13,5	57	SQ 3/8"	P137332
BMTH3216-A	2	16	50 ~ 470	1,6	479	13,5	62	Hex 1/4"	P113439
BMTH3216-Q 3/8	2	16	50 ~ 470	1,6	479	13,5	57	SQ 3/8"	P113441
BMTH3224-A	4	24	50 ~ 310	1,6	479	13,5	62	Hex 1/4"	P137333
BMTH3224-Q 3/8	4	24	50 ~ 310	1,6	479	13,5	57	SQ 3/8"	P113443
BMTH3236-Q 3/8	5	32	50 ~ 200	1,7	493	17	63	SQ 3/8"	P113445
BMTH3245-Q 3/8	6	40	50 ~ 160	1,7	508	17	63	SQ 3/8"	P113447
BMTH3245-Q 1/2	6	40	50 ~ 160	1,7	508	17	67	SQ 1/2"	P137334
BMTH3264-Q 3/8	8	50	50 ~ 115	1,9	508	17	63	SQ 3/8"	P109227
BMTH3264-Q 1/2	8	50	50 ~ 115	1,9	508	17	67	SQ 1/2"	P113449

*Weight without battery.

Square drive with pin socket retainer, square drive with ball available on request for quick change socket.

Angle head wireless DC tools BMT serie - Models with 1D and 2D barcode scanners



Designation	Torque (min. Nm)	Torque (max. Nm)	Speed (tr / min.)	Weight* (kg)	Dimensions			Drive	Code
					L (mm)	R (mm)	h (mm)		
BMTH3204-A/S	0,4	4,5	100 ~ 1 800	1,4	465	13,5	62	Hex 1/4"	P137337
BMTH3204-Q/S 3/8	0,4	4,5	100 ~ 1 800	1,4	465	13,5	57	SQ 3/8"	P137338
BMTH3206-A/S	0,8	6,5	100 ~ 1 250	1,4	465	13,5	62	Hex 1/4"	P137339
BMTH3206-Q/S 3/8	0,8	6,5	100 ~ 1 250	1,4	465	13,5	57	SQ 3/8"	P137340
BMTH3211-A/S	1,5	11,5	50 ~ 690	1,6	479	13,5	62	Hex 1/4"	P137341
BMTH3211-Q/S 3/8	1,5	11,5	50 ~ 690	1,6	479	13,5	57	SQ 3/8"	P137342
BMTH3216-A/S	2	16	50 ~ 470	1,6	479	13,5	62	Hex 1/4"	P109229
BMTH3216-Q/S 3/8	2	16	50 ~ 470	1,6	479	13,5	57	SQ 3/8"	P137343
BMTH3224-A/S	4	24	50 ~ 310	1,6	479	13,5	62	Hex 1/4"	P137344
BMTH3224-Q/S 3/8	4	24	50 ~ 310	1,6	479	13,5	57	SQ 3/8"	P116813
BMTH3236-Q/S 3/8	5	32	50 ~ 200	1,7	493	17	63	SQ 3/8"	P116814
BMTH3245-Q/S 3/8	6	40	50 ~ 160	1,7	508	17	63	SQ 3/8"	P137346
BMTH3245-Q/S 1/2	6	40	50 ~ 160	1,7	508	17	67	SQ 1/2"	P137345
BMTH3264-Q/S 3/8	8	50	50 ~ 115	1,9	508	17	63	SQ 3/8"	P107156
BMTH3264-Q/S 1/2	8	50	50 ~ 115	1,9	508	17	67	SQ 1/2"	P113461

*Weight without battery.

Square drive with pin socket retainer, square drive with ball available on request for quick change socket.

ACCESSORIES

Battery



Designation	BL25201
Voltage	25.2 V
Number of cells	3.6 V x 7
Capacity	3 Ah nominal
Dimensions	118 x 80 x 56 mm
Weight	505 gr
Code	P100254

▶ Do not use the battery for any other tool or purpose.

Battery charger



Designation	D25247A
Input	AC220-240 V, 50 / 60 Hz, 1.1 A
Output	DC18-25.2 V, 4.0 A
Fuse	250 VAC T3.15 A
Operating environment	0 ~ 40 / 15 ~ 80 % RH (without dew)
Full charging time	50 minutes
Safety class	Class II
Dimensions	210 x 114 x 72 mm
Weight	620 gr
Code	P100147

▶ LED display information:

- **Charging** ● **Complete**
- **Blink « Battery overheat »**
- **Blink « Charging not possible »**
- **Blink « Ready »**

Protections



Designation	Code
BM protection silicone pistol	P113515
RA BMTH 3204 ~ 24 protection	P136947
RA BMTH 3236 protection	P137297
RA BMTH 3245 ~ 64 protection	P137298

USB cable programming



Designation	Code
Programmation cable 1 m USB A to Mini USB	P137300

Communication modules



Designation	Code
Communication module Modbus TCP to Profinet	P113165
Communication module Modbus TCP to Ethernet IP	P117308
Communication module settings	P179414

Others protocols on request. Wi-Fi access point not included.

Rotating suspension ring



Designation	Code
BMTH 3204 ~ 24 rotating ring Ø 36.8 mm	P113217
BMTH 3236 ~ 64 rotating ring Ø 39 mm	P136949
BMT rotating ring Ø 41 mm	P136950

Fixed suspension rings



Designation	Code
BMT collar Ø 41 mm	P136928
BMT fixed suspension ring Ø 41 mm	P103909

Side handle



Designation	Code
BMT 3204 ~ 24 side handle	P104374

Supports



Designation	Code
Pistol holster	P100140
Pistol or RA screwdriver support battery side	P101464

Crowfoots



Designation	Code
Customized crowfoots	On request

Wireless bit tray BST-8W LCD Wi-Fi



Designation	Code
Bit tray BST-8W LCD	P112477
Wi-Fi access point	P111954
Bit holder Ø 18 mm	P112988
Bit holder Ø 15 mm	P137305
Bit holder Ø 10 mm	P112712
Bit holder Ø 7,5 mm	P101221
Bit holder pre-drilled Ø 3 mm	P104894
Bit holder to be machined	P100402

- ▶ Bit tray 8 positions to BM and BMT series with its Wi-Fi and battery operation (same as screwdrivers).
- ▶ Assignment a programme to a bit; selection can be made by the screwdriver or by the tray, depending on the desired operating mode.
- ▶ Simple setup with a button-operated display giving access to all menus.
- ▶ It doesn't require a controller; communication is direct between the bit tray and the screwdriver, through a Wi-Fi access point (not compatible with ParaMon Pro X).
- ▶ Mechanical coding and detection of location errors by inductive sensors.

PARAMON-PRO X INTERFACE CONTROLLER (OPTIONAL)

Features



- ▶ Total 8 tools can be connected, BM / BMT / MD / MDT series.
- ▶ Management of parameters and programs for all connected screwdrivers.
- ▶ Data monitoring (visualization of graphs and results).
- ▶ Creation of screwing jobs (Job manager) : product assembly quality control with tightening strategies, batch counting, assembly visualization, I/O logic management and operator assistance.
- ▶ Tool remote control.
- ▶ Fastening data auto saving with file system.

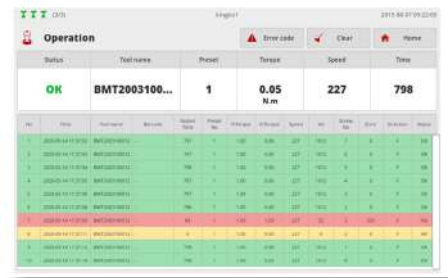
Specifications

Input power	AC220 - 240 V, 50/60 Hz, 0.35 A
Dimensions	300 (L) x 196 (H) x 80 (P) - Wall mount bracket included
Display	10.1" TFT LCD touch
Communication ports	Ethernet, 4 x USB, barcodes reader, I/O (TOR inputs 16, TOR outputs 16), RS232
Memory	Internal memory: 16 Gb + slot for micro SD card up to 32 Gb (micro SD card not included)
Wi-Fi	USB 2.4 & 5 GHz dual-band Wi-Fi key (external)
Display extension	HDMI
Weight	3.54 kg
Code	P102478

Operation mode with job versus multi-screwdrivers mode

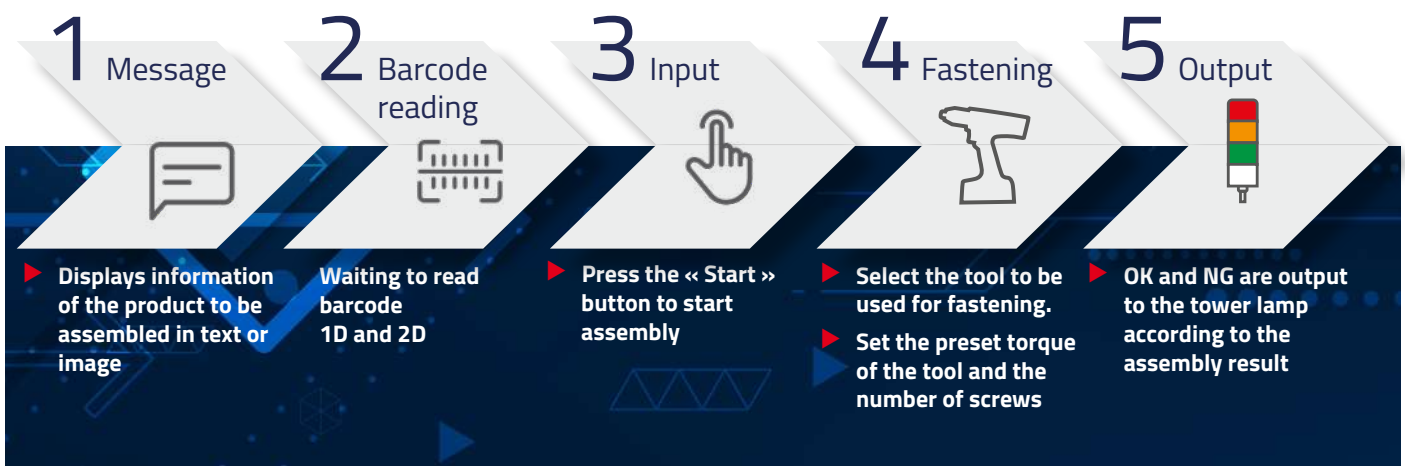


VS

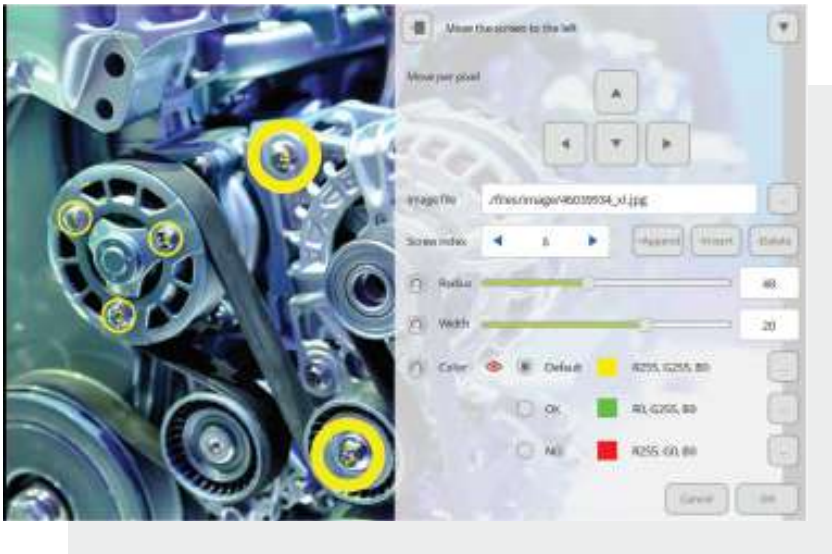


Operation mode	Job Manager (Sequencing mode with logical steps)	Multi-screwdrivers (Multi-tool tightening mode)
Features	<ul style="list-style-type: none"> 5 types of steps (fastening / input / output / delay / message) are provided for sequence programming. Interactive photo management with overlay of screwdriving points. The combination of steps is called a job. Up to 1 000 jobs are supported. Fastening data is auto saved in the file system. Job pause and resume modes. Additional screwdriving programs available. 	<ul style="list-style-type: none"> Not support process control. Display fastening data receiving from tools in real-time. Fastening data is auto saved in the file system.
Screwdrivers	<ul style="list-style-type: none"> The tool works only in the fastening step. In the fastening step, only one tool can be assigned. Two or more tools cannot work simultaneously. Suitable for single operator environments. 	<ul style="list-style-type: none"> No restriction on the use of the tool. All tools can work simultaneously. Suitable for multiple operator environments
Barcodes scanner	<ul style="list-style-type: none"> To load the desired job by scanning barcode. Components traceability. 	<ul style="list-style-type: none"> To select the preset torque on the tools.

Sample job



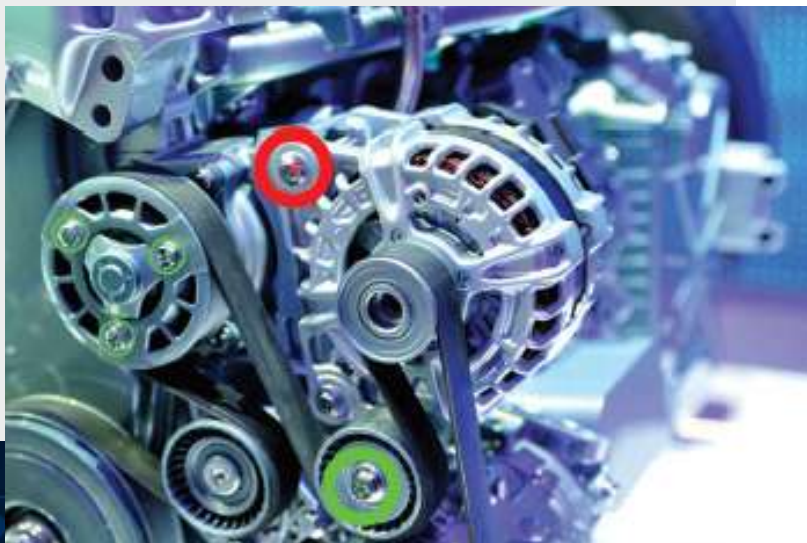
Assembly process visualization in a Job



Visualize the assembly procedure with just a few clicks

- ▶ From a picture of the work-piece.
- ▶ Set position of screw according to the fastening order.
- ▶ Up to 99 screws can be set per fastening step.
- ▶ Radius / width of the circle can be adjusted to fit the size of the screw.
- ▶ Color of the product and color of the circle overlap, you can change the color of the circle.

Below is the screen that is actually performing the job.



RELATED PRODUCTS



Process management and monitoring

Monitor all production steps and achieve compliance with our IHM and bit socket trays.

- Sequencing and process monitoring interface - DPC Touch
- Bit socket trays
- Socket tray



Sockets, bits et accessories

We have a wide range of bits, sockets and accessories for your screws and nuts, in all shapes and materials.

- Standard and special impact sockets
- Bits, special bits, bits holders and accessories
- Accessories



Crowfoots

Compatible with all tools on the market, our standard and special crowfoots are designed to the highest quality standards.

DOGATEC

Mit Sicherheit montiert

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