Atlas Copco Low Torque Solutions

Securing productivity from 0.005 Nm

Sustainable Productivity

Atlas Copco


0,005 Nm
0,1 Nm
0,5 Nm
1 Nm
5 Nm
12 Nm

Contents

Five levels of functionality

For every low-torque assembly need, the Atlas Copco screwdriver range range has a solution – from ultra-low torque timepiece assembly to industrial scale electronics production. The range features innovative technology and advanced control capabilities, combined with unrivalled ergonomics.

Level 5: Zero fault fastening

You need zero fault fastening plus level 4 functionality.

Level 4: Critical fastening

You need critical fastening plus level 3 functionality.

Level 3: Joint control

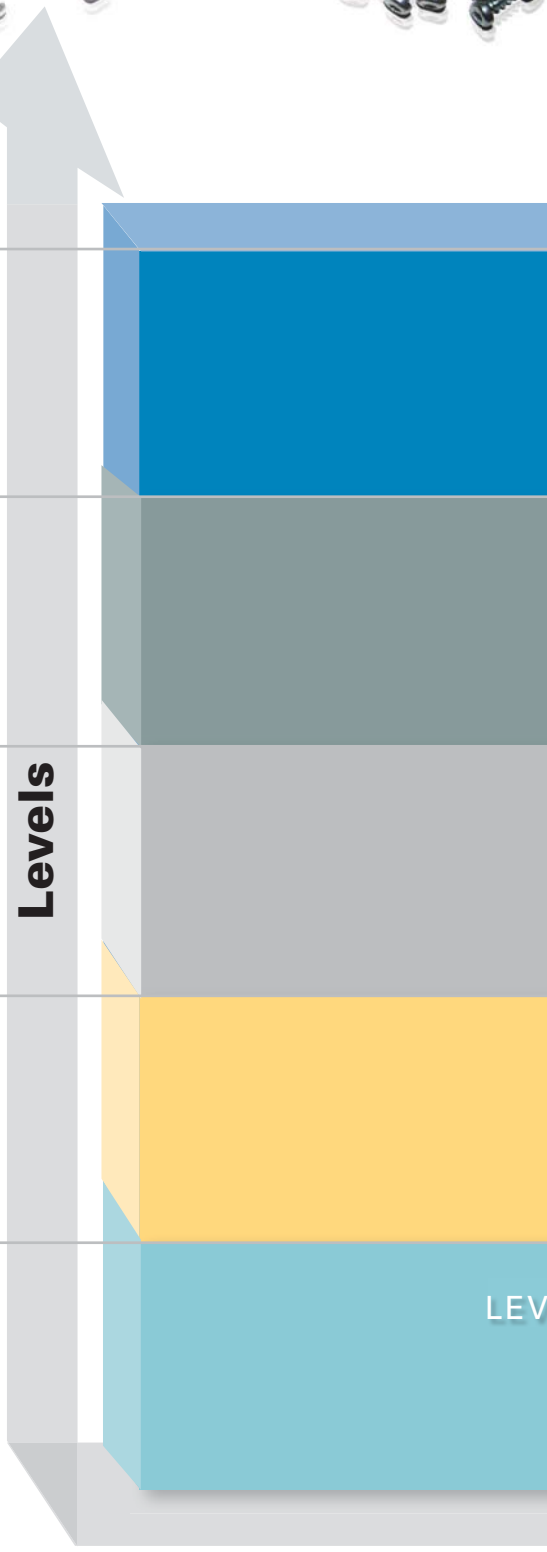
You need fastening that ensures joint integrity, plus level 2 functionality.

Level 2: Batch count

You need to know that every screw has been fastened, plus level 1 functionality.

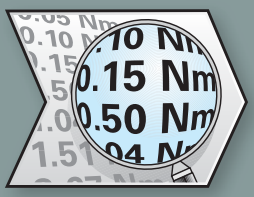
Level 1: Torque control

You need precision fastening, cycle after cycle. Torque must be accurate and consistent.

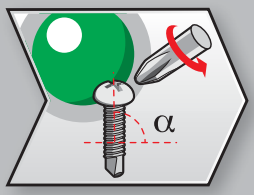


LEVEL 5

LEVEL 4



LEVEL 3



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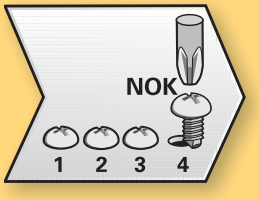
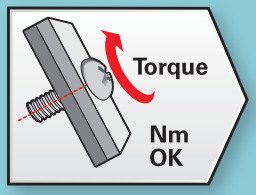


EL 1

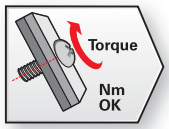


Functionality

The EBL electric screwdriver is in line with Atlas Copco's reputation. With this tool I get a significant process improvement, thanks to the improved quality of the fastening. This is a result of the better torque accuracy and consistency. The EBL will also increase productivity because it is light, very easy to handle and more comfortable to use.

Mr Jesus Reyes, Project Engineer, Valeo Mexico.

Functionality level 1



Torque control

For industrial assembly operations, accurate fastening and productivity go hand-in-hand. The application of accurate and consistent torque on high-volume production applications is crucial to efficient assembly.

Accurate and consistent torque control reduces customer warranty claims and production costs, improves productivity and minimizes production line downtime.

Problem: Repetitive stress injuries and fatigue.
Solution: Screwdrivers with fast clutch release, ergonomic design and soft, warm grips for optimum operator comfort.

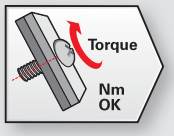
Problem: High noise levels in the working environment.
Solution: EBL screwdriver – quiet operation thanks to brushless motor.

Problem: Damage to plastic threads and delicate components.
Solution: The Atlas Copco soft-stop feature reduces the shock levels transmitted to delicate joints during the tightening cycle.

Problem: High running costs for tools.
Solution: Tools designed to last for many years with low service and maintenance costs.

Assembly needs:

You need precision fastening, cycle after cycle.
Torque must be accurate and consistent.



Atlas Copco screwdriver solutions:

LUM02 and EBL

LUM02

- *From 2 to 60 cNm*
- *Rapid shut-off*
- *Low reaction impulse*
- *Low noise level*
- *Operator comfort*
- *Lubrication-free*
- *Vacuum pick up accessories for LUM02*
- *ESD approved*

EBL standard electric brushless screwdrivers

- *From 0.05 to 5.5 cNm*
- *Rapid shut-off*
- *Brushless motor – longer lifespan*
- *Low noise level*
- *Unique non-tamper torque setting*
- *Lever start or push start*
- *Vacuum pick-up accessories*
- *Soft stop versions*
- *ESD and UL approved*

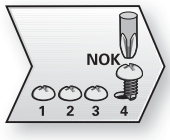
ESD certification guarantees against damage of electronic components by an uncontrolled electrostatic discharge (ESD) from the tools. In practice it certifies that at no point will the material of the equipment hold an electrostatic potential above 100 V for more than 2 seconds.


Rolls-Royce

EBL screwdrivers had the functionality we needed when we built our new LCD assembly lines. Durability, quiet operation and batch count capabilities – in combination with line control – made the screwdriver the ideal choice, making sure we never miss a screw.

Mr Marek Blaha,
LCD Production Division
General Manager, Sony Slovakia.

Functionality level 2



■ Batch count + Torque control

Eliminate the problem of missing screws with batch count functionality. Complex fastening regimes with multiple screws and high-speed production can lead to missed screws and compromised quality.

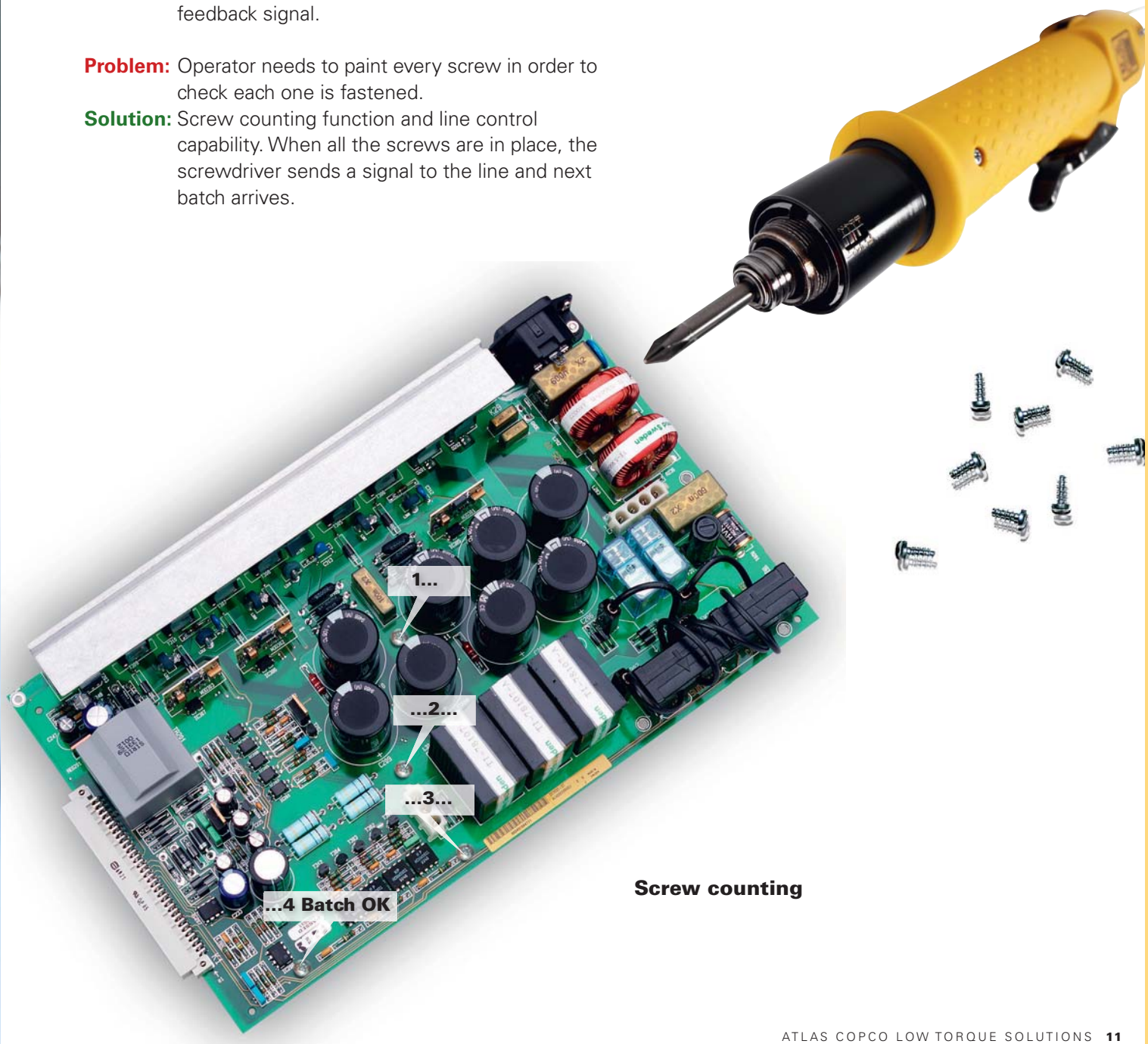
Get it right the first time round with batch count and line control functionality.

Problem: On fast moving assembly lines, operators can miss screws.
Solution: Screw counting capability with operator feedback signal.

Problem: Operator needs to paint every screw in order to check each one is fastened.
Solution: Screw counting function and line control capability. When all the screws are in place, the screwdriver sends a signal to the line and next batch arrives.

Does your production process require screw counting?

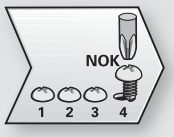
Eliminate the problem straight out of the box with the Atlas Copco EBL advanced electric brushless screwdriver.



Screw counting

Assembly needs:

You need precision fastening, cycle after cycle. Torque must be accurate and consistent. You also need batch count functionality.



Atlas Copco screwdriver solution:

EBL – Advanced electric brushless screwdriver

EBL – Advanced electric brushless screwdriver

- *From 0.05 to 5.5 cNm*
- *Rapid shut-off*
- *Brushless motor – longer lifespan*
- *Low noise levels*
- *Unique non-tamper torque setting*
- *Lever start or push start*
- *Vacuum pick-up accessories*
- *Soft stop versions*
- *Reporting models*
- *ESD and UL approved*

RE Drive

- *Batch count functionality*
- *Tightening cycle time programming*
- *I/O digital signals for line control*

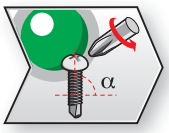
ESD certification guarantees against damage of electronic components by an uncontrolled electrostatic discharge (ESD) from the tools. In practice it certifies that at no point will the material of the equipment hold an electrostatic potential above 100 V for more than 2 seconds.


Schneider
Electric

We need to identify that operators correctly install the screws in one of our critical products. The Micro-Torque's angle control functionality is amazingly precise and has helped us to reduce scrapped parts. Additionally, the robust design of the screwdriver makes it the most durable we have ever had.

Mr Sam Zhao
Equipment Maintenance Manager
Schneider Electric,China.

Functionality level 3



■ Joint control + Batch count + Torque control

Complex assembly, requiring multiple torque settings within the same cycle sequence, can be time consuming to execute correctly.

Do it automatically with level 3 functionality – torque settings change sequentially, eliminating operator errors – while process control detects cross-threaded joints and angle control eliminates assembly errors. The Seating control step, available in MT Focus 400 advanced version, uses an intelligent algorithm to ensure proper clamp torque and complete screw seating. The tightening strategy is the perfect solution for handling variations in joint condition.

Problem: Cross-threading of joints.
Solution: Detection of cross-threading by controlling the torque level during the rundown stage of the tightening cycle.

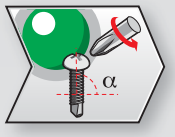
Problem: Stripped screw in sensitive plastics.
Solution: Programmable speed in the second stage of the tightening.

Problem: Wrong screw in the wrong place.
Solution: By programming the angle according to the screw length the system detects if the screw is installed in the right place, and gives opera tor feedback.

Problem: Several tools required for different types of joint.
Solution: Use one tool that can be programmed to handle different torque settings.

Problem: Loose or floating screws.
Solution: Use the Seating control step to ensure 100% complete screw run down and secure proper clamp torque.

Assembly needs:



You need precision fastening, cycle after cycle. Torque must be accurate and consistent, batch count and securing the joint are also essential.

Atlas Copco screwdriver solutions:

MicroTorque Focus 400 Screwdriver System

MicroTorque G4 Screwdriver System

MTF 400 Digitork screwdriver

- *From 0.5-250 cNm*
- *Fixtured or handheld screwdriver*
- *Available in Advanced version (400A) with 20 psets and Basic version (400B) with 1 pset.*
- *Tighening strategy with torque and angle control for detecting assembly problems*
- *Program with Autoset on controller display*
- *Program with PC software ToolsTalk MT*
- *Prepared for vacuum pick up*
- *ESD approved*

MT G4 Digitork screwdriver

- *From 0.5-800 cNm*
- *Fixtured or handheld screwdriver*
- *Possible to program 64 p-sets and 15 jobs for full flexibility.*
- *Tightening strategy with torque and angle control for detecting assembly problems*
- *Program with PC software ToolsTalk MT*
- *Prepared for vacuum pick up*
- *ESD approved*

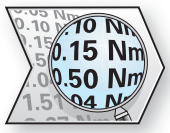
ESD certification guarantees against damage of electronic components by an uncontrolled electrostatic discharge (ESD) from the tools. In practice it certifies that at no point will the material of the equipment hold an electrostatic potential above 100 V for more than 2 seconds.


XIM
XIM

In order to maintain our competitiveness and achieve better assembly quality, we installed four fixtured MicroTorque screwdrivers. Working as multiple spindles within one automated assembly station, we significantly increased productivity and by detecting common assembly problems, we now have documentable process control.

Mr Luis Marques,
Manufacturing Engineer,
Visteon Portugal

Functionality level 4



■ Critical fastening + Joint control + Batch count + Torque control

For the most demanding fastening scenarios, the Atlas Copco screwdriver range offers tools for performing safety and mission-critical assembly.

Capable of handling multiple parameter sets sequentially, producing detailed information for tightening analysis and allowing full traceability, these transducerized tools represent state-of-the-art control and precision.

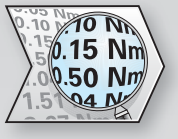
Problem: Operator has to use a click wrench after tightening to check fastening is correct.
Solution: Using a high-accuracy screwdriver eliminates the need to use a click wrench.

Problem: The assembly of safety-critical components needs to be operator independant.
Solution: Transducerized screwdrivers deliver the highest level of accuracy and allow comprehensive data collection.

Problem: Assembling safety-critical or delicate plastic components requires the highest level of tightening accuracy.
Solution: Choose an Atlas Copco transducerized screwdriver – the only type of screwdriver that can perform repeated fastening with industry-leading accuracy.

Problem: Need to increase cycle rate – automation.
Solution: Use fixtured tools, controllers equipped with I/O bus and network integration.

Assembly needs:



You need precision fastening, cycle after cycle. Torque must be accurate and consistent, batch count and securing the joint are also essential. In addition you need to ensure critical fastening.

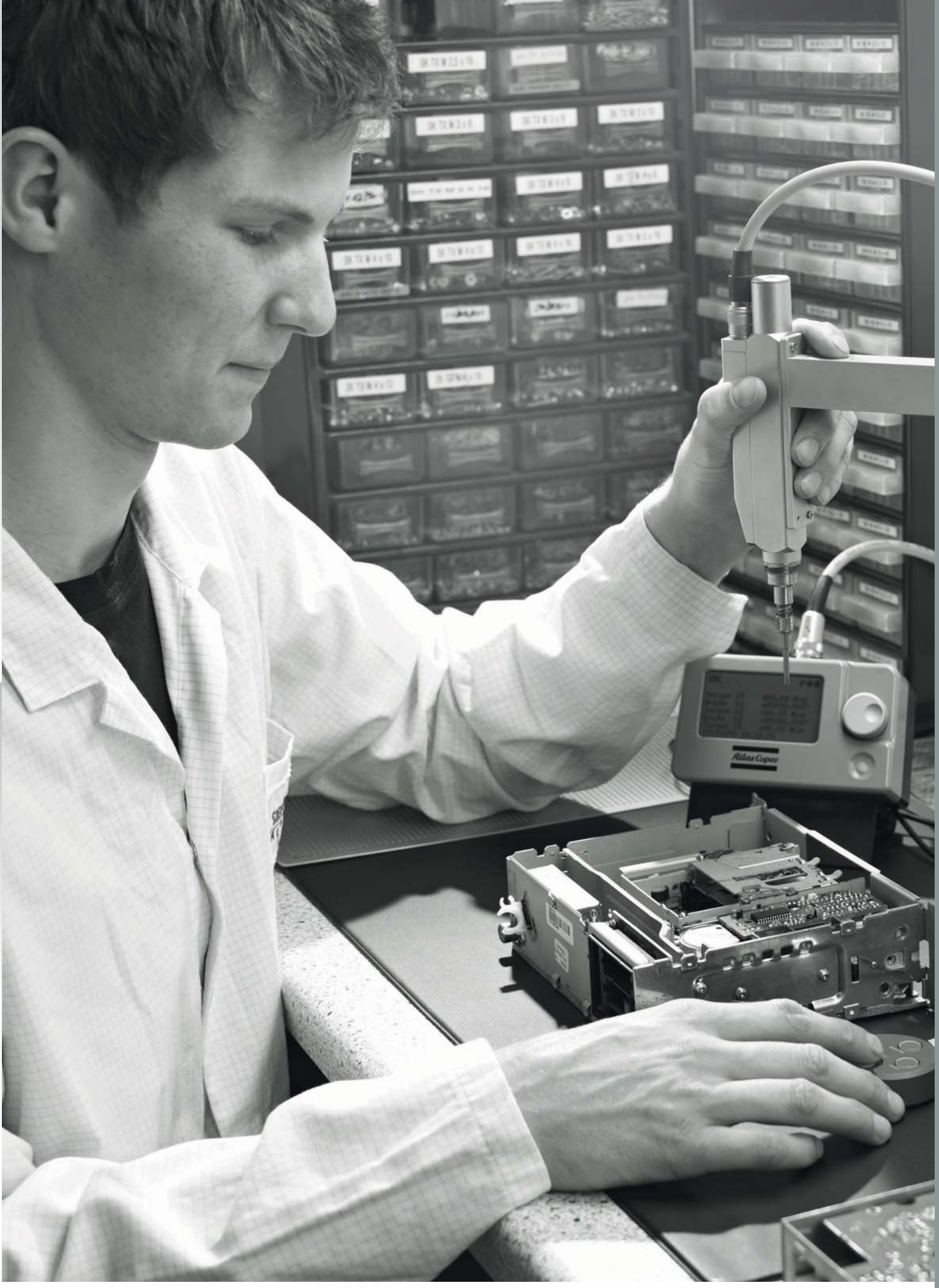
Atlas Copco screwdriver solutions:

MicroTorque™ ETF MT

MT G4 Transducerised screwdriver

- *From 0.5-500 cNm*
- *Fixtured screwdriver*
- *Possible to program 64 p-sets and 15 jobs for full flexibility.*
- *Tightening strategy with torque and angle control for detecting assembly problems*
- *Program with PC software ToolsTalk MT*
- *Prepared for vacuum pick up*
- *ESD approved*

ESD certification guarantees against damage of electronic components by an uncontrolled electrostatic discharge (ESD) from the tools. In practice it certifies that at no point will the material of the equipment hold an electrostatic potential above 100 V for more than 2 seconds.


Atlas Copco

Visualization of the assembly sequence makes work much easier, prevents production errors and improves product quality. We like using Atlas Copco electric screwdrivers. With Tensor tools we are always in full control of the tightening processes.

Mr Gerhard Visser, Manager,
Pilot Production, Lenze Drive Systems GmbH,
Aerzen, Germany

Functionality level 5

Zero fault fastening

Zero fault fastening is now easily achievable thanks to Atlas Copco's ToolsNet software. Centralized trend monitoring of production line data allows problem areas to be identified and processes to be streamlined.

Real-time data collection and analysis allows adjustments to be made directly to the production process. The system allows full traceability and auditing, allowing compliance with the most challenging quality control programmes.

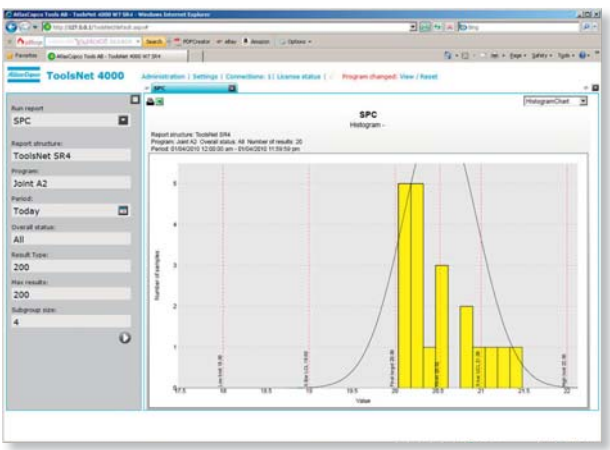
Take full control with ToolsNet

- Collect data for process improvement
- Access historical data and statistics
- Historical and real-time data presentation
- Full process traceability

Traceability minimizes recall costs

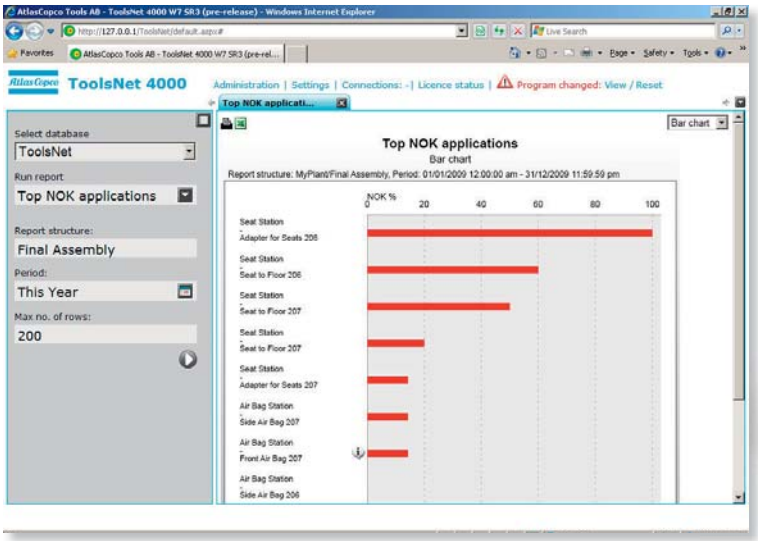
Data can be presented historically or in real-time and shift reports are easily generated to satisfy production managers.

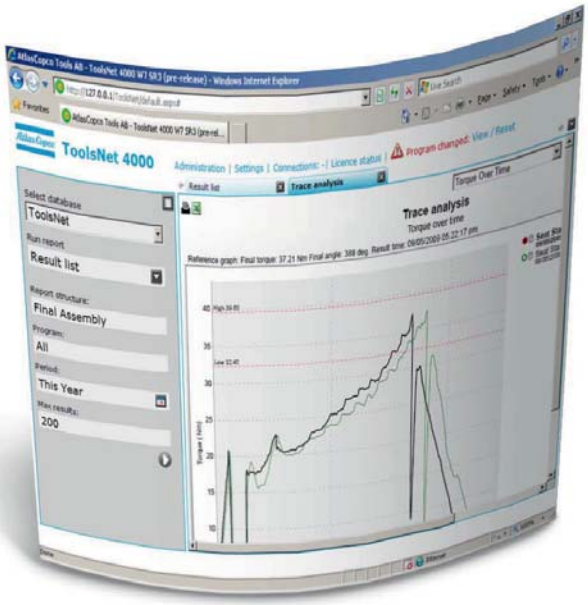
In the event of warranty recalls, the result database provides access to critical information which can easily minimize the extent of any recall leading to an overnight payback on your investment.



ToolsTalk MT Net

Data collection software for the MT screwdriver range.





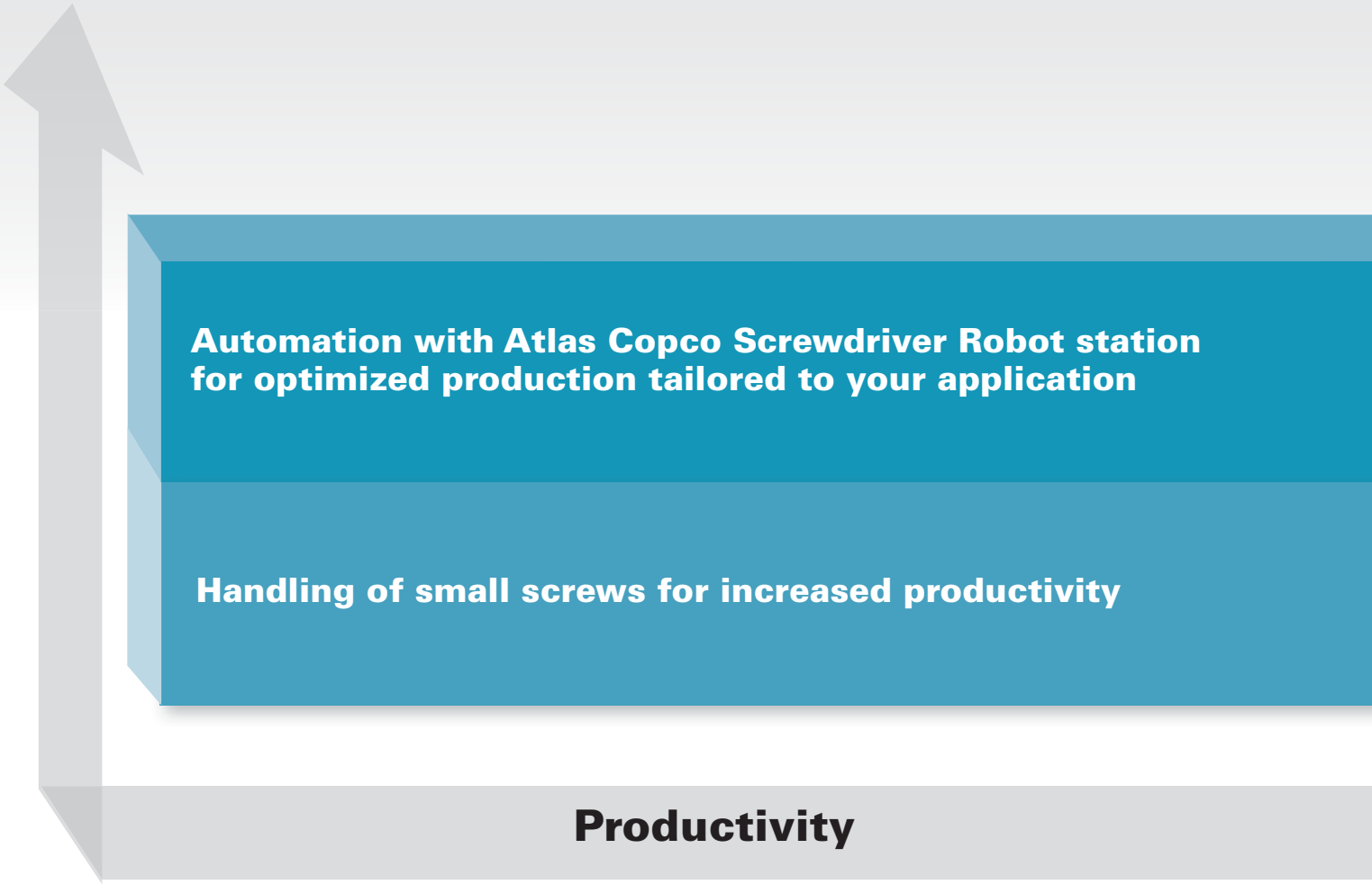
ToolsNet PF W10

Data collection software for statistic process control

Optimize your production with advanced automation solutions

Tailored to your application for maximum productivity

A complete system provider, we provide automation solutions that integrate high quality Atlas Copco assembly products and dedicated components into tightening systems for industrial manufacturing. Using our platform of standard solutions and components, we have the know-how and experience to build a fully automated system for low torque production tailored to your specific application.



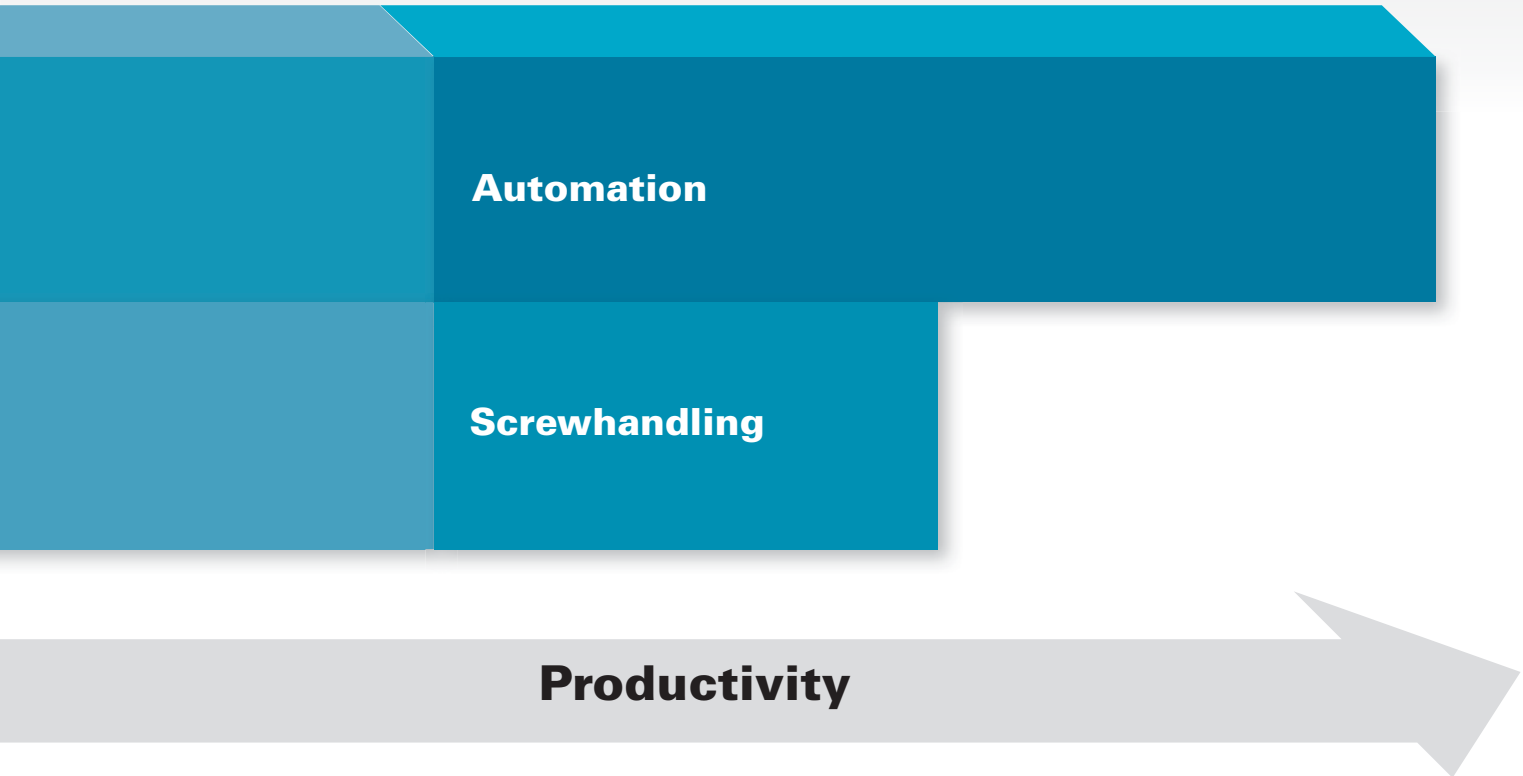
Your partner for automated fastening solutions

Atlas Copco's global projects organization has broad competence and extensive experience of project management, from planning and execution to project completion.

We are active throughout the world, with project application centers in Asia, Europe, North America, South America and India. Working in harmony, we support the activities of our customers on a global scale.

Sales and support in your country is provided by your local Atlas Copco sales, service and project organization.

Atlas Copco is committed to providing the same world-class service wherever you are.




Atlas Copco
SWITCH BOX
TPU
CAUTION

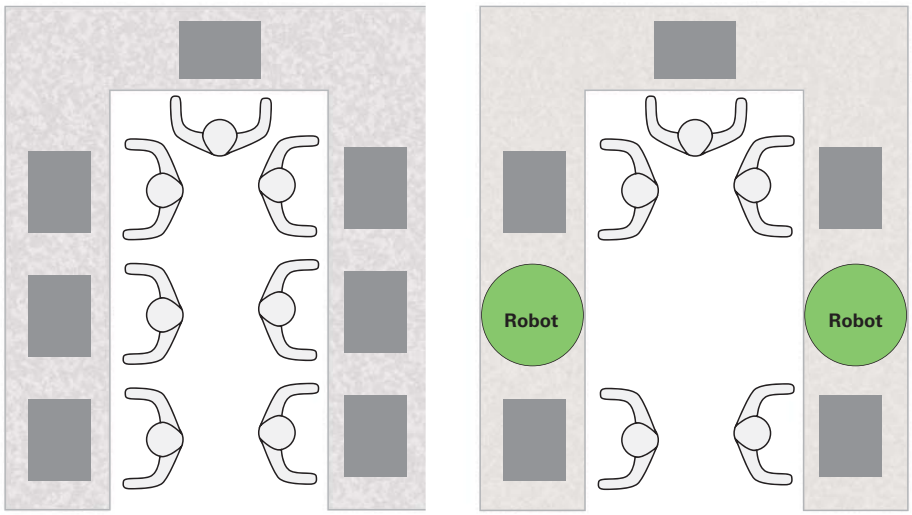
The screwdriver robot station

An efficient solution for ‘lean’ cell production

Developed for the production of small electronic devices, an Atlas Copco screwdriver robot station is tailored for your application. It incorporates MicroTorque assembly tools, controllers and software and will ensure reliable tightening operations with stable quality output. The station can replace operators in a production cell and speed up your manufacturing. All MicroTorque screwdriver systems have torque and angle control, ensuring that assembly problems are detected and eliminated for full quality control.

Problems: Variations in quality output.
High costs for operator training.
Tiny screws difficult for operators to handle.
Production tempo too slow.
Need to introduce “lean” cell production.

Solution: One or more Atlas Copco screwdriver robot stations.



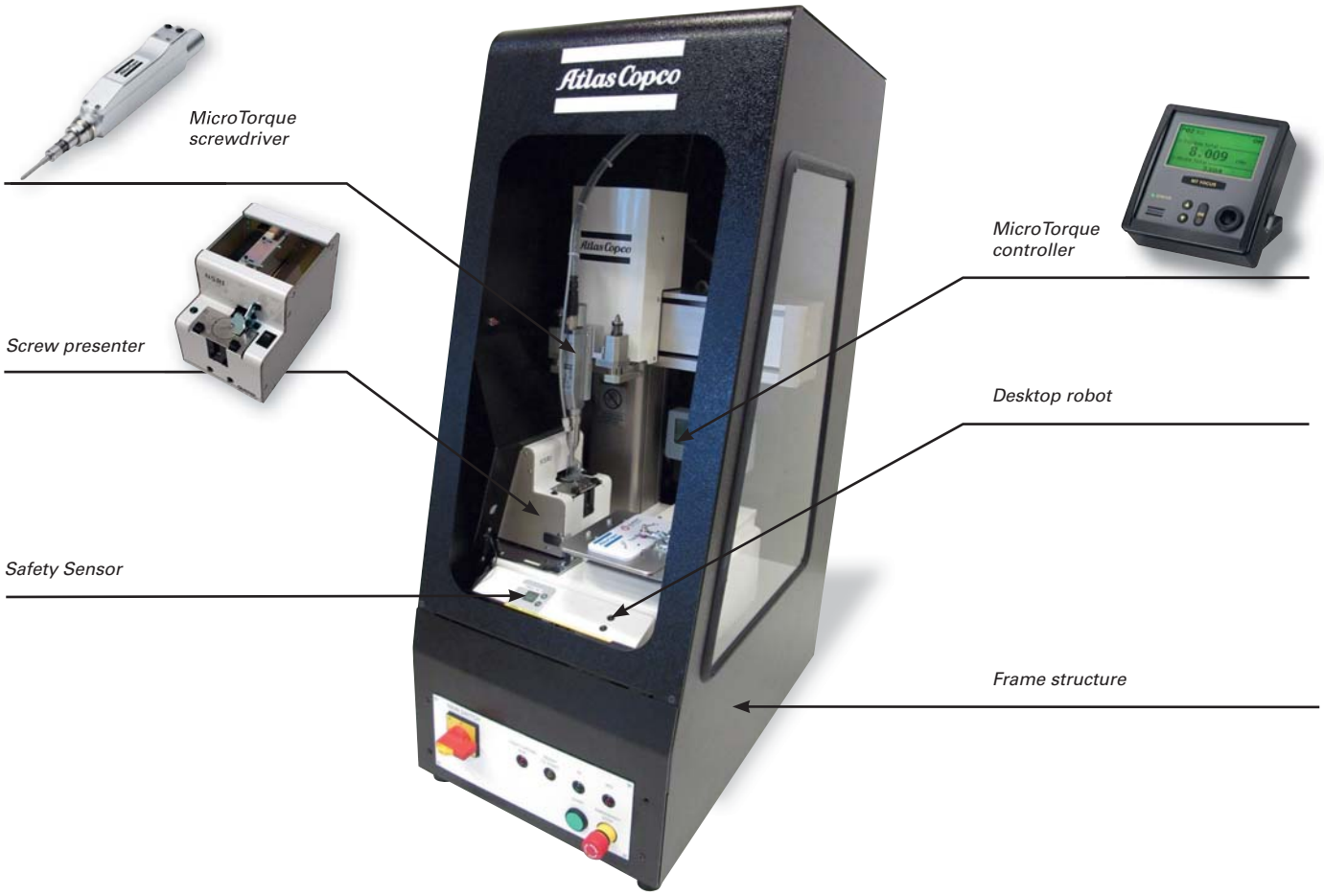
Optimized assembly cell layout – two operators replaced with screwdriver robots.


SWITCH BOX
CAUTION
TPU

Versatile systems to suit all your applications

Easily replicated for other production sites

For flexible adaptation to your application, some components of the Atlas Copco screwdriver robot station are available "off the shelf," while some are adapted to your specific requests. The complete solution can easily be replicated for other stations, or other sites, to ensure a consistent level of productivity and quality throughout your global production.



Key benefits

- *Ensures reliable screw operations with stable quality output*
- *Minimizes operator dependency in screw operations, reducing costs for operator training*
- *Potential for cycle time improvements*
- *Reliable vacuum screw pick-up*
- *Reduces the number of operators needed*
- *Operator feedback with OK/NOK tightening*
- *Screw counting data collection and maintenance alarms*

Key features

- *Transducerized screwdriver detects common assembly problems for full quality control*
- *Intuitive user interface with touch screen MiniDisplay*
- *Screw presenter is refilled without opening the station or stopping operation*
- *Semi-automatic, good access for maintenance, safety light curtain, pick-and-place screw feeding*
- *Robot with 3 servo controlled axes, CE-safety compliant*


1:2.8
IS USM
SDS
Atlas Copco

Efficient screw handling

Eliminates the problems of handling tiny screws

A big problem in low-torque tightening operations, such as the manufacture of electronic devices, cameras and watches, is that screws are small and in many products, really tiny. They are simply not easy for human hands to handle. Two useful Atlas Copco components integrated into your tailored automation solution solve the problem.

Problem: How to handle small screws quickly
Solution: An SDS screw presenter.

SDS Screw presenter

- *The SDS screw dispenser feeds the screws allowing them to be easily picked by the operator, either by magnetized bit, or with a vacuum pick-up. It is refilled without opening the station or stopping operation.*

For technical data, see page 37.

Problem: Handling tiny screws that are hard to pick up
Solution: An vacuum screw pick-up unit

Vacuum screw pick-up

- *The vacuum screw pick-up program contains all parts needed, from a vacuum pump that is connected to controller to shaker tray, vacuum adapter and nozzle.*

For technical data, see page 36.


Pos. OK
+046.80 Ncm
ACTA MT
OK
EBL12-ST

Where quality counts!

A quality assurance system that will sharpen your competitive edge

Are your tools performing to specification? To maintain high product quality in your low-torque production and reduce assembly problems, you must be sure that your assembly tools are performing correctly. Atlas Copco has state-of the-art tools that will put your mind at rest.

Problems: Frequent reworking and warranty claims
You are unsure of the torque accuracy of your screwdrivers.
You want to avoid disruptions due to sending tools for factory calibration.

Solution: The battery powered ACTA MT4 torque analyser partnered with a torque transducer.

The highly user-friendly ACTA MT4 torque analyser enables you to check torque with very high precision in low-torque assembly applications. Take this compact unit with its robust aluminum housing directly to your applications. Up to 1,000 results will be stored in the controller and the rechargeable battery lasts up to one day of operation.

With ACTA MT4 you can...

- Check torque accuracy of all types of screwdrivers.
- Handle your own factory calibration.
- Make machine capability studies.
- Create statistical reports.
- Investigate torque over angle or time and characteristics of a joint (joint analysis).

Three types of torque transducer

- **Stationary torque transducer** Can be used in lab for torque check or in the calibration process of the MT screwdriver system. During the tightening, no rotary action takes place in the transducer, which makes it suitable for calibration.

- **Inline rotary torque and angle transducer** Can be used in a production environment for torque check while installing the actual joint in the application, or in the lab for analysis, providing angle and torque traces.

- **Manual screwdriver torque transducer** Can be used for transducer controlled manual tightening in low volume production, or in rework stations. It can also be used for after check on already installed joints as an additional quality control.

LUM02 Screwdriver

Model	Torque range soft joint Nm	Torque range soft joint in lb	Free speed r/min	Air consumption at free speed l/s	Air consumption at free speed cfm	Weight kg	Weight lb	Length mm	Air inlet thread in	Distance centre to side mm	Drive type	Vibration total value 3-axes value) according to ISO 28927-2 Value 3-axes m/s²	Vibration total value 3-axes value) according to ISO 28927-2 Uncertainty m/s²	Sound and sound power levels [a] according to ISO 15744 Sound pressure dB(A)	Sound and sound power levels [a] according to ISO 15744 Sound power dB(A)	Ordering No.
LUM02 PR04-1800	0.03-0.32	0.27-2.9	1800	2.2	4.7	0.17	0.35	172	*	10	4 mm HM	<2.5	–	71	–	8431 0146 02
LUM02 PR04-1200	0.03-0.32	0.27-2.9	1200	2.2	4.7	0.17	0.35	172	*	10	4 mm HM	<2.5	–	71	–	8431 0146 04
LUM02 PR07-500	0.025-0.6	0.23-5.4	500	2.2	4.7	0.17	0.35	172	*	10	4 mm HM	<2.5	–	71	–	8431 0146 06
LUM02 PR07-350	0.025-0.6	0.23-5.4	350	2.2	4.7	0.17	0.35	172	*	10	4 mm HM	<2.5	–	71	–	8431 0146 08
LUM02 PR04-1800-Q	0.03-0.32	0.27-2.9	1800	2.2	4.7	0.17	0.35	172	*	10	3 mm Hex	<2.5	–	71	–	8431 0146 12
LUM02 PR04-1200-Q	0.03-0.32	0.2 7-2.9	1200	2.2	4.7	0.17	0.35	172	*	10	3 mm Hex	<2.5	–	71	–	8431 0146 14
LUM02 PR04-950-Q	0.03-0.32	0.27-2.9	950	2.2	4.7	0.17	0.35	172	*	10	3 mm Hex	<2.5	–	71	–	8431 0146 15
LUM02 PR07-500-Q	0.025-0.6	0.23-5.4	500	2.2	4.7	0.17	0.35	172	*	10	3 mm Hex	<2.5	–	71	–	8431 0146 16
LUM02 PR07-350-Q	0.025-0.6	0.23-5.4	350	2.2	4.7	0.17	0.35	172	*	10	3 mm Hex	<2.5	–	71	–	8431 0146 18
LUM02 PR07-600-Q	0.025 - 0.6	0.23 - 5.4	500	2.2	4.7	0.17	0.35	172	*	10	3 mm Hex	<2.5	–	71	–	8431 0146 03

All models are reversible and have quick change chuck.

PR-models have push button reverse.

[*] Air inlet thread M5. Nipple and coupling included accessory for all LUM 02 models, hose size diameter 6 mm.

[a] The uncertainty in the sound levels is 3 dB(A).

Service kit

Ordering No. 4081 0418 90

Optional accessories

Tool stand with bits holder
Ordering No. 4210 4711 00

Vacuum screw pick-up
Ordering No. 4210 4706 80

Accessories included

Exhaust air lead out hose

Coupling

Suspension yoke

Exhaust air lead-out hose.

EBL Screwdrivers

Model	Screw capacity	Torque range soft joint Nm	Torque range soft joint in lb	Free speed r/min	Weight kg	Weight lb	Length mm	Bit drive	Vibration total value 3-axes value) according to ISO 28927-2 Value 3-axes m/s²	Vibration total value 3-axes value) according to ISO 28927-2 Uncer-tainty m/s²	Sound and sound power levels [a] according to ISO 15744 Sound pres-sure dB(A)	Sound and sound power levels [a] according to ISO 15744 Sound power dB(A)	Ordering No.
Standard models													
EBL03	M1-2	0.05-0.3	0.4-2.7	870	0.3	0.7	185	Wing type 4 mm	<2.5	–	<70	–	8431 0170 02
EBL03-Q	M1-2	0.05-0.3	0.4-2.7	870	0.3	0.7	185	1/4″ Hex	<2.5	–	<70	–	8431 0170 04
EBL12	M2-3	0.2-1.2	1.8-10.6	910	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 11
EBL12-1500	M2-3	0.2-1.2	1.8-10.6	1500	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 41
EBL20	M2-3	0.5-2.0	4.5-18	750	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 16
EBL21-1500	M2-3	0.5-2.1	4.5-19	1500	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 43
EBL25	M2.5-4	1.0-2.5	8.8-22.1	930	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 23
EBL25-1500[a]	M2.5-4	1.0-2.5	8.8-22.1	1500	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 25
EBL35	M2.5-4	1.0-3.5	8.8-31	700	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 33
EBL45[a]	M2.5-5	1.0-4.5	8.8-40	700	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 40
EBL55[a]	M2.5-5	1.0-5.5	8.8-48	600	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 44
Soft-stop models													
EBL03-SS	M1-2	0.05-0.3	0.4-2.7	870	0.3	0.7	185	Wing type 4 mm	<2.5	–	<70	–	8431 0170 07
EBL12-SS	M2-3	0.2-1.2	1.8-10.6	910	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 15
EBL20-SS	M2-3	0.5-2.0	4.5-18	750	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 20
EBL25-SS	M2.5-4	1.0-2.5	8.8-22.1	930	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 28
EBL35-SS	M2.5-4	1.0-3.5	8.8-31	700	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 38
Reporting													
EBL03-RE	M1-2	0.05-0.3	0.4-2.7	870	0.3	0.7	185	Wing type 4 mm	<2.5	–	<70	–	8431 0170 55
EBL03-Q-RE	M1-2	0.05-0.3	0.4-2.7	870	0.3	0.7	185	1/4″ Hex	<2.5	–	<70	–	8431 0170 06
EBL12-RE	M2-3	0.2-1.2	1.8-10.6	910	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 13
EBL12-1500-RE	M2-3	0.2-1.2	1.8-10.6	1500	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 18
EBL20-RE	M2-3	0.5-2.0	4.5-18	750	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 19
EBL21-1500-RE	M2-3	0.5-2.1	4.5-19	1500	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 47
EBL25-RE	M2.5-4	1.0-2.5	8.8-22.1	930	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 26
EBL25-1500-RE[b]	M2.5-4	1.0-2.5	8.8-22.1	1500	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 22
EBL35-RE	M2.5-4	1.0-3.5	8.8-31	700	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 36
EBL45-RE[b]	M2.5-5	1.0-4.5	8.8-40	700	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 42
EBL55-RE[b]	M2.5-5	1.0-5.5	8.8-48	600	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 45
Soft-stop Reporting models													
EBL03-SS-RE	M1-2	0.05-0.3	0.4-2.7	870	0.3	0.7	185	Wing type 4 mm	<2.5	–	<70	–	8431 0170 08
EBL12-SS-RE	M2-3	0.2-1.2	1.8-10.6	910	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 17
EBL20-SS-RE	M2-3	0.5-2.0	4.5-18	750	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 21
EBL25-SS-RE	M2.5-4	1.0-2.5	8.8-22.1	930	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 29
EBL35-SS-RE	M2.5-4	1.0-3.5	8.8-31	700	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 39
Soft-start													
EBL12 ST	M2-3	0.2-1.2	1.8-10.6	910	0.5	1.1	215	1/4″ Hex	<2.5	–	<70	–	8431 0170 14
EBL25 ST	M2.5-4	1.0-2.5	8.8-22.1	930	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 24
EBL35 ST	M2.5-4	1.0-3.5	8.8-31	700	0.8	1.8	235	1/4″ Hex	<2.5	–	<70	–	8431 0170 37

[a] EBL 45, 55 and EBL 25-1500 to be used with EBL Drive Plus.

[b] EBL 45/55 -RE and EBL 25-1500-RE to be used with EBL Drive Plus and EBL RE module.

[c] The uncertainty in the sound levels is 3 dB(A).

All tools models, drives and cables are ESD and UL certified.

Tool box include cable for drive connection (standard models with 5 pins cable and reporting models with 6 pins cable)

All the models are push-to-start or lever start configurable.

Accessories – EBL

Screw pick-up system

Picking and positioning of screws are many times crucial for productivity in small screw assembly. The optional equipment offers a vacuum pick-up system to simplify pre-tightening preparations. The system consists of a vacuum pump, adapters for the screwdriver a shaker tray and grids for different screw dimensions.

Nozzle blanks

They must be machined to fit the specific screw to be picked up.

Vacuum pick-up adapters

Screwdrivers can be equipped with vacuum pick-up adapters ready to connect to a vacuum pump. The adapters are delivered without nozzles.

Vacuum pick-up system

Nozzle blank

Vaccum pick-up adapter

Vacuum pick-up accessories

Accessories (not ESD approved)	Ordering No.
Vacuum pump – 220V	4220 0062 00
Vacuum pump – 115V	4220 0062 05
Nozzle blank Ø 8 mm for EBL 03	4220 0067 03
Nozzle blank Ø 8 mm for EBL 12, 20, 21, 25, 35	4220 0070 03
Nozzle blank Ø 14 mm for EBL 12, 20 ,21, 25, 35	4220 0072 03
Vacuum pick-up adapter for EBL 03	4220 0080 30
Vacuum pick-up adapter for EBL 12, 20	4220 0080 31
Vacuum pick-up adapter for EBL 21, 25, 35	4220 0080 33

Shaker tray

For screw size	Ordering No.
M1-M1,2	8432 0880 00
M1,4-1,6 (curent model)	8432 0880 01
M1,8-M2	8432 0880 02
M2-M2,4	8432 0880 03
M2,4-M2,8 (M3)	8432 0880 04

Cables

Model	Ordering No.
Cable (not ESD approved)	
Spiral cable, 1.3 m (5 pin)	4220 0347 00
Spiral cable, 1.3 m (6 pin)	4220 0349 00
Heavy duty, cable 2.0 m (5 pin)	4216 0132 00
Heavy duty, cable 2.0 m (6 pin)	4216 0133 00
Cable (ESD approved)	
Extension cable[b] 3.0 m (5 pin)	4220 0138 01
Extension cable[b] 3.0 m (6 pin)	4216 0115 00

[b] *Maximum total length 8 m.*

ISO standard connectors

To build your own 22 V AC network. With our components and an ordinary two core cable, min 1.5 mm^2, you can quickly arrange the electric supply for a series of screwdrivers.

Model	Ordering No.
Male plug	4220 0095 00
2-way female socket. For wall mounting (not ESD approved)	4220 0096 00

Angle head

Angle head adapter

EBL screwdriver models EBL 25 and 35 can be equipped with a 90° angle head for access in cramped quarters.

Model	Ordering No.
EBL screwdriver	4220 0081 02
Square drive 1/4" (06)	4210 4033 80
Hex bit drive 1/4" (42)	4210 4033 81
Hex quick change 1/4" (Q)	4210 4033 82
Adapter[a] (ESD approved)	4210 4609 80

[a] *Need to be ordered separately.*

Pistol grip handle
(ESD approved)

Model	Ordering No.
EBL 21, 25, 35	4220 0051 05
EBL 12, 20	4220 0051 04

Pistol grip handle

Service kits

Model	Ordering No.
EBL	4216 0049 90

Screw dispenser

Screw dispenser

Model	Ordering No.
SDS Screw dispenser	8432 0830 00

Pistol grip

Pistol grip

Model	Ordering No.
EBL 12, 20	4220 0051 04
EBL 21, 25, 35, 45, 55 (ESD approved)	4220 0051 05

EBL Drive

EBL RE-Drive

EBL Drive Plus

Drives

Model		Ordering No.
EBL Drive	standard models and soft-stop models	8431 0170 70
EBL RE-Drive	reporting models and soft-stop + reporting models	8431 0170 75
EBL Drive Plus	all standard models and soft-stop models	8431 0170 85

EBL Soft start controller

EBL Soft-start controller

Model	Ordering No.
EBL ST controller (ESD approved)	8431 0170 80

- EBL ST controller to be used in applications that require slow start speed.
- EBL ST controller to be connected between ST tool and drive.

EBL RE module

EBL Reporting module

Model	Ordering No.
EBL RE module	8431 0170 76

Angle head

Model	Ordering No.
Angle head	
Front part square drive 1/4" (06)	4210 4033 90
Hex bit drive 1/4" (42)	4210 4033 81
Hex quick change 1/4" (Q)	4210 4033 82
Adapter	
Adapter EBL 12, 20	4210 4609 85
Adapter EBL 21/25/35/45/55	4210 4609 81

Both angle head and adapter needs to be ordered for mounting on EBL.

MicroTorque Focus 400 Screwdriver system

ETD M 120-250 ABL 400A/B

ETD M 50-80 ABL 400A/B

ETD M 20-27 ABL 400A/B

MT Focus 400 controller

ETF M 5-20 400A

ETF M 80-200 400A

ETD M 3 - 10 A 400 A/B

ETD S 8 - 25 400 A/B

MT Focus 400 screwdriver system

Model	Torque range cNm	Torque range in lb	Speed r/min*	Length mm	Overall width mm	Weight kg	Weight lb	Bit drive	Vibration total value 3-axes value) according to ISO 28927-2 Value 3-axes m/s²	Vibration total value 3-axes value) according to ISO 28927-2 Uncer-tainty m/s²	Sound and sound power levels [a] according to ISO 15744 Sound pres-sure dB(A)	Sound and sound power levels [a] according to ISO 15744 Sound power dB(A)	Ordering No.
Handheld "Digitork", without push-to-start MT Focus 400A													
ETD M 08 ABL 400A	2-8	0.18-0.7	1500	185	29	0.2	0.57	HM 4 mm	<2.5	–	<70	–	8432 0816 04
ETD M 20 ABL 400A	5-20	0.44-1.77	950	185	29	0.26	0.57	HM 4 mm	<2.5	–	<70	–	8432 0816 00
ETD M 27 ABL 400A	7.5-27	0.66-2.4	950	185	29	0.26	0.57	HM 4 mm	<2.5	–	<70	–	8432 0816 02
ETD M 03 A 400A	0.5-2.5	0.04-0.2	1000	132	16	0.1	0.22	Ø 2 mm	<2.5	–	<70	–	8432 0816 05
ETD M 10 A 400A	3-10	0.27-0.9	750	132	16	0.1	0.22	Ø 2 mm	<2.5	–	<70	–	8432 0816 07
ETD M 25 AVB 400A	7.5-25	0.66-2.2	950	174	22	0.25	0.55	HM 4 mm	<2.5	–	<70	–	8432 0816 09
Handheld "Digitork", without push-to-start MT Focus 400B													
ETD M 08 ABL 400B	2-8	0.18-0.7	1500	185	29	0.26	0.57	HM 4 mm	<2.5	–	<70	–	8432 0817 04
ETD M 20 ABL 400B	5-20	0.44-1.77	950	185	29	0.26	0.57	HM 4 mm	<2.5	–	<70	–	8432 0817 00
ETD M 27 ABL 400B	7.5-27	0.66-2.4	950	185	29	0.26	0.57	HM 4 mm	<2.5	–	<70	–	8432 0817 02
ETD M 03 A 400B	0.5-2.5	0.04-0.2	1000	132	16	0.1	0.22	Ø 2 mm	<2.5	–	<70	–	8432 0817 05
ETD M 10 A 400B	3-10	0.27-0.9	750	132	16	0.1	0.22	Ø 2 mm	<2.5	–	<70	–	8432 0817 07
ETD M 25 AVB 400B	7.5-25	0.66-2.2	950	174	22	0.25	0.55	HM 4 mm	<2.5	–	<70	–	8432 0817 09
Handheld "Digitork", configurable push-to-start MT Focus 400A													
ETD M 50 ABL 400A	15-5	01.33-4.4	1000	238	36	0.56	1.23	HM 4 mm	<2.5	–	<70	–	8432 0816 08
ETD M 80 ABL 400A	20-80	1.77-7.1	1100	238	36	0.56	1.23	HM 4 mm	<2.5	–	<70	–	8432 0816 11
ETD M 120 ABL 400A	30-120	2.7-10.6	950	240	43	0.65	1.43	1/4" Hex	<2.5	–	<70	–	8432 0816 12
ETD M 200 ABL 400A	50-200	4.42-17.7	750	240	43	0.65	1.43	1/4" Hex	<2.5	–	<70	–	8432 0816 20
ETD M 250 ABL 400A	75-250	6.64-22.13	700	240	43	0.65	1.43	1/4" Hex	<2.5	–	<70	–	8432 0816 25
Handheld "Digitork", configurable push-to-start MT Focus 400B													
ETD M 50 ABL 400B	15-50	1.33-4.4	1000	238	36	0.56	1.23	HM 4 mm	<2.5	–	<70	–	8432 0817 08
ETD M 80 ABL 400A	20-80	1.77-7.1	1100	238	36	0.56	1.23	HM 4 mm	<2.5	–	<70	–	8432 0816 11
ETD M 120 ABL 400A	30-120	2.7-10.6	950	240	43	0.65	1.43	1/4" Hex	<2.5	–	<70	–	8432 0816 12
ETD M 200 ABL 400B	50-200	4.42-17.7	750	240	43	0.65	1.43	1/4" Hex	<2.5	–	<70	–	8432 0817 20
ETD M 250 ABL 400B	75-250	6.64-22.13	700	240	43	0.65	1.43	1/4" Hex	<2.5	–	<70	–	8432 0817 25
Fixtured "DigiTork" MT Focus 400A													
ETF M 05 400A	1.5-5	0.13-0.4	750	183	20	0.4	0.9	HM 4 mm	b	–	<70	–	8432 0818 15
ETF M 20 400A	5-20	0.44-1.8	650	183	20	0.4	0.9	HM 4 mm	b	–	<70	–	8432 0818 17
ETF M 50 400A	15-50	1.33-4.4	850	269	30	1.1	2.42	HM 4 mm	b	–	<70	–	8432 0818 18
ETF M 80 400A	20-80	1.77-7.1	850	269	30	1.2	2.64	HM 4 mm	b	–	<70	–	8432 0818 19
ETF M 100 400A	25-100	2.21-8.8	700	272	30	1.2	2.64	1/4" HEX	b	–	<70	–	8432 0818 20
ETF M 200 400A	50-200	4.42-17.7	600	272	30	1.2	2.64	1/4" HEX	b	–	<70	–	8432 0818 21
ETF S25 400A	5.5-25	0.49-2.2	1000	125	65	0.3	0.68	HM 4mm	b	–	<70	–	8432 0818 24

[a] The uncertainty in the sound levels is 3 dB(A). [b] Vibrations are not given for tools intended for fixtured applications.

** Free running speed during angle step*

MicroTorque MT G4 Screwdriver System

ETD M 120-250 ABL

ETD M 50-80 ABL

ETD M 20-27 ABL

MT G4 controller

ETF M 5-20

ETF M 80-200

MT G4 screwdriver system

Model *	Torque range cNm	Torque range in lb	Speed r/min*	Length mm	Overall width mm	Weight kg	Weight lb	Bit drive	Vibration total value 3-axes value) according to ISO 28927-2 Value 3-axes m/s²	Vibration total value 3-axes value) according to ISO 28927-2 Uncer-tainty m/s²	Sound and sound power levels [a] according to ISO 15744 Sound pres-sure dB(A)	Sound and sound power levels [a] according to ISO 15744 Sound power dB(A)	Ordering No.
Fixtured transducerized													
ETF MT 5	0.5-5	0.04-0.4	1300	183	20	0.4	0.9	HM 4 mm	[b]	–	<70	–	8432 0800 10
ETF MT 10	1-10	0.09-0.9	900	183	20	0.4	0.9	HM 4 mm	[b]	–	<70	–	8432 0800 11
ETF MT 20	2-20	0.18-1.8	900	183	20	0.4	0.9	HM 4 mm	[b]	–	<70	–	8432 0800 12
ETF MT 50	5-50	0.44-4.4	1300	269	30	1.1	2.42	HM 4 mm	[b]	–	<70	–	8432 0800 13
ETF MT 50 F	5-50	0.44-4.4	1300	218	30	1.0	2.20	HM 4 mm	[b]	–	<70	–	8432 0800 20
ETF MT 80	8-80	0.71-7.1	1300	269	30	1.2	2.65	HM 4 mm	[b]	–	<70	–	8432 0800 14
ETF MT 100	10-100	0.88-8.8	1300	272	30	1.2	2.65	1/4″ HEX	[b]	–	<70	–	8432 0800 15
ETF MT 100 HM4	10-100	0.88-8.8	1300	269	30	1.2	2.65	HM 4 mm	[b]	–	<70	–	8432 0800 21
ETF MT 200	20-200	1.77-17.7	800	272	30	1.2	2.65	1/4″ HEX	[b]	–	<70	–	8432 0800 16
ETF MT 500	50-500	4.42-44.2	500	258	40	1.84	4.05	1/4″ HEX	[b]	–	<70	–	8432 0800 17
Handheld "Digitork", without push-to-start													
ETD M 03 A	0.5-2.5	0.04-0.2	1350	132	16	0.1	0.22	Ø 2 mm	<2.5	–	<70	–	8432 0810 05
ETD M 10 A	3-10	0.27-0.9	1350	132	16	0.1	0.22	Ø 2 mm	<2.5	–	<70	–	8432 0810 08
ETD M 25 AVB	7.5-25	0.66-2.2	900	174	22	0.25	0.55	HM 4 mm	<2.5	–	<70	–	8432 0810 09
ETD M 20 ABL	5-20	0.44-1.77	900	185	29	0.26	0.57	HM 4 mm	<2.5	–	<70	–	8432 0815 00
ETD M 27 ABL	7.5-27	0.66-2.4	900	185	29	0.26	0.57	HM 4 mm	<2.5	–	<70	–	8432 0815 02
Handheld "Digitork", push-start configurable													
ETD M 50 ABL	15-50	1.33-4.4	1300	238	36	0.56	1.23	HM 4 mm	<2.5	–	<70	–	8432 0815 08
ETD M 80 ABL	20-80	1.77-7.1	1300	238	36	0.56	1.23	HM 4 mm	<2.5	–	<70	–	8432 0815 11
ETD M 120 ABL	30-120	2.7-10.6	900	240	43	0.65	1.43	1/4″ Hex	<2.5	–	<70	–	8432 0815 12
ETD M 200 ABL	50-200	4.42-17.7	700	240	43	0.65	1.43	1/4″ Hex	<2.5	–	<70	–	8432 0815 20
ETD M 250 ABL	75-250	6.64-22.13	700	240	43	0.65	1.43	1/4″ Hex	<2.5	–	<70	–	8432 0815 25
Fixtured "Digitork"													
ETF M 05	1.5-5	0.13-0.4	1300	183	20	0.4	0.9	HM 4 mm	[b]	–	<70	–	8432 0810 15
ETF M 10	3-10	0.27-0.9	900	183	20	0.4	0.9	HM 4 mm	[b]	–	<70	–	8432 0810 16
ETF M 20	5-20	0.44-1.8	900	183	20	0.4	0.9	HM 4 mm	[b]	–	<70	–	8432 0810 17
ETF M 50	15-50	1.33-4.4	1300	269	30	1.1	2.42	HM 4 mm	[b]	–	<70	–	8432 0810 18
ETF M 80	20-80	1.77-7.1	1300	269	30	1.2	2.64	HM 4 mm	[b]	–	<70	–	8432 0810 19
ETF M 100	25-100	2.21-8.8	900	272	30	1.2	2.64	1/4″ HEX	[b]	–	<70	–	8432 0810 20
ETF M 200	50-200	4.42-17.7	650	272	30	1.2	2.64	1/4″ HEX	[b]	–	<70	–	8432 0810 21
ETF M 400	150-400	13.27-35.4	320	258	40	1.8	3.96	1/4″ HEX	[b]	–	<70	–	8432 0810 22
ETF M 800	300-800	26.55-70.8	300	322	45	2.6	5.73	1/4″ HEX	[b]	–	<70	–	8432 0810 23

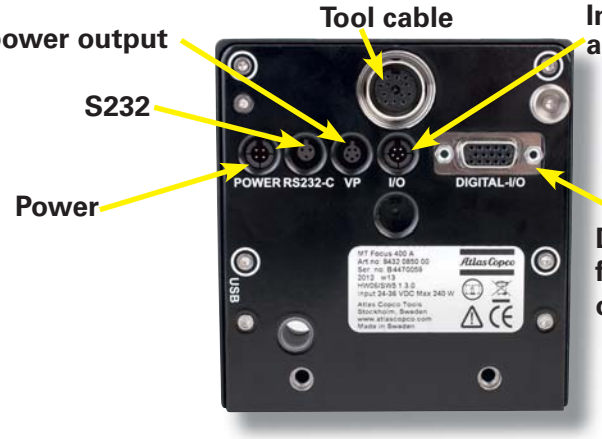
** Free running speed during angle step*

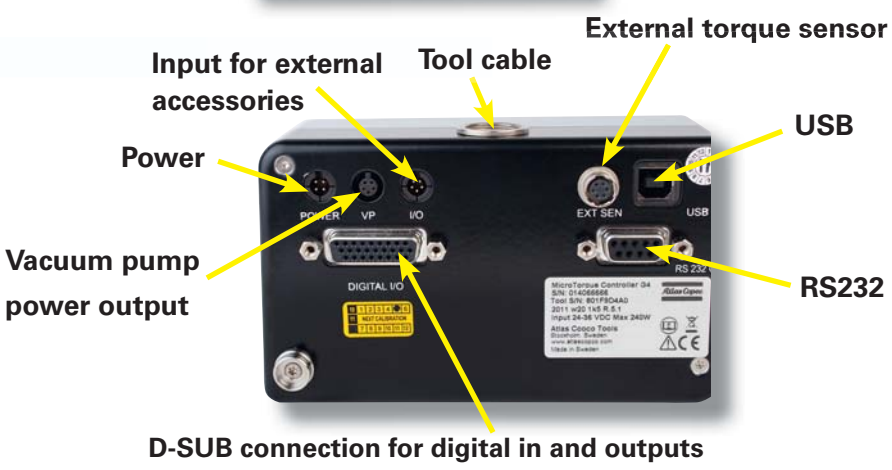
[a] The uncertainty in the sound levels is 3 dB(A).

[b] Vibrations are not given for tools intended for fixtured applications.

MicroTorque controller functionality

	MTF 400B	MTF 400A	G4
Functionality			
Number of tools	1	1	1
Number of Psets	1	20	64
Batch count	35	99	x
Lock on reject	x	x	x
Transducer controlled tools (MT)			x
Job function			x
Number of jobs			15
Number of joints per job			2500
Autoset function	x	x	
Strategies and options			
Number of tightening steps	6	6	8
Thread engage step	x	x	x
Angle control with torque monitoring	x	x	x
Torque control with angle monitoring	x	x	x
Input step			x
Hold step		x	x
Seating control step		x	
Controller			
RS232	1	1	3
USB-B (slave)	x	x	x
Vacuum pump control output			
Fixed I/O	x		x
Configurable I/O		x	
Remote start via I/O	x	x	x
P-set selection via I/O		x	x
Programable via controller keypad	x	x	
Lockable keypad function	x	x	
Configurable multi line display	x	x	x
Status LED	x	x	x
ToolsTalk MT			
Serial connection	x	x	x
USB-connection	x	x	x
Tightening graph function		x	x
Tightening result table function		x	x
Password protection	x	x	x





MicroTorque
Optional Accessories

Software

Model	Ordering No.
ToolsTalk MT (for G4)	8432 0830 30
ToolsTalk MT Analysis (for trace analysis)	8432 0830 31
ToolsTalk MT Analysis/Net (for trace analysis and data collection)	8432 0830 45
ToolsTalk MT	8432 0831 30
MT TN Adapter ToolsNet 4000	8432 0832 98

Controller accessories

Model	Ordering No.
Combi (Remote control + program selector)	8432 0830 88
Remote control	8432 0830 08
Digital program selector	8432 0830 34
Controller fixture table	8432 0830 84
Controller fixture wall	8432 0830 32
Footswitch	8432 0830 07
Y cable for I/O connector [a]	8432 0831 99
Adapter [b], (15 pin/26 pin d-sub)	4216 2179 80
Desktop socket (with screwdriver presence sensor)	8432 0831 89

[a] Y cable suitable when two I/O accessories are required.

[b] For MT Focus 400 connection to I/O accessories.

Stacklights

Model	Ordering No.
Table stand	8432 0830 97
Wall mount	8432 0830 99

Tool cable

Model	Length	Ordering No.
M-(AB)L	2 m	8432 0830 37
MT/M/M-AXXX	2 m	8432 0830 36
M-(AB)L	3.5 m	8432 0831 02
MT/M/M-AXXX	3.5 m	8432 0831 01
MT/M/M-AXXX, angle 90 deg	2 m	8432 0831 15

Cable accessories

Model	Ordering No.
Cable, RS232	8432 0830 38
Cable, USB	8432 0830 39
Transducer cable	8432 0830 35
Cable bracket	8432 0830 91

Digital program selector

G4 controller fixture wall

Remote control

Controller fixture table

Desktop socket

Footswitch

Stacklight wall mount

Stacklight table stand

Tool cable

Tool cable, 90 deg

Optional Accessories

Vacuum adapter

Model	Bit mm / Nozzle Ø mm	Blank nozzle Ordering No.	Vacuum adapter Ordering No.
ETD 03-25 xVx	36-44 / 6	4216 1189 00	8432 0770 02
ETD 20-80 ABL	64 / 6	4216 1189 00	8432 0770 12
ETD 20-80 ABL	44 / 6	4216 1189 00	8432 0770 13
ETD 20-80 ABL	64 / 6	4216 1189 00	8432 0770 15
ETD 20-80 ABL	44 / 8	4216 1190 00	8432 0770 17
ETD 20-80 ABL	64 / 8	4216 1190 00	8432 0770 05
ETD 100-250 ABL	50 / 8	4216 1190 00	8432 0770 27
ETD 100-250 ABL	70 / 8	4216 1190 00	8432 0770 30
ETF 5-80, 100 HM4	44 / 6	4216 1189 00	8432 0770 33
ETF 5-80, 100 HM4	64 / 6	4216 1189 00	8432 0770 35
ETF 5-80, 100 HM4	44 / 8	4216 1190 00	8432 0770 38
ETF 5-80, 100 HM4	64 / 8	4216 1190 00	8432 0770 40
ETF 100-200	70 / 8	4216 2066 00	8432 0770 43
ETF 400-800	70 / 10	4216 1164 00	8432 0770 45
ETD M 120-250 ABL	70 / 8	4216 1190 00	8432 0770 55

Vacuum adapter

Blank nozzles

Vacuum pump

Model	Ordering No.
Vacuum pump, VPX 6	8432 0830 06

VPX 6 vacuum pump

Screw dispenser

Model	Ordering No.
SDS screw dispenser	8432 0830 00

Screw dispenser

Shaker tray

Type	Slot mm	Ordering No.	Type	Slot mm	Ordering No.
SGQ Large[a] (110x110x35 mm)			**MSG Small[b] (70x70x15 mm)**		
SGQ 15	1.5	8432 0830 09	MSG 06	0.6	8432 0830 20
SGQ 20	2	8432 0830 10	MSG 07	0.7	8432 0830 21
SGQ 25	2.5	8432 0830 11	MSG 08	0.8	8432 0830 22
SGQ 30	3	8432 0830 12	MSG 09	0.9	8432 0830 23
SGQ 35	3.5	8432 0830 13	MSG 10	1.0	8432 0830 24
SGQ 40	4	8432 0830 14	MSG 11	1.1	8432 0830 25
SGQ 45	4.5	8432 0830 15	MSG 12	1.2	8432 0830 26
SGQ 50	5	8432 0830 16	MSG 13	1.3	8432 0830 27
SGQ 55	5.5	8432 0830 17	MSG 14	1.4	8432 0830 28
SGQ 60	6	8432 0830 18	MSG 15	1.5	8432 0830 29

[a] SGQ type (big version): For screws up to 30 mm lenght. From Ø 1.5 up to Ø 6 mm.

[b] MSG type (small version): For screws up to 10 mm lenght. From Ø 0.6 up to Ø 1.5 mm.

Shaker tray box

Transducers and Analyzer

Quality assurance system – sharpening your competitive edge

To ensure the highest quality of your fastening – and ultimately your company's products – Atlas Copco has developed a comprehensive quality assurance system for micro torques. The controllercable- transducer package provides fast, accurate and reliable measurement of critical parameters.

MT TRA 500

MT TH

ACTA MT 4

MT TS

ACTA MT4 – features

- Connect to PC via USB/RS232/Ethernet.
- 16 different engineering units to choose from.
- Colour configurable display (Torque/Angle/Status/ Trace).
- Battery for portable usage.
- Programmable via keypad or software "ToolsTalk ACTA MT".
- Dual transducer inputs.
- High resolution OLED colour display.
- Audio signal for operator feedback.
- Digital I/O signals for communication with external devices such as PLC.
- ESD grounding terminal.
- Tool speed measurement function possible when using MT TRA transducers.
- Store and export tightening data to excel with Tools Talk ACTA MT PC software.
- Calculate average torque directly on the display.

Model	Capacity cNm	Capacity in lb	Drive	Overall length mm	Ordering No.
Manual screwdriver torque transducer					
MT TH 1	1.0	0.09	Ø 3 mm	115	8432 0820 10
MT TH 2	2.0	0.18	Ø 3 mm	115	8432 0820 11
MT TH 5	5.0	0.44	Ø 3 mm	115	8432 0820 12
MT TH 10	10.0	0.88	Ø 3 mm	115	8432 0820 13
MT TH 20	20.0	1.77	1/4″	115	8432 0820 14
MT TH 50	50.0	4.42	1/4″	124	8432 0820 15
MT TH 100	100.0	8.85	1/4″	124	8432 0820 16
MT TH 200	200.0	17.70	1/4″	124	8432 0820 17
Static reaction torque transducer					
MT TS 1	1.0	0.09	Ø 3 mm	81	8432 0820 18
MT TS 2	2.0	0.18	Ø 3 mm	81	8432 0820 19
MT TS 5	5.0	0.44	Ø 3 mm	81	8432 0820 20
MT TS 10	10.0	0.88	Ø 3 mm	81	8432 0820 21
MT TS 20	20.0	1.77	Ø 3 mm	81	8432 0820 22
MT TS 50	50.0	4.42	1/4″	98	8432 0820 23
MT TS 100	100.0	8.85	1/4″	98	8432 0820 24
MT TS 200	200.0	17.70	1/4″	98	8432 0820 25
MT TS 500	500.0	44.25	1/4″	111	8432 0820 52
In-line rotary torque and angle transducer					
MT TRA 2	2.0	0.18	Ø 3 mm	76	8432 0820 41
MT TRA 5	5.0	0.44	Ø 3 mm	76	8432 0820 42
MT TRA 10	10.0	0.88	Ø 5 mm	76	8432 0820 43
MT TRA 20	20.0	1.77	Ø 5 mm	76	8432 0820 44
MT TRA 50	50.0	4.42	1/4″	105	8432 0820 45
MT TRA 100	100.0	8.85	1/4″	105	8432 0820 46
MT TRA 200	200.0	17.70	1/4″	105	8432 0820 47
MT TRA 500	500.0	44.25	1/4″	105	8432 0820 48

Torque analyzer

Model	Ordering No.
ACTA MT 4 (programable over keypad)	8432 0820 04
ToolsTalk MT Analysis (trace analysis)	8432 0830 31
Transducer cable	8432 0830 35
RS232 cable ACTA MT	8432 0831 39

Test joints for MTTS transducers

Model	Designation	Range, Ncm	Ordering No.
Test joint	M6 Soft joint 1/4” HEX	500 - 1000	8432 0833 62
	M6 Soft joint 1/4" HEX	200 - 500	8432 0833 61
	M4 Soft joint 1/4" HEX	27 - 200	8432 0833 60
	M3 Soft joint 1/4" HEX	5 - 27	8432 0833 59
	M3 Soft joint HM	5 - 27	8432 0833 58
	M2 Soft joint 1/4" HEX	0 - 10	8432 0833 57
	M2 Soft joint HM	0 - 10	8432 0833 56
	M6 Hard joint 1/4" HEX	200 - 1000	8432 0833 55
	M4 Hard joint 1/4" HEX	27 - 200	8432 0833 54
	M3 Hard joint 1/4" HEX	5 - 27	8432 0833 53
	M3 Hard joint HM	5 - 27	8432 0833 52
	M2 Hard joint 1/4" HEX	0 - 10	8432 0833 51
	M2 Hard joint HM	0 - 10	8432 0833 50

Joint kit

Stationary transducer.

Screwdriver robot

Model	Operating range X- & Y- axis mm	Operating range Z-axis mm	Portable weight X-axis kg	Portable weight Z-axis kg	Maximum speed X- & Y- axis mm	Maximum speed Z-axis mm	Weight kg	Weight lb	Ordering No.
Desktop robot									
MTR-23N	200x200	50	7	3.5	700	250	18	40	8432 0870 02
MTR-23NCE	200x200	50	7	3.5	700	250	18	40	8432 0870 04
MTR-33N	300x320	100	11	6	800	320	35	78	8432 0870 12
MTR-33NCE	300x320	100	11	6	800	320	35	78	8432 0870 14
MTR-43N	400x400	150	11	6	800	320	42	93	8432 0870 42
MTR-43NCE	400x400	150	11	6	800	320	42	93	8432 0870 44
MTR-53N	510x510	150	11	6	800	320	46	102	8432 0870 52
MTR-53NCE	510x510	150	11	6	800	320	46	102	8432 0870 54

Screwdriver Robot functionality

Resolution	X-axis	0.005 mm
	Y-axis	0.005 mm
	Z-axis	0.0025 mm
Motor type		5-phase stepping motor
Teaching pattern		Direct teaching using a teaching pendant Off-line teaching using MTR Configurator
Program capacity		255 programs
Data capacity		Maximum 30,000 points Teaching pendant (RS422)
External interface		COM1 for PC communication (RS232) I/O SYS In:16 Out:16
External input/output		I/O-1 In:8 Out:8 (4 relay contacts)
Simple PLC function		100 programs (1000 steps/program)
Power source		AC90-132V / AC180-250V (single-phase)
Power consumption		200W
Working ambient temperature		0-40°C
Relative humidity		20-90% (Non condensing)

Robot accessories

Model	Ordering No.
Vacuum sensor	8432 0870 89
I/O cable for G4	8432 0870 57
I/O cable for MTF400	8432 0870 60
Ejector unit	8432 0870 27
Teaching pendant. Hand terminal for configuration of the robot	8432 0870 20
I/O cable / Standard I/O-37 pin conector	8432 0870 22
I/O cable /Standard I/O-25 pin conector	8432 0870 25
MiniDisplay	8432 0870 86

Screwdriver accessories

Model	Ordering No.
Vacuum tube for vacuum adapter	4216 2305 00
Screwdriver holder, Screwdriver bracket and slide ETF S 25	8432 0870 41
Screwdriver holder, bracket and slide ETF M (T) 5 / 10 / 20 / 50 / 80 / 100	8432 0870 51
MTF400 Controller fixture	8432 0870 46
G4 Controller fixture	8432 0830 84

Screw presenter for vacum pickup

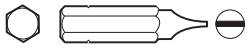
Model	Screw size	Ordering No.
SDS SR 10	M1	8432 0870 30
SDS SR 17	M1.7	8432 0870 31
SDS SR 12	M1.2	8432 0870 32
SDS SR 20	M2.0	8432 0870 33
SDS SR 14	M1.4	8432 0870 34
SDS SR 23	M2.3	8432 0870 35
SDS SR 26	M2.6	8432 0870 36
SDS SR 30	M3.0	8433 0870 37
Screw presenter accessories		
SDS fixing plate		8432 0870 39

Atlas Copco Screwdriver Bits – Hexagon Drive

DRIVE SYSTEM: 1/4" HEXAGON, STYLE C 6.3

SCREW PROFILE:

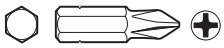
Slotted bits



Application: For slotted screws
Drive: 1/4" Hexagon, Style C 6.3

Blade thickness mm	Blade width mm	Length mm	Ordering No.
0.55	3.5	25	4023 1400 21
0.6	4	25	4023 1400 22
0.8	5.5	25	4023 1400 26

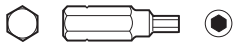
Phillips bits



Application: For Phillips screws
Drive: 1/4" Hexagon, Style C 6.3

Point	Length mm	Ordering No.
PH0	25	4023 1326 00
PH1	25	4023 0696 01
PH2	25	4023 0697 01
PH3	25	4023 0698 01

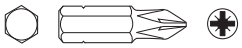
Hex bits



Application: For Hex-socket screws
Drive: 1/4" Hexagon, Style C 6.3

Point	Length mm	Ordering No.
2	25	4023 1318 00
2.5	25	4023 1319 00
3	25	4023 0819 00
4	25	4023 1320 00
5	25	4023 0820 00
6	25	4023 0821 00
7	25	4023 1430 00
8	25	4023 0905 00

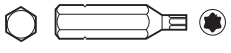
Pozidriv bits



Application: For Pozidriv screws
Drive: 1/4" Hexagon, Style C 6.3

Point	Length mm	Ordering No.
PZ1	25	4023 1101 11
PZ2	25	4023 1101 12
PZ3	25	4023 1101 13

TorxPlus bits



Application: For TorxPlus screws
Drive: 1/4" Hexagon, Style C 6.3

Point	Length mm	Ordering No.
IP6	25	4023 0001 70
IP8	25	4023 0001 74
IP10	25	4023 0001 78

Torx bits

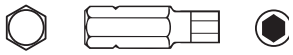
Application: For Torx screws
Drive: 1/4" Hexagon, Style C 6.3

Point	Length mm	Ordering No.
TX6	25	4023 0001 60
TX8	25	4023 1329 00
TX9	25	4023 1330 00
TX10	25	4023 1321 00
TX15	25	4023 1331 00
TX20	25	4023 1322 00
TX25	25	4023 1332 00
TX27	25	4023 1333 00
TX30	25	4023 1323 00
TX40	25	4023 1334 00

DRIVE SYSTEM: 5/16" HEXAGON, STYLE C 8

SCREW PROFILE:

Hex Bits



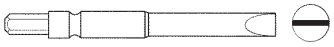
Application: For Hex-socket screws
Drive: 5/16" Hexagon, Style C 8

Point mm	Length mm	Ordering No.
5	34	4023 1215 00
6	25	4023 1216 00
7	25	4023 1219 00
8	25	4023 1217 00
10	25	4023 1218 00

DRIVE SYSTEM: 3 MM HEXAGON

SCREW PROFILE:

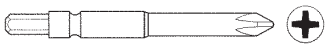
Slotted bits



Application: For slotted screws
Drive: 3 mm Hexagon

Blade thickness mm	Blade width mm	Length mm	Ordering No.
0.3	1.8	50	4023 0004 03
0.4	2	50	4023 0004 04
0.4	2.5	50	4023 0004 05
0.5	3	50	4023 0004 06
0.5	4	50	4023 0004 07
0.5	3.5	50	4023 0004 08
0.5	4.5	50	4023 0004 09
0.8	4	50	4023 0004 10
0.8	5.5	50	4023 0004 11

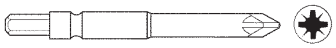
Phillips bits



Application: For Phillips screws
Drive: 3 mm Hexagon

Point	Length mm	Ordering No.
00	50	4023 0004 00
0	50	4023 0004 01
1	50	4023 0004 02

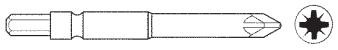
Torx bits



Application: For Torx screws
Drive: 3 mm Hexagon

Point	Length mm	Ordering No.
T6	50	4023 0004 14
T7	50	4023 0004 15
T8	50	4023 0004 16
T10	50	4023 0004 17

Pozidriv bits



Application: For Pozidriv screws
Drive: 3 mm Hexagon

Point	Length mm	Ordering No.
PZ0	50	4023 0004 12
PZ1	50	4023 0004 13

DRIVE SYSTEM: 1/4" HEXAGON, STYLE E 6.3

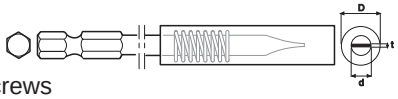
SCREW PROFILE:

Slotted bits

Application: For slotted screws
Drive: 1/4" Hexagon, Style E 6.3

Blade thickness mm	Blade width mm	Length mm	Ordering No.
3.2	0.7	49	4023 2020 21
3.9	0.8	49	4023 2020 23
4.7	0.9	49	4023 2020 24
6.3	1	49	4023 2020 26
7	1.1	49	4023 2020 27
7.9	1.2	49	4023 2020 28
9.1	1.3	49	4023 2020 29
3.2	0.7	76	4023 2030 21
3.9	0.8	76	4023 2030 23
4.7	0.9	76	4023 2030 24

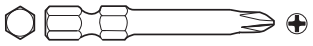
Slotted bits with finder



Application: For slotted screws
Drive: 1/4" Hexagon, Style E 6.3

Outside dia (D) mm	Blade thickness (t) mm	Blade width (d) mm	Length mm	Ordering No.
9.5	0.9	4.9	95	4023 0683 00
11.1	1	6.1	93	4023 1313 00
12.7	1.1	7.4	93	4023 0684 00
14.3	1.2	8.9	96	4023 0949 00
15.9	1.3	10.0	95	4023 0685 00

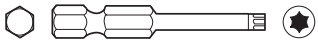
Phillips bits



Application: For Phillips screws
Drive: 1/4" Hexagon, Style E 6.3

Point	Length mm	Ordering No.
PH00	50	4023 0001 51
PH00	70	4023 0001 52
PH00	90	4023 0001 53
PH0	50	4023 1325 00
PH1	50	4023 2320 21
PH1	70	4023 2327 21
PH1	89	4023 2335 21
PH1	152	4023 2360 21
PH2	50	4023 2320 22
PH2	70	4023 2327 22
PH2	89	4023 2335 22
PH2	152	4023 2360 22
PH3	50	4023 2320 23
PH3	70	4023 2327 23
PH3	89	4023 2335 23
PH3	152	4023 2360 23

Torx bits



Application: For Torx screws
Drive: 1/4" Hexagon, Style E 6.3

Point	Length mm	Ordering No.
TX5	49	4023 0002 16
TX5	70	4023 0002 17
TX6	49	4023 0001 61
TX6	70	4023 0001 62
TX6	90	4023 0001 63
TX7	49	4023 0002 18
TX7	70	4023 0002 19
TX8	49	4023 2220 21
TX8	90	4023 2235 21
TX9	49	4023 2220 22
TX9	90	4023 2235 22
TX10	49	4023 2220 23
TX10	90	4023 2235 23
TX15	49	4023 2220 24
TX15	90	4023 2235 24
TX20	49	4023 2220 25
TX20	90	4023 2235 25
TX25	49	4023 2220 26
TX25	90	4023 2235 26
TX27	49	4023 2220 27
TX27	90	4023 2235 27
TX30	49	4023 2220 28
TX30	90	4023 2235 28
TX40	90	4023 2235 29

Hex bits

Application: For Hex-socket screws
Drive: 1/4" Hexagon, Style E 6.3

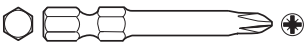
Point mm	Length mm	Ordering No.
2	49	4023 1311 00
2.5	49	4023 1312 00
3	49	4023 0710 00
4	49	4023 0711 00
5	49	4023 0712 00
6.35	49	4023 0906 00
8	49	4023 1369 00
10	49	4023 1370 00

TorxPlus bits

Application: For TorxPlus screws
Drive: 1/4" Hexagon, Style E 6.3

Point	Length mm	Ordering No.
IP5	50	4023 0002 20
IP5	70	4023 0002 21
IP6	50	4023 0001 71
IP6	70	4023 0001 72
IP6	90	4023 0001 73
IP7	50	4023 0002 23
IP7	70	4023 0002 24
IP7	90	4023 0002 25
IP8	50	4023 0001 75
IP8	70	4023 0001 76
IP8	90	4023 0001 77
IP10	50	4023 0001 79
IP10	70	4023 0001 80
IP10	90	4023 0001 81

Pozidriv bits



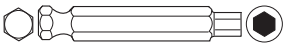
Application: For Pozidriv screws
Drive: 1/4" Hexagon, Style E 6.3

Point	Length mm	Ordering No.
PZ0	50	4023 0001 41
PZ0	70	4023 0001 42
PZ1	50	4023 2420 21
PZ1	70	4023 2427 21
PZ1	89	4023 2435 21
PZ2	50	4023 2420 22
PZ2	70	4023 2427 22
PZ2	70	4023 2435 22
PZ3	50	4023 2420 23
PZ3	89	4023 2435 23

DRIVE SYSTEM: 7/16" HEXAGON, STYLE E 11.2

SCREW PROFILE:

Hex bits



Application: For Hex-socket screws
Drive: 7/16" Hexagon, Style E 11.2

Point mm	Length mm	Ordering No.
5	70	4023 0800 00
6	70	4023 0801 00
8	70	4023 0802 00
10	70	4023 0760 00

Bit Holders

DRIVE SYSTEM: 1/4" HEXAGON, STYLE E 6.3

APPLICATION: SUITABLE FOR BITS WITH 1/4" HEXAGON DRIVE

Standard type

Hex-drive	Hex-female	Dia-meter (D) mm	Length L mm	Length L1 mm	Magnetic	Ordering No.
1/4"	1/4"	11.1	46.5	28.5	Yes	4023 1208 01
1/4"	1/4"	11.1	46.5	55.5	Yes	4023 1208 02
1/4"	1/4"	11.1	46.5	103.7	Yes	4023 1209 00

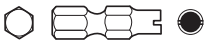
Quick release type

Hex-drive	Hex-female	Dia-meter (D) mm	Length L mm	Length L1 mm	Magnetic	Ordering No.
1/4"	1/4"	9.4	35.7	25.4	Yes	4023 1353 00
1/4"	1/4"	9.4	50	25.4	Yes	4023 0707 00

Adapters

DRIVE SYSTEM: 1/4" HEXAGON, STYLE E 6.3

APPLICATION: FOR BITS WITH WING-SHANK 4 MM DRIVE



Adapters

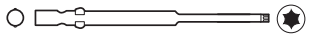
	Ordering No.
Adapter	4220 0105 00

Atlas Copco Screwdriver Bits – Wing-shank Drive

DRIVE SYSTEM: 4 MM WING-SHANK

SCREW PROFILE:

Torx bits



Application: For Torx screws
Drive: Wing-shank 4 mm

Point	Length mm	Ordering No.
TX1	40	4023 0002 52
TX2	60	4023 0002 53
TX3	60	4023 0002 54
TX4	60	4023 0001 90
TX5	60	4023 0001 91
TX6	60	4023 0001 92
TX8	60	4023 0001 93
TX10	60	4023 0001 94

TorxPlus bits

Application: For TorxPlus screws
Drive: Wing-shank 4 mm

Point	Length mm	Ordering No.
IP4	60	4023 0002 10
IP5	60	4023 0002 11
IP6	60	4023 0002 12
IP8	60	4023 0002 13
IP10	60	4023 0002 14

Pozidriv bits

Application: For Pozidriv screws
Drive: Wing-shank 4 mm

Point	Length mm	Ordering No.
PZ0	60	4023 0002 03
PZ1	60	4023 0002 04
PZ2	60	4023 0002 55

Phillips bits

Application: For Phillips screws
Drive: Wing-shank 4 mm

Point	Length mm	Ordering No.
PH00	40	4023 0002 56
PH0	40	4023 0002 57
PH0	60	4023 0002 03
PH1	40	4023 0002 58
PH2	40	4023 0002 59

Hex bits

Application: For Hex screws
Drive: Wing-shank 4 mm

Point	Length mm	Ordering No.
1.5	60	4023 0002 60
2	60	4023 0002 61
2.5	60	4023 0002 62
3	60	4023 0002 63

Slotted bits

Application: For Slotted screws
Drive: Wing-shank 4 mm

Blade thickness mm	Blade width mm	Length mm	Ordering No.
0.28	1.3	60	4023 1327 01
0.30	1.7	60	4023 1327 02
0.3	2.0	60	4023 1327 03
0.3	2.5	60	4023 1327 04

Atlas Copco Screwdriver Bits – Halfmoon Drive

DRIVE SYSTEM: 4 MM HALFMOON

SCREW PROFILE:

Pozidriv bits

Application: For Pozidriv screws
Drive: Halfmoon 4 mm

Point	Length mm	Ordering No.
PZ0	44	4023 0002 26
PZ0	64	4023 0002 27
PZ1	44	4023 0002 28
PZ1	64	4023 0002 29

Phillips bits

Application: For Phillips screws
Drive: Halfmoon 4 mm

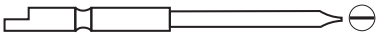
Point	Length mm	Ordering No.
PH000	44	4023 0001 10
PH000	64	4023 0001 11
PH00	44	4023 0001 12
PH00	64	4023 0001 13
PH0	44	4023 0001 14
PH0	64	4023 0001 15
PH1	44	4023 0001 16
PH1	64	4023 0001 17
PH1	90	4023 0001 18
PH2	44	4023 0002 30
PH2	64	4023 0002 31

Hex-socket bits

Nutsetter. Application: For nuts and thread-headed screws
Drive: Halfmoon 4 mm

Point	Length mm	Ordering No.
2.3	44	4023 0002 45
2.5	44	4023 0002 46
3	44	4023 0002 47
4	44	4023 0002 48
4.5	44	4023 0002 49
5	44	4023 0002 50
5.5	44	4023 0002 51

Slotted bits



Application: For slotted screws
Drive: Halfmoon 4 mm

Blade width mm	Blade thickness mm	Length mm	Ordering No.
2	0.3	44	4023 0002 37
2.5	0.3	44	4023 0002 38
3	0.4	44	4023 0002 39
4	0.5	44	4023 0002 40

Torx bits

Application: For Torx screws
Drive: Halfmoon 4 mm

Point	Length mm	Ordering No.
TX1	44	4023 0002 32
TX2	44	4023 0001 06
TX3	44	4023 0001 08
TX3	64	4023 0001 09
TX4	44	4023 0001 20
TX4	64	4023 0001 21
TX5	44	4023 0001 22
TX5	64	4023 0001 23
TX6	44	4023 0001 24
TX6	64	4023 0001 25
TX8	44	4023 0001 26
TX8	64	4023 0001 27
TX10	44	4023 0001 28
TX10	64	4023 0001 29

TorxPlus bits

Application: For TorxPlus screws
Drive: Halfmoon 4 mm

Point	Length mm	Ordering No.
IP2	44	4023 0002 35
IP3	44	4023 0002 36
IP4	44	4023 0001 30
IP4	64	4023 0001 31
IP5	44	4023 0001 32
IP5	64	4023 0001 33
IP6	44	4023 0001 34
IP6	64	4023 0001 35
IP8	44	4023 0001 36
IP8	64	4023 0001 37
IP10	44	4023 0001 38
IP10	64	4023 0001 39

Hex bits

Application: For Hex-socket screws
Drive: Halfmoon 4 mm

Point	Length mm	Ordering No.
1.5	44	4023 0002 41
2	44	4023 0002 42
2.5	44	4023 0002 43
3	44	4023 0002 44

Adapters

DRIVE SYSTEM: 4 MM HALFMOON
APPLICATION: SUITABLE FOR BITS WITH 1/4" HEXAGON DRIVE

Adapters

	Ordering No.
Magnetic	4023 0002 15

Twój dystrybutor:

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