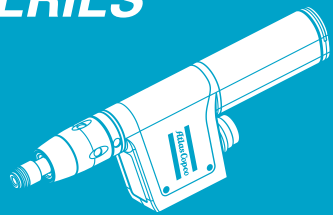




## **MICROTORQUE QMC SERIES AND MTF 400A**



Productivity, flexibility and  
quality in one screwdriver.

**Atlas Copco**

# MICROTORQUE FIXTURED SCREWDRIVERS



## Productivity boosting with maximum quality

Extremely light and compact, full of functionalities. The MicroTorque QMC Series Fixtured Screwdrivers combined with the powerful MT Focus 400 controller, boosts productivity, improves quality and reduces costs. It is the most advanced tightening solution for any low torque application.

## Features

- A** Compact, space saving design.
- B** Display with clearly visible and configurable information.
- C** Colored background for operator feedback.
- D** Simple and intuitive navigation through three controller buttons.
- E** Multiple communication ports.
- F** Vacuum adapter.
- G** Bit grounding.
- H** Threaded holes for easy and simple installation.
- J** Compact & lightweight design.
- K** LED lights indicating tightening status.



# INTELLIGENT AND ADVANCED TIGHTENING



## Productivity and Flexibility

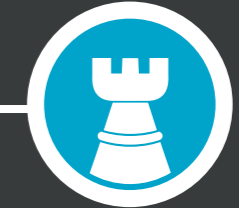
Combining productivity with flexibility has never been this easy. **Multiple Torque Programs** minimize and eliminate setups, **Multi Step Tightening** helps you to reduce cycle times while keeping high quality and **Multiple Tightening Strategies** give you all the resources you need to tighten any type of screwed joint.



MULTI STEP  
TIGHTENING



MULTIPLE TORQUE  
PROGRAMS



TIGHTENING  
STRATEGIES

## Quality and Process Control

Secure torque consistency at every tightening and at every joint, with the **High Torque Accuracy** of QMC tools. The **Angle Monitoring & Control** functionality detects stripped joints, missing components, mis-alignments and incomplete tightenings. Combined with **Error Proofing Possibilities** by connecting MT Focus 400A with poka yoke systems, you will have best in class process control and high quality.



HIGH TORQUE  
ACCURACY



ANGLE MONITORING  
& CONTROL



ERROR PROOFING  
POSSIBILITIES

## Continuous Improvement

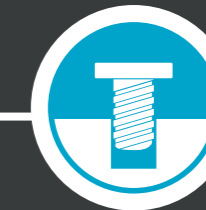
Keep process history traceable – and valuable information accessible – by storing process and production results using the **Data Reporting** function. **The Graphic Data & Analysis** is a powerful feature for process optimization and the **Seating Control Strategy** is the smartest tightening method in the market. Offering you a powerful package to continuously improve and optimize your production process.



DATA  
REPORTING



GRAPHIC DATA  
& ANALYSIS



SEATING CONTROL  
STRATEGY



# THE SOLUTION IS FRIENDLY ...

# ...AND GREEN

## Operator Friendly

Set the system with just a few clicks with the easy and intuitive **Auto-Set function**. The **Batch Count** helps the operator complete his operation successfully and the tool LED lights, the controller display and buzzer, provides clear and instant **Operator Feedback**, making the whole system extremely operator friendly and easy to use.



AUTO-SET



BATCH COUNT



OPERATOR FEEDBACK

## Automation Friendly

Save significant amounts of money on robot size and weight capacity with the **Compact & Lightweight** QMC tools. The **Multi Communication** options facilitates integration with PLCs and automation systems, and the **Easy Installation** design make it really simple to attach the tool anywhere.



COMPACT & LIGHTWEIGHT



EASY INSTALLATION



MULTI COMMUNICATIONS



**Decreased Weight.** The product weight for the QMC has been decreased by 45% compared to its predecessor. This contributes to the possibility of higher cycle rates on robot applications and a decreased environmental impact from transportation.



**Recycling Information.** Information regarding dismantling and recycling has been added in the Product Information to facilitate correct handling of QMC when it has served its purpose.



**Safe Chemicals.** Safety Data Sheets are available for all chemicals used in QMC and the content of chemicals are ensured not to contain prohibited substances.



**Service Instructions.** Detailed information regarding Service Instructions are provided to ensure long product life of the QMC.



**No Hazardous Materials.** No substances from the Atlas Copco Prohibited or Restricted list are present in QMC.



**RoHS II Directive.** All electronic components in QMC are in compliance with the RoHS II legislation.



**Easy Disassembly.** Screw joints and modular design ensure easy access to all components in QMC.



# PROCESS CONTROL AND OPTIMIZATION

MicroTorque screwdrivers can bring you to a whole new level of process control and optimization. The system has so many capabilities and functionalities that any tightening challenge can be met.

**With the 3 step tightening strategy** you can define speed, torque and angle parameters for each step. With perfect engagement, rundown and tightening giving you full process control – maximizing speed and quality.

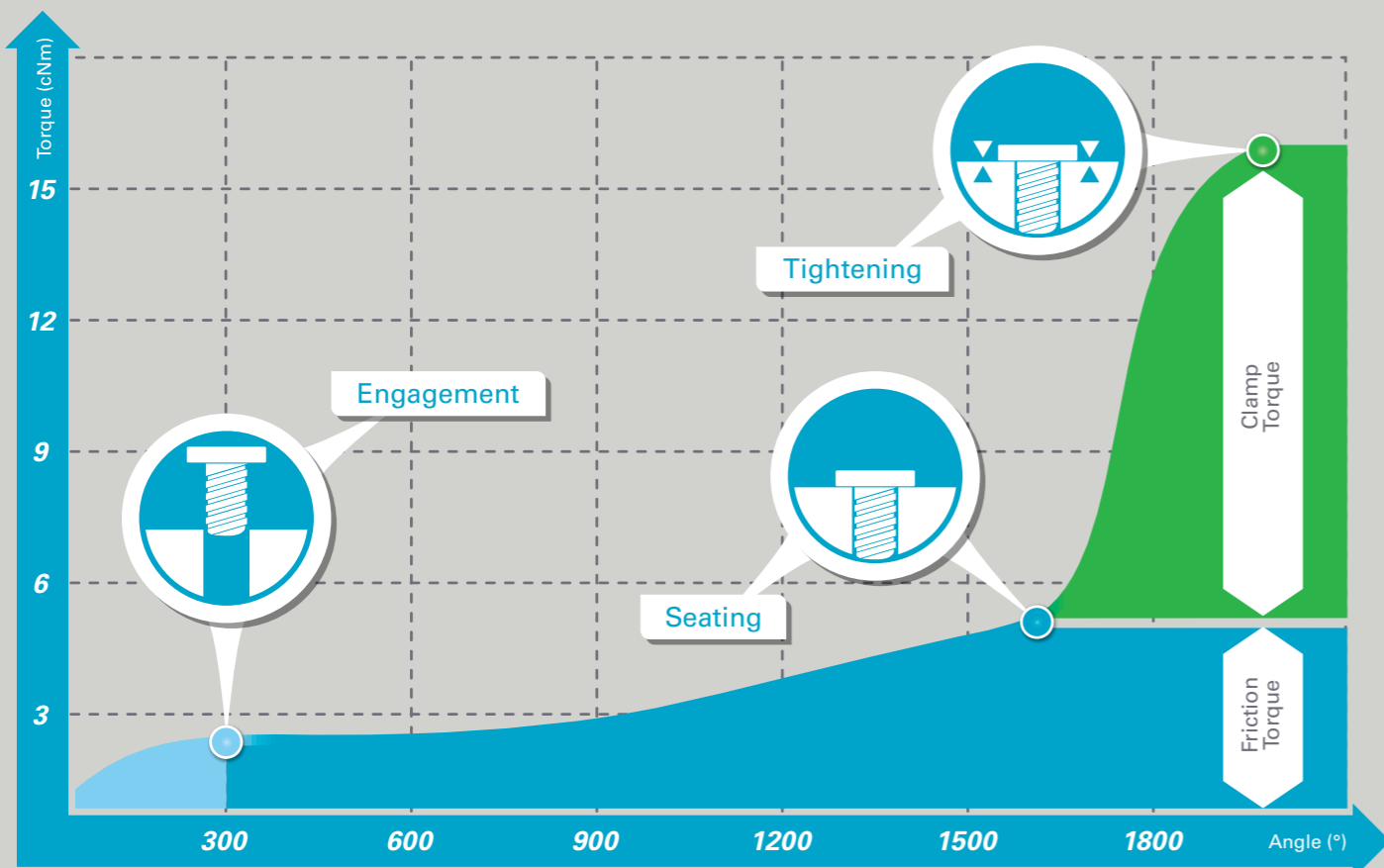
**With the Seating control strategy**, a complete different approach is obtained. This advanced solution offers a system intelligence

that helps you to obtain the best tightening process, focusing on the right amount of clamping torque.

No matter which approach you choose – MicroTorque Screwdrivers have all the features and resources needed to keep your process under control, with real time traces obtained at every tightening. With a powerful diagnosis tool, full tightening data can be exported providing key information for analysis and process records.

## Seating control strategy

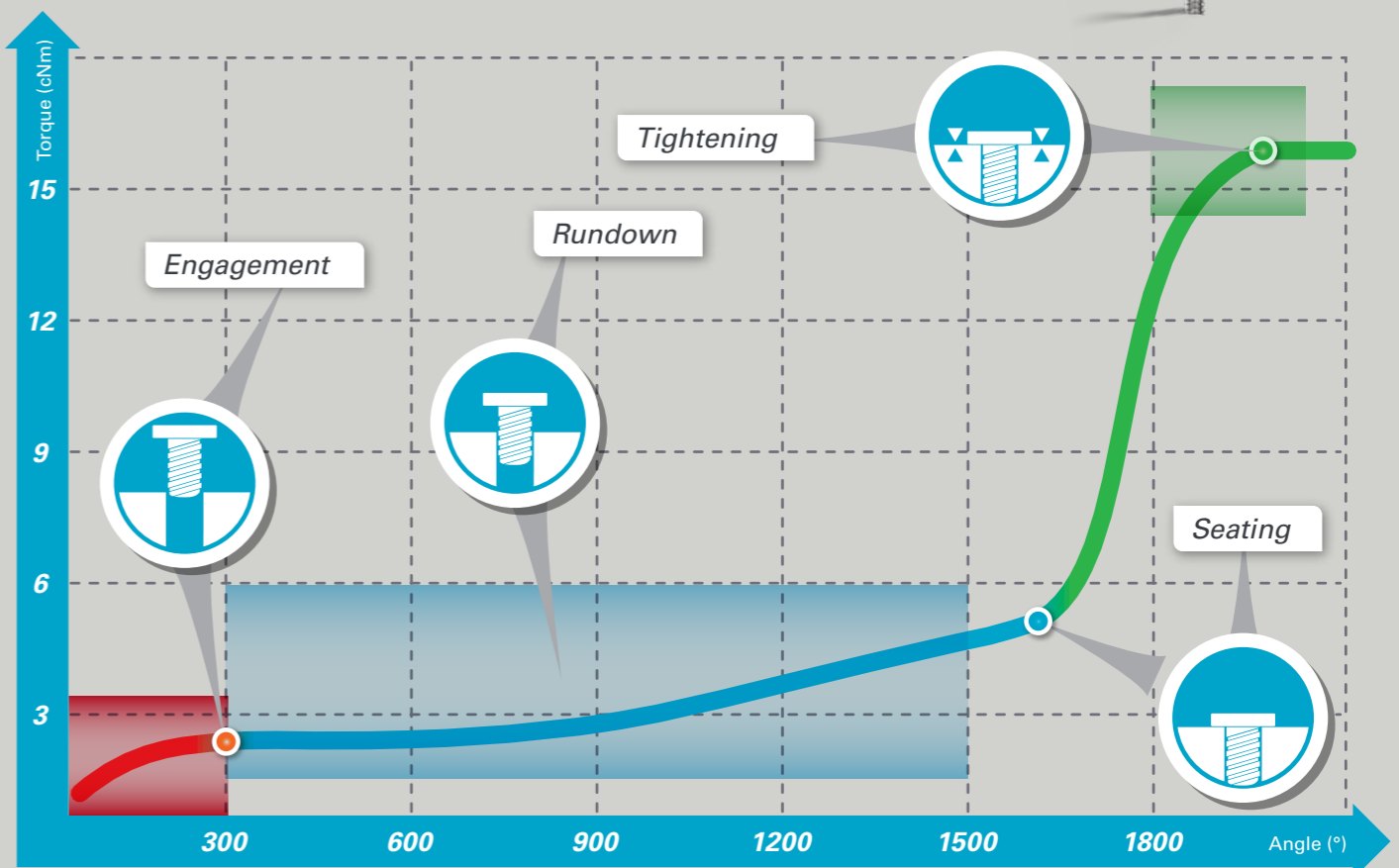
The monitoring capability during the entire process makes sure that the MTF400 identifies the seating point and then adds the specified amount of torque or angle. Securing the right amount of clamping to every single joint independent of the common friction variations due to dimensions, roughness, material, alignment and more.



## 3 step tightening process

With the 3 step tightening strategy the entire tightening process is covered with maximum control and quality. At the first step (Engagement), a slow speed is used to secure the proper alignment of the screw. At the second step (Rundown), fast speed is used to increase productivity, monitoring torque. With the final step (Tightening), speed is reduced focusing on high accuracy while the angle is monitored to make sure the process is correct.

- Transition Angle  
Transition Torque
- Target: Angle  
Monitoring: Torque
- Target: Torque  
Monitoring: Angle



# 100% CONTROL

**MicroTorque Toolstalk** is the software that makes everything possible, with a very graphical, intuitive and user friendly interface it makes the configuration process easy and effortless.

This unique software combines everything from parameters configuration, programming new joints and creating new Psets, to setting different strategies, defining speed and angle input. Further more it offers visualization of controller and tool information, I/Os interface configuration, graph analysis, data collection and a whole lot more. Making it an important piece that completes and empowers the MicroTorque System, making it the right solution for any low torque application.

Toolbar

Active Pset

Pset Configuration

Navigation Map

Graph Analysis

MT Net Function

I/O Configuration

Tools Information

Controller Information

Configuration

100% CONTROL



Model	Torque range		Speed rpm	Length mm	Overall width mm	Weight		Bit Drive	Ordering No.*
	cNm	in lb				kg	lb		
<b>Fixtured current controlled</b>									
QMC 21-05-HM4	1.2 - 5	0.11 - 0.44	1500	124	57	0.2	0.46	HM4	8432 0844 05
QMC 21-10-HM4	3.0 - 10	0.27 - 0.89	1500	178	57	0.3	0.66	HM4	8432 0844 10
QMC 21-25-HM4	5.5 - 25	0.49 - 2.21	1000	178	57	0.3	0.66	HM4	8432 0844 25
QMC 41-50-HM4	12.5 - 50	1.11 - 4.42	2000	200	65	0.6	1.32	HM4	8432 0844 52
QMC 41-100-HM4	25.0 - 100	2.21 - 8.85	2000	200	65	0.6	1.32	HM4	8432 0844 53
QMC 41-50-I06	12.5 - 50	1.11 - 4.42	2000	205	65	0.6	1.32	1/4" Hex	8432 0844 61
QMC 41-100-I06	25.0 - 100	2.21 - 8.85	2000	205	65	0.6	1.32	1/4" Hex	8432 0844 62
QMC 41-150-I06	37.5 - 150	3.32 - 13.27	1000	213	65	0.6	1.32	1/4" Hex	8432 0844 63
QMC 41-250-I06	62.5 - 250	5.53 - 22.13	850	224	65	0.7	1.54	1/4" Hex	8432 0844 64

Controller Unit	Ordering No.
MT FOCUS 400A	8432 0850 00

Tool Cables	Ordering No.
2.0 m	8432 0835 02
3.5 m	8432 0835 03

Power Supply Units	Ordering No.
PSU 36V/72W (QMC 21-XX)	8432 0840 01
PSU 36V/180W (QMC 41-XX)	8432 0840 02

Vacuum Adapters	Ordering No.
QC Vacuum Adapter - HM4 (Ø8 mm)	8432 0770 58
QC Vacuum Adapter - 1/4" HEX (Ø12 mm)	8432 0770 57

Vacuum Nozzles	Ordering No.
Plastic Nozzle - Ø8 mm	4216 1190 16
Plastic Nozzle - Ø12 mm	4216 1190 20
Metallic Nozzle - Ø8 mm	4216 1190 17
Metallic Nozzle - Ø12 mm	4216 1190 21

Stacklights	Ordering No.
Stacklight table stand	8432 0830 97
Stacklight wall mount	8432 0830 99

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

Screw Dispenser System	Screw Size	Ordering No.
<b>Screw dispenser for magnetized bit</b>		
SDS	M 1.0 - 5.0	8432 0830 00
<b>Screw dispenser for vacuum pick up</b>		
SDS SR 10	M 1.0	8432 0870 30
SDS SR 12	M 1.2	8432 0870 32
SDS SR 14	M 1.4	8432 0870 34
SDS SR 17	M 1.7	8432 0870 31
SDS SR 20	M 2.0	8432 0870 33
SDS SR 23	M 2.3	8432 0870 35
SDS SR 26	M 2.6	8432 0870 36
SDS SR 30	M 3.0	8432 0870 37







MEDICAL



ELECTRONICS



SMARTPHONE



VEHICLE

FLEXIBILITY



COMMITTED TO SUSTAINABLE PRODUCTIVITY

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