

Controllers and systems



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Error-proofing through intuitive control of the assembly process

Atlas Copco advanced controllers and software provide intuitive monitoring and control of tightening operations performed using Atlas Copco electric assembly tools. Assembly process control and quality assurance is made easy by advanced control functions. The system guides the operator through the assembly process, avoiding mistakes that can result in costly quality problems.

POWER FOCUS 6000

The Power Focus 6000 is compatible with STR, ST, STB, SR, ES, STwrench and QST and is the perfect choice for safety critical assembly. It comes in one single hardware version regardless of which tool model or functionality level is used. Its powerful industrial design gives a reliable process that will speed up your tightening operations.

The Power Focus 6000 is easy to use to use due to its 7 inch touch screen and intuitive software. The web HMI enables you to configure and monitor the controller from any device with a web browser. Smart software management will guarantee highest possible uptime. Upgrade your controller in a few seconds using only a USB stick.

The Power Focus is based on standard hardware and software components which, when combined, will fulfill all demands, from the most basic stand-alone installation to full integration into the factory network. The modules fit together using the "plug-and-play" concept.

Assembly process control and quality assurance is made easy by advanced control functions. On receipt of assembly information, the Power Focus automatically selects the correct tightening sequence and parameters. The operator is guided through the process, avoiding mistakes that can result in costly quality problems.

POWER FOCUS 4000

The Power Focus range controls tools from the Tensor ST, SR, STR, STB and ETX families. With its built-in functions, it also participates in controlling the station or line segment. The Power Focus and associated software packages provide easy-to-understand information for everyone, from operators to plant managers.

PROGRAMMING SOFTWARE TOOLS-TALK PF

ToolsTalk PF is the user-friendly tool that enables you to communicate with your Power Focus tool controller. It makes programming and process analysis of a tightening station simple.

POWER FOCUS 600

The Power Focus 600 is compatible with the Tensor ES tools and is the perfect choice for quality critical assembly. It comes in one single hardware version regardless of which tool model or functionality level is used. Its powerful industrial design gives a reliable process that will speed up your tightening operations.

Thanks to the intuitive interface and the fact that it's so easy to use you can set up and run a new system from the

box in minutes. External computer software is no longer required since you can browse in using a web HMI. The intuitive interface and color screen provide clear operator feedback.

Smart software management will guarantee highest possible uptime. Upgrade your controller in a few seconds using only a USB stick.

MT FOCUS

The new ground-breaking controller MT Focus 6000 is designed for Industry 4.0 and is Atlas Copco's most innovative controller for MicroTorque. The MT Focus 6000 elevates Atlas Copco's low torque tightening offer with advanced tightening strategies, a wide range of communication possibilities and smart solutions for high efficiency in any tightening process. For more information about MicroTorque controllers see chapter Electric Assembly Tools.



POWER FOCUS 6000

This all new fastening solution from Atlas Copco takes productivity, ergonomics, quality and environmental impact to entirely new levels. And all this with the most user-friendly experience ever.

Enjoy the benefits of a system providing a unique operator experience, with superior quality control and the most flexible integration.

ONE PLATFORM

One platform for handheld and fixtured tools. The Power Focus 6000 reduces your inventory costs and training requirements.

Easy to connect and configure back up tools, using the same programming interface. More compatible solutions will continuously be deployed. And the Power Focus 6000 will be your common controller for all tools and needs.

MULTITOOL CONTROLLER

The Power Focus 6000 increases your flexibility in rebalancing assembly lines. Atlas Copco's virtual stations concept allows you to connect up to 6 tools to the same controller. Giving you a simpler installation with less cables, hardware components and network drops. Add to that the lower power consumption, less floor space utilization and a much lower environmental footprint, the benefits are obvious.

- Compatible with: Tensor STR, ST, STB, SR, ES, STwrench and QST.
- Connect up to 6 tools to the same controller with Virtual Stations
- Simpler installation with less cables, hardware components and network drops.
- Lower power consumption.
- Less floor space utilization.

IAM

Virtual stations, software, tightening data and configuration – all in one place. In the IAM two software areas allow for smart software management. Allowing a much safer upgrade process, always giving the possibility to switch between two software versions.



Power Focus 6000

Model	Ordering No.
Drive unit	
Power Focus 6000	8436 1800 02
IAMs	
Critical control	8436 0910 10
Process control	8436 0910 40
Software Features Electronic Delivery	
Virtual Station, 1 pcs	8436 1910 01
TurboTight, 1 pcs	8436 1910 02
TrueAngle, 1 pcs	8436 1910 03
SoftPLC, 1 pcs	8436 1910 04
Yield, 1 pcs	8436 1910 06
Gradient, 1 pcs	8436 1910 07
Software Features Physical Goods Delivery	
Virtual Station, 1 pcs	8436 1910 11
TurboTight, 1 pcs	8436 1910 21
TrueAngle, 1 pcs	8436 1910 31
SoftPLC, 1 pcs	8436 1910 41
Yield, 1 pcs	8436 1910 61
Gradient, 1 pcs	8436 1910 71
Fieldbus modules	
DeviceNet	8436 0940 10
Ethernet/IP 2 port	8436 0940 15
ProfiNet I/O 2 port	8436 0940 20
ProfiBus	8436 0940 05
Controller accessories	
FMS Portable	8436 1910 99
Power Focus 6000 Adapter plate	4222 1783 80
Power Focus 6000 Security seal	4222 1736 03

REVOLUTIONARY TIGHTENING STRATEGIES

TurboTight® and TrueAngle® are Atlas Copco's cutting-edge tightening strategies for the Power Focus 6000.

TURBOTIGHT®

TurboTight® lets the tool absorb the reaction force and significantly improves ergonomics for the operator. Shorten cycle times and at the same time improving flexibility. Less hardware means less maintenance.

TRUEANGLE®

TrueAngle® uses a gyro signal to read operator movement, increasing the accuracy of your angle reading. Enabling handheld angle controlled tightening's while removing operator influence. This allows you to narrow down your angle window, and detect the most common assembly problems such as wrong or missing components and damaged threads. Avoid premature shut-offs and detect re-hits.

VIRTUAL STATIONS – THE ENABLER

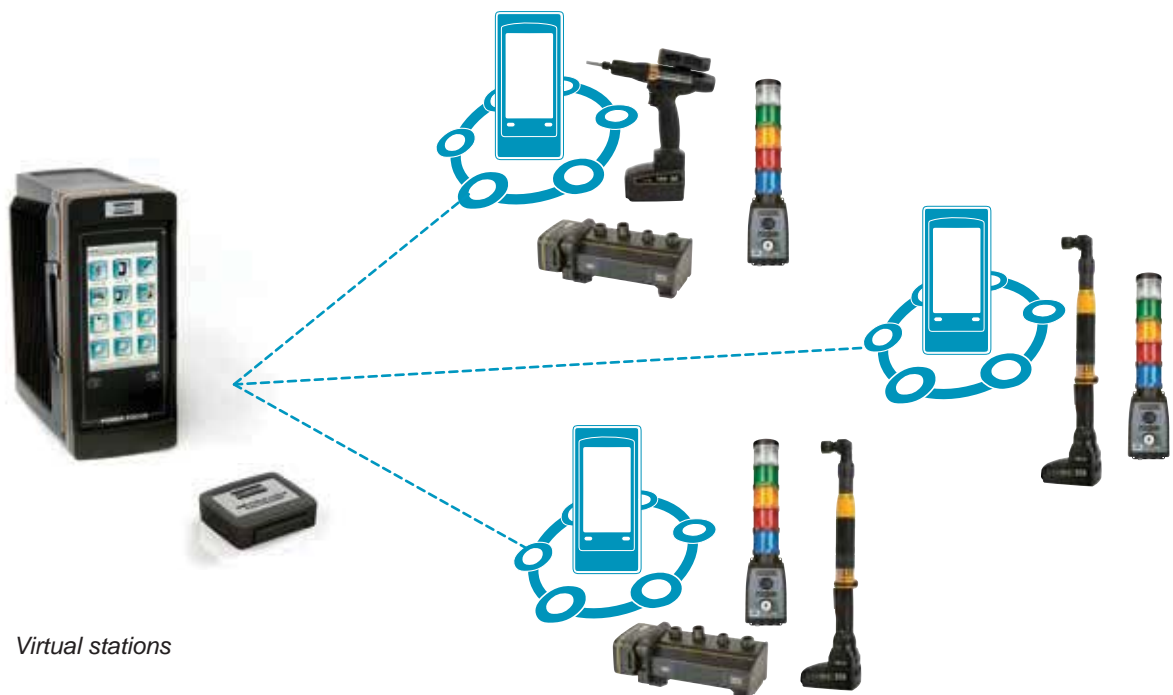
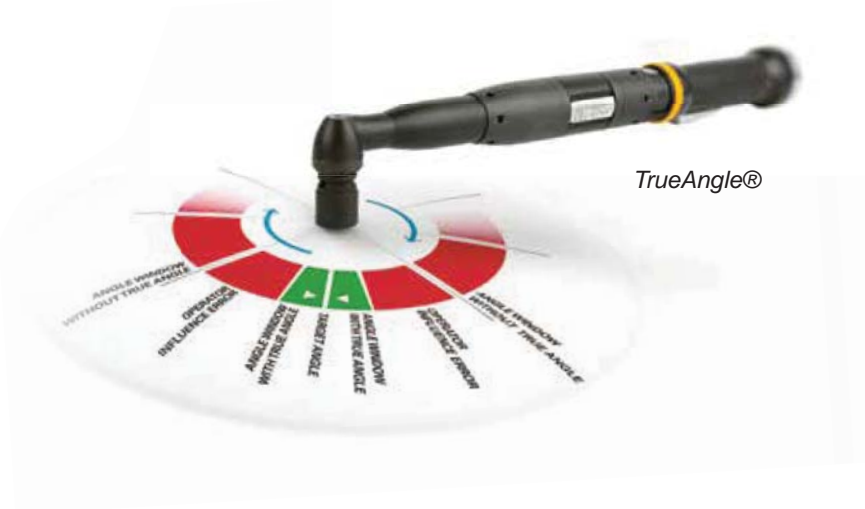
Virtual Station is the Power Focus 6000 concept that offers the possibility to connect multiple tools and accessories into the system. With the Virtual Station concept, each tool can have its own separate result view on the Power Focus 6000 controller HMI.

The Virtual Station keeps all information about the assembly process, giving an instant overview of what is going on in the production.

TurboTight®



TrueAngle®



Virtual stations

ADVANCED PROCESS CONTROL AND MONITORING FUNCTIONS

Power Focus is a modular range of controllers, with full flexibility, designed for applications ranging from single spindle hand-held operations to fixtured multiple nutrunning systems. Advanced process control and monitoring functions make it easy to view and collect data using the Internet infrastructure.

The Power Focus 4000 is available in two versions, Compact and Graph. The difference between them is the user interface, where the Graph features the color display and a full keyboard.

COMPACT

This version offers full functionality at a lower cost, but requires a PC with the ToolsTalk PF software for process set-up.

GRAPH

With the Graph hardware, you have full stand-alone programming possibilities. When networked, the Graph can function as a programming terminal for other Power Focus units.

RBU CUTS DOWNTIME

Atlas Copco's patented Rapid Backup Unit (RBU) concept transfers functionality to a non-configured hardware unit, ensuring that hardware can easily be upgraded should functionality requirements change. The RBU also acts as back-up for programming and configuration. If a change of hardware is required, just fit the RBU to the new hardware, switch on the unit and you're ready. All programming and network configurations are transferred in seconds. The RBU cuts downtime to a minimum.



Compact



Graph

POWER FOCUS 4000 FOR TENSOR ST, SR, STR, STB AND ETX

Model	Ordering No.
Power Focus 4000 W 10	
PF 4000-G-HW	8433 7100 00
PF 4000-C-HW	8433 7100 05
PF 4000-G-DN- HW	8433 7140 00
PF 4000-C-DN-HW	8433 7140 05
PF 4000-G-PB-HW	8433 7142 00
PF 4000-C-PB-HW	8433 7142 05
PF 4000-G-CC-HW	8433 7143 00
PF 4000-C-CC-HW	8433 7143 05
PF 4000-G-PN-HW	8433 7148 00
PF 4000-C-PN-HW	8433 7148 05
PF 4000-G-EIP-HW	8433 7149 00
PF 4000-C-EIP-HW	8433 7149 05

POWER FOCUS 4002 FOR TENSOR SL

Model	Ordering No.
Power Focus 4002 W 10	
PF 4002-G-HW	8433 3100 00
PF 4002-C-HW	8433 3100 05
PF 4002-G-DN-HW	8433 3140 00
PF 4002-C-DN-HW	8433 3140 05
PF 4002-G-PB-HW	8433 3142 00
PF 4002-C-PB-HW	8433 3142 05
PF 4002-G-PN-HW	8433 3148 00
PF 4002-C-PN-HW	8433 3148 05
PF 4002-G-EIP-HW	8433 3149 00
PF 4002-C-EIP-HW	8433 3149 05

IRC FOCUS FOR STWRENCH AND TENSOR STB

Model	Ordering No.
IRC Focus W 10	
IRC FOCUS-B-G-HW	8433 6500 00
IRC FOCUS-B-C-HW	8433 6500 02
IRC FOCUS-B-G-DN-HW	8433 6500 04
IRC FOCUS-B-C-DN-HW	8433 6500 06
IRC FOCUS-B-G-PB-HW	8433 6500 12
IRC FOCUS-B-C-PB-HW	8433 6500 14
IRC FOCUS-B-G-PN-HW	8433 6500 24
IRC FOCUS-B-C-PN-HW	8433 6500 26
IRC FOCUS-B-G-EIP-HW	8433 6500 28
IRC FOCUS-B-C-EIP-HW	8433 6500 30

CONTROLLER FUNCTIONALITY

Hardware key	Ordering No.
RBU-Bronze	8433 0010 10
RBU-Silver	8433 0015 20
RBU-Gold	8433 0020 20
RBU-DS	8433 0005 10
RBU-X	8433 0080 20



RBU

General				
Functionality Level / RBU				
Runs Tool Types	Bronze ST/SR/STR	Silver ST/SR/STR	Gold ST/SR/STR	X ETX
Tensor controllers				
Compact hardware	x	x	x	x
LED display	x	x	x	x
6 button keyboard	x	x	x	x
Graph hardware		x	x	x
LCD display		x	x	x
Full keyboard		x	x	x
Functionality				
Number of tools	1	1	1	1
Number of Psets	64	250	250	250
Batch count	x	x	x	x
Open end spanner	x	x	x	x
Quick programming	x	x	x	x
Cross thread / Rehit detection	x	x	x	x
Tool service indicator	x	x	x	x
Autoset	x	x	x	x
Lock on reject	x	x	x	x
Line control		x	x	x
Transducer torque traceability	x	x	x	x
Tightening status storage (default)	5 000	5 000	5 000	5 000
Tightening data storage (default)	5 000	5 000	5 000	5 000
MultiStages		8	8	8
Trace storage	8	8	8	8
Real time statistics	x	x	x	x
SPC	x	x	x	x
RBU	x	x	x	x
Bar code reading		x	x	x
ID input to select Pset		x	x	x
Job function		x	x	x
Number of jobs (default)		99	99	99
ID input to select job		x	x	x
Logic Configurator (4000 only)		x	x	x
Cell programming		x	x	x
Label printer (via Open protocol)		x	x	x
Cell Job			x	x
Strategies and options				
Two stage/Quick step/Ergoramp	x	x	x	x
Torque control and angle monitoring	x	x	x	x
DS control		x	x	x
Auto zoom step	x	x	x	x
CW / CCW operation	x	x	x	x
Rundown angle monitoring	x	x	x	x
Self tap / PVT monitoring	x	x	x	x
Reverse angle	x	x	x	x
Rotate spindle	x	x	x	x
Click wrench input	x	x	x	x
Torque and angle control	x	x	x	x
Angle control and torque monitoring	x	x	x	x
Current monitoring	x	x	x	x
Post view torque		x	x	x
Yield control (PF 4000 and ETX combination only)			x	x
StepSync, SynchroTork (PF 4000 only)			x	x
Home position			x	x
Snug gradient			x	x
I/O				
RS232 programming port	x	x	x	x
USB port (PF 4000 only)	x	x	x	x
Discrete I/O	x	x	x	x
Remote start	x	x	x	x
Socket selector (optional)	x	x	x	x
RE Alarm (optional)	x	x	x	x
Parallel printer port	x	x	x	x
I/O Expander (optional)	x	x	x	x
Expandable I/O (up to 124 in / 124 out)	x	x	x	x
Operator ID card input		x	x	x
Fieldbus card		Optional	Optional	Optional
RS232 bar code reader port		x	x	x
Easily programmed fieldbus protocol		x	x	x
Ethernet port for remote prog		x	x	x
Ethernet port for data collection		x	x	x
Protocols				
Open protocol serial	x	x	x	x
Open protocol Siemens 3964R serial	x	x	x	x
Open protocol Ethernet		x	x	x



Tensor spindles are easily fixtured using our standard range of Express mechanics. The control strategies StepSync and SynchroTork synchronize Tensor spindles to provide consistent clamp forces over the entire component mating face.

SPINDLE SYNCHRONIZATION

All Atlas Copco tightening spindles are easily fixtured using our standard range of Express mechanics. The StepSync and SynchroTork tightening strategies give various levels of spindle synchronization during clamp force build-up. Communication between the controllers in the cell or group takes place via the I/O bus. Depending on user-interface preferences and budget, the SyncMaster may be a Compact or Graph hardware unit.

MULTISTAGE FUNCTIONALITY REDUCES RELAXATION

The inherent “MultiStage” functionality permits the combination of up to eight different parameter sets in a linear sequence. The entire process is activated

with just one press of the tool trigger. For joint conditioning, fasteners can be run down to a pre-torque value, backed off by a configurable number of degrees and then re-tightened to the desired final torque. This advanced functionality is ideal for reducing relaxation in a joint.

CELL NETWORKING GIVES PROCESS SECURITY

The Cell concept allows for Ethernet networking without a PC, and offers overall station process control at a lower cost. A Cell consists of up to 20 units, where the Master controls the process of all Members in the tightening station, and communicates process data as a single interface point.

ADVANCED STATISTICS FOR BETTER QUALITY CONTROL

Data is continuously collected and analyzed, and can be presented as statistics on, e.g., the Graph color display. Diagnostics and statistical alarms such as SPC monitor charts, and capability (Cpk) alarms highlight changes and trends in the assembly process. Effective information and SPC are good motivators, and encourage operators to adopt a proactive approach to monitoring the quality of the assembly process.

POWER FOCUS 600

The Power Focus 600 controller takes quality critical assembly to the next level. Setting up and using an electric system has never been easier. And, by switching from pneumatic tools, you can reduce your energy consumption by up to 85%. Unbelievable but true – we call it easy transformation!

EASY

Set up and run a new system from the box in minutes. Computer software is no longer required. Intuitive interfaces enable real-time analysis and fast reaction if needed.

EFFICIENT

Same controller hardware regardless of tool model. Powerful industrial design gives a reliable process to maximize uptime and speed up your tightening operations.

ERGONOMIC

Both hardware and software is intuitive, giving clear operator feedback on the screen.



Power Focus 600

Model	Ordering No.
Drive unit	
Power Focus 600 with remote start	8436 3700 01
IAM	
IAM Joint Control	8436 0900 01
IAM Station Control	8436 0900 05

FUNCTIONALITY OVERVIEW

	IAM Joint Control	IAM Station Control
Functionality		
Number of Psets	1	16
Batch sequence	1	16
Lock on reject	x	x
Strategies and options		
Torque control	x	x
Torque control and angle monitoring	x	x
Configurable limits for torque and angle	x	x
Rotate spindle forward/reverse	x	x
TurboTight	-	x
Two Step	x	x
Quick Step	x	x
Three Step	x	x
CW / CCW operation	x	x
Complete re-hit detection	x	x
Self tap	x	x
Process information and service		
Tightening data storage (Torque, Status OK/NOK, NOK reason)	30	1000
Torque-time trace	x	x
Event log	1000	1000
Hardware and connectivity		
Web-browser client programming	x	x
Read and write programming via remote Ethernet	-	x
Tightening data via local USB	x	x
Tightening data via remote Ethernet	-	x
Controller SW upgrade via local USB	x	x
Controller SW upgrade via remote Ethernet	-	x
1D/2D Barcode reader for selection	-	x
Remote start	x	x
Configurable I/O	x	x
Stacklight	x	x
Socket selector	x	x
Operator panel	x	x

TOOLSTALK PF

ToolsTalk PF provides tightening parameter set-up, fieldbus and Logic Configurator set-up, plus customized reporting and presentation of statistics. With a simple click, results can be exported into other commercial file formats.

ToolsTalk communicates with the PowerFocus via Ethernet, USB or serial RS232. If you are networking from your office desk, ToolsTalk PF allows for quickest access to the different control units connected.

**TOOLSTALK POWER FOCUS**

Model	Ordering No.
ToolsTalk W14	
1-user license	8092 1191 01
5-user license	8092 1191 05
10-user license	8092 1191 10
Plant license	8092 1191 19
ToolsTalk W10	
1-user license	8092 1190 01
5-user license	8092 1190 05
10-user license	8092 1190 10
Plant license	8092 1190 99

Model	Ordering No.
ToolsTalk upgrade to W14	
1-user license	8092 1191 11
5-user license	8092 1191 15
10-user license	8092 1191 20
Plant license	8092 1191 29
ToolsTalk PF W05 upgrade to W10	
1-user license	8092 1190 51
5-user license	8092 1190 55
10-user license	8092 1190 60
Plant license	8092 1190 69
ToolsTalk PF W07 upgrade to W10	
1-user license	8092 1190 31
5-user license	8092 1190 35
10-user license	8092 1190 40
Plant license	8092 1190 49

TOOLSTALK 2

ToolsTalk 2, the new generation software in controller programming, is ready to take your line management to the next level. The client-server based software solution is geared to provide quick and easy configuration, as well as complete visibility and traceability to your entire line structure.

Built on a state-of-the-art user experience and with an extended amount of unique features it is tailored to fit your needs and optimized to get the job done. It allows you to delegate additional features at any time to respective stations, through the embedded simple Functionality Management System (FMS). With 100% customizable user rights, you maintain quality control in complex production systems and increase uptime in production critical operations.

**TOOLSTALK 2**

Model	Delivery	Ordering No.
ToolsTalk 2 – Station Set Up, computer installation		
1- computer installation license	Electronic delivery	8092 1714 00
1- computer installation license	Physical delivery	8092 1714 01
ToolsTalk 2 – Line configurator, virtual station		
1-Virtual Station license	Electronic delivery	8092 1714 02
1-Virtual Station license	Physical delivery	8092 1714 03
5-Virtual Station license	Physical delivery	8092 1714 04
10-Virtual Station license	Physical delivery	8092 1714 05
ToolsTalk 2 – Line Manager, virtual station		
1-Virtual Station license	Electronic delivery	8092 1714 06
1-Virtual Station license	Physical delivery	8092 1714 07
5-Virtual Station license	Physical delivery	8092 1714 08
10-Virtual Station license	Physical delivery	8092 1714 09

Atlas Copco's Station Solutions reduce cost and ensure quality

As part of Atlas Copco's Quality Integrated Fastening (QIF) concept we offer complete error proofing stations. These are created by combining our advanced tightening equipment with standard Atlas Copco hardware and software components. Integrated error-proofing assembly stations help you avoid costly reworking, raise productivity and ensure quality on your production line.

Atlas Copco is one of the few suppliers able to offer a range of products comprehensive enough to build a fully integrated assembly station. QIF error-proofing stations offer the following benefits:

- Increased product quality.
- Standard modules reduce project and set-up time.
- Fast line re-balancing with standard interfaces.
- Higher productivity due to improved operator guidance.
- Full after sales support from Atlas Copco.

FAST, EASY SET-UP

Most QIF products can easily be connected to Power Focus and Pulsor Focus using one I/O Bus cable, and to PowerMACS using one MACS I/O cable. They can be configured using standard Atlas Copco software ToolsTalk. This user-friendly PC software makes programming very simple.

A key factor that makes QIF products so well accepted by users is their logical and intuitive set-up. By combining QIF products with ToolsTalk Logic Configurator, it is possible to make logical diagrams with inputs and outputs that further enhance the flexibility of the products.

SELECTOR 6 SERIES

Improve your productivity and achieve reduction in defects and energy use with superior flexibility and error proofing of your tightening process. Selector 6 Series is designed to give you a perfect Error Proofing solution with outstanding mobility and connectivity. It will improve your productivity and operator ergonomics with increased uptime, make product introduction easier as well as ease of installation.



Improve total cost of ownership



FEEDBACK

Higher quality can be achieved by giving audio and/or visual feedback about the assembly process to the operators. Time and costs can be saved by reducing reworking and avoiding faulty products leaving the production line. For feedback use Atlas Copco's Stacklights.



REDUCTION IN DEFECTS AND NEW PRODUCT INTRODUCTION

The value of guiding the operator is key when introducing new models or having a big product mix. Selector 6 Series provides visual feedback to the operator, decreasing costs related to scrapping and rework.

Selector 6 Series and wireless connectivity greatly supports variance support by bringing the selector closer to application unnecessary operator movement is reduced.



OPERATOR GUIDANCE

Flexible assembly lines demand different products to be assembled at the same station. Providing direct instructions on a screen with images and text of the assembly process reduces the risk of operator errors. For operator guidance use the Atlas Copco's Single Quality Solution and HMIs.



PROCESS MONITORING

Storing production data for documentation and further analysis is a key factor for traceability. Process improvements can be made by analyzing data. This contributes to increasing quality and boosting productivity by minimizing the number of recalls. For process monitoring use Atlas Copco's ToolsNet 8.



Model	Ordering No.
Socket selector	
Selector 4	8433 0610 04
Selector 8	8433 0610 08
Selector for large sockets	8433 0610 44
Rotary selector	8433 0606 15
Bit selector 8	8433 0612 08
double ^a	4222 0933 92
single ^b	4222 0933 91
^a Only compatible with Bit selector.	
^b Only compatible with Socket selector 4 and 8.	
I/O Expanders	
Open	8433 0564 39
Sealed	8433 0564 45
Stacklights	
ESL-04 Standard	8433 0570 13
Rotating red	8433 0570 30
Rotating yellow	8433 0570 35
Siren	8433 0570 40
Compact	8433 0570 16
DSL-03 with push button	8433 0570 10
with blanking plugs	8433 0570 11
Operator panel	
Advanced	8433 0565 00
Basic	8433 0565 10
Remote Start	
Operator handle (ball joint/handle)	
- front/plastic	8435 3030 00
- front/rubber	8435 3030 01
- rear/plastic	8435 3030 02
- rear/rubber	8435 3030 03
Start handle	4220 1391 91
Cables	
Accessory cables	
I/O bus cable 0.5 m	4222 0917 00
1 m	4222 0917 01
3 m	4222 0917 03
5 m	4222 0917 05
10 m	4222 0917 10
15 m	4222 0917 15
I/O Termination plug	4222 0443 00
M12-4 pin	
Female - Open end 5 m	4243 0166 05
Male - Female 5 m	4243 0167 05
10 m	4243 0167 10
15 m	4243 0167 15

TLS

Model	Ordering No.
Tool Tags	
TLS ST Tag 32 U1	8433 1030 10
TLS ST Tag 61-S U1	8433 1030 20
TLS ST Tag 61-L U1	8433 1030 30
TLS ST Tag 81-S U1	8433 1030 40
TLS ST Tag 81-L U1	8433 1030 50
TLS ST Tag 101 U1	8433 1030 60
Product Tags (package of 5 units)	
TLS Compact Tag U1-63	8433 1026 05
TLS Power Tag U1-65	8433 1025 05
TLS GPS TAG U1-65	8433 1024 05

SELECTOR 6 SERIES

Model	Ordering No.
Selector 6 M (Mobile)	
Selector 6 with 4 slots	8433 0613 04
8 slots	8433 0613 08
bit slots	8433 0613 09
Power battery 18V	4211 6030 85
Power battery 36V	4211 6030 86
Multi Charger 18-36V	4211 6083 84
Protective cover 18V battery	4211 6090 18
External power supply 24V	8432 0840 00
Carry handle	4222 3142 80
Daisy chain cable 4 to 4	4222 3155 80
4 to 8	4222 3155 81
8 to 8	4222 3155 82
PF6000 adapter cable	4222 3073 00
Socket holder 25 mm	4222 3114 20
50 mm	4222 3114 21
DIN rail adapter	4222 3145 80
Selector 6 S (Stationary)	
Selector 6 with 4 slots	8433 0611 04
8 slots	8433 0611 08
bit slots	8433 0611 09
External power supply 24V	8432 0840 00
Daisy chain cable 4 to 4	4222 3155 80
4 to 8	4222 3155 81
8 to 8	4222 3155 82
PF6000 adapter cable	4222 3073 00
Socket holder 25 mm	4222 3114 20
50 mm	4222 3114 21
DIN rail adapter	4222 3145 80

NOTE: Selector 6 Series is only available for Power Focus 6000



Rotary selector



Operator handle



Start handle



Selector 6 S8



Selector 6 S8 with carry handle



Multi Charger



Operator panel Advanced



Stacklight DSL-03



I/O expander sealed

TOOLSNET 8

ToolsNet 8 is a data collection and process improvement software application for use with Power Focus, Pulsor Focus, PowerMACS and STWrench with support for other controllers over ToolsNet open protocol. Combined, these products provide total control of the assembly process, providing a platform for quality improvements. Historical data, statistics and capability indexes can be accessed at any time via a standard web browser such as Microsoft Internet Explorer. ToolsNet is the complete assembly process improvement tool.

TRACEABILITY MINIMIZES RECALL COSTS

The production can be followed in real-time through the dashboard or monitored through different reports such as the Result List report or Product List report which provides information of every tightening related to a specified period or product. 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.



THE RIGHT SOLUTION FOR YOUR NEEDS

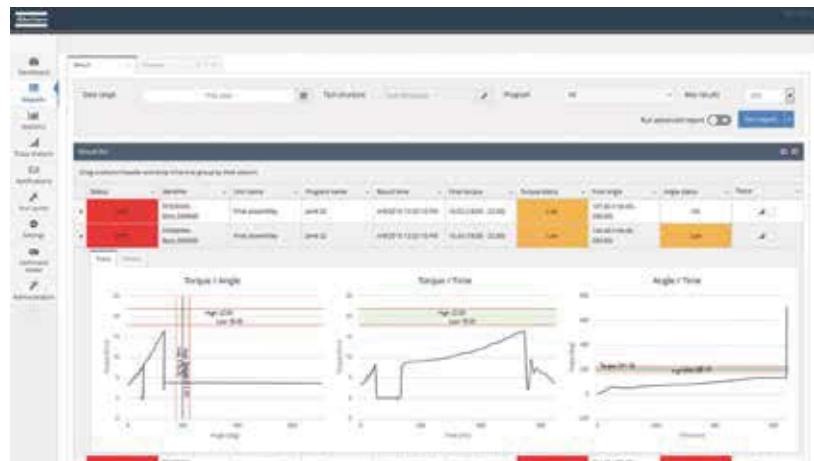
ToolsNet 8 is divided in three different packages to cover different needs.

REPORTS

Take the first step in traceability by collecting all tightening results and storing them in a secure database system. Legal documentation and process improvements can be handled by running several pre-formatted reports specially designed to save user time and effort.

ALERT

Extend the usage of available information by collecting all production events as they occur on the assembly line, in real time. Generate reports to identify events that are happening often and trigger emails to the right personnel based on event distribution rules you create. Be always on the alert for quality variation and workstations that require preventative or corrective tool maintenance.



ANALYSIS

The analysis package adds advanced statistical capabilities making it possible to search for variations when it comes to large amounts of production data. Another feature that is added with the analysis

package is tool center which makes it possible to track detailed information about the tools that are used in production ensuring that they are serviced and calibrated on time.

Software		Ordering No.	Upgrade Ordering No.
ToolsNet 8 - Reports		Upgrade¹	
5	Spindle license	8092 1710 05	8092 1810 05
10	Spindle license	8092 1710 10	8092 1810 10
25	Spindle license	8092 1710 25	8092 1810 25
50	Spindle license	8092 1710 50	8092 1810 50
75	Spindle license	8092 1710 75	8092 1810 75
125	Spindle license	8092 1710 80	8092 1810 80
200	Spindle license	8092 1710 85	8092 1810 85
350	Spindle license	8092 1710 90	8092 1810 90
500	Spindle license	8092 1710 95	8092 1810 95
Plant	Spindle license	8092 1710 00	8092 1810 00
ToolsNet 8 - Alerts		Upgrade²	
5	Spindle license	8092 1711 05	8092 1811 05
10	Spindle license	8092 1711 10	8092 1811 10
25	Spindle license	8092 1711 25	8092 1811 25
50	Spindle license	8092 1711 50	8092 1811 50
75	Spindle license	8092 1711 75	8092 1811 75
125	Spindle license	8092 1711 80	8092 1811 80
200	Spindle license	8092 1711 85	8092 1811 85
350	Spindle license	8092 1711 90	8092 1811 90
500	Spindle license	8092 1711 95	8092 1811 95
Plant	Spindle license	8092 1711 00	8092 1811 00
ToolsNet 8 - Analysis		Upgrade³	
5	Spindle license	8092 1712 05	8092 1812 05
10	Spindle license	8092 1712 10	8092 1812 10
25	Spindle license	8092 1712 25	8092 1812 25
50	Spindle license	8092 1712 50	8092 1812 50
75	Spindle license	8092 1712 75	8092 1812 75
125	Spindle license	8092 1712 80	8092 1812 80
200	Spindle license	8092 1712 85	8092 1812 85
350	Spindle license	8092 1712 90	8092 1812 90
500	Spindle license	8092 1712 95	8092 1812 95
Plant	Spindle license	8092 1712 00	8092 1812 00
ToolsNet 8 - Archiving			
5	Spindle license	8092 1713 05	
10	Spindle license	8092 1713 10	
25	Spindle license	8092 1713 25	
50	Spindle license	8092 1713 50	
75	Spindle license	8092 1713 75	
125	Spindle license	8092 1713 80	
225	Spindle license	8092 1713 85	
350	Spindle license	8092 1713 90	
500	Spindle license	8092 1713 95	
Plant	Spindle license	8092 1713 00	
Operator guidance			
1	User license	8092 1185 01	

¹ ToolsNet 4000 Reports is required.

² ToolsNet 4000 Alerts is required.

³ ToolsNet 4000 History is required.

NOTE: Check for availability on your market.



HLTQ - INDUSTRIAL PC

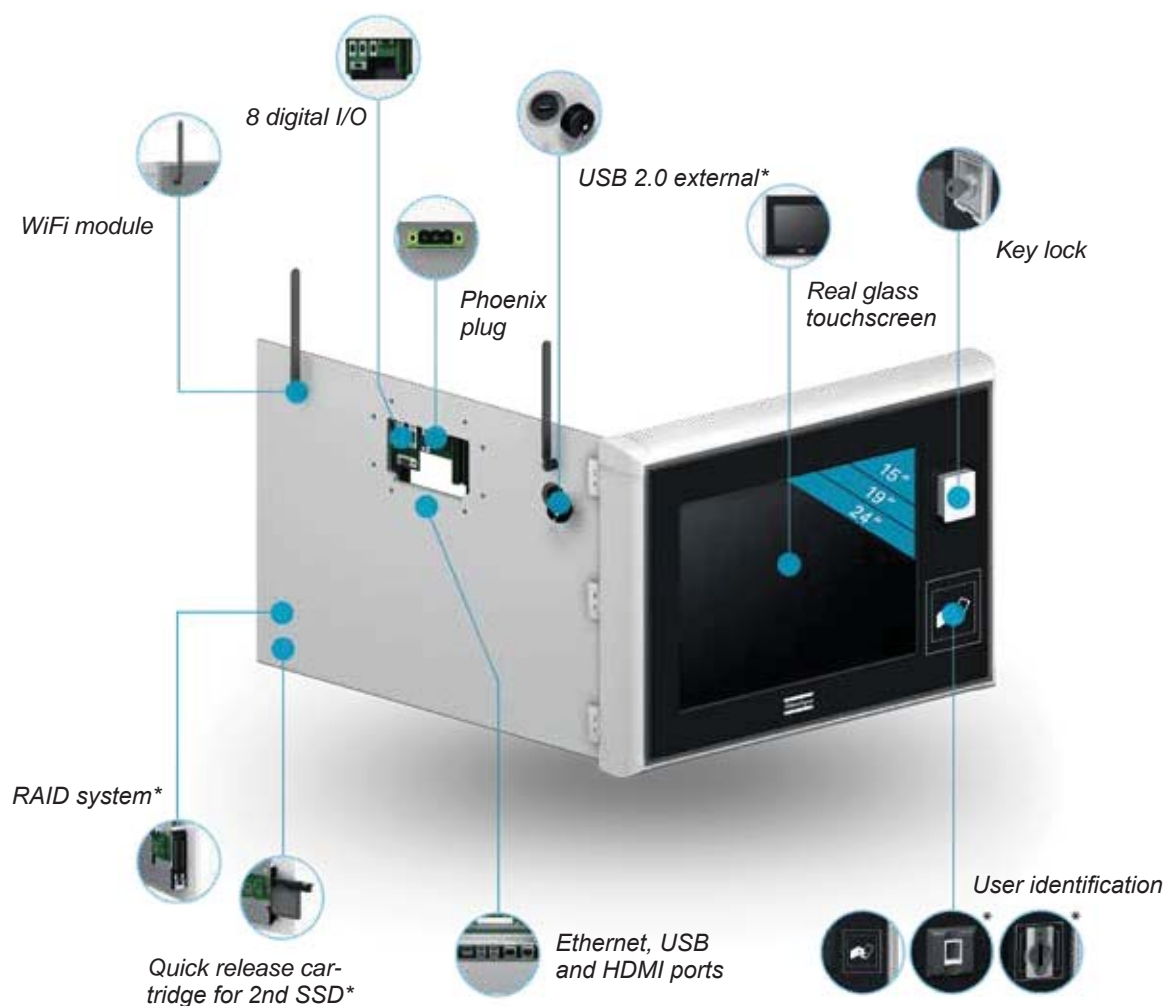
With their robust design and high-performance components the HLTQ (Hard Line Terminal) series are state-of-the-art devices for your industrial purposes.

You can choose between 6 stand-alone models that are pre-configured and available off-the-shelf, or a customized version which can be configured individually based on available options.



Model	Ordering No.
Standard	
HLT15Q	8434 2300 00
HLT15Q-W (3)	8434 2300 10
HLT19Q	8434 2300 20
HLT19Q-W (3)	8434 2300 30
HLT24Q	8434 2300 40
HLT24Q-W (3)	8434 2300 50
Configurable	
HLT15Q	*
HLT19Q	*
HLT24Q	*

* Please contact your local Atlas Copco sales representative who will be pleased to help you configure your requested industrial PC.



Technical data

		Standard (15" 19" 24")	Configurable (15" 19" 24")
CPU Type	AMD® G-Series GX-424CA (Quad-Core 2.4 GHz), L2 2 MB, 25 W	•	•
Motherboard	NANO-KBN-i1-4241-R10	•	•
RAM	4 GB, DDR3, FSB 1600/1333 MHz 8 GB, DDR3, FSB 1600/1333 MHz	— •	• Optional
Mass storage	64 GB SSD, 2.5", SATA 3 interface, quick release cartridge 128 GB SSD, 2.5", SATA 3 interface, quick release cartridge 256 GB SSD, 2.5", SATA 3 interface, quick release cartridge	— • —	• Optional Optional
Ports	1 x LAN Gigabit Intel i210-AT, with NCSI support 1 x LAN Gigabit Intel i211-AT 2 x USB 3.0, 2x USB 2.0 (internal accessible) 5 x COM RS232, each with 5V configurable 1 x RS232 / RS422 / RS485, each with 5V configurable Digital Input: 8 x 24VDC Digital Output: 8 x 24VDC, 100mA (single) or 400mA (complete) loadable 1 x extension connector (RJ45) - 7 extension modules connectable 1 x miniPCI express slot 1 x USB 2.0 (external accessible)	• —	• Optional
Ext. Monitor port	1 x HDMI 1.4a	•	•
Display	15": LED TFT, 4:3, 1024 x 768 pixel, brightness ≤ 400 cd/m² 19": LED TFT, 5:4, 1280 x 1024 pixel, brightness ≥ 350 cd/m² 24": LED TFT, 16:9, 1920 x 1080 pixel, brightness ≤ 300 cd/m²	• • •	• • •
Touch	Glass, resistive	•	•
RAID system	RAID1 configuration (mirrored system, quick release cartridge for two SSD's and second 2.5" SSD, min. 64 GB necessary, needs miniPCI express slot)	— ⁽¹⁾	Optional ⁽²⁾
WiFi	WLAN Client Interface (802.11 a/b/g/n)	— / •	Optional
User identification	RFID reader 13,56 MHz and 125 kHz LEGIC reader with ID badge holder Fingerprint reader Mifare reader Euchner reader Euchner electronic key system EKS (available on demand)	• • • • • •	• Optional Optional Optional Optional Optional
Lock	Rittal standard	•	•
Power supply	100 – 240 VAC (Phoenix plug) NOTE: No powercable is included in delivery.	•	•
Power rating	Max. 70W	•	•
Current rating	Max. 1A	•	•
Mounting	Adapter console Rittal CP 60 (holder for mounting bracket included)	•	•
Housing	Aluminum	•	•
Protection class	HLT15Q & HLT19Q -> IP44; HLT24Q -> IP42 (regarding EN 60529)	•	•
Operating system	Windows Embedded Standard 7: 64 Bit Windows 7 Pro: 32 Bit / 64 Bit Windows Embedded Standard 7: 32 Bit / 64 Bit	• — —	Optional Optional Optional
Size / Weight	15": 484 x 368 x 70 mm / 12 kg / 26.5 lb (without options, weight of configured options to be added) 19": 583 x 434 x 70 mm / 15 kg / 33.0 lb (without options, weight of configured options to be added) 24": 732 x 434 x 70 mm / 21 kg / 46.3 lb (without options, weight of configured options to be added)	• • •	• • •

(1) Standard RAID upgrade kit is with 128 GB SSD size only

(2) RAID upgrade kit is with the customer specified SSD size

(3) Available with WiFi

NOTE: For individual configurations please contact your local sales representative.

SINGLE QUALITY SOLUTION

The Single Quality Solution (SQS) is an error proofing software that helps achieving zero defects and reducing cost of re-work, scrap or warranty claims.

In combination with the industrial PC HLTQ it guides operators step by step through the assembly process.

The software ensures that all fasteners are torqued with the appropriate tool, the correct program, and the right socket to improve product quality and eliminate waste of material.

The data collection feature records the results of all assembly tasks for traceability purposes.

The integrated configurator has a user-friendly interface that does not require programming skills to set up and configure new products and processes.



Software	Ordering No.	
Single Quality Solution	License for 1 station	8434 2380 00



Operator guidance



Configurator

FUNCTIONS



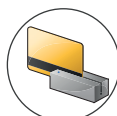
Tool interlock

- Enables and disables DC tools and wrenches via the controller
- Automatic program or job selection



Visual operator guidance

- Step-by-step visual operator guidance
- Guarantees that everything is done right the first time, every single time



User access control

- Prevents unauthorized system access
- Enforces user roles and privileges



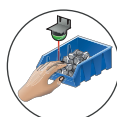
Part verification and documentation

- Identifies parts by means of serial numbers or product IDs
- Ensures the correct parts are being used to build a product



Digital I/O capability

- Enables easy connectivity of external I/O devices, Eliminating the need for a PLC



Basic pick-to-light/pick-by-light

- Visually guides operators in picking parts from bins
- Based on digital IO capability



Data collection

- Traceability of all assembly actions (torque, parts, digital I/O, manual confirmation) and missed tasks

CONNECTIVITY

In combination with the Atlas Copco Single Quality Solution software the HLTQ series visualizes and controls your entire assembly process on the shop floor.

