



# ***MTF6000*** ***SMART,*** ***CONNECTED*** ***& EFFICIENT***

Version: 1.0

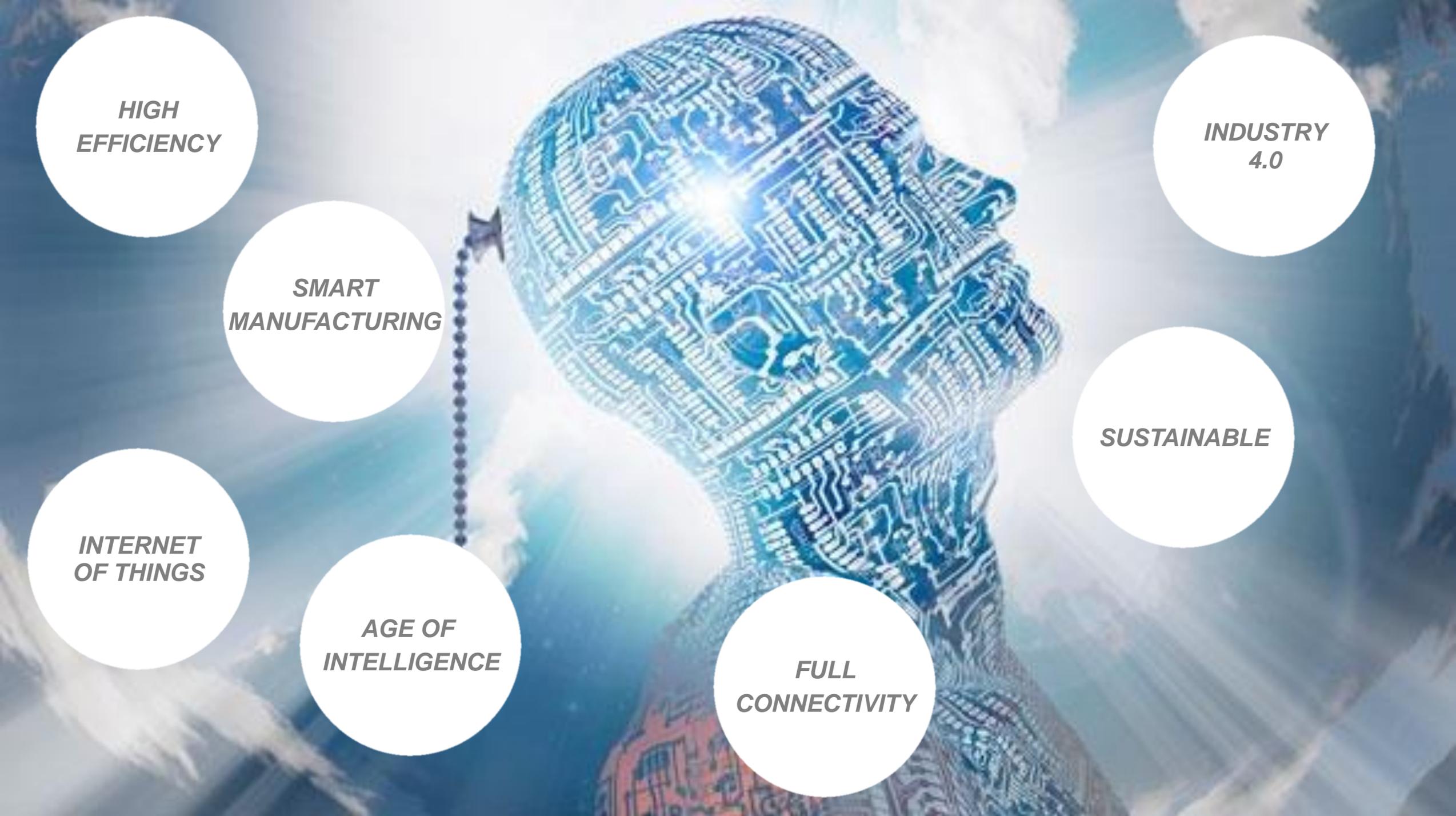


## ***COMMITTED TO SUSTAINABLE PRODUCTIVITY***

We stand by our responsibilities towards our customers, towards the environment and the people around us.

We make performance stand the test of time. This is what we call – Sustainable Productivity.

***WHAT THE INDUSTRY  
SAYS ABOUT THE  
FUTURE OF  
MANUFACTURING?***



**HIGH  
EFFICIENCY**

**SMART  
MANUFACTURING**

**INTERNET  
OF THINGS**

**AGE OF  
INTELLIGENCE**

**FULL  
CONNECTIVITY**

**INDUSTRY  
4.0**

**SUSTAINABLE**

# HOW ATLAS COPCO SOLUTIONS CAN HELP?



Zero Fault Assembly



Flexible Solutions



Automation Ready  
Solutions



Fully Connected and  
Integrated Solutions



Smart and Intelligent  
Screwdrivers



Provide Full Data  
Analysis



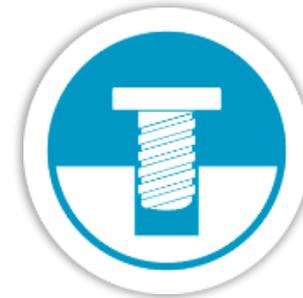
# SMART



## CONTINUOUS IMPROVEMENT



**TORQUE SEATING  
MONITORING**



**SEATING CONTROL  
STRATEGY**



**GRAPH ANALYSIS**

- **MOST INNOVATIVE AND UNIQUE TIGHTENING STRATEGIES**
- **SMARTEST TIGHTENING METHODS IN THE MARKET**
- **PROCESS ANALYSIS AND OPTIMIZATION**

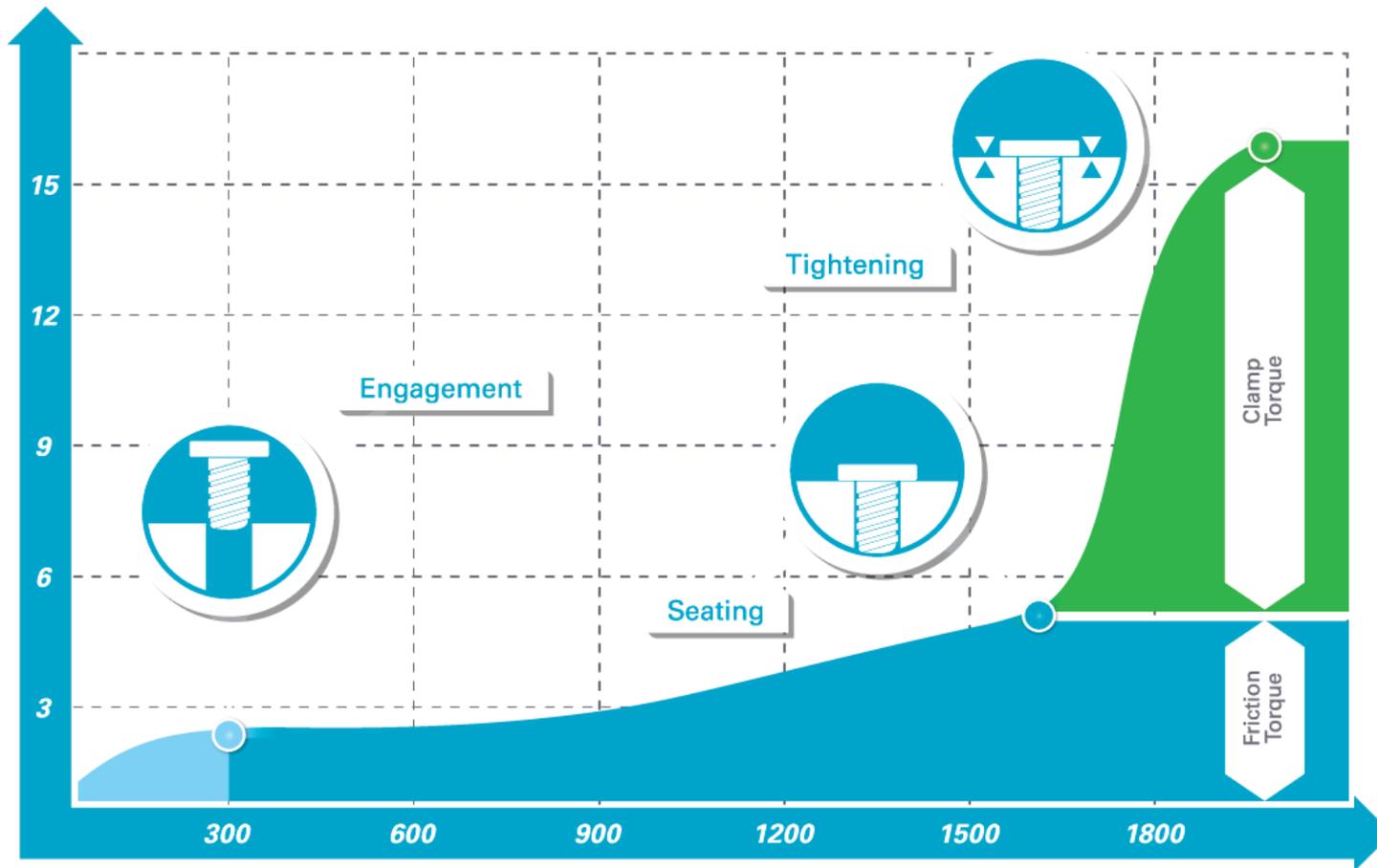


**TORQUE SEATING  
MONITORING**



**MTF 6000**  
**SMART, CONNECTED & EFFICIENT**

# MTF6000 – TORQUE SEATING MONITORING



Secures Target Torque

Clamp Torque Monitoring

Seating Point Detection

Eliminates Floating Screws

Maximum Tightening Quality

HIGH TORQUE ACCURACY

SECURES CLAMPING TORQUE

ELIMINATES TIGHTENING ERRORS

SMART & UNIQUE TIGHTENING TECHNOLOGY



## TRANSPARENCY & ACCESSIBILITY



**REMOTE  
PROGRAMMING**



**TN8  
REPORTING**



**MULTI  
COMMUNICATION**

- **QUICK REMOTE ACCESS REDUCING DOWN TIME & SETUP TIME**
- **TRACEABILITY, EASY ERROR DETECTION AND FULL PROCESS CONTROL**
- **EASY INTEGRATION WITH ANY SYSTEM**





**TN8**  
**REPORTING**



**MTF 6000**  
**SMART, CONNECTED & EFFICIENT**

# MTF6000 – TOOLSNET 8 REPORTING



**FULL  
PROCESS  
CONTROL**

**TRACEABILITY**

**REDUCE  
COSTS**

**FULL DATA STORAGE & CONTROL**

**Tightening Results & Graphs**

**Alarms & Errors Reports**

**Tools & Process Information**

**Graph Analysis**

**Multiple & Detailed Report**

**Process Statistics**

**NETWORK**





# **EFFICIENT**



## **PRODUCTIVITY AND FLEXIBILITY**



**MULTIPLE TORQUE PROGRAMS**



**MULTI STEP TIGHTENING**



**TIGHTENING STRATEGIES**

- **MINIMIZE AND ELIMINATES SETUPS**
- **REDUCE CYCLE TIME WITH MAXIMUM QUALITY**
- **MULTIPLE RESOURCES FOR ANY TYPE OF SCREWED JOINT**

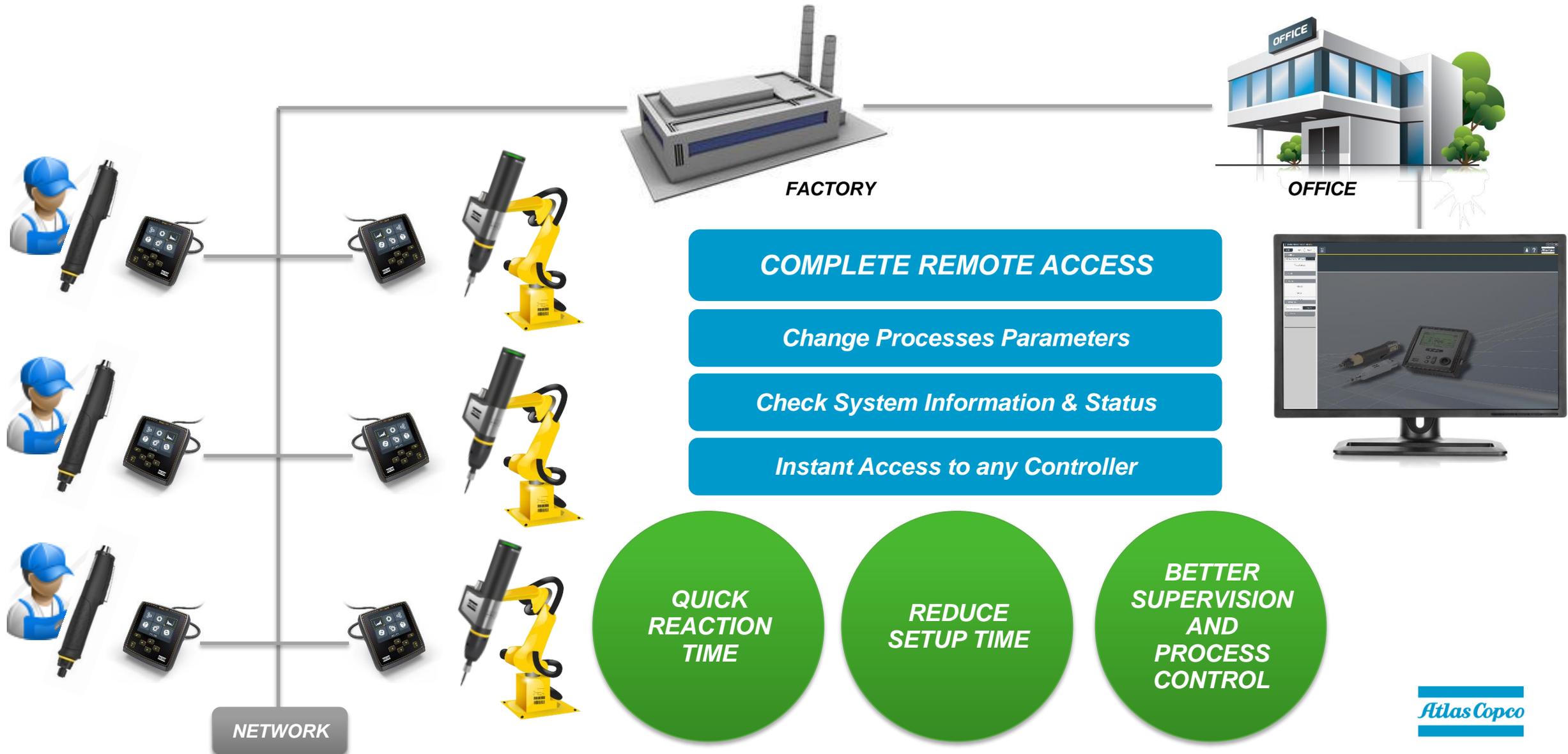


**REMOTE  
PROGRAMMING**



**MTF 6000**  
**SMART, CONNECTED & EFFICIENT**

# MTF6000 – REMOTE PROGRAMMING





# ADVANCED FEATURES

## QUALITY AND PROCESS CONTROL



**HIGH  
TORQUE  
ACCURACY**



**ANGLE  
MONITORING  
& CONTROL**



**BATCH  
SEQUENCE**

- **TORQUE CONSISTENCY AT EVERY JOINT**
- **DETECTION OF COMMON TIGHTENING ERRORS**
- **WORKFLOW CONTROL AND PROCESS ROBUSTNESS**





**BATCH SEQUENCE**



**MTF 6000**  
**SMART, CONNECTED & EFFICIENT**

# MTF6000 – BATCH SEQUENCE

**WORKFLOW CONTROL**

**ELIMINATES OPERATION ERRORS**

**QUALITY ASSURANCE**



*Workstation*

**No Batch Sequence Activated**

Waiting for new scan



**WORKFLOW CONTROL**

*Configurable workflow sequence*

*Operator guidance*

*Integration with external systems*

*Rejection and repair assistance*

*Detailed data reporting*

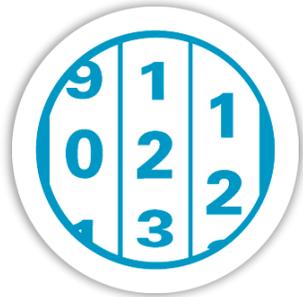


**EASY TO USE**

**OPERATOR FRIENDLY**



**OPERATOR  
FEEDBACK**



**BATCH  
COUNT**



**AUTO-SET**

- **IMMEDIATE FEEDBACK AND ERROR DETECTION**
- **ELIMINATES AND REDUCES MISSING SCREWS ERRORS**
- **SIMPLE AND EASY TO SETUP THE SYSTEM**



# MTF6000

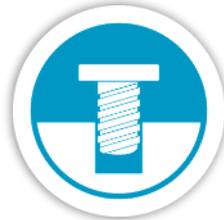
## Features & Functionalities



**MULTIPLE TORQUE PROGRAMS**



**ANGLE MONITORING & CONTROL**



**SEATING CONTROL STRATEGY**



**OPERATOR FEEDBACK**



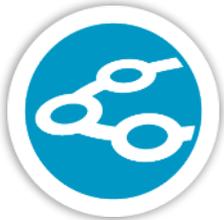
**COMPACT & LIGHTWEIGHT**



**TORQUE SEATING MONITORING**



**BIT SLIP DETECTION**



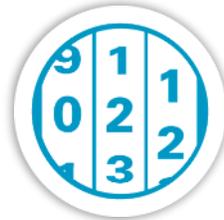
**MULTI STEP TIGHTENING**



**HIGH TORQUE ACCURACY**



**GRAPHIC DATA & ANALYSIS**



**BATCH COUNT**



**EASY INSTALLATION**



**TN8 REPORTING**



**REMOTE PROGRAMMING**



**TIGHTENING STRATEGIES**



**ERROR PROOFING POSSIBILITIES**



**DATA REPORTING**



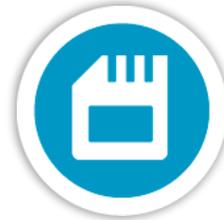
**QUICK SET**



**MULTI COMMUNICATION**



**BATCH SEQUENCE**



**DATA MEMORY**



**ONE CONTROLLER,  
UNLIMITED POSSIBILITIES**

# MTF6000

**One Controller – Unlimited Possibilities**



Software  
**ToolsTalk MT**



Controller  
**MTF6000**



**Workstation Process**



Handheld  
Current Control  
**ETD M ABL V2**



Fixtured  
Current Control  
**QMC**



# MTF6000

## One Controller – Full Communication & Integration Capabilities

Serial & I/Os



Ethernet



ToolsTalk MT



TN8



Automation



Accessories



Smart Jigs & Sensors



USB Drive



Bar Code Reader



RF ID Reader



# MTF 6000

## IAM Functionality Levels



Quality Tightening

Joint Control

Error Proofing

**Workstation**

- ✓ STAND ALONE SOLUTION
- ✓ BASIC TIGHTENING STRATEGIES LIMITED TO 5 STEPS
- ✓ ERROR PROOFING WITH JIGS AND SENSORS, VIA I/OS
- ✓ AUTOMATION INTEGRATION USING I/OS ONLY
- ✓ BAR CODE SCANNING FOR PSETS/BATCH SEQUENCE SELECTION
- ✓ WORKFLOW CONTROL USING BATCH SEQUENCE



Smart Tightening

Process Control

Full Traceability

**Process**

- ✓ FULLY CONNECTED SOLUTION
- ✓ DATA REPORTING AND MANAGEMENT VIA TN8
- ✓ SMART TIGHTENING STRATEGIES UP TO 10 STEPS
- ✓ SCS AND TSM TIGHTENING STRATEGIES
- ✓ ERROR PROOFING WITH JIGS AND SENSORS, VIA I/OS
- ✓ AUTOMATION INTEGRATION USING I/OS
- ✓ BAR CODE SCANNING FOR DATA REPORTING (TN8) AND SELECTION OF PSETS/BATCH SEQUENCE
- ✓ WORKFLOW CONTROL USING BATCH SEQUENCE



DIFFERENT FUNCTIONALITIES LEVELS CUSTOMIZED FOR YOUR NEEDS...

# MTF 6000

## IAM Functionality Levels

### Tightening

	 Workstation	 Process
Number of Psets	50	150
Multi Step Tightening	•	•
Number of Tightening Steps	5	10
Number of Batch Sequence	20	50
Batch Sequence - Batch Count	250	250
Batch Sequence - Steps	30	30
Number of Identifiers	20	50
Seating Control Strategy (SCS)	-	•
Torque Seating Monitoring (TSM)	-	•
Bit Slip Detection	-	•



# MTF 6000

## IAM Functionality Levels

### Data Storage & Analysis

Detailed Data Results Stored in the Controller

•

•

Results - Data Storage

100.000

100.000

Graphs - Data Storage

-

1.000

Download Results Data via USB Memory

•

•

Download Graphs Data via USB Memory

-

•

Real-time Trace Analysis - ToolsTalk Analysis

•

•

Save Graphs via ToolsTalk Analysis

•

•

Auto Save Graph via ToolsTak Analysis (USB Only)

•

•

ToolsNet 8 Data Reporting

-

•



Workstation



Process



# MTF 6000

## IAM Functionality Levels



Workstation



Process



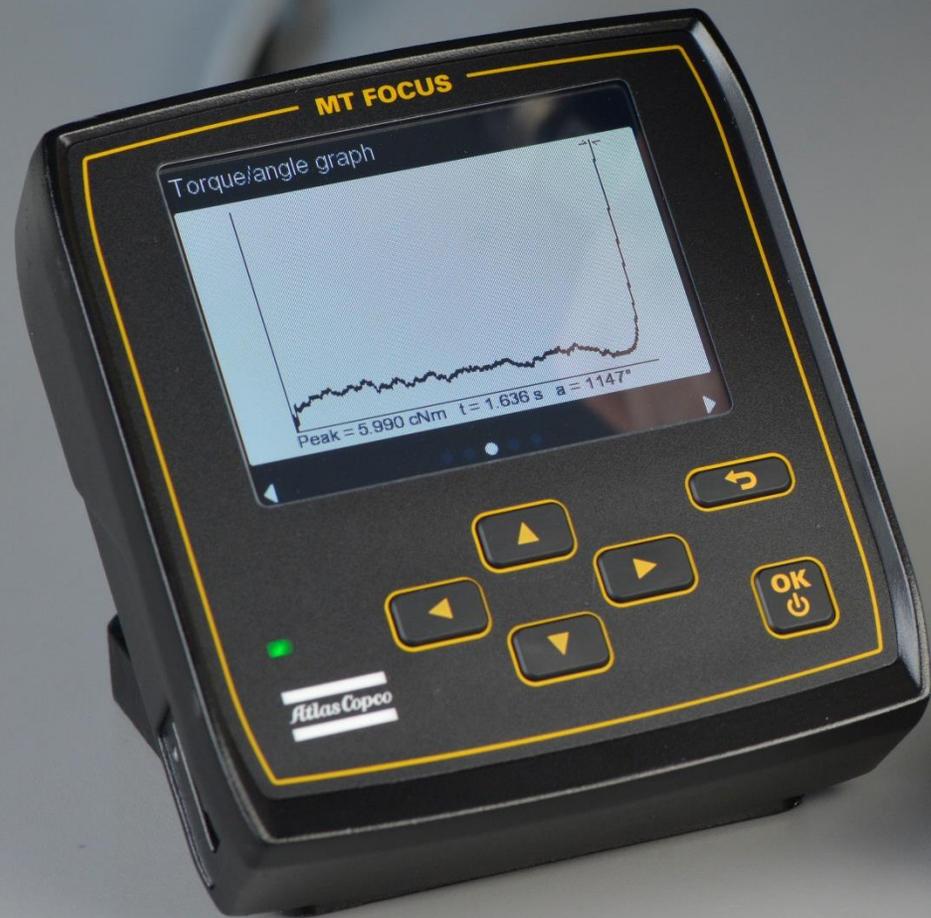
### Communication

Configurable Digital I/Os	•	•
Number of Digital I/Os (in/out)	(12/8)	(12/8)
Direct Communication with ToolsNet 8	-	•

### Others

Barcode Reader	•	•
Quick Program	•	•
Password Protection	•	•
Customized 3 Levels of Password Protection	•	•
Remote Configuration via Ethernet	-	•





**MTF6000  
EFFICIENCY,  
QUALITY AND  
COST  
REDUCTIONS  
TO YOUR  
PROCESS**

***COMMITTED TO  
SUSTAINABLE PRODUCTIVITY.***



*Atlas Copco*

