Tensor IxB

Welcome to the
Smart Factory revolution

Contact us for a quote
or a demonstration

The next generation of assembly tools

The Tensor IxB tool family is ready to be integrated directly into your production system.

The tools can be managed in several different ways, in combination with our physical controllers PF6000 and PF8, using the integrated controller without the need for any intermediate controller box, or connected to our server-based controller software environment, ToolsControl.

These three different ways of managing the Tensor IxB supports all types of assembly lines and enables a transformation toward a new, smart, and flexible way of manufacturing.

x2.5 — Faster station installation

- 50% — Rebalancing time

+ 30% — Faster tightening

Tensor ITB-P
Integrated controller Tensor Battery tool - Pistol

Torque range : 1.2 - 12 Nm

Tensor ITB-A
Integrated controller Tensor Battery tool - Angle

Torque range : 1 - 200 Nm

Tensor ICB
Integrated controller Compact Battery tool

Torque range : 1.4 - 20 Nm

Ease of use

The Tensor IxB platform is user-friendly and doesn't require extra training to get started. The tools are created to give operators constant visibility of production via an intuitive interface and workstation display. In addition, the systems are designed to enable universal access through web browsers with a familiar interface into other Atlas Copco systems, saving time on training and implementation.

Accessibility & ergonomics

The Tensor IxB platform offers a revolutionary approach to working in applications that carry inherent ergonomic risks. We have spent significant time researching and developing a tool family that makes your operators lives easier and safer on the line.

Easy line adjustments

The Tensor IxB platform is quick to install, easy to rebalance, and simple to maintain. In addition, the integrated controller makes new product introduction faster and line rebalancing easier with complete process control of the station and real-time integration to your production system.

Quality of the joint

The Tensor IxB platform brings production quality to all-new levels. Serving as the most precise cordless tool family in our product portfolio, the Tensor IxB platform is engineered to drive an increase in production quality, along with improved levels of accuracy and control. The integrated controller software gives access to more in-depth data, designed to help investigate and solve tightening issues easier and faster.
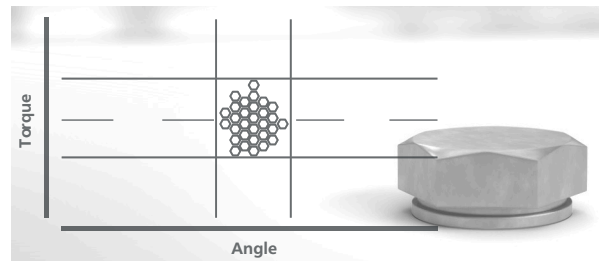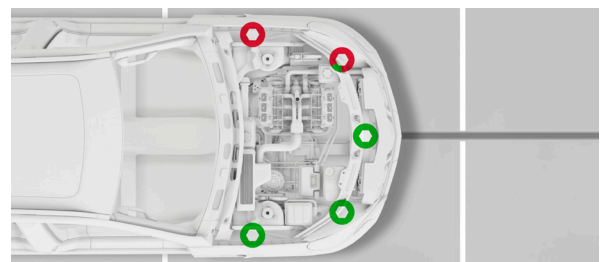

Continuous production

The Tensor IxB platform improves uptime in challenging connectivity environments. With Tensor IxB tools, continuous production with maintained process control of the workstation is made possible. Furthermore, radio shadows are no longer an issue, as tools can be managed without a wireless connection, preventing unexpected production halts.

Productivity

The Tensor IxB platform enables a stable, high performance production, along with true operator freedom. Traditional battery tool performance can limit productivity rates compared to cabled tools. Tensor IxB tools are engineered to allow for cordless freedom as they simultaneously providing your operators the productivity of a traditional cabled tool.

The Tensor IxB family

Smart. Connected. Scalable.

The Tensor IxB family are handheld and cordless, designed to be lighter, faster, and smaller than previous generation tools. We provide a wide range of tool models, all compatible with our physical controllers PF6000 and PF8, the integrated controller, and ToolsControl. The IxB family is adaptable to your needs with a variety of batteries and accessories.

The Tensor IxB family consist of mainly three tool models: the Tensor ITB-A, the Tensor ITB-P and the Tensor ICB.
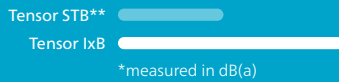
Installation – up to 2.5x faster

Tensor STB** — 24.40 min
Tensor IxB — 9.44 min

Software update – up to 70x times faster*

Tensor STB** — 710 min
Tensor IxB — 10 min

*per 100 tools

Continuous production

Connectivity strength – at least 2x better signal*

Tensor STB**
Tensor IxB

*measured in dB(a)

Number of batch sequences in radio shadow

Tensor STB** — 1 batch
Tensor IxB — 99 batches

Accuracy

Tensor STB** — 5%
Tensor IxB — 3.5%

**previous generation of battery tools used with a physical controller box

Tensor ITB-P

Productivity, quality and user experience to the next level

Designed with ergonomic excellence, the ITB-P increases productivity during prolonged use through multiple configurable operator feedback: colored front LED, vibrator and embedded display.

ITB-P is key for streamlining your processes and enhancing your overall operations thanks to unrivaled accuracy to secure your most challenging joints.

- Up to 2 times faster than STB

- Operator feedback from the integrated RHMI display

- Reduce operator influence on the angle of the tightening with TrueAngle, an advanced tightening strategy that utilizes a built-in gyroscope

- Optimum operator feedback with vibrator and color front lights

Accessories

Operator feedback

Front color LED

Haptic feedback

Rundown booster

Tensor ITB-A / ITB-S

Fast and precise tightening

The Tensor ITB-A / ITB-S, with its wide range of models, is a truly productive cordless nutrunner with a torque range of 1–200 Nm. By integrating the controller intelligence into the tool, the freedom and flexibility is in the hands of the factory operator.

- Up to 30% faster tightening than Tensor STB

- Wide range of models and tool accessories

- Reduce operator influence on the angle of the tightening with TrueAngle, an advanced tightening strategy that utilizes a built-in gyroscope

Tightening speed – up to 30% faster*

Tensor STB 15 Nm	11 seconds
Tensor ICB 15 Nm	8.23 seconds

*five tightenings on max speed

Straight head, 90 or, 110 degrees angle head

Rotation socket

Accessories

Operator feedback

Built-in gyroscope

Rundown booster

18 V

Tensor ICB-A

Accessibility in cramped spaces

The Tensor ICB, a small, ergonomic nutrunner, is specifically designed for space-limited applications.
It can be operated with one hand, and both the trigger and the angle head can be adjusted to fit the need of the application and the operator.

- 360° rotatable angle head and trigger

- 30% lighter and 30% shorter than the previous generation of battery tools

- Operator feedback from the integrated eHMI display

- Reduce operator influence on the angle of the tightening with TrueAngle, an advanced tightening strategy that utilizes a built-in gyroscope

90 or 110 degrees angle head

Rotatable angle head (optional)

Rotatable trigger

Operator feedback

Rundown booster

14 V

Accessibility & ergonomics

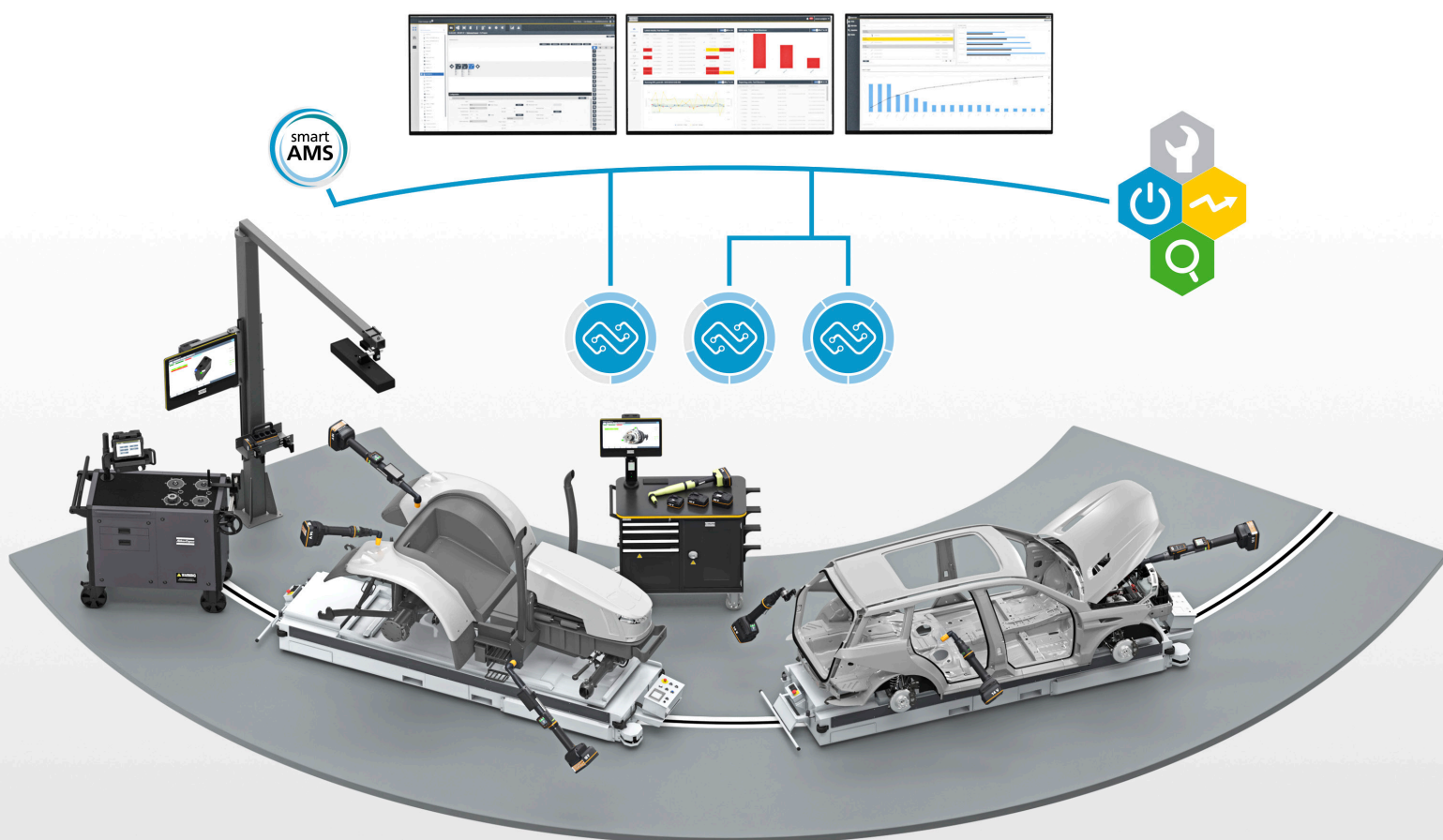| Weight incl. battery – 30% lighter		Length – 31% shorter		One hand to operate	
Tensor STB 15 Nm	2.15 kg	Tensor STB 15 Nm	435.4 mm	Tensor STB 15 Nm	
Tensor ICB 15 Nm	1.57 kg	Tensor ICB 15 Nm	300.3 mm	Tensor ICB 15 Nm	

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Easy integration into the Atlas Copco Ecosystem

The Tensor IxB family of tools are the first to be integrated directly into the Atlas Copco Ecosystem through our 3 controller deployment solutions. All tightening processes can be managed via the integrated controller, our physical controller PF6000 and PF8, or via our server-based software environment, ToolsControl. The Tensor IxB tools, together with the Atlas Copco Ecosystem, can bring a significant difference to your plant.

The Tensor IxB platform enables major assembly station improvements and reduces costs associated with assemby tools. With Tensor IxB tools, you can increase productivity, ergonomics, and flexibility – three very important elements to consider in today's manufacturing environment of frequent change.

The Smart Integrated Ecosystem offers a wide range of solutions, including visualization equipment, positioning solutions, error-proofing accessories, and bolt positioning software. In addition, the Atlas Copco Ecosystem offers station control and operator guidance solutions through Smart AMS and SQS software solutions, along with a complete service portfolio that supports your plant from start up all the way to repair and optimization.

This is Smart Integrated Assembly in reality; it simplifies connections, reduces installations, and supports connectivity, visualization, error proofing, and data – all in one package, linked together.

Atlas Copco 5G Connect
Connectivity for true production flexibility

Smart factories rely on seamless data collection from the assembly line to enhance process control, improve quality assurance, and drive operational excellence. Transform your manufacturing process with 5G-connected assembly solutions that provide ultra-reliable connectivity and unmatched mobility on the factory floor.

The Atlas Copco 5G Connect module unlocks new possibilities for the IxB family of tools, transforming them into the world´s first 5G connected nutrunners. This cutting-edge front accessory seamlessly integrates with the tool and easily connects to the private 5G network. It completely transforms operator mobility and flexibility, giving them the freedom to move within the station and along the line, work inside or behind large structures or even outdoors—all while enjoying reliable, uninterrupted, low-latency connectivity.

Why Choose 5G Connect by Atlas Copco?

Experience the benefits of 5G in your manufacturing environment

True Mobility
Seamless roaming across your facility without interruptions

Low Latency
Real-time responsiveness for critical production processes

Extensive Coverage
Reliable connectivity throughout large spaces, indoors and outdoors simplifies installation complexity and reduces costs

Scalability
Easily expand and connect more tools without compromising performance

Enhanced Security
Robust authentication and encryption over a licensed private 5G network

Licensed Frequency
Ensures private, reliable, low-interference connectivity

Ordering numbers

Below, you will find a selection of Tensor IxB tool models and accessories:

View the full Tensor IxB range and read more about each product by scanning the QR codes below

Model	Torque range [Nm]	Speed [r/min]	Length [mm]	Ordering number
ITB-A31 (90° Angle nutrunner)				
ITB-A31-05-10	1-5	2972	419.6	8436 0030 05
ITB-A31-10-10	3-12	1270	419.6	8436 0030 10
ITB-A31-15-10	5-15	944	419.6	8436 0030 15
ITB-A31-20-10	5-22	681	453.5	8436 0030 20
ITB-A31-30-10	7-30	480	455.5	8436 0030 30
ITB-A61 (90° Angle nutrunner)				
ITB-A61-25-10	6-28	1294	478	8436 0060 25
ITB-A61-30-10	7-35	977	479.5	8436 0060 30
ITB-A61-40-10	8-40	727	491.5	8436 0060 40
ITB-A61-50-10	10-55	587	491.5	8436 0060 50
ITB-A61-70-13	15-80	424	503.3	8436 0060 70
ITB-A61-100-13	20-100	280	540.3	8436 0060 10
ITB-A61-150-13	30-160	195	576.5	8436 0060 15
ITB-A61-180-13	35-180	171	576	8436 0060 18
ITB-A61-200-20	40-200	171	578	8436 0060 20
ITB-S31 (Straight nutrunner)				
ITB-S31-05-10	1-5	3529	426.6	8436 0130 05
ITB-S31-10-10	3-10	1508	426.6	8436 0130 10
ITB-S61 (Straight nutrunner)				
ITB-S61-15-10	5-16	2000	477	8436 0161 15
ITB-S61-20-10	5-22	1511	476.7	8436 0161 20
ITB-S61-30-10	7-35	907	468.2	8436 0161 30
ITB-P31 (Pistol grip nutrunner)				
ITB-P31-06-10	1.2-6	1990	209.4	8436 0130 07
ITB-P31-12-10	2.4-12	1480	209.4	8436 0130 13
ICB-A21 (Compact 90° angle nutrunner)				
ICB-A21-07-06	1.4-7	1205	289.6	8436 0020 07
ICB-A21-15-10	4-15	755	300.3	8436 0020 15
ICB-A21-20-10	5-20	580	306.8	8436 0020 20
ICB-A21 (Compact 110° angle nutrunner)				
ICB-A21-15-10-Z	4-15	755	301.8	8436 0016 15
ICB-A21-07-06-Z	1.8-7	1015	301.8	8436 0020 05

 ITB-A

 ITB-P

 ITB-S

 ICB-A

Power source solutions	Ordering number
Flex charger	4211 6083 84
Flex charger daisy chain cable	4211 6083 60
14V battery	4211 6130 02
18V battery	4211 6030 85
36V battery	4211 6030 86
Config power adaptor	8438 6061 00
Cable Power supply* (only for ICB-A, ITB-P & ITB-A)	8432 0840 06

*up to 140 Nm

Software – electronic delivery	Ordering number
Integrated Controller License	8436 1988 80
Station Control Virtual Station	8436 1960 30
Critical Control Virtual Station	8436 1960 40
Process Control Virtual Station	8436 1960 50
TrueAngle	8436 1910 03
Open Protocol Extension	8436 1950 20
Industrial Location Guidance – ILG	8436 1950 10

Wireless socket selector	Ordering number
Selector 6 M4	8433 0613 04
Selector 6 M8	8433 0613 08
Selector 6 M8 Bit	8433 0613 09

ITB-A tool accessories**	Ordering number
Accessory front lower position	
Dual trigger for open end 135°	8436 6199 20
Adjustable headlights	8436 6199 40
Upper ring (needed for front lower position accessories)	8436 6199 50
Accessory front upper position	
Dual trigger for open end	8436 6199 10
Front button	8436 6199 30
Barcode scanner	8436 6199 00
Scanner and tag – 2-in-1 (2D) Ubisense D4	8433 5050 10
ILM Tag	8436 6776 37
5G Connect	8436 0190 01
Lower ring (needed for front upper position accessories)	8436 6199 60
Accessory back position	
eHMI ITB	8436 6199 73

****Verify the accessory is compatible with specific IxB models**

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