Freedom³
Torque/Angle Digital Wrench
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Freedom³ wrench, equipped with torque transducer and gyroscope, is an advanced tool for production tightening, joint analysis and quality control test.

- Production Tightening:
  - Fastening torque driven
  - Fastening torque/angle
  - Fastening yield
  - Fastening yield/angle

- Joint Analysis

- Quality Control:
  - Smart breakaway
  - Breakaway peak
  - Breakaway angle
  - Loosen/tighten
  - Minimum torque
  - Loose torque

- Integrated Barcode Scanner

- Color Touchscreen Display

- Radio communication with external programs and databases:
  - VPG+
  - SQnet+
  - Custom applications

- Automatic tool recognition:
  - For tightening control and torque/angle correction

- Tool number and correction coefficients
Freedom³
Torque/Angle Digital Wrench

**Features**
- Quality control and joint analysis
- Tightening strategies
- Remote software programming
- Wide color touchscreen display
- Optional radio (WiFi, Bluetooth or 868 MHz)
- Automatic end-fitting tool recognition
- VIN (vehicle identification number) scan
- Torque/time and torque/angle traces
- Onboard trace analysis
- Statistical Process Control (Cp-Cpk, X/R charts)
- Sequential work out horizontal or vertical
- Digital signature
- Error codes management

**Benefits**
- Operator guidance
- Error proofed assembly/rework procedures
- Error proofed tightening
- Operator independent
- Full traceability with 1D or 2D barcode scanner
- Three operational modes: Lab, Quality and Production
- Supports many industry protocols

**Technical Data**
- Torque range for Freedom³ family: 1.5 N·m ÷ 1200 N·m
- Torque measurement accuracy: 0.5% of the reading
- Angle measurement accuracy: 1° over 360°
- Max angular speed: 300 °/s
- Memory capacity: 1000 tightening programs, 20000 results, 20000 curves
- Battery endurance: 9 hours

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Rechargeable Battery
Battery Charger
Charging Cradle

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www.scsconcept.com
### Freedom³

**Torque/Angle Digital Wrench**

<table>
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<th>Code</th>
<th>Model</th>
<th>Capacity</th>
<th>Drive</th>
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<th>L2</th>
<th>Weight (without end fitting)</th>
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### Accessories

- Tool recognition programing unit
- External battery charger for 1 battery with J21
- Case wood and aluminium for Freedom³ 15 - 100 Nm 60x26 h15 cm
- Case wood and aluminium for Freedom³ 200 - 400 Nm 84x26 h15 cm
- Case wood and aluminium for Freedom³ 600 Nm 115x26 h15 cm
- Case wood and aluminium for Freedom³ 800 - 1200 Nm 168x26 h15 cm
- USB cable
- Additional battery
- Rubber protection with display protection
- Rubber protection
- Plastic case for wrenches max 15 - 100 Nm 54x33 h11 cm
- Plastic case for wrenches max 200 - 300 Nm 78x25 h11 cm
- Plastic case for wrenches max 400 - 600 Nm 122x25 h11 cm

### Options

- Bluetooth module integrated
- Wi-Fi module integrated
- 868 MHz module integrated
- Barcode reader integrated
- 2D Barcode reader integrated
- Automatical recognition of the inserted socket
LAB
Laboratory

- Joint analysis
- Prototype
- Material studies
- Pre-series
- Onboard results analysis
- Onboard traces
- Results and traces analysis on PC with Explorer software

SPC
Quality Control

- Residual torque check on a production line
- Route and job management via software (SQnet+ or QS Torque)
- Wireless programming
- Data traceability
- VIN management

Test Strategies

- Joint analysis (LAB only)
- Breakaway peak
- Breakaway angle
- Smart breakaway
- Loosen/tighten
- Loose torque
- Minimum torque
PRW Production

- Production tightening with different strategies
- Programming via VPG+ (visual production guide)
- Wireless programming
- Data traceability
- VIN management

Tightening strategies

- Tightening torque
- Tightening torque and angle
- Tightening torque + angle
- Tightening to yield point
- Tightening to yield point + angle