

Freedom Quality	Designation	Wireless cradle	Capacity	Drive	L1	Weight
			N·m	mm	mm	kg
113 37 0015	Freedom ⁴ 15	197 13 0049: 15 N·m	1.5 - 15	9 x 12	364	1.0
113 37 0030	Freedom ⁴ 30	197 13 0049: 30 N·m	3 - 30	9 x 12	364	1.0
113 37 0050	Freedom ⁴ 50	197 13 0049: 50 N·m	5 - 50	9 x 12	364	1.0
113 37 0070	Freedom ⁴ 70	197 13 0050: 70 N·m	7 - 70	9 x 12	470.5	1.0
113 37 0100	Freedom ⁴ 100	197 13 0050: 100 N·m	10 - 100	9 x 12	470.5	1.0
113 37 0200	Freedom ⁴ 200	197 13 0051: 200 N·m	20 - 200	14 x 18	604.5	1.2
113 37 0300	Freedom ⁴ 300	197 13 0052: 300 N·m	30 - 300	14 x 18	754.5	1.2
113 37 0400	Freedom ⁴ 400	197 13 0053: 400 N·m	40 - 400	14 x 18	854.5	1.4
113 37 0600	Freedom ⁴ 600	197 13 0054: 600 N·m	60 - 600	14 x 18	1034.5	1.4
113 37 0800	Freedom ⁴ 800	197 13 0055: 800 N·m	80 - 800	22 x 28	1255	
113 37 1000	Freedom ⁴ 1000	197 13 0056: 1000 N·m	100 - 1000	Special	1470	
113 37 1200	Freedom ⁴ 1200	197 13 0063: 1200 N·m	120 - 1200	Special	1570	

Part Number	Designation
333 51 0017	Direct battery charger to connect with your USB cable
197 14 0046	1D Barcode reader integrated
197 14 0044	2D Barcode reader integrated
197 14 0029	External battery charger
323 19 0105	Rubber protection
313 11 0177	Rubber and display protection
323 19 0012	Display protection

Features

- Autonomy : up to 8 hours
- Torque accuracy : 0.5% of the read value
- Torque range : 10 to 100%
- Angle accuracy : +/-1° over 360°
- Memory 16 GB: >50 000 operations, traces and results
- Full quality control strategy following VDI/VDE 2645-3:2019
- SPC functionalities
- LAB functionalities



SCS Concept Group
Ph. +39 02 925 02 684
info@scsconcept.com
www.scsconcept.com

Freedom⁴ Quality - Ed. 1 - EN

Freedom⁴ Quality

Torque & angle wrench

Advance solution for quality
from 0 to 1 200 N·m

- Light, robust and accurate
- Automatic obstacle detection & incorrect hand position
- Full quality check strategy
- Self diagnostic solution
- High memory capacity

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Freedom⁴ Quality Solution



Freedom⁴ fulfil the evaluation methods conforming to VDI/VDE 2645-3:2019

- Peak value measurement
- Torque at angle of rotation
- Minimum after breakaway
- Intersection determination
- Gradient change

LAB

Laboratory

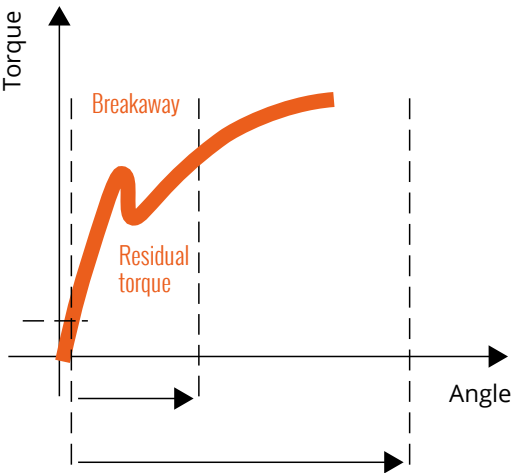
- ✓ Joint analysis
- ✓ Prototype
- ✓ Material studies
- ✓ Pre-series
- ✓ Onboard results analysis
- ✓ Onboard traces
- ✓ Results and traces analysis on PC with Explorer software

SPC

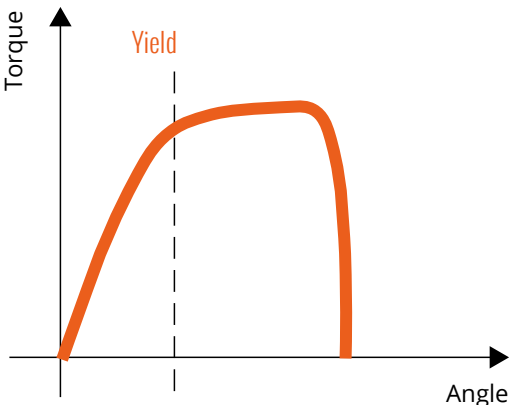
Quality control

- ✓ Residual torque check on a production line
- ✓ Route and job management via software (SQnet+ or QS torque)
- ✓ Onboard results analysis
- ✓ Data traceability
- ✓ VIN management
- ✓ Onboard traces
- ✓ Results, traces and statistic analysis on PC with SQNET + software

Smart breakaway



Joint analysis



Quality strategy

- Smart breakaway
- Breakaway peak
- Breakaway angle
- Loosen/tighten
- Minimum torque
- Loose torque
- Intersection determination

Route management



Statistic

Cm / Cmk e X/R charts

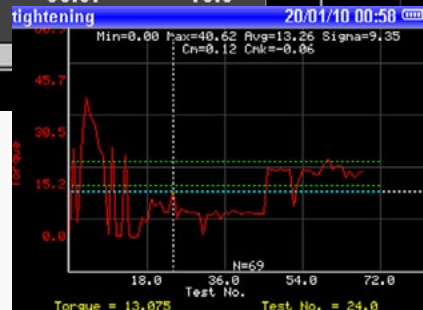
Cm/Cmk

No.	Torque	Angle	M
1	1.44	10.7	
2	25.74	4.8	
3	4.47	22.7	
4	30.49	12.4	
5	40.62	10.4	
6	35.37	15.9	
7			



T/A curve

X/R chart



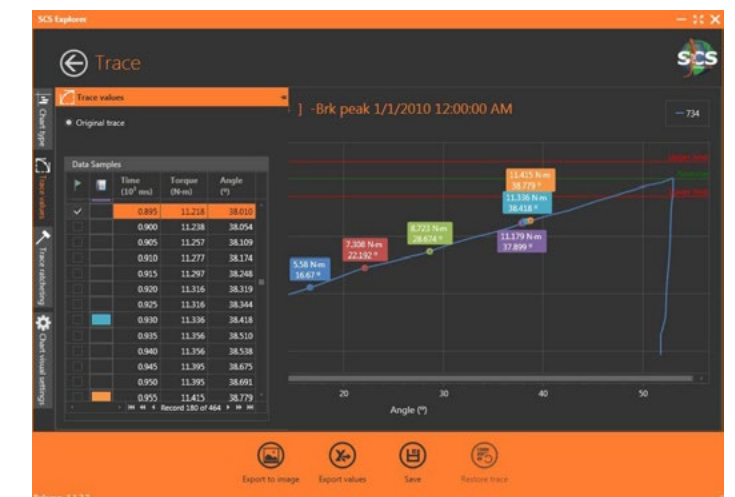


➤ Hand position detection to ensure correct operation

➤ Full quality control strategy following VDI/VDE 2645-3:2019

➤ SCS Explorer

- Test definitions
- Instrument programming
- Results & trace download
- Trace comparison
- Analytic function to find the right residual torque strategy



• Part number: 102 11 0025

➤ Quality process manager for production line

- Data collection
- Operation management
- Statistic analysis
- Process control management
- SPC management
- Route definition



➤ Obstacle detection “patented” eliminate damage of your parts and protect your wrench