Innovation for screw fastening

Smart Tools Category

➢ **Transducerized-KL-GTCS series**

➢ **Transducerized-KL-TCG series**

➢ **Current Control-KL-TCC series**

➢ **Clutch Type-KL-CTDS series**

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Transducerized
KL-GTCS with SGT-CS series

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Features:

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- Precise Torque/Angle control
- Premium Color Touch Panel
- Intuitive User Interface
- Real time Fastening data
- Fastening Graphic & Record
- I/O signal port can be customized

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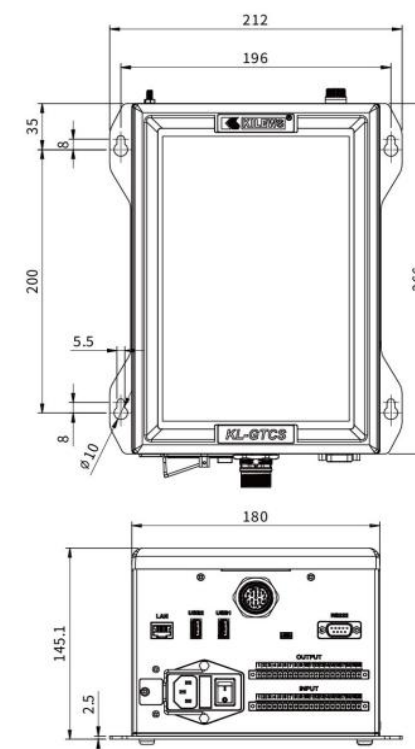# The spec of KL-GTCS controller

Specifications

Model	KL-GTCS
Input Voltage	AC 115V / 230V
Input Frequence	50 - 60Hz
Input Current	6.3A
Output Voltage	DC 40V
Output Current	Max 9A
power consumption	360W
External dimensions(mm)	266*180*145
Weight(g)	4080
Applicable Model	SGT-CS Series

External Dimension

Unit: mm

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SGT- CS/LCS/CST screwdriver

◆ **Inline type**

SGT-CS300 series: 0.1~3 N.m / 2000 r.p.m

SGT-CS500 series: 0.38~7 N.m / 1600 r.p.m

SGT-CS700 series: 1.5~25 N.m / 800 r.p.m

◆ **Angle type**

SGT-LCS500 series: 0.38~7 N.m / 1100 r.p.m

SGT-LCS700 series: 1.5~25 N.m / 600 r.p.m

◆ **Pistol type**

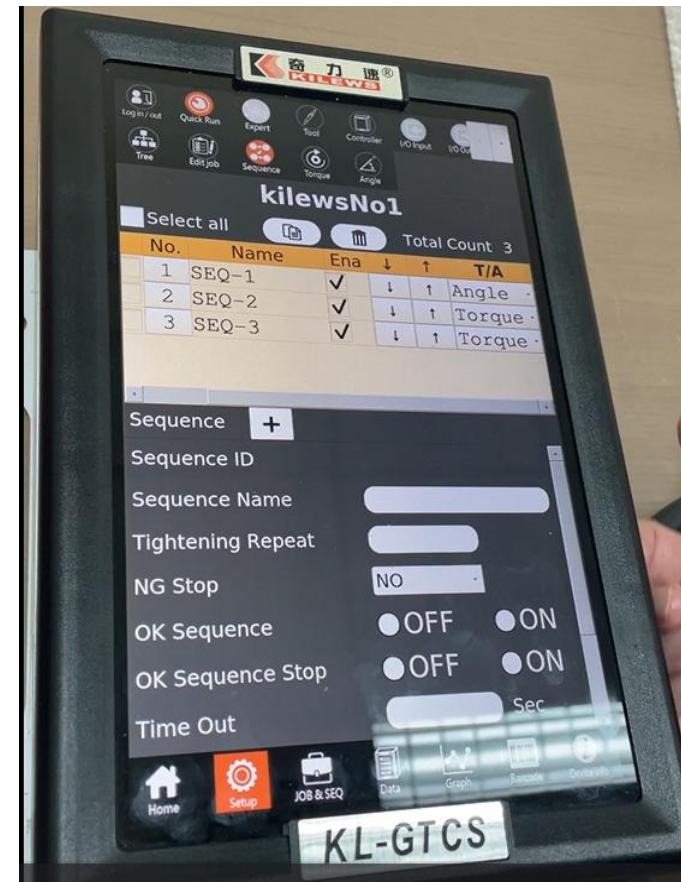SGT-CS300T series: 0.1~3 N.m / 2000 r.p.m

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1. Home page

Able to view about screw tightening and other relevant information in real-time on the home page.
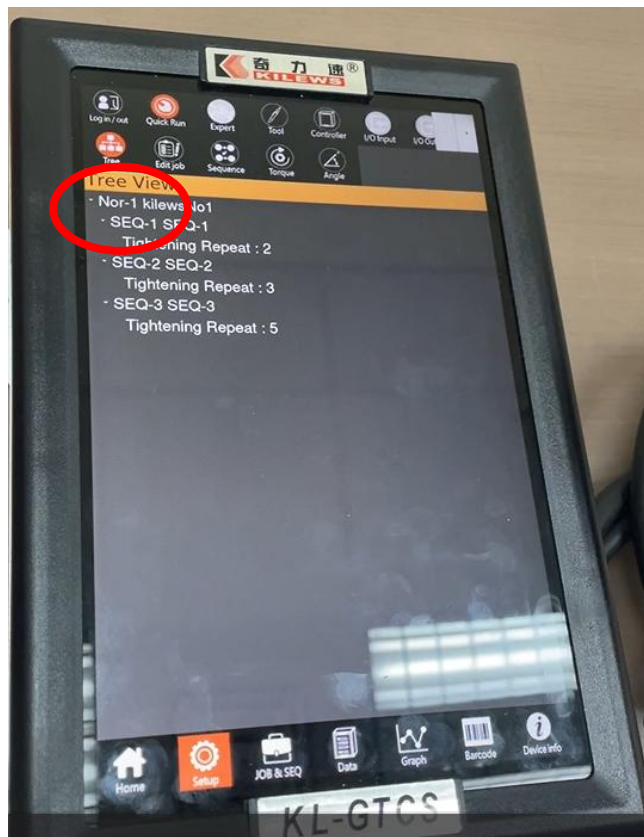

2. Setup page

On the setup page, the job and other related parameters can be set.
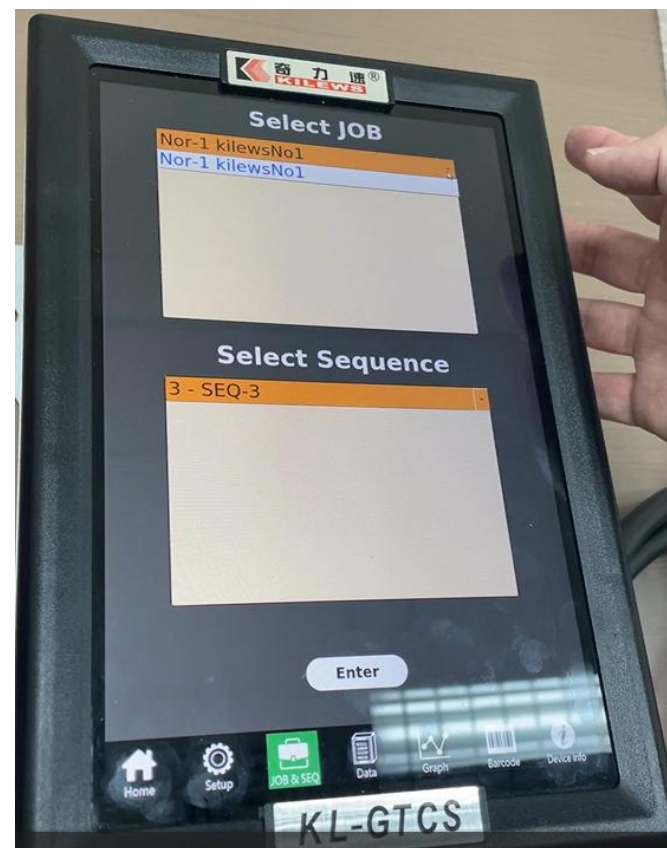
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Setup page

The Tree view on the setup page displays detailed configuration information for the fastening sequence of the job.
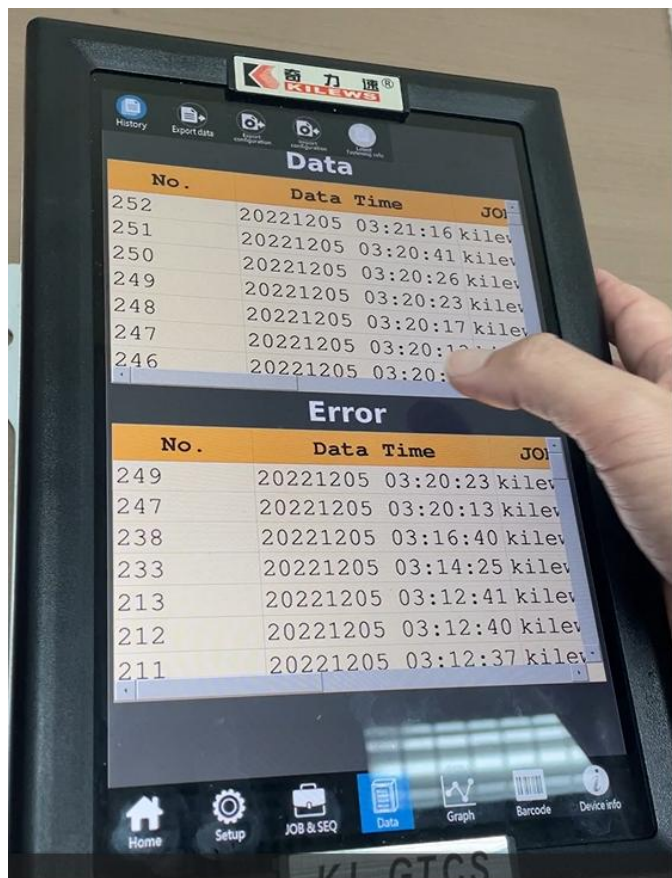

JOB & SEQ page

On the JOB & SEQ page, you can quickly switch jobs and sequences by clicks.

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Data page

On the Data page, you can view the history of past fastenings results.
Additionally, Errors part have a separate column list for record.

Graph page

The Graph page displays real-time fastening graphics.

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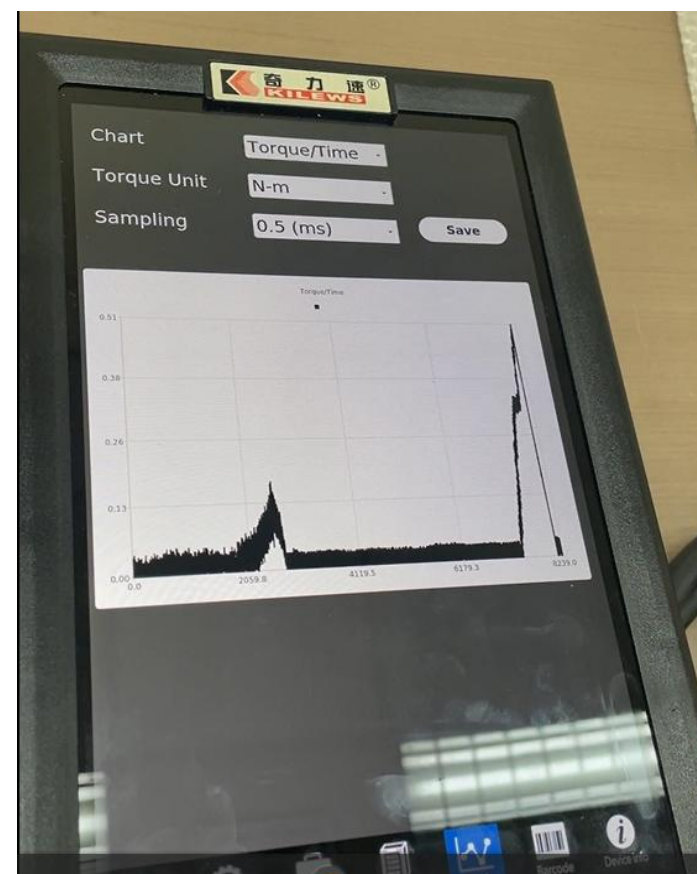
Barcode page

On the Barcode page, you can set the barcode for job switching.
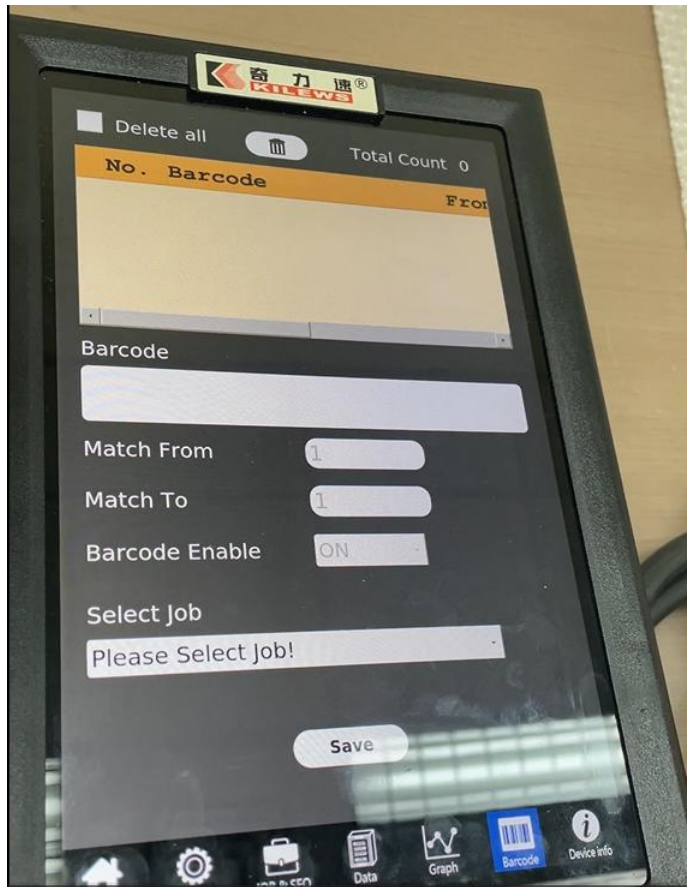
Device info page

On the Device info page, you can view detailed information about the controller and tool.

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Innovation for screw fastening

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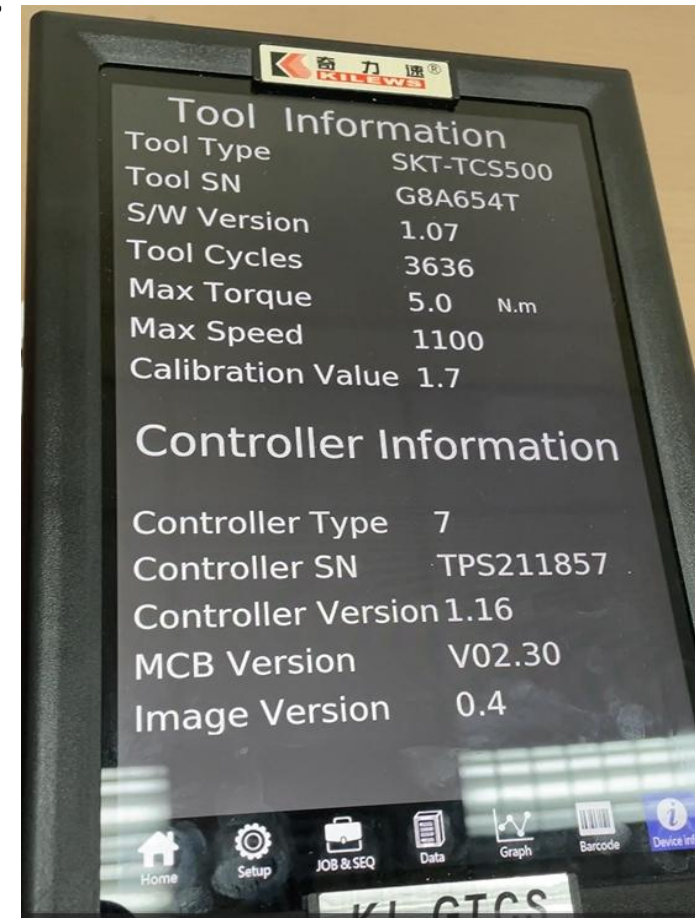
Transducerized

KL-TCG & KL-TCG-L

with SKT-CG & CGS & LCG & CGT Series

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The features

- Very attractive price
- Adopted high-precision torque transducer sensor
- Torque/ Thread Control
- Real time data monitoring and management
- Start mode: Lever/ Push/ Lever + Push
- Fastening graph presented through N-DAS PRO

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Version for KL-TCG

▶ Up to 7 groups of Job Switching via I/O signal for selection

▶ The difference between KL-TCG and KL-TCG-S1

I/O Signal	KL-TCG	KL-TCG-S1
7 groups of Job Switching via I/O signal		V
Start	V	
Reverse	V	
Disable	V	V
Confirm	V	V
Clear	V	V
Gate	V	V
Return	V	

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SKT-CG screwdriver- Inline type

Applicable with KL-TCG

➢ **SKT-CGS10/S30: 0.1~3N.m with compact body**

➢ **SKT-CGS24F: 0.4~2.4N.m with 2000rpm**

➢ **SKT-CG30/50/70: 0.6~7N.m**

SKT-CGS10/24F/30   *SKT-CG30/50/70*

Applicable with KL-TCG-L

➢ **SKT-CG120/180: 2.4~18N.m**

➢ **SKT-CG250: 5~25N.m**

(Special requirement for smaller torque with 0.05N.m is available.)

SKT-CG120/180   *SKT-CG250*

*Lever start type: SKT-CGS10/CG250
Lever & Push start type: SKT-CGS24F/CGS30/CG30/CG50/CG70/CG120/CG180

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SKT-LCG screwdriver- Angle type

For 90 degree angle application.

Applicable with KL-TCG

➢**SKT-LCG30/50/70: 0.6~7N.m**

Applicable with KL-TCG-L

➢**SKT-LCG120/180: 2.4~18N.m**

➢**SKT-LCG250: 5~25N.m**

SKT-LCG30/50/70

*Lever start type only for SKT-LCG series

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SKT-CGT screwdriver- Pistol Type

Applicable with KL-TCG-L

➢SKT-CG50FT (1~5N.m) Fast Type

➢SKT-CG90T (1.8~9N.m)

➢SKT-CG120T (2.4~12N.m)

SKT-CG50FT/CG90T/CG120T

*Lever start type only for SKT-CGT series

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Concepts

KL-TCG

➡ TS: Tightening Step(250)

➡ TP: Tightening Program(50)

➡ JS: Job Sequence{(TP_01)+(TP_02)+...}(50)

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Video Link

https://youtu.be/pUuTTkbAZYU

The demonstration video of KILEWS KL-TCG DC Transducerized Tools Loover-Kilews L2020.08

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TAIWAN EXCELLENCE 2020

Kilews DC Transducerized Tools KL-TCG

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The Software of N-DAS Pro

The fastening data can be presented by graph.

Check Video with clear image for fastening graph.

https://www.youtube.com/watch?v=kGdr0bVhWDw
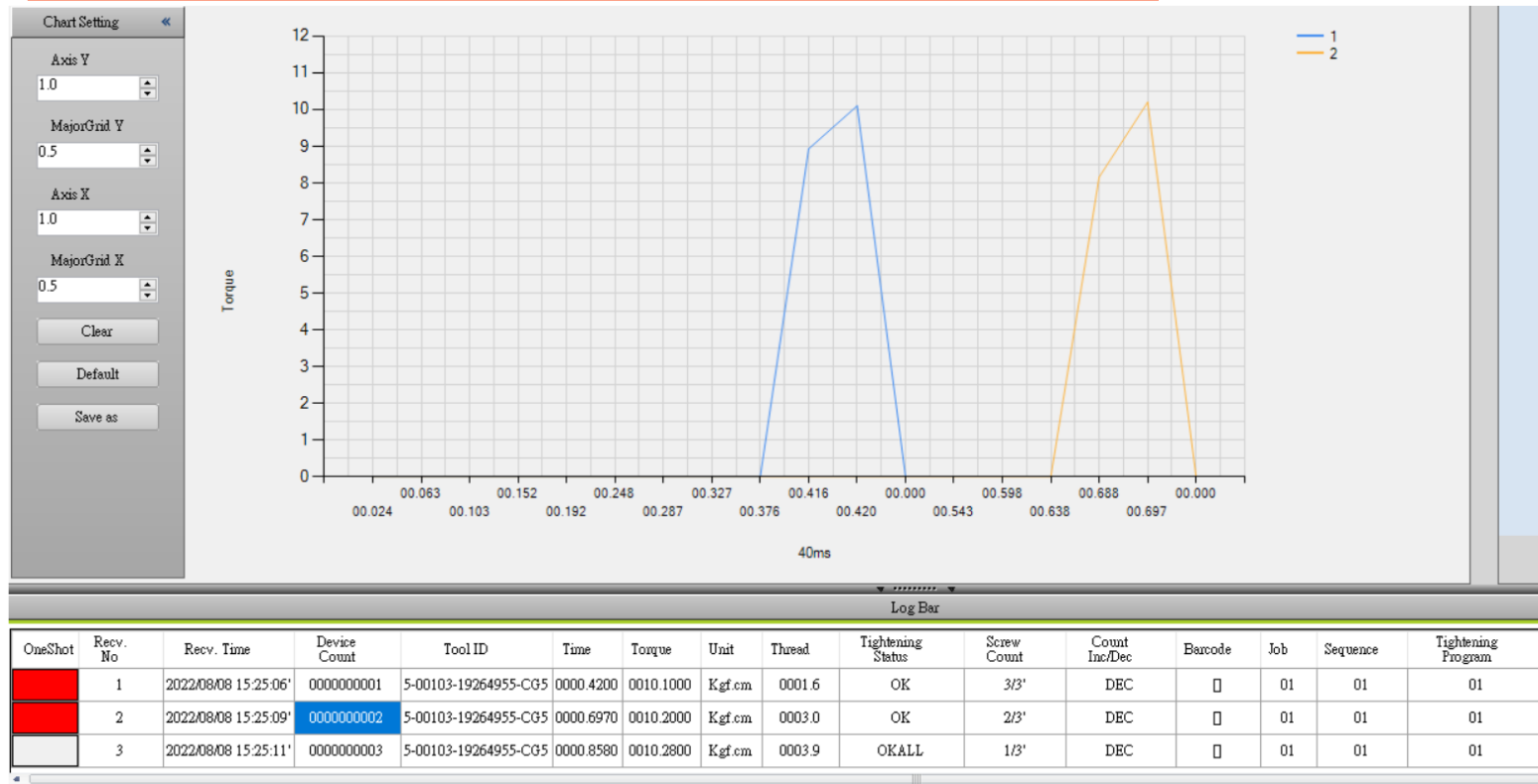
The Calibration of SKT-CG Tools

Kilews allows the distributors to do the calibration for SKT-CG tools on their site based on completing below requests step by step.

1. Purchase the calibration jigs & accessories first.

2. Get calibration training of SKT-CG tools and KL-TCG.

3. Get maintenance training of SKT-CG tools and KL-TCG at Kilews Taiwan and get approval by Kilews.

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SKT- CG Tool test standard in KILEWS

SKT- CG Series screwdriver

Test jig stand

Rotary sensor
(n·gineric : TTR500-xi)

Run-down Joint
(ATLAS : M6 900Drgree & M4 Soft Joint)

Software: SKT-CG-TAS (Calibration)

CG Tool test data sheet

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SKT- CG Tool test data sheet example (CG30)

Serial number TPS192539	0.6 N.m		0.7 N.m		0.9 N.m		1 N.m		2.4 N.m		3 N.m	
Number of tests	TCG	N·gineric	TCG	N·gineric	TCG	N·gineric	TCG	N·gineric	TCG	N·gineric	TCG	N·gineric
1	0.593	0.649	0.690	0.735	0.887	0.882	0.987	1.026	2.372	2.387	2.981	3.182
2	0.595	0.646	0.693	0.738	0.889	0.898	0.988	1.019	2.371	2.379	2.979	3.169
3	0.592	0.642	0.691	0.740	0.888	0.892	0.989	0.995	2.369	2.385	2.980	3.199
4	0.592	0.642	0.693	0.745	0.886	0.893	0.989	1.016	2.368	2.395	2.984	3.175
5	0.592	0.647	0.690	0.747	0.887	0.895	0.989	1.015	2.369	2.397	2.977	3.167
6	0.593	0.643	0.689	0.744	0.887	0.898	0.989	1.014	2.369	2.379	2.978	3.174
7	0.592	0.642	0.691	0.739	0.889	0.898	0.989	1.012	2.371	2.395	2.975	3.114
8	0.591	0.648	0.691	0.738	0.884	0.875	0.990	1.011	2.37	2.401	2.984	3.179
9	0.592	0.644	0.690	0.734	0.888	0.873	0.989	1.011	2.372	2.398	2.978	3.177
10	0.592	0.654	0.690	0.738	0.887	0.876	0.990	1.012	2.376	2.390	2.976	3.117
11	0.593	0.652	0.689	0.736	0.890	0.890	0.988	1.012	2.375	2.399	2.979	3.086
12	0.592	0.653	0.690	0.737	0.888	0.887	0.990	1.013	2.373	2.391	2.975	3.105
13	0.593	0.655	0.690	0.740	0.888	0.891	0.988	1.014	2.37	2.385	2.975	3.077
14	0.593	0.648	0.692	0.744	0.889	0.894	0.990	1.013	2.367	2.390	2.974	3.082
15	0.594	0.651	0.692	0.736	0.888	0.898	0.989	1.013	2.37	2.419	2.976	3.080
16	0.593	0.646	0.690	0.738	0.888	0.894	0.988	1.014	2.373	2.378	2.978	3.111
17	0.593	0.642	0.689	0.737	0.887	0.889	0.990	0.977	2.374	2.409	2.978	3.117
18	0.594	0.647	0.689	0.735	0.888	0.887	0.990	0.974	2.373	2.400	2.978	3.137
19	0.593	0.648	0.690	0.738	0.889	0.893	0.991	1.007	2.373	2.416	2.975	3.122
20	0.591	0.650	0.690	0.736	0.889	0.893	0.989	1.016	2.367	2.410	2.979	3.113
21	0.593	0.648	0.689	0.743	0.888	0.892	0.986	1.008	2.375	2.425	2.976	3.133
22	0.597	0.641	0.692	0.742	0.888	0.891	0.986	0.989	2.373	2.418	2.975	3.137
23	0.591	0.634	0.689	0.737	0.890	0.887	0.990	1.020	2.371	2.405	2.976	3.095
24	0.592	0.635	0.693	0.672	0.889	0.889	0.988	1.020	2.373	2.370	2.976	3.106
25	0.593	0.647	0.689	0.751	0.891	0.890	0.986	1.102	2.37	2.411	2.973	3.083
Mean	0.593	0.646	0.690	0.737	0.888	0.890	0.989	1.013	2.371	2.397	2.977	3.129
Std Dev s	0.0013	0.005265295	0.0013565	0.014127397	0.0014119	0.006928203	0.0013699	0.022395907	0.0024644	0.014345499	0.0027839	0.037924398
Std Dev s	0.22%	0.81%	0.20%	1.92%	0.16%	0.78%	0.14%	2.21%	0.10%	0.60%	0.09%	1.21%
3 Std dev s	0.66%	2.44%	0.59%	5.75%	0.48%	2.34%	0.42%	6.63%	0.31%	1.80%	0.28%	3.64%
Rundown joint	ATLAS : M6 900Drgree & M4 Soft Joint											
Measuring device	N·gineric : TTR500-xi											

Calculated by Statistical formula

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Current Control
# KL-TCC with SGT-CC series

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Features:

● Angle control function included

● Stable performance with high torque accuracy +/- 5%

● Selective in Hard/Soft joint

● Compact and lightweight design for comfortable long-term operation

● Downshift function to slow down rpm automatically in the final tightening step of screw fastening

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Specifications:

Model	KL-TCC
Input Voltage	AC 115V / 230V
Input Frequence	50 - 60Hz
Input Current	6.3A
Output Voltage	DC 40V
Output Current	Max 9A
Power Consumption	360W
External dimensions	241 x 185 x 127(mm)
Weight	4.6Kg
Applicable Model	SGT-CC Series

Unit: mm

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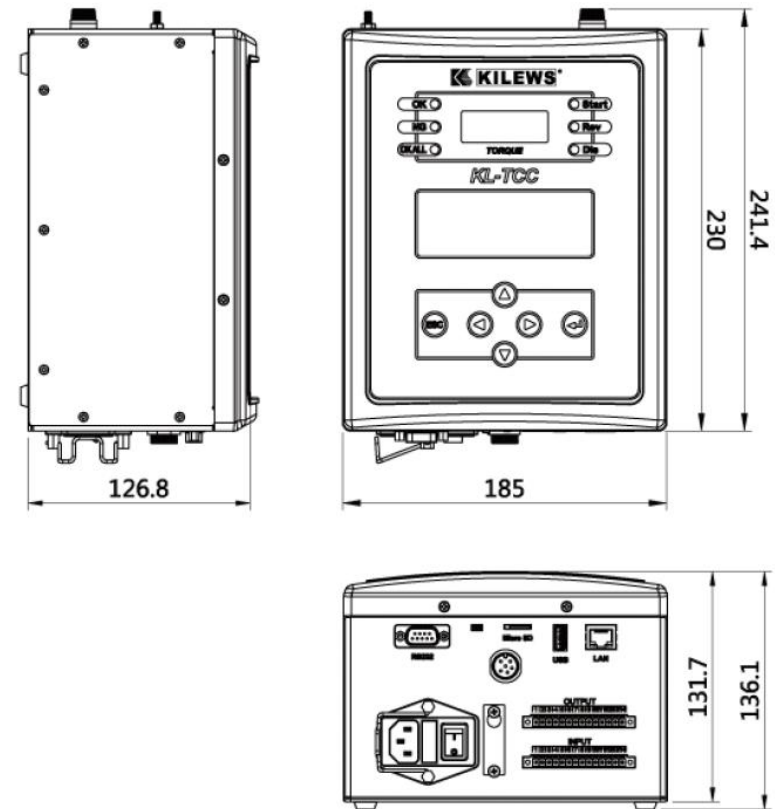
SGT-CC tools

SGT-CC612- 0.3~1.2 N.m /1000r.p.m

SGT-CC620- 0.6~2 N.m /1000r.p.m

SGT-CC625(Non-CE)-0.5~2.5 N.m /1000r.p.m

SGT-CC630F(Non-CE)-1~3 N.m /1700r.p.m

SGT-CC650-1.5~5 N.m /1000r.p.m

SGT-CC670-2~7 N.m /800r.p.m

* Lever type only.

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KL-TCC - Introduction to job setting combination

Job → JS→ TS→TR → Downshift (on/off) → Threshold

Job: (15)
JS: Job Sequence (15)
TS: Tightening Steps (4)
TR: Tightening Repeat
Downshift: r.p.m drop when reach the point of setting torque, which is about the fastening screw touch the surface of the object and start increase the loading and sense the torque value that reach to the setting value, then the rpm will drop to the setting value of rpm from original automatically; However, if downshift function is turn on, then TS can be set by 1 step only.(Please be noted)
Threshold: Start counting the rotate angle once reach the threshold setting point of torque value.
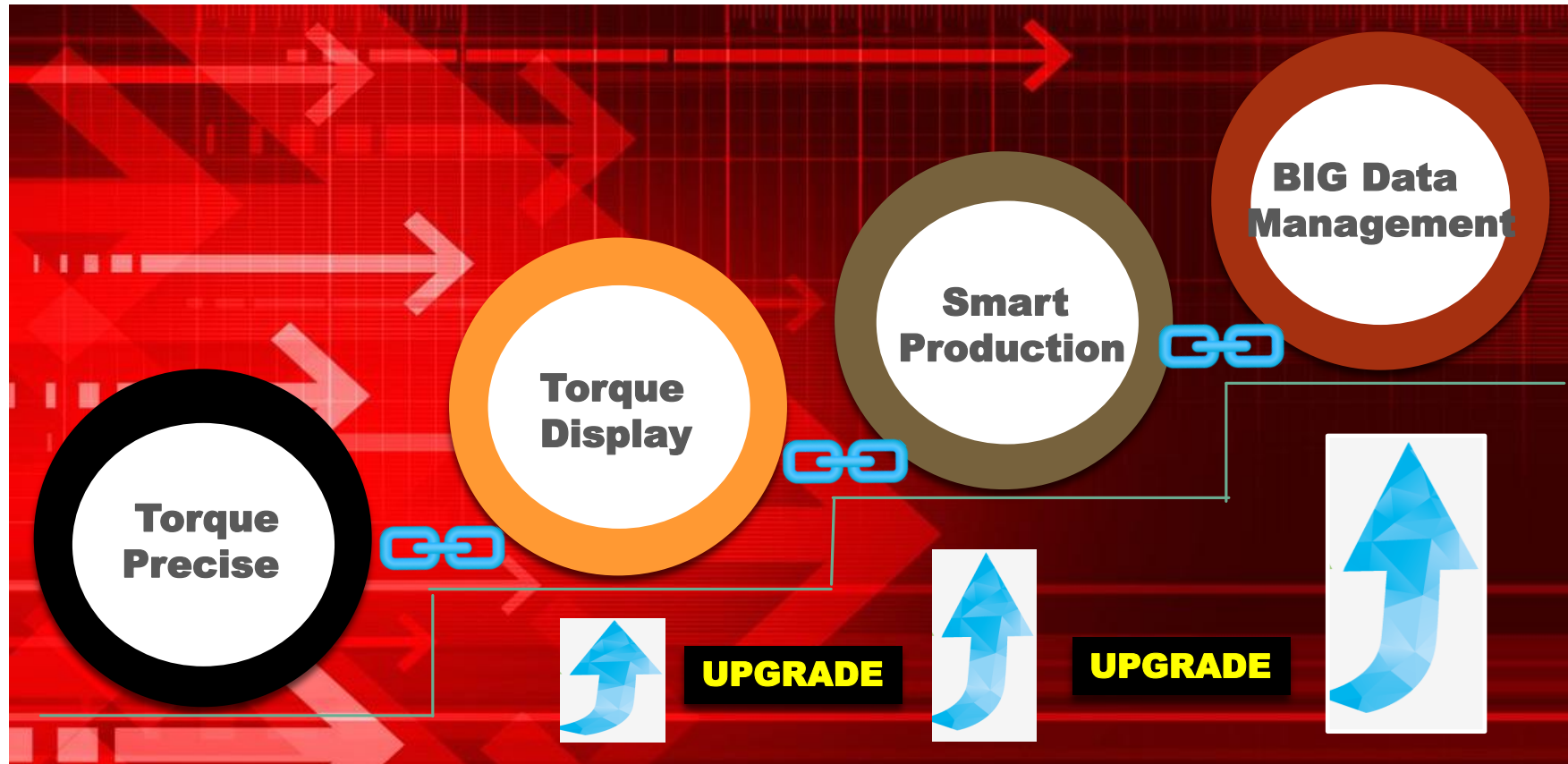
Threshold (Angle counting)

Downshift
(r.p.m drop)

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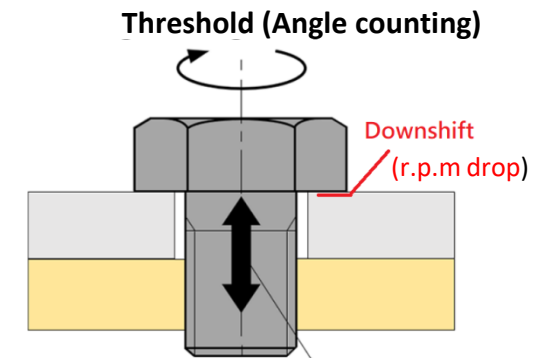
Innovation for screw fastening

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Clutch Type KL-CTDS with SKD-BNK/TBNK/RBNK/LRBNK series

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KL-CTDS Torque Display

SKD-BNK/RBNK/TBNK/LRBNK series

1 KL-CTDS to 1 screwdriver

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The features of KL-CTDS

1. Real Time Data/Status Display

Fastening torque results will display in real time to prevent and detect error immediately. (The results of torque value was calculated by each of fastening peak current)

2. Data Transmission

Every signal fastening results can be transmitted and stored in computer (KL-NDAS).

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3. I/O port available

Automated production can be achieved by linked with PLC

4. Parameters/Program and Work Sequence

Can be programing by device setting or computer software KL-DAS.

5. Bar code reader

A. Job Switch

B. Record the product serial number (Bar code scanner can be used for switching program and record workpiece's bar code)

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System Schematic

Wi-Fi

KL-AMS

Bar code Reader

RS-232 Port

PLC I/O

I/O Port

Status Lamp & Buzzer

AC110-240V

PS

KL-CTDS

SKD-(T)(R)BNK series
(KL-CTDS Connect a screwdriver version)
(KL-MCTDS5:Connect the five screwdrivers version)

SKP-BE32HL/SKP-40B-HL(-800)

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The application of KL-CTDS

✓ UPS (Uninterrupted Power System)

✓ Car bumper

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3. SKD-BNK screwdriver

➡ ***Low & Medium Torque series***

➢ SKD-BNK200/ BNK500

➡ ***Power Torque series***

➢ SKD-BNK800/BNK900

➢ SKD-RBNK60/90/120/180/250/350/500

➢ SKD-LRBNK50/100(F)/150(F)/220

➢ SKD-TBNK60/90/120/180 & SKD-TBNK20L/30L(F)/35LF/50L(F)/70L

Brushless & Clutch Control Tool

L2025

SKD-BNK200/ BNK500

- Low & medium torque (under 19kgf.cm)
- Repeatable torque accuracy: $\pm3\%$
- Maximum speed can reach 2000r.p.m (SKD-BNK500)
- Noise-free & low voltage

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SKD-BNK800 / BNK900

- Torque range 0.98~4.9N.m
- Repeatable torque accuracy:
  ±3% (for BNK800) & ±5% (for BNK900)
- Noise-free & low voltage

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SKD-RBNK60/90/120/180/250/350/500

- Torque can reach 50N.m
- Repeatable torque accuracy: ±5%
- Suitable for assembling industrial products
- Automobile parts assembly production
- May be collaborated with auxiliary arm for easy operation

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SKD-LRBNK50/100(F)/150(F)/220

- New models for 90 degree angle application
- Repeatable torque accuracy: ±5%
- Automobile parts assembly production
- May be collaborated with auxiliary arm for easy operation

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SKD-TBNK60/90/120/180

- Best fit to assemble high torque products
- Torque can reach up to 18N.m.
- Repeatable torque accuracy : ±5%

SKD-TBNK20L/30L(F)/35LF/50L(F)/70L

- COMPACT new models
- High speed (3300r.p.m.) to replace pneumatic tools
- Torque reach up to 0.3~7N.m.
- Repeatable torque accuracy : ±5%

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