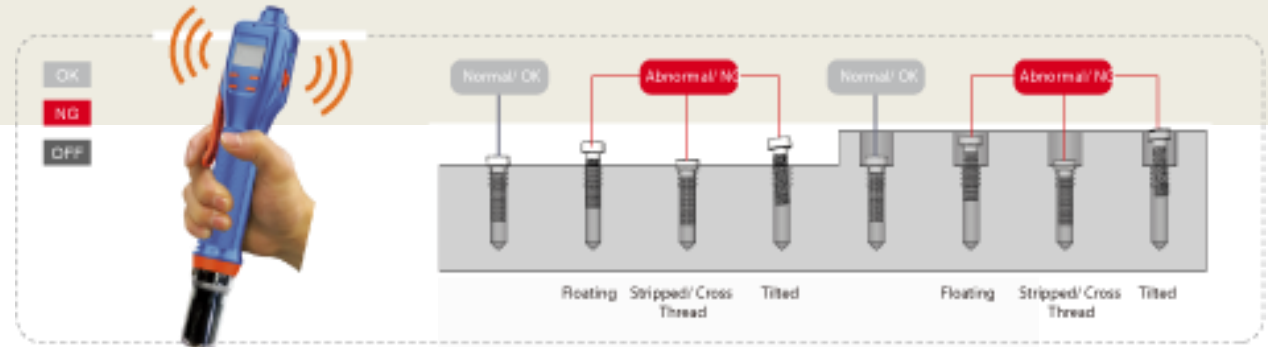


好幫手® SAS

SAS POWER TOOLS INC

Since 1976



好幫手® SAS / SAS POWER TOOLS INC



Chairman James Liao




A Visionary Leader Full of Thoughts & Inspiration

- Industrial-grade Corded Electric Screwdriver Design & Manufacturer Since 1976
- Quality Assurance Solutions @ Affordable Costs
- Core Products in Full Range Conventional High Precision Shut-off and Re-invented High Precision Intelligent Servo Screwdrivers
- Top Grade Essential Accessories: Smart (Digital) Torque Meter, Reaction (Torque) Arm, Screw Feeder, Balancer...
- 3 Areas of Core Competencies:
 - micro-torque (<1 kgf-cm) shut-off/tilt control/counter/OK-NG
 - 0.15-200 kgf-cm shut off with essential options & $<\pm 5\%$ or within ± 0.05 (0.025) kgf-cm variation
 - Pseudo servos with same servo screwdrivers performance at unbelievable cost savings










Profile



Head Office (R&D/Production) & Domestic Market

-  Shanghai Pro-Hand Electric Screwdriver Co., Ltd. (Since 1976)
-  No. 81 Youdong Road, Minhang District, Shanghai, China
-  Technology/Product Development, Manufacturing, Sales Support, and Domestic Sales
-  120 employees worldwide
-  ISO9001:2015

Overseas Sales & Marketing

-  SAS POWER TOOLS INC (SAS Brand, since 2022)
-  196 Technology Dr., Suite B, Irvine, CA 92618 USA
-  Overseas Sales & Marketing, Distribution Network, and Regional (NA) Technical Support
-  Global Partners
 -  Greater China
 -  North Americas
 -  Europe
 -  Northeast Asia
 -  Southeast Asia



WHY SAS

Unique Needed Solutions

- Continuous development of new technology and products market needed
- Targeting the needs of users with cost vs. quality issues covering 0.015 – 200 kgf-cm
- Affordable high-quality MicroTorque (<1 kgf-cm) and servo screwdrivers expert



Cost Benefits

- Long-time supply chain partners to effectively drive costs down
- Turn competitive costs into benefits for stakeholders



Delivery

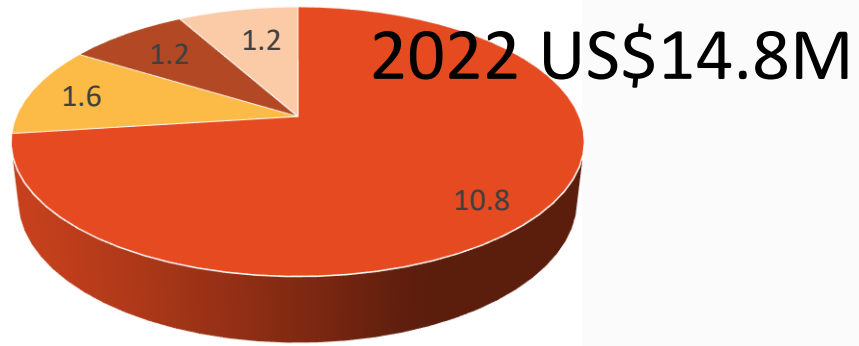
- Local presence for faster service with support from partners
- Shorter turnaround time from manufacturer-direct or local stocks
- Best with forecast and planned production & shipment



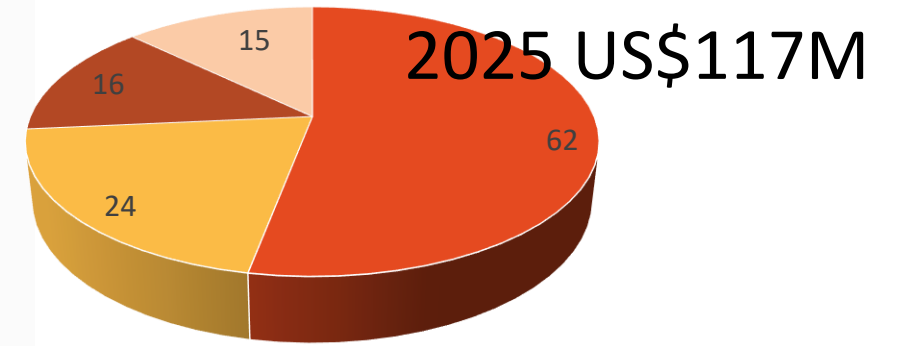
Quality Assurance

- 46 years with continuous quality improvement (CQI)
- 25% 17+ years employees in key positions
- ESD, UL/CE & ISO 9001:2015

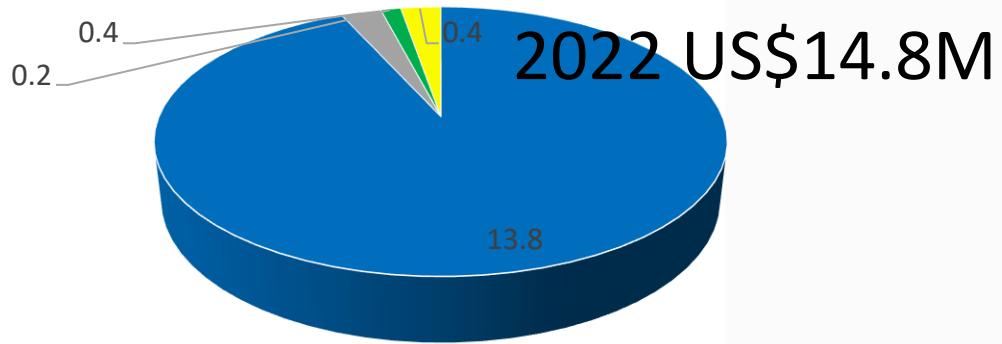
CURRENT & FUTURE MARKET



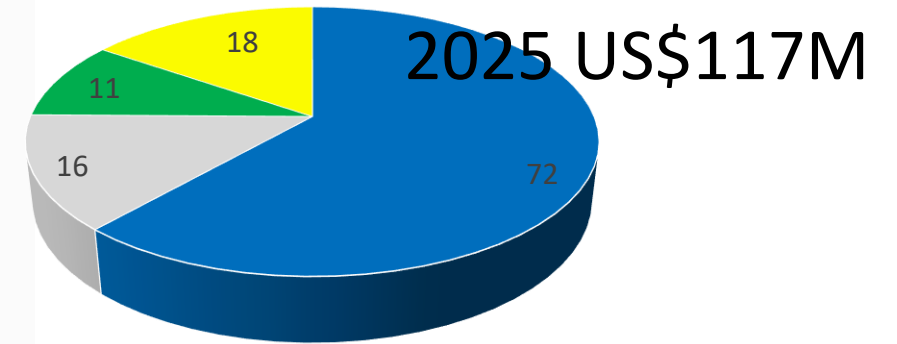
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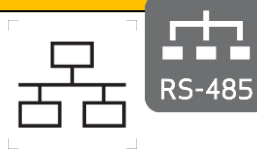


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SAS Products



A series that performs like servo screwdrivers with all essential features at a much lower cost



Intelligent Pseudo Servos Smart AI (0.15-25)

MicroTorque BFG-1.0GL (0.15-1.0)

A series that deals with 0.15 to 1 kg-fcm & tolerance of ± 0.025 microtorque tightening offering tilt angle control w/ foolproof features

A series that offers 0.15-200kgf-cm with the straight, right angle, pistol, automation, and many other options

High-Efficiency BLDC BLF (0.15-200)

③ (kgf-cm) ④

Torque Tester & Wrench APT & MTD

4.2" Touch Screen Digital Torque Meter That Monitors and Displays on PC & Save While Dual Display Torque Wrench Allows Better Visions Under Any Condition



Power Controller AP & AM

Accessories

Power controllers offer only power (AP) and foolproof feature (AM)

Essential accessories needed other than just screwdriver and power controller

⑤ ⑥

Customers Who Use Our Products



Distribution & Support Network





Thank You

ありがとうございました

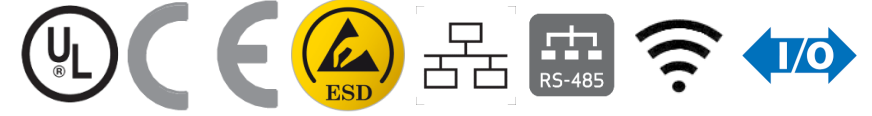
感谢您

QUESTIONS?



1

Intelligent Pseudo Servos : AI



Specifications:

Model Name: AI

Torque Range: 0.15 – 25 kgf·cm (>25 ETA 4Q2022)

Product Description: Current control performs just like a servo screwdriver with much lower costs

Torque Control: Motor Current & Angle

Torque Variance: $<\pm 5\%$ or $<\pm 0.05$ (0.025) kgf-cm

CMK: 1.67 @ 10% of Full Range

Function:

- Tightening / Untightening screw and generating data
- Tightening torque and angle control
- Communicating with upstream devices

Features:

- Setup, display, alarm, report, and store tightening
- Communicate via Wi-Fi, TCP/IP, UART & I/O
- Programmable to perform up to 8 target torque, time & angle as a group
- PC, TCP/IP, on-controller (standard buttons or advanced touch panel) or mobile options for setting
- Optional HID scanner connectivity
- PC software management

Applications (M1.0-M3.0/M1.0-M2.6):

- High precision/repeatability tightening w/ traceability
- iPhone, i-watch, laptops, glasses, automated assembly





② MicroTorque : BFG-1.0GL



Specifications:

Model Name: BFG-1.0GL

Torque Range: 0.15 – 1.0 kgf·cm

Product Description: Swiss Dust Free Motor and low RPM to ensure high-quality tightening w/ tilt angle control and OK/NG (foolproof features)

Torque Control: Mechanical Clutch

Torque Variance: $<\pm 0.025$ kgf·cm

CM: 1.67 @ 10% of Full Range



The Most Effective Tightening Solutions Provider

Functions:

- Tightening / Untightening Screw
- Tightening torque and time with tilt angle control
- Communicating with upstream devices via I/O

Features:

- Setup, display, alarm, and report tightening status
- Communicate via I/O
- Options to setup screw count and time (turns) to alarm non-acceptable tightening
- Standard model with tilt angle control with counter and OK/NG alarm, LED and z-axis options are available

Applications (M 0.6-1.4 T / M 1.0-1.8 M):

- Designated iPhone/iPad assembly tool supplier
- For any micro or mini torque screw tightening



③ High-Efficiency BLDC : BLF



Specifications:

Model Name: BLF (Standard + AP) & Foolproof (+AM)

Torque Range: 0.15 – 200 kgf·cm

Product Description: Auto shut-off screwdriver with high-efficiency BLDC and numerous platforms and options

Torque Control: Mechanical clutch

Torque Variance: $<\pm 5\%$ or $<\pm 0.05$ kgf·cm

CM: 1.67 @ 10% of Full Range



Functions:

- Tightening / Untightening Screw
- Tightening torque and time
- Communicating with upstream devices via I/O

Features:

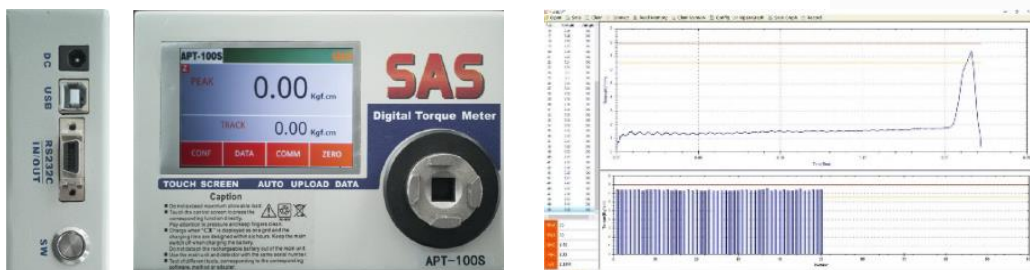
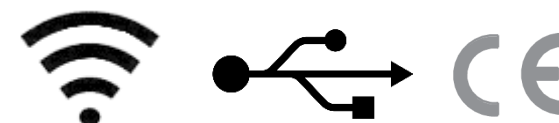
- Setup, display, alarm, and report tightening status
- Communicate via I/O
- Options to setup screw count and time (turns) to alarm non-acceptable tightening
- Push/lever start, right angle head, z-axis, pistol housing, tilt sensor, external triggering options available for most models

Applications (M0.7-M9.0/M0.6-M8.0):

- For all tightening jobs at almost any condition



④ Digital Torque Meter & Wrench



New Generation LED+LCD Dual Display Digital Torque Wrench

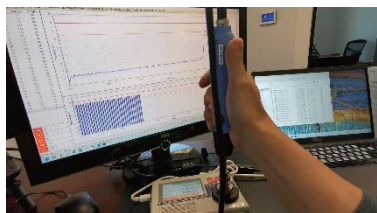
Tightening Mode to report breakaway peak torque while Measuring Mode to report untightening torque

Setup upper & lower limits to alarm if outside of the acceptable range

Connecting to PC & record data into Excel & save via USB or Wi-Fi

Models cover from 10 to 500 Nm

CE & FCC



New Generation 4.2" Color Touch Screen Digital Torque Tester

Connecting to PC & record test data (torque & curve) into Excel & save

Models cover from 0.2 to 50 Nm



5 Power Controller : AP & AM

Specifications:

Model Name: AP/AM

Voltage Range: 20V / 30V / 40V

Power Rating: 37W / 60W / 75W / 150W

Product Description: power adapter with standard (AP) and foolproof (AM) with tightening management capability

Function:

- Power supply for DC brush/brushless motor
- Communication with tool and upstream device
- Tightening management

Features:

- Setup, display, alarm, report, and store tightening
- Foolproof AM
 - ✓ Screw count and tightening time to define OK/NG
 - ✓ Communicate via I/O
 - ✓ Output OK signal capability
 - ✓ Group setting as workpiece management
 - ✓ External triggering and motor stop for automation





⑥ Accessories

