HS-T Aerospace

Applications and solutions

SLOVAKIA s.r.o.
INTOOL

NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW

Premium Power Tools

MADE IN GERMANY

IAF MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT

SWISS ACCREDITATION sas.admin.ch SCESm 0013

HS-Technik GmbH
High - System - Technik

TorqBee® Tightening Tools

Overview

Series	
TBASL-Series	Battery-Shut-Off-Tool for applications with limited accessibility
TorqBee Light-Series	Battery-Shut-Off-Tool
TorqBee SO-Series	Battery-Shut-Off-Tool*
TorqBee SOP-Series[1]	Programmable Battery-Shut-Off-DC-Tool with torque reaction sensor*
TorqBee ECO-Series	Programmable Battery-DC-Tool with torque reaction sensor*
TorqBee EC-Series	Programmable Battery-DC-Tool with rotating torque transducer and angle encoder*
TorqBee EC²-Series[2]	Programmable Battery-DC-Tool with rotating torque transducer and angle encoder, redundant torque reaction sensor and torque transducer*

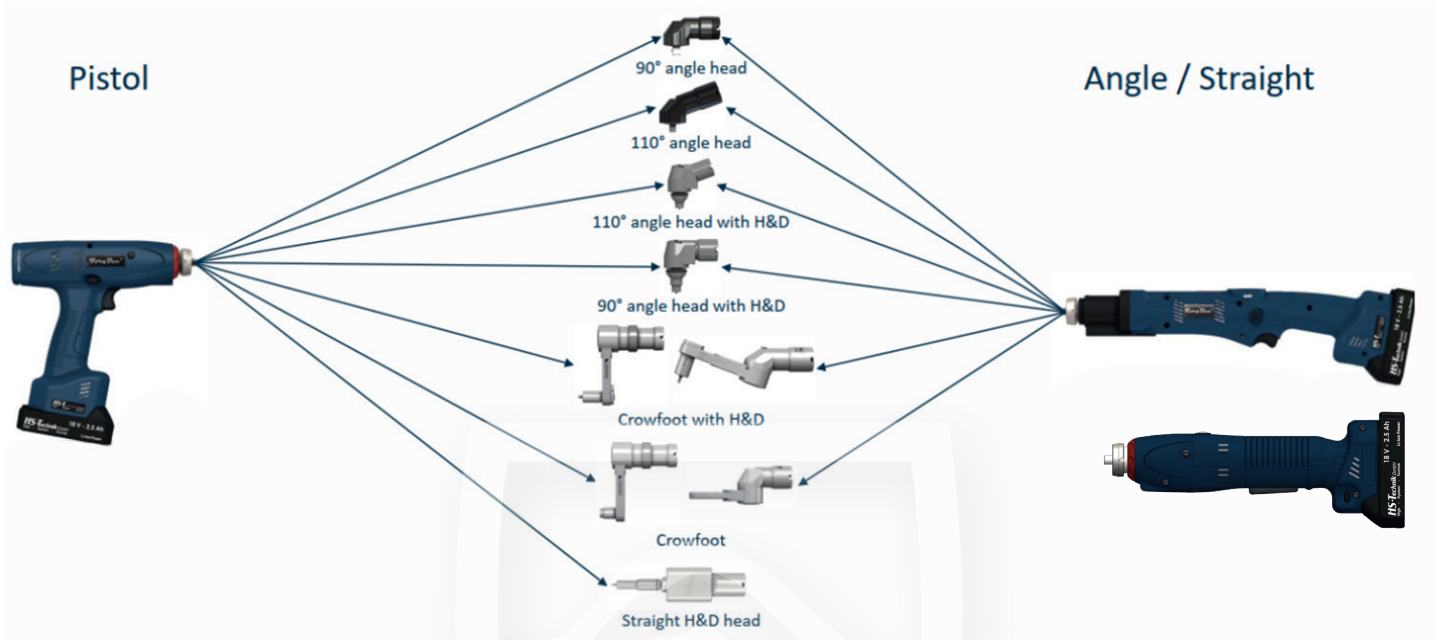
*with optional barcode reader & Wi-Fi

[1]Our TorqBee SOP tools come with a unique concept of a mechanical shut-off clutch combined with a static torque sensor which doubles the safety in your manufacturing processes and fulfills your documentation obligation.

[2]Have you ever heard of a double transducerized tool? Our EC² Tool comes with two self-monitoring torque sensors for maximum accuracy, which allows you to reduce the test and validation frequency in your production.

TorqBee® Tightening Tools

TorqBee Modularity with Lübbering LSP3-Interface



RivBee® Riveting Tools

Overview

RivBee® Light-Series

Type designation: RBL-xx

Battery Blind Rivet Tool with OLED-Display

- For precise setting processes
- Service counter

RivBee® P-Series

Type designation: RBP-xxxx

Programmable Battery Blind Rivet Tool

- Blind rivet counter
- Optional:
  Barcode reader & Wi-Fi

RivBee® PF-Series

Type designation: RBPF-xxxx

Programmable Battery Blind Rivet Tool

- Force sensor
- Process documentation
  (Force/Stroke)
- Optional:
  Barcode reader & Wi-Fi

Model	Max. setting force	Setting speed	Dimensions L × W × H	Weight	Max. mandrel Ø
RBxx-15*	15 kN (3370 lbf)	47 mm/sec.	302 × 73 × 270 mm (11.88 × 2.87 × 10.63 in)	1.70 kg (3.75 lbs)	4.5 mm (0.18 in)
RBxx-20*	20 kN (4496 lbf)	37 mm/sec.	302 × 73 × 270 mm (11.88 × 2.87 × 10.63 in)	1.70 kg (3.75 lbs)	6.3 mm (0.25 in)

*W = Wi-Fi option
*B = Barcode reader option
*WB = Wi-Fi & barcode reader option

RivBee® Riveting Tools

Adapters for Aerospace pulling heads

Howmet 245 adapter*

Compatible with most pulling heads for Howmet 245 interface

Howmet 234/244 adapter*

Compatible with most pulling heads for Howmet 243/244 interface

Cherry 84 adapter*

Compatible with most pulling heads for Cherry G84

Cherry 744 adapter*

Compatible with most pulling heads for Cherry G744

Cherry 747 adapter*

Compatible with most pulling heads for Cherry G747A and Cherry G747

Adapter for Huck Offset-Heads*

*Compatibility with pulling heads must be checked in each individual case.

NutBee® Riveting Tools

Overview

NutBee® LF-Series

Type designation: NBLF-xx

Force controlled battery blind rivet nut tool

NutBee® PF-Series

Type designation: NBPF-xx

Programmable force controlled battery blind rivet nut tool

- Process documentation (force/stroke)
- Optional: Barcode reader & Wi-Fi

NutBee® LS-Series

Type designation: NBLS-xx

Stroke controlled battery blind rivet nut tool

NutBee® PS-Series

Type designation: NBPS-xx

Programmable stroke controlled battery blind rivet nut tool

- Process documentation (current/stroke)
- Optional: Barcode reader & Wi-Fi

Model	Max. setting force	Max. setting stroke	Dimensions L × W × H	Weight
NBxx-25*	25 kN (5620 lbf)	21 mm (0.83 in)	212 × 73 × 270 mm (8.35 × 2.87 × 10.63 in)	2.00 kg (4.41 lbs)
NBxx-21*	-	21 mm (0.83 in)	212 × 73 × 270 mm (8.35 × 2.87 × 10.63 in)	2.00 kg (4.41 lbs)

*W = Wi-Fi option
*B = Barcode reader option
*WB = Wi-Fi & barcode reader option

RoboRiv® Riveting Tools

Programmable battery blind rivet nut tool for robot usage

RoboRiv®

Programmable battery blind rivet nut tool for robot usage

- Process documentation and quality assessment with force/stroke curve
- Programmable via USB with HST-Tool-Manager
- Programmable parameters:
  - Force
  - Current
  - Stroke
  - Speed
  - Time
- Multi-step programming (6 steps)
- Multi-colored status LED
- Robust metal housing
- OLED-Display
- Blind rivet nut counter
- 100 individual setting programs
- Min. 150,000 results incl. setting curves (force/stroke) are saved in the tool
- Linear compensation unit including light barrier for position determination
- Output of the process parameters via serial interface RS232 and 24 V digital IO´s

Model	Max. setting force	Max. setting stroke	Dimensions L × W × H	Weight
ROBORIV-BRN-232_RD	25 kN (5620 lbf)	21 mm (0.83 in)	309 × 189 × 110 mm* (12.17 × 7.44 × 4.33 in)	4.00 kg (8.82 lbs)

*Dimensions and weight with 5,0 Ah battery

Blind Fastener Tools

Ergo-Tech* / Composi-Lok**

TorqBee® Pistol tool with adapter for Howmet Ergo-Tech* pulling heads

Model	Torque range	Max. speed	Dimensions L × W × H	Weight
TBPxx-12ET	12 - 14 Nm	530 U/min	222 × 72 × 211 mm (8.74 × 2.83 × 8.31 in)	1.35 kg (2.98 lbs)

* Ergo-Tech is a registered trademark of Howmet Aerospace

TorqBee® Pistol tool with adapter for Monogram Composi-Lok** pulling heads

Model	Torque range	Max. speed	Dimensions L × W × H	Weight
TBPxx-10CL	10 Nm	740 U/min	291 × 72 × 211 mm (11.46 × 2.83 × 8.31 in)	1.60 kg (3.53 lbs)

** Composi-Lok is a registered trademark of Monogram Aerospace Fasteners

BTC / vBTC

Wi-Fi controller for battery tightening and riveting tools

BTC

Wi-Fi controller for battery tightening and riveting tools

- Up to 20 HST Wi-Fi tools (TorqBee / RivBee / NutBee / WrenchBee)
- With 2.4 / 5 GHz Wi-Fi Access Point (811.2 a / b / g / n / ac)
- Quick system exchange (SD card for system configuration)
- 4 × 20 character OLED-Display for status information
- Web interface for programming and visualization via web browser with tablet or panel PC possible
- Interfaces
  - 2 × 10 / 100Mbit Ethernet
  - 2 × USB
  - 1 × audio
- Connection to the following systems:
  - OpenProtocol
  - PFCS (FCA)
  - ProfiBus
  - ProfiNet
  - 24 Volt Digital I/O's
- Accessories
  - Socket Trays
  - Display Panel
  - Printer

vBTC

Virtual solution to manage HST-Wi-Fi Tools (installed on a server)

- Unlimited number of Wi-Fi tools connectable (limited by hardware & network capabilities) (TorqBee / RivBee / NutBee / WrenchBee)
- Possibility to define several Enclaves without size constrictions
- Management of sequences and complex programs
- Web interface for programming and visualization
- Tool enable/disable selection
- Connectable with Tool Manager and upper softwares (ERP etc)
- Several Protocols available (MQTT / MQTTS)
- Possibility to use barcode reader and external socket tray

Model	Input	Operating temperature	Weight	Dimensions L × W × H
BTC-O-*	85 - 264 V AC, 47 - 63 Hz	0 - 40 °Celsius	approx. 1.60 kg (3.53 lbs)	180 × 150 × 90 mm (7.09 × 5.91 × 3.54 mm)

TBe series

Electric EC screwdriver with torque transducer & angle encoder

TBe series

EC screwdriver with torque transducer and angle encoder

Transducer of highest quality and with highest accuracy (calibrated at +/-1 % of the nominal value)

- Torque ranges from 0.1 - 10 Nm
- 4 programs, in C-version 32 programs
- Ergonomically shaped aluminium housing, ESD-compatible
- Push and lever start
- Brushless motor technology
- Modular system, can be expanded at any time
- Industry 4.0 capable

Model	Torque range	Speed	Drive	Length	Diameter	Clamping-Ø	Weight
TBe-1/1C*	0.1 - 1.0 Nm	50 - 1,300 U/min	1/4“ hex	279 mm (10.99 in)	42 mm (1.65 in)	36 mm (1.42 in)	0.88 kg (1.94 lbs)
TBe-5/5C*	0.5 - 5.0 Nm	50 - 600 U/min	1/4“ hex	279 mm (10.99 in)	42 mm (1.65 in)	36 mm (1.42 in)	0.88 kg (1.94 lbs)
TBe-10/10C*	1.0 - 10.0 Nm	20 - 400 U/min	1/4“ hex	335 mm (13.19 in)	48 mm (1.89 in)	40 mm (1.57 in)	1.20 kg (2.65 lbs)

*C = Including controller with higher functionality

WrenchBee

Torque & Angle Wrench

- Light, robust and accurate
- Automatic obstacle detection & incorrect hand position
- Wireless communication for data traceability
- End-fitting recognition (optional)
- High memory capacity
- Optional with barcode reader

Technical data	
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
Features	• Wireless communication Wi-Fi/Bt • Wi-Fi 802.11 a/b/g/n • Bluetooth V2 • Full security management • WEP, WPA, WPA 2, EAP-TLS, LEAP, PEAP • LAB functionalities • Untightening detection

Model	Torque range	Angle accuracy	Memory 16 GB
WB-Pxx	10 to 100 % 1.5 to 1200 Nm	+/-1° over 360°	>50 000 operations, traces and results

Tightening strategy
Fastening torque driven
Fastening torque/angle
Fastening yield
Fastening yield/angle
Prevailing torque

07062023

Im Martelacker 12
D-79588 Efringen-Kirchen
Phone: +49 (0) 76 28 - 91 11-0
Fax: +49 (0) 76 28 - 91 11-90
E-mail: info@hs-technik.com
Internet: www.hs-technik.com

HS-Technik GmbH
High - System - Technik