

# HS-T Aerospace

Applications and solutions



Premium Power Tools



MADE IN GERMANY



**HS-Technik** GmbH  
High - System - Technik



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

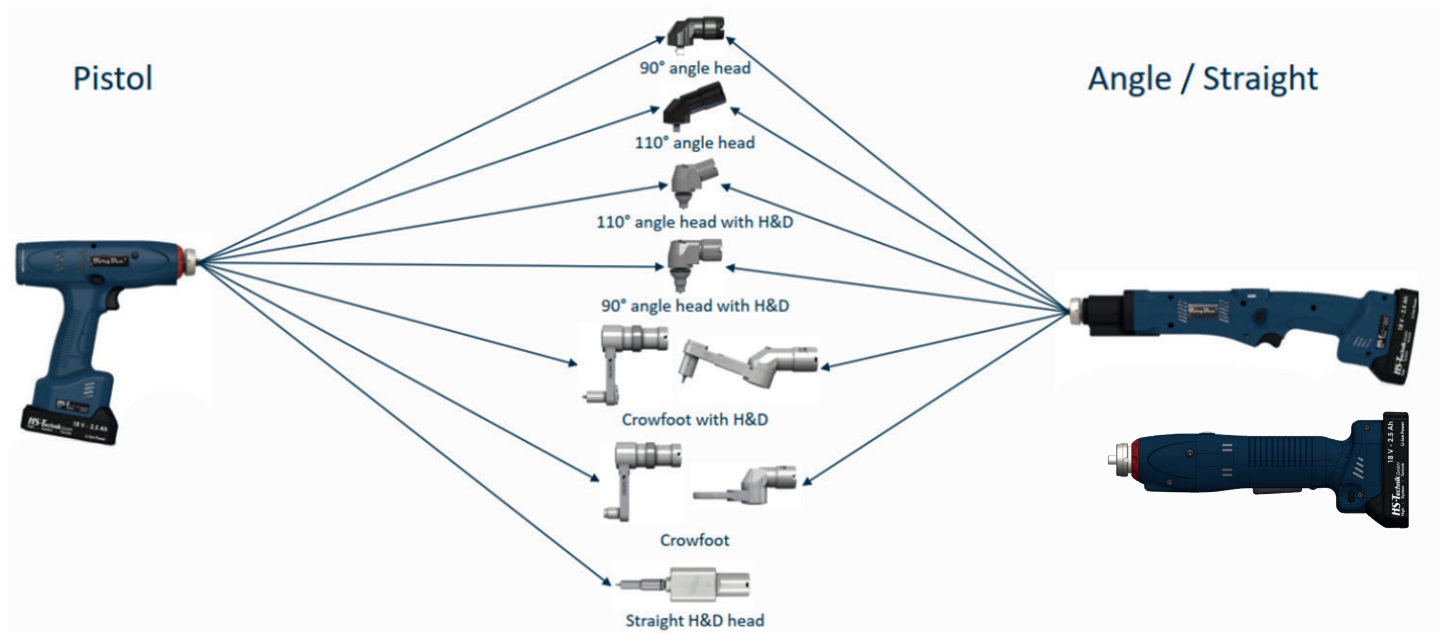
\*with optional barcode reader & Wi-Fi

<sup>1</sup>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.

<sup>2</sup>Have you ever heard of a double transducerized tool? Our EC<sup>2</sup> 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 Lubbering LSP3-Interface





### 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



### 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.



## 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\*\*



## TotqBee® 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

## TotqBee® 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	<ul style="list-style-type: none"> <li>• Wireless communication Wi-Fi/Bt</li> <li>• Wi-Fi 802.11 a/b/g/n</li> <li>• Bluetooth V2</li> <li>• Full security management</li> <li>• WEP, WPA, WPA 2, EAP-TLS, LEAP, PEAP</li> <li>• LAB functionalities</li> <li>• Untightening detection</li> </ul>

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



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