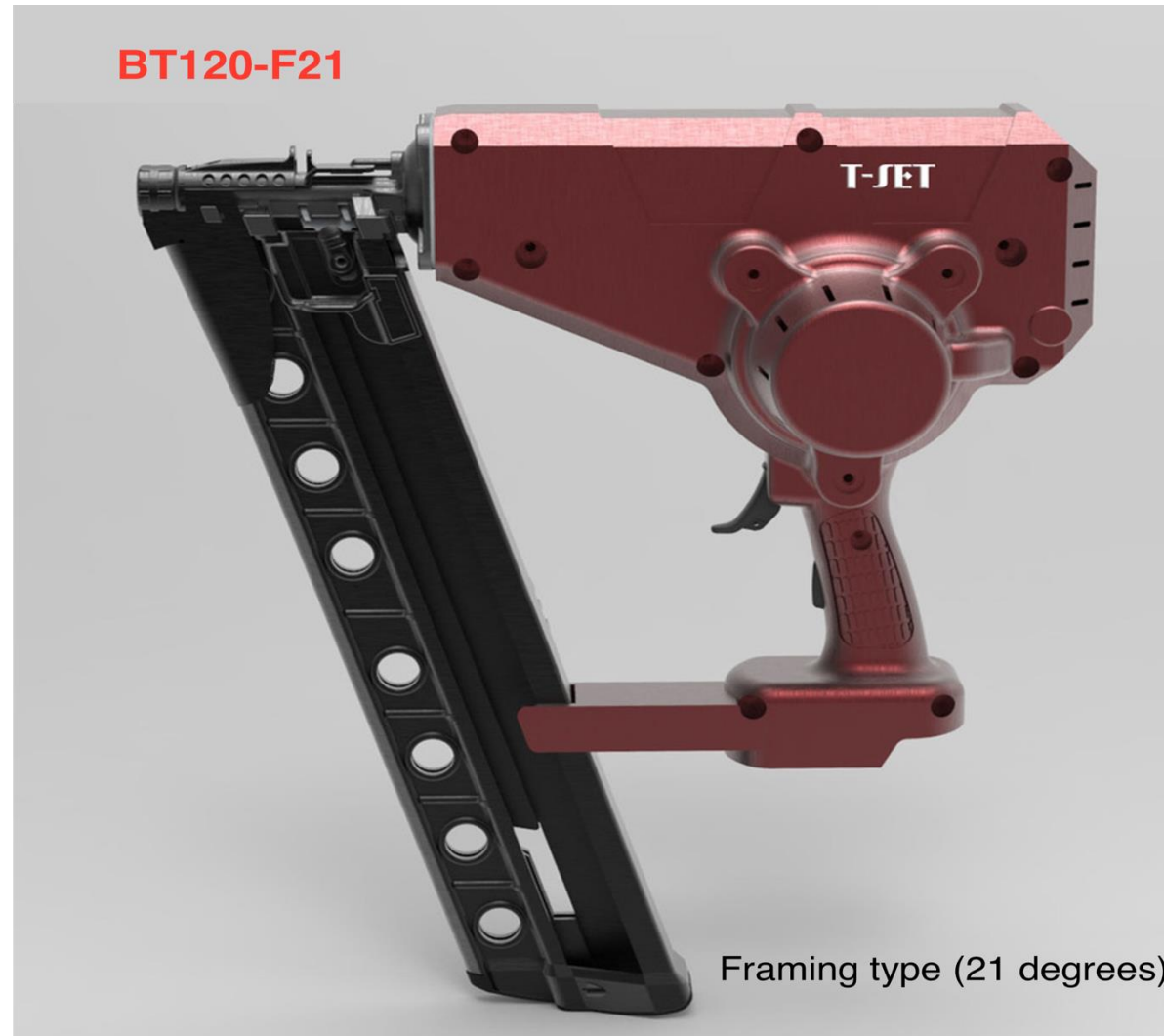


Battery-Powered Fastening Tools **BT120 series**

(EU/US/CN/TW/KR Patent Issued, JP/IN etc. Patent Pending)



Dear Sirs,

We are excited to introduce our newly developed battery-powered fastening tool, the BT120 series, which brings cutting-edge technology and powerful performance to the fastening industry. Our innovation has already earned granted patents in the US, EU, China, Taiwan and Korea, with patents pending in Japan and India.

As the industry shifts towards more efficient and environmentally friendly solutions, our battery-powered fastening tools stand out in comparison to traditional methods. With no combustion (no powder loads or gas fuels), minimal recoil, reduced noise, lower cost, and an eco-friendly design, our tools are poised to replace gas-actuated and many powder-actuated tools both now and in the future.

Comparing the Existing Technology

The market currently features three main types of battery-powered fastening tools, each with its own driving mechanism, but all of which face limitations and potential legal challenges due to existing patents:

1. Compressed Spring (Hilti)

Introduced in 2015, Hilti's system uses a compressed spring device activated by a rotating gear and ball screw mechanism. While it delivers 85 joules of impact energy, this system has a relatively slow driving speed of 1.3 nails per second.

2. Compressed Storage Gas (Milwaukee & Others)

Milwaukee's compressed storage gas system relies on a piston to strike the nail.

It's suitable for wood but lacks the power to drive nails into concrete or steel.

Impact energy is 80 joules, and driving speed ranges from 1-2 nails per second.

Many Chinese manufacturers (e.g., NailTask, Toua) and Bosch have imitated this design, but there may be patent licensing issues involved.

3. Flywheel Friction Driving (DeWalt)

DeWalt's system uses a flywheel to transfer kinetic energy through friction. With an

Impact energy of 105 joules, this design reaches a nail-driving speed of one per second.

However, it requires time for the flywheel to reach operational speed, limiting its efficiency.

4. Our Innovation Solution: **Pulley Impact Driving** (T-SET)

T-SET has broken new ground with our Pulley Impact Driving technology. This innovative design, which launched in 2023, uses a pulley and synchronous rotation of the motor to produce more power than the other systems. With an impact energy exceeding 105 joules, up to 120 joules and a driving speed of 2-3 nails per second, our tool will be one of the most powerful on the current market.

Unlike the previously mentioned systems, which are patented and could potentially require patent licensing, our Pulley Impact Driving design is free from such legal concerns and offers superior performance.

The BT120 Series – Powerful, Efficient, and Ready for Your Needs

We will be launching four versions of the BT120 series *this coming fourth quarter*.

1. BT120-**MX** (Magazine Type) – Drives nails in strips, same as gas nails (shank dia. 2.6-3.0 mm, length 15-40 mm)
2. BT120-**SX** (Single Type) – Drives nails same as PAT drive pins (head dia. 7.5-8.0 mm, shank dia. 2.6-3.8 mm, length 15-75 mm), or with washers or conduct clips available

- 3. BT120-**IX** (Insulation Type) – Designed for driving insulation nails same as current market
- 4. BT120-**F21** (Framing Type) – Drives framing nails for wood (up to 90 mm in length)

With these innovations, we are confident that the BT120 series will meet your demands and help you expand your service offerings. We look forward to your feedback and hope to continue our collaboration.

Best regards,

Sam Huang

Products Manager

T-Set Co., Ltd.

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Comparing the Existing Technology

1. Compressed spring (Hilti BX3)



2. Compressed storage gas (Milwaukee)



3. Flywheel Friction Driving (DeWalt DCN890)



4. Pulley impact driving (T-SET BT120)



Each driving system has its own advantage and disadvantage

Driving Mode	Brand	tool	Patent	Power	hit nail /sec	Weight	Advantage	Disadvantage
1. Compressed Spring	HILTI	BX3	V	85 j	1.3	3.50 KG	Weight	Power is not strong
		BX4		95 j				
2. Compressed Storage Gas	Milwaukee		V		1 - 2		Model	Power is not enough for steel /concrete
	NailTask	DCCN100X	?	<90 j	"			Patent issue
		DCCN100X2		<100 j	"	4.20KG		Loss of gas volume over time.
								3 irreversible causes of gas leakage
	TOUA	GSN40	?	<90 j	"			Repairs are not easy on site.
		GSN50C		<100 j	"	4.20 KG		"
	Bosch	GNB18V-12	?	85 j	"	4.10 KG	Air-Spring	"
3. Flywheel Friction Driving	DeWALT	DCN890	V	100-105 j	1	4.20 KG	Power	Waiting working time
								Slide seat attrition
4. Pulley Impact Driving	ODM	BT120	V	>105 j	2 - 3	4.20 KG	Power strong and even	Late to the market
	T-SET	(EU,US,China & Taiwan Patent Issued, Japan, Korea, India Patent Pending.)						