# iF Design & Taiwan Excellence Awards Winners iF設計獎及台灣精品獎得主



2020 iF Design Award

# 546 PRO Lever Series / Ball Valve

The 546 PRO lever series focuses on the brand-specific implementation of functional product features. The distinctive shape of the lever references the responsibility of opening and closing the ball valve within piping systems. The faceted asymmetrical shape creates an optical presence clearly communicating the opened or closed position. With pins in the black inlay the lever can be used to open the ball valve for maintenance. By pressing down the locking ring, the lever position can be set and optionally secured with standard padlocks. The 546 PRO lever series includes different product sizes.

GF Piping Systems Schaffhausen, Switzerland



#### TID 18 / Impact Driver

| FESTOOL GmbH | Wendlingen, Germany

This compact powerhouse offers an impressive service life thanks to its extremely robust hammer mechanism. The perfect combination of the new-generation brushless EC-TEC motor and the battery pack ensure maximum performance and endurance. In addition to this, the TID 18 with 1/4" tool holder turns the screw without straining your wrist – thanks to the tangential hammer mechanism with no strength-sapping back torque. The machine weight of just 700 grams also allows you to work longer without getting tired.



#### SF 6-A22 Hilti Corporation SF 6H-A22 Cordless Drill Driver / Hammer Drill Driver

SF 6 is the high-performance power class of drill driver and hammer drill within the SF family of cordless tools. A uniform design language unites the entire SF family. SF 6 tools are intended for everyday professional construction - so the design focuses intensely on task-specific ergonomics, raw power and battery life. A new brushless motor, developed in-house, delivers more torque and higher RPM

than any comparable tool, but consumes less battery power. An all-metal gearbox housing and non-slip, shock-absorbing surfaces ensure the tool sits firmly in the user's hand while protecting it from rough jobsite conditions.

# Screwdriver Set / Tool Set

SW-Stahl GmbH Remscheid, Germany

The screwdriver set from SW-Stahl features ergonomically shaped handles that ensure ideal usage. Defined contours, smooth surfaces and perfectly balanced hard and soft plastic parts provide the perfect grip for optimal power transmission. The contrast between hard and soft areas as well as the unique and dynamic SW-Stahl design contribute to the iconic appearance and a differentiation from its competitors.



#### **Cordless Screwdriver**

The Bosch GO is a prime example of a user-centered power tool. It features an innovative "Push & Go" operation mode, which is directly derived from hundreds of hours of close user observations. With fine-tuned torque adjustment, the electronic brake stop and the most powerful in class second-generation Bosch motor, the GO provides the perfect balance of precision and power to get every job done. Its well-thought-out ergonomics naturally lead to a design that exists at the delicate intersection of innovation and intuition.

Bosch Power Tools Emerging Markets Shanghai, China





## 2021 Taiwan Excellence Award

#### **Pneumatic Impact Wrench**

KI-1480 is a 1/2" Air Impact Wrench. It is innovative, multi-functional and safe. The tool meets the needs of the current market. The following is an introduction to KI-1480:

- 1. Lightweight Design Introducing FRP and TPR embedded design, the tool weighs only 2.29kg.
- 2. **Vibration Reduction Design** (Ductile Iron with High Strength) is adopted to improve the rigidity bearing capacity and smooth force.
- 3. Low Emission Design Compared with products of the same stage, the air consumption is reduced by about 15%.
- 4. **PATENTED** <One-Handed F/R Switch Operation> The first innovation in the industry that allows the thumb and index finger to quickly switch between "positive" and "negative".
- 5. New Two Hammers Clutch The structure of the lifting chamber is strengthened; the impact surface of the drill is increased.
- 6. Ergonomic Handle Design The TPR design directly absorbs vibration and is comfortable.
- 7. **High Efficiency Motor** Effectively improve the output efficiency of the air motor by about 20-25%.

#### Torque Wrench / Tool

The new torque wrench from SW Stahl allows for ergonomic and precise handling and therefore adapts perfectly to the automotive industry. Soft contours on the handle area and refined details such as the setting wheel emphasize a wellbalanced overall appearance of the tool. The high-grade material and defined color separation ensure a professional finish and lend the product the design characteristics typical of SW-Stahl.

| SW-Stahl GmbH | Remscheid, Germany



# Special Feature >>



#### Super Stubby Air Impact Wrench

A concave drive shaft design brings AW050H 5 main advantages: first, with the impact sockets, the total length is 104mm only which can be applied to a narrow working environment. Secondly, the user can use AW050H as either 3/8" or 1/2" with 3/8" Dr. & 1/2" Dr. anvil adaptors. Third, the user can use the bit holders (standard set: 8 & 10mm) as either sockets or holders to attract 8 & 10mm bits. Forth, with the magnet feature inside the 14mm driveshaft, 14mm bits can be attracted with no socket as a connection. Lastly, with the 14mm extension bar, the user can use all the accessories in broader applications with only one tool - AW050H.

Instead of having several different power tools, AW050H is flexible in multiple applications such as automotive, motorcycle, agriculture machine, packaging, crates & pallets. With one-hand operation for forward & reverse and 3 positions for each side while also being lightweight (1.35kg), AW050H is suitable for most users.

## **Planetary Roller Screws**

Developed to use small rollers to replace the steel balls of the ball screws. According to Hertz Friction Theory: the load and rigidity are proportional to the contact area. After replacing with a small roller, the contact surface changes from point contact to line contact. Higher impact resistance and higher load capacity enhance the uniqueness of the product. The high load capacity of this product completely replaces the ball screw and hydraulic system. The industrial application has a good response on punching machines, injection molding machines, etc. It can be driven only by a motor, it takes up little space, and the power loss is only one tenth of the hydraulic system, which is safer and more convenient to operate.

Characteristics:

- 1. High load capacity: The load capacity is 5 times that of ball screws.
- 2. High speed and acceleration: Generally up to 3 times of ball screws.
- 3. Long life: The life is 10 times that of ball screws.
- 4. Low noise: The noise is lower than 79db.

## **Double Loop Mounting Tie**

Product features:

- Utility model patent.
- a. Fasten from either side.
- b. Bundle 2 objects with a single tie.
- c. Mounting hole for screw fixing.
- d. 114kg guaranteed loop tensile strength.
- e. Toxin-free material proved by SGS.

KAI SUH SUH ENTERPRISE CO., LTD. Taiwan

#### The Low-Energy Wood Screw

TENZ<sup>®</sup> wood building screws with TENZ Stairs Thread Technology<sup>®</sup> are self-screwing, made from special carbon steel, hardened and galvanized for protection. This technology makes work fast and easy with less effort.

The secret is the stairs along the thread called "Stairs of the Peak (SP)" and "Stairs of the Vale (SV)". Their precise shape makes it possible to displace the wood fibers in a gentle way. TENZ Stairs reduce contact surfaces between screw and wood, thereby reducing friction along the thread up to 50% and significantly minimizing the screwing torque and the energy required. One battery charge can drive up to twice as many screws than before, and the tool life increases up to factor 10.

Globally, around 2,000 tons or 2 billion of screws are used – every day. The used energy can be reduced by up to 50% with TENZ Stairs Technology<sup>®</sup>. The use of the TENZ energy-saving screw offers potential energy saving in construction projects never seen before!

TENZ INTERNATIONAL LTD. Taiwan

U-SCREWS PRECISION CO. Taiwan

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