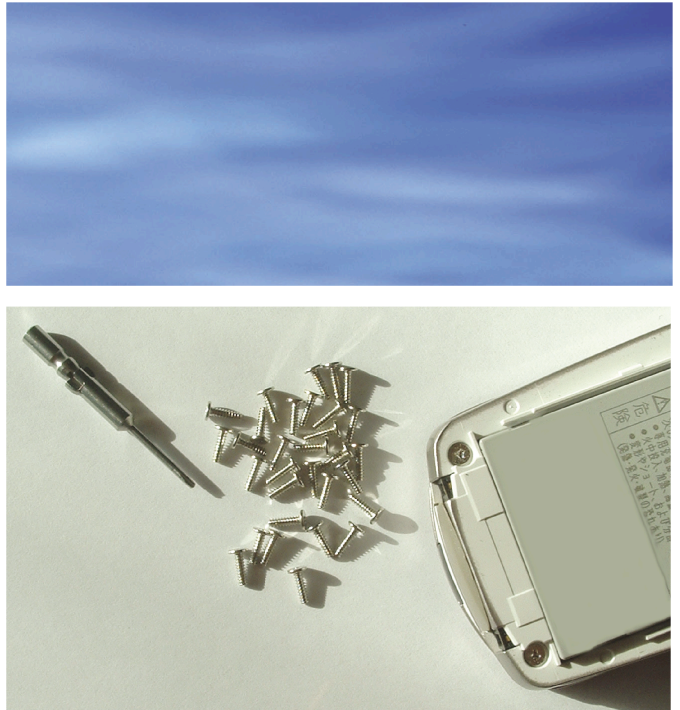


Clover Screw D.PAT.

HIOS clover screws offer very precise tightening in critical applications. The benefits and features of the drive assist production efficiency.



New design

The location of the driver bit in the screw head is precise and positive enabling maximum assembly efficiency to be achieved.

Prevents the driver bit cam out enabling reduced operator exerted thrust, minimising operator fatigue. No risk of RSI.

Positive location and no cam out means tool wear is reduced significantly.

The recess is designed to guide the driver bit to the inner circle location point at the centre of the recess, improving the fit between the driver bit to screw head.

Can be used with power drivers for automatic operations.

Clover Screw D.PAT.

NEW Inclination guide

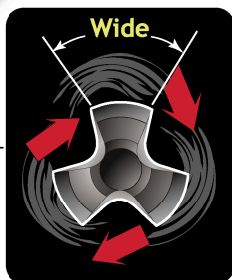
Designed to guide the driver bit to the inner circle location point in the centre of the recess.

NEW Angle of the wings

78.5°

NEW Width of the wings

The Clover drive translates applied torque efficiently into screw rotation thanks to the inward force generated by the wide curved design of the wings.



- ☐ The wide curved wings improve torque transmission efficiency and stabilize tightening torque.

Other Makers 'Y'

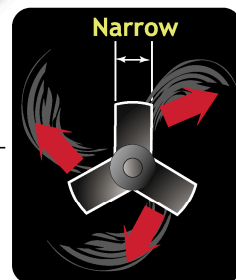
Angle of the wings

約120°

Width of the wings

The drive profile results in an upward force being generated from the applied torque.

Driver bit cam out occurs easily which means lower achievable tightening torques.



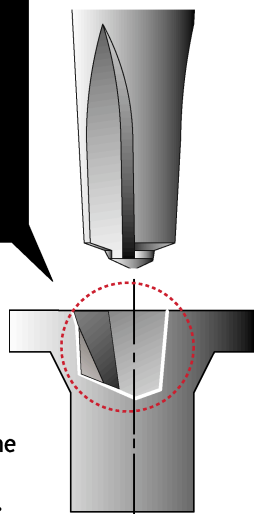
- ☐ The narrow wings bring about poor torque transmission which could lead to uneven tightening torque.

The drive contact area is almost double as large as that of other makers 'Y' drives.

NEW Straight design

NEW Drive contact area

The drive force, per unit area, of the contact area is low, so head breaking-off is not generated easily.



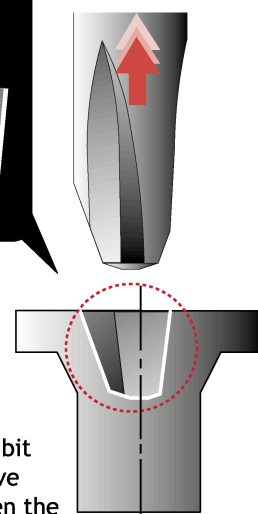
- ☐ With no upward force being generated from the applied torque, thanks to the drive profile, the driver requires less thrust as the driver bit does not cam out.
- ☐ The drive force, per unit area, of the contact area is low, so damage/wear to the drive/driver bit is reduced. This results in better control and very precise tightening torque.

The tapered drive profile

causes the driver bit to rise and cam out.

Drive contact area

The small contact area between driver bit and screw recess means that a high drive force per unit area is required to tighten the screw, so head breaking-off occurs easily.



- ☐ The tapered drive profile requires higher thrust force to be exerted by the operator.
- ☐ The small contact area means that a high drive force per unit area is required to tighten the screw, so driver bit easily gets worn.
- ☐ The poor fit between driver bit and screw recess causes fastening troubles.

HIOS Inc.,

111-6, Akiyama, Matsudo City Chiba, Pref., JAPAN

TEL: 81(JAPAN) 47-392-2001

FAX: 81(JAPAN) 47-392-7773

URL ▶ <http://www.hios.com>

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