

Don't forget to do regular checkups of the machine spindle!

With Nikken's pulling force measurement tool, you can measure pulling force regularly.

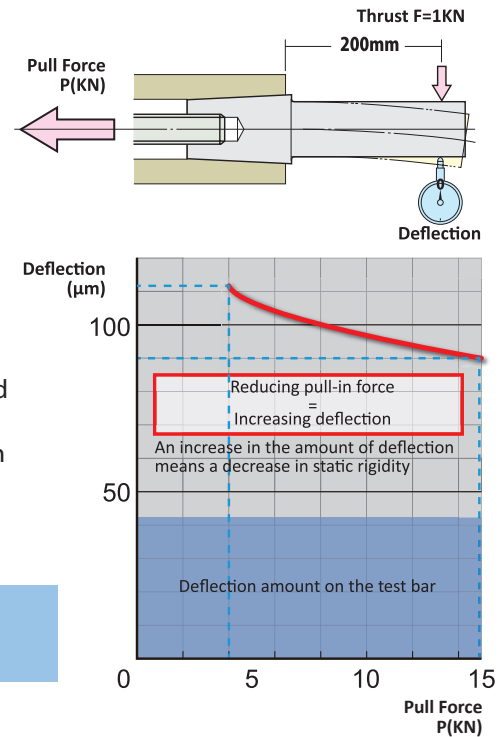


Regularly measure the pulling force to prevent the reduction of cutting force, machining accuracy and cutting tool life caused by the reduction of pulling force.

In the tool clamp device of the machine spindle, the pulling force may be reduced due to deterioration of the internal disc spring and wear on the force increasing mechanism. If the pull-in force is reduced, the static rigidity is also reduced, which causes a deterioration in cutting force, machining accuracy, and tool life.

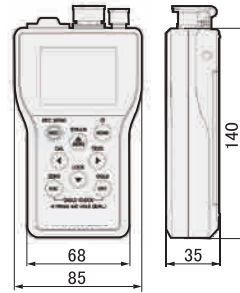
NEW Portable Pull Force Measurement Tool

The transducer, load cell, and cable have the same specifications.
By adding or replacing the tool body, it is possible to measure HSK, NC5, etc.



■ Transducer Part (indicator): TD-01-P

- Display: 2.4-inch TFT color display
- Power supply: AA batteries x 4
- Or nickel hydrogen rechargeable battery x 4
- USB power: (equipped with Micro-USB B terminal)
- Dimensions: 85×140×35mm (excluding protrusions)
- Weight: 320g (including batteries)



■ Connection Cable (5m): L-A-5

Included the cable that connects the load cell and transducer

■ Soft Case: CS-TD01S

Carrying soft case designed for the transducer with the shoulder strap

□ Optional Special Aluminum Case (sold separately): 9CLP-PAC

Optional aluminum case that can store the load cell, the transducer, the cable, and the tool body (one each)
Dimensions: 470×355×150

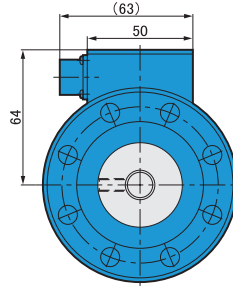
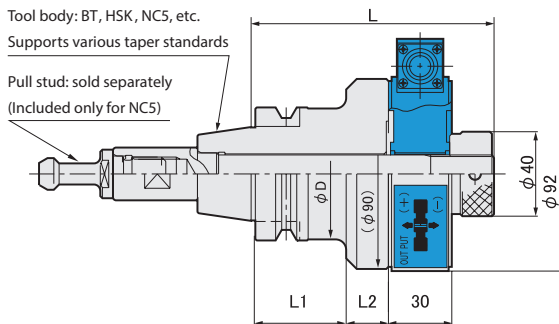
□ A Set with a Special Aluminum Case

Part Number Example: S.BT40-CLP-P

■ Load Cell Part (blue colored part of drawing): SH-50KN

Tool body: BT, HSK, NC5, etc.
Supports various taper standards

Pull stud: sold separately
(Included only for NC5)



Shank	Code No.	φD	L1	L2	L	Set Content				Range of Use	Weight (KG)	
						Load cell (MAX. load)	Transducer	Cable	Soft Case			Tool Body
BT30	BT30-CLP-N-P	45	35	15	100	SH-50KN	TD-01-P	L-A-5	CS-TD01S	BT30-CLP-N-BD	0 ~ 15KN	2.5
BT40	BT40-CLP-P	62	45	20	115					BT40-CLP-BD	0 ~ 24KN	3.5
BT50	BT50-CLP-P	90	70	-	121					BT50-CLP-BD	0 ~ 40KN	5.0

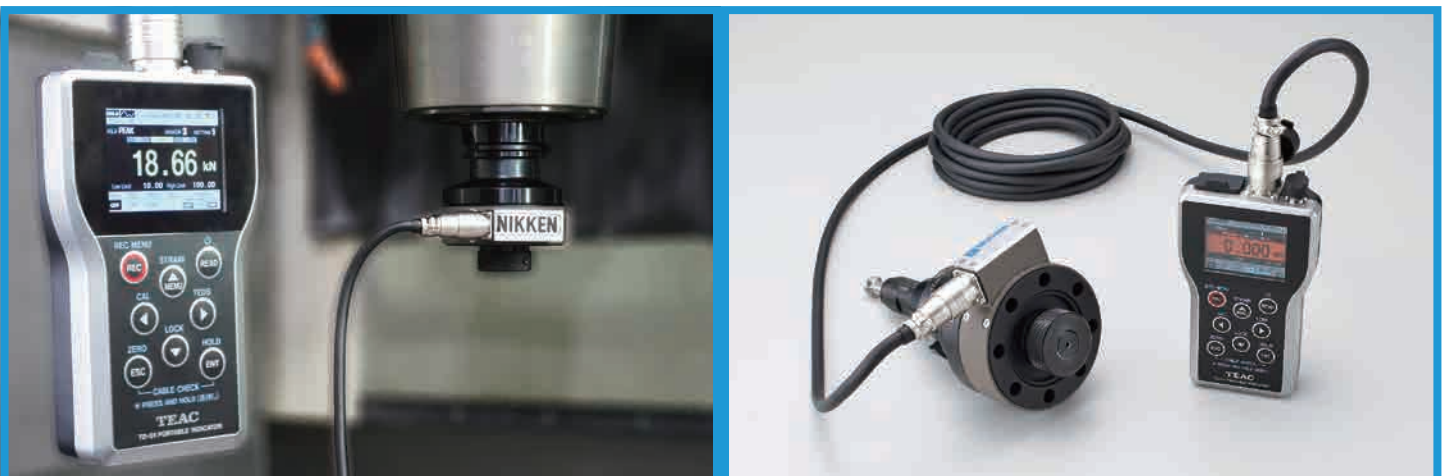
- HSK and NC5 are also available. Example - HSK: HSK63A-CLP-P, NC5: NC5-63-CLP-D40-P
- Pull studs are included only for NC5. Please specify the pull stud Part Number. Example: PS-N63A
- When ordering only the tool body of the measurement tool, add "BD" to the end of Part Number. Example: BT50-CLP-BD

NIKKEN Tool Clinic

Regular Checkup for Tooling

Did you know cutting force varies depending on the drawing force of the machine spindle?

In order to maintain the high cutting force of the machining center, the pulling force of the machine spindle should be checked and adjusted periodically. The pulling force has a great influence on the cutting performance of the machining center. It can be said to be an important factor that affects machining accuracy and cutting tool life.



Portable Pull Force Measurement Tool CLP-P

- High cutting force of machine tools can be maintained by measuring the pulling force.
- Battery powered (Four AA batteries), lightweight and portable design
- Measurement via cable connection onboard is possible by utilizing ATC magazine



SUSTAINABLE
DEVELOPMENT GOALS

Nikken Kosakusho Co., Ltd. supports the Sustainable Development Goals