

TE 104

**Bedienungsanleitung
Operating instructions
Mode d'emploi**

HILTI

Hilti TE 104 Scaler

Technical data

Input power:	550 W
Voltage (versions):	100 V, 110 V, 115 V, 230 V, 240 V
Input current:	5.8 A, 5.0 A, 4.8 A, 2.4 A, 2.3 A
Frequency:	50–60 Hz
Machine weight:	3.5 kg
Dimensions:	365 x 190 x 85
Hammering under load:	0–3800 blows/min.
Single impact energy:	2.2 Nm
Front section designed to be held	
Permanent lubrication	
Variable speed control switch	
Automatic cut-out brushes	
Quick-release chuck for set of scaling needles	
Quick-release chuck for chisels	
Chisel blade adjustment to 8 positions	
Chisels with extended TE-C connection end:	Pointed, narrow, flat, wide flat/scrapper, flexible, channel, mortar and joint chisels
Needle protector with round and oval opening for the sets of needles	
Double insulation, class II, as per CENELEC HD 400	
Radio and TV interference suppression as per the EC directives 76/889 and 82/499, also as per EN 55014	



Kit supplied with the machine:

Plastic case, cleaning cloth, Hilti connection end grease, operating instructions

Please note before starting to work:

1. The electric supply must be the same as given on the TE 104 nameplate.
2. The TE 104 is double insulated and must not be grounded (earthed).

Wear protective goggles and gloves.

During operation, the sound pressure level may exceed 85 dB (A). In such cases, it may be necessary to take suitable protection against the noise.

Before starting to work, please read the enclosed safety precautions.



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Fig. 1: Cleaning of connection ends

The chuck is not incorporated in the lubricating system of the TE 104. The connection ends of chisels, etc. must, therefore, be cleaned regularly and **lubricated sparingly with Hilti grease.**

Holding the front section:

The cylinder section has been insulated against heat and designed for a good hold. Operators, however, should wear suitable gloves.

Start-up in cold surroundings

The TE 104 will start up quicker if its jolted once briefly against the work surface just after switching on.

Operating when chiselling

Fig. 2: Attach the chisel chuck (change the needle chuck.)

Pull forward locking ring against spring pressure and mount chuck on spindle. Release locking ring and turn slightly until locking balls engage.

Note: The chisel chuck can only be attached when the chuck is open.

Fig. 3: Insert/change a chisel.

Turn chuck counter-clockwise (symbol ☺). Insert chisel as far as it will go. Turn chuck in opposite direction and lock chisel (symbol ☹).

Position the chisel blade. Press forward locking sleeve, turn chuck with inserted chisel more or less to desired position, release locking ring, and continue turning until locking ring engages.

Select the hammering power. Regulate hammering power from 0 to 100%, as required, using electronic switch. The TE 104 runs continuously without maintaining pressure on the switch. Press switch again to switch off.

Operation when needle scaling Attach the needle chuck (change the chisel chuck.)

Proceed as for chisel chuck, fig. 3.

Fig. 4: Select/adjust needle protector.

Select a round or oval needle protector depending on the scaling job i.e. a flat, corner or edge surface. Adjust needle protrusion and secure (open) protector using wing nut.

Fig. 5: Change the needle set. Press needle holder towards locking ring and then turn. Spring tension separates needle holder from locking sleeve. Needles can be replaced separately or as a set. Apply only moderate pressure when working.

Caution! Insufficient pressure will shorten the life. (Make sure the tool is always in contact with the base material.)

Servicing

Electric tools must comply with the respective safety regulations. Servicing must, therefore, be carried out only by qualified electricians/electrical specialists. The use of original Hilti parts ensures an optimum of safety.

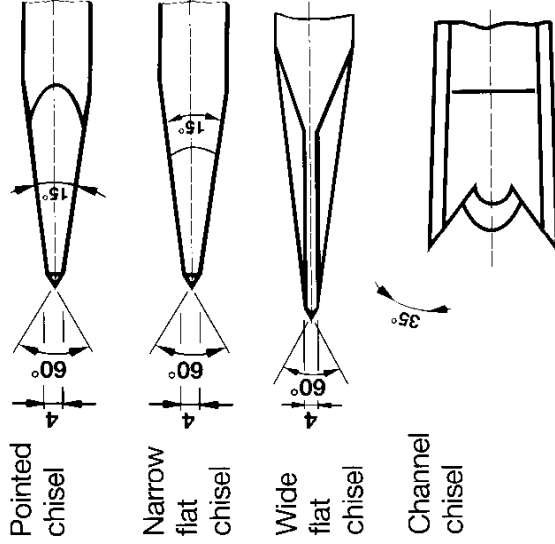
Chisel maintenance

Pointed, narrow flat and wide flat chisels: If chisel blades are slightly worn, they

can be reground/resharpened without loss of hardness.

If chisel blades are badly worn or chipped, they should be reforged, hardened and tempered. To do so, heat the chisel to approx. 850-900°C (bright cherry red to yellow) and forge the blade. Then anneal it at 750°C (cherry red). Harden the blade by heating it up to 900°C (bright cherry red) and quenching it in oil. Afterwards, temper the steel at 450 to 500°C (dark red).

Resharpener:



Warranty

Hilti warrants that the tool supplied is free of defects in material and workmanship. This warranty is valid as long as the tool is operated and handled correctly, cleaned and serviced properly and in accordance with the Hilti Operating Instructions, all warranty claims are made within 12 months from the date of the sale (invoice date), and the tech-

nical system is maintained. This means that only original Hilti consumables, components and spare parts may be used in the tool.

This warranty provides the free-of-charge repair or replacement of defective parts only. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty.

Under no circumstances will Hilti be obligated for direct, indirect, incidental or consequential damages, losses or expenses in connection with, or by reason of, the use of, or inability to use the tool for any purpose. Hilti specifically excludes the implied warranties of merchantability and fitness for a particular purpose.

For repair or replacement, send the tool and/or related parts immediately upon discovery of the defect to the address of the local Hilti marketing organization provided.

This constitutes Hilti's entire obligation with regard to warranty and supersedes all prior or contemporaneous comments and oral or written agreements concerning warranties.