

Instruction manual

Spoke threading machine V.04

- adjustable thread diameter
- only one threading die pair for all sizes
- cutting and thread rolling in one step
- for bent head spokes
- for spoke length 80 mm to 310 mm



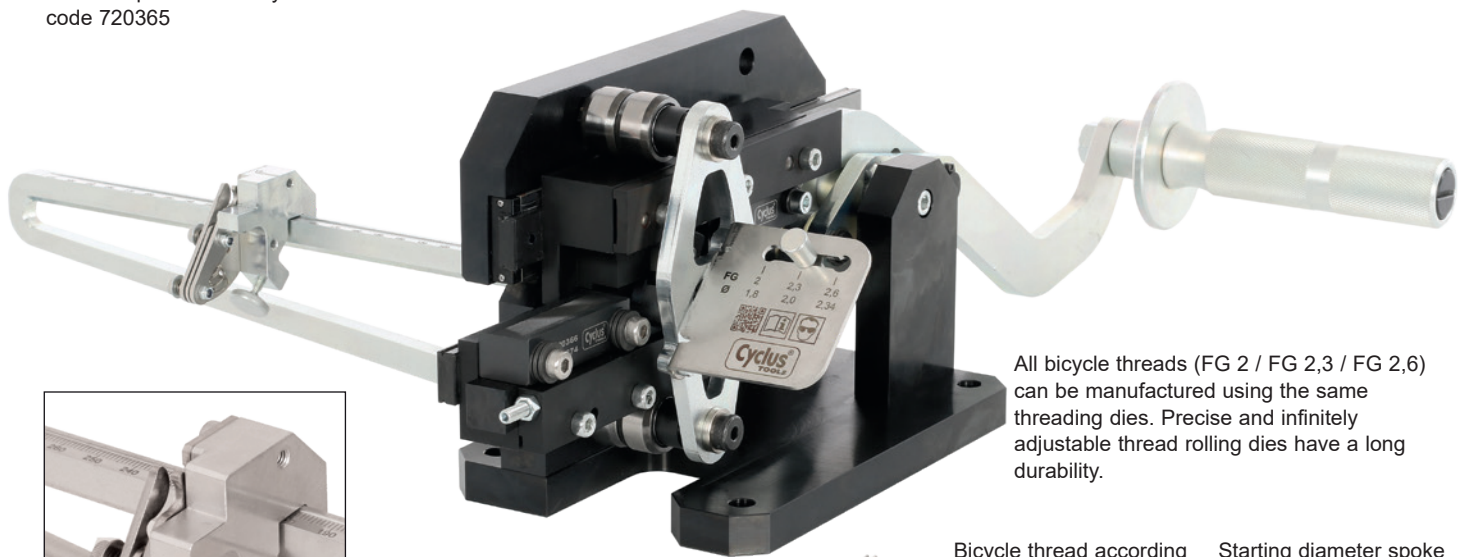
PROFESSIONALTOOLS



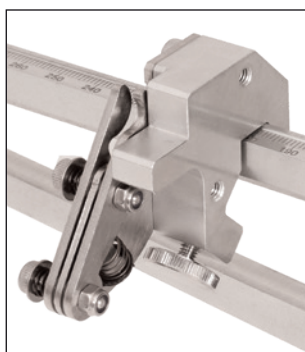
Scan the QR code and get informations, instructions and tutorials.

SPOKE THREADING MACHINE V.04

spoke cutting and thread rolling in one step, for bent spokes with bicycle thread code 720365



All bicycle threads (FG 2 / FG 2,3 / FG 2,6) can be manufactured using the same threading dies. Precise and infinitely adjustable thread rolling dies have a long durability.

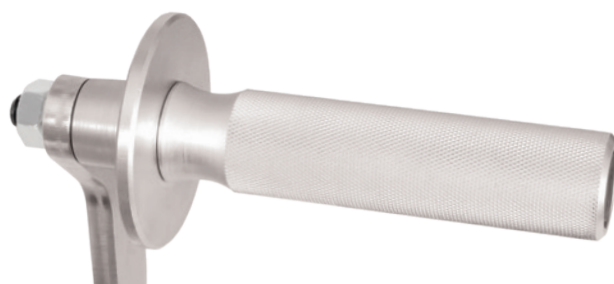


Fixture of bend head spokes

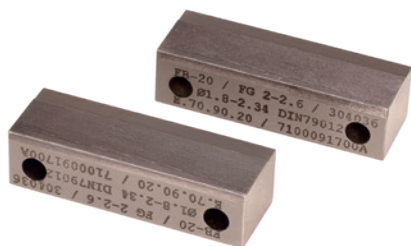
Bicycle thread according to DIN 79012

Starting diameter spoke with rolled thread

FG 2	Ø 1,8 mm
FG 2,3	Ø 2,0 mm
FG 2,6	Ø 2,34 mm



strong handle



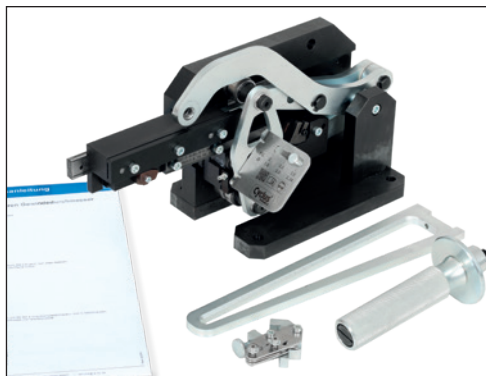
SPARE ROLLING DIES V.04

code 720366

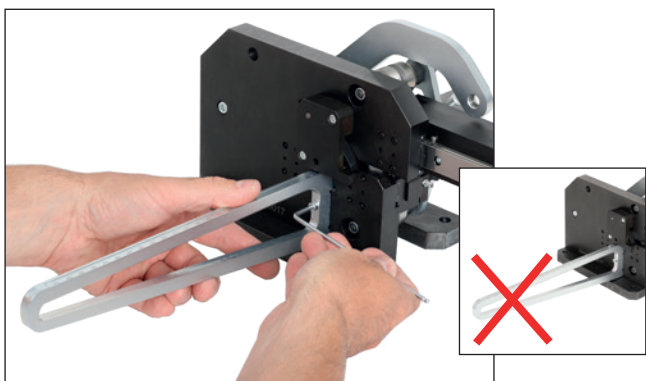
Machine startup - please read the instructions!



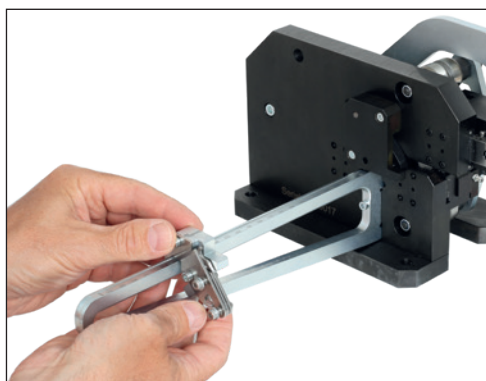
1. Loosen the phillips screws and control the content of the wooden box. Store the box for eventual safe transport in future.



2. Content:
- spoke machine incl. threading dies
- guide rail with scale
- fixture for bent head spokes
- handle
- instruction manual



3. Mount the guide rail (hexagon screw HX 3 mm)
Make sure that the guide rail is protected from mechanical impacts! Do not use it to lift or move the machine.



4. Mount the spoke fixture



5. Mount the handle



Remind marker

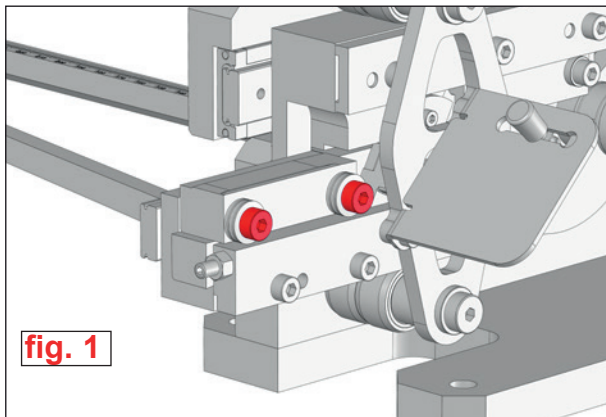


6. Mount the spoke machine on a safe horizontally layered underground using suitable screws.

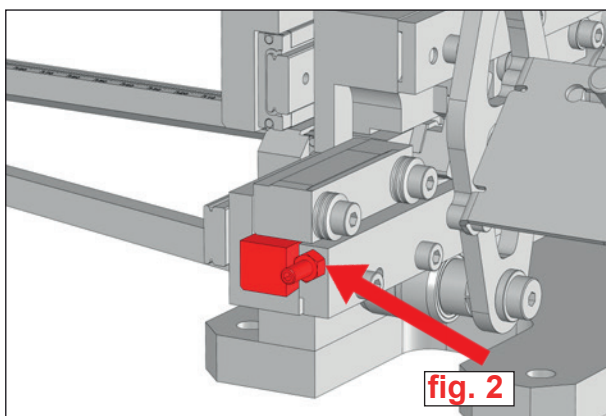
The spoke machine V.04 will be delivered from the factory with threading dies included. The threading dies are adjusted for the maximum spoke diameter. In order to roll a spoke, the machine needs to be adjusted to the corresponding diameter first. For that please follow the instructions how to adjust the machine. Use remind marker in order to indicate the spoke diameter, which the machine is currently adjusted for (FG 2 / FG 2,3 / FG 2,6).

Machine adjustment for different spoke diameter

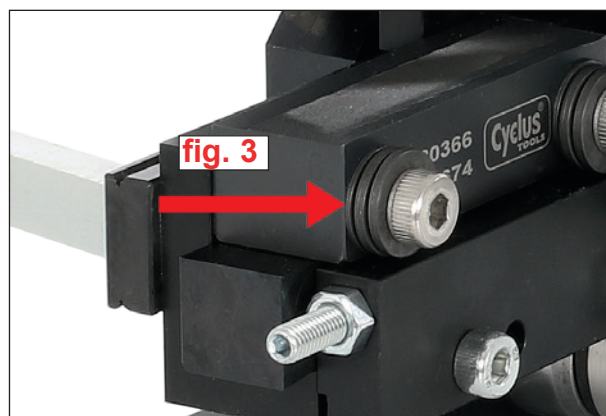
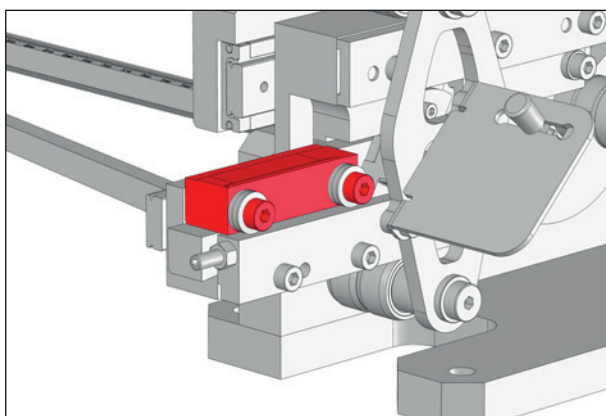
1. Loosen the 2 hexagon screws (HX 4 mm) on the lower threading die (fig. 1)
Do **not** remove screws and threading die from their place



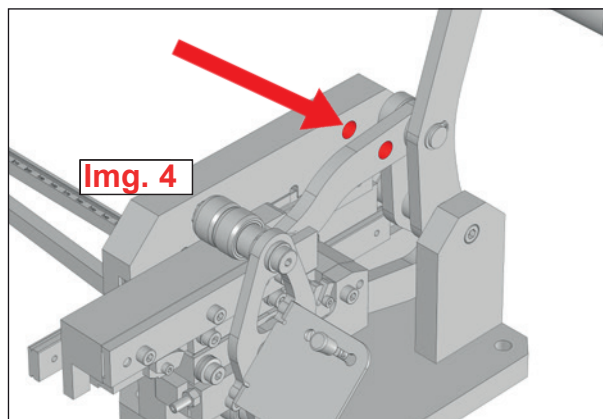
2. Loosen the locking nut (hexagonal 8mm) by turning counter-clockwise, and allow the wedge to come down (fig.2). The wedge will now protrude approx. 7 mm from the initial position.



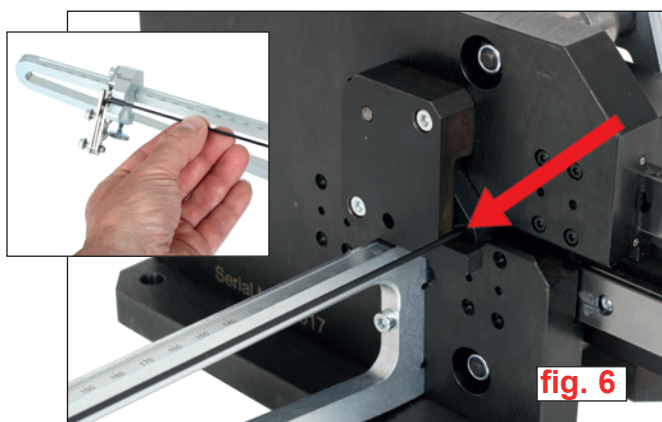
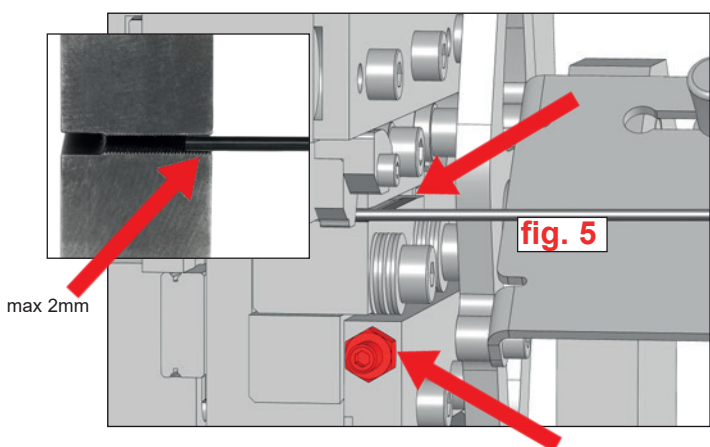
3. Press down the lower threading die with the thumb and tighten the 2 hexagon screws (HX 4 mm) **max. 3 Nm** the needed initial tension will result in combination of the screw and spring washer (fig. 3).



4. Bring the machine in adjustment position and lock it with a suitable steel pin (fig. 4).
(threading dies stand now exactly over each other)



5. Turn the front hexagon screw (HX 2,5 mm) in right direction (clockwise) and lift the lower threading die up, until the spoke end without thread will fit loosely into the gap between lower and upper threading die (fig. 5).
Insert the spoke between the threading dies from the right side, max 2 mm deep.



6. Make a test spoke threading
(Put a spoke into the machine from the left side, place the spoke head into the fixture, rotate the handle 180° evenly, fig. 6)

7. Take a measure of the rolled thread using a micrometer (diameter after DIN79012); in case that the rolled thread diameter is too small, continue with step 8.

8. Adjust the gap between the threading dies by turning the front hexagon screw HX 2,5 mm clockwise.
Proceed with small turns, max. 1/8 turn for each adjustment! Repeat steps 6 and 7.
Lastly, lightly re-tighten the 8 mm lock-nut.

Attention! When readjusting the spoke thread to a larger size e.g. from \varnothing 2.0 mm => \varnothing 2.34 mm always start with step 1.

In order to ensure a long durability of the threading dies, do not exceed the upper tolerance limit for the thread diameter to be rolled. For machine adjustment it is basically recommended to tend to the lower tolerance limit of the spoke diameter.

Do not roll on existing threads. Use sufficient spoke lengths to produce new spokes.

The spoke machine can not be used with colored, zinc-plated and chrome-plated spokes. Otherwise threading dies may get damaged.

Keep sources of magnetism away from your thread rolling machine. Magnetism increases the chance that metal fragments will adhere to the internal components, resulting in damage to dies, cut-off knives, guides and other moving parts. Demagnetise affected components if necessary."