

operation manual

Thread rolling machine GW 5

System Markthaler – MBM Schellhammer

Spezialwerkzeuge und Werkzeuge

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We are pleased that you have decided to use our thread rolling machine for professional mechanical thread production. The GW 5 thread rolling machine is a robust, easy-running machine that is mainly used in production. This rational production of optimal regulating threads on wire thicknesses from 1.5 to max. 2.5 mm will save you a lot of time in the future. You are therefore independent of suppliers.

Optimal results ensure your quality and give you satisfaction over a successful craftsmanship.

function

Using a handwheel with a crank handle, the profile jaws, which are arranged one above the other in opposite directions, are moved horizontally and thus roll the specified thread on the wire in between. This rolling process results in an outer diameter that is approx. 0.4 mm larger diameter of the thread. As a result, threads at some distance from the end of the wire are also possible.

The specified thread can be adjusted to wire

Thicknesses from 1.5 to max. 2.5 mm can be rolled. The profile jaw width determines the thread length for a single processing. Shorter thread lengths are possible at the wire ends by partially using the profile width. Longer threads are possible by starting in a second pass.

machine construction

The machine body is made of steel and largely painted for protection. All other guide and fastening parts are unpainted. The lower profile jaw is for

The hand wheel is slightly raised and firmly fixed to the side on a roller bearing guide.

This guide is moved horizontally by means of a hand wheel and worm gear. The upper profile jaw rests on the height adjustment wedge at the top and is also fastened at the side.

profile jaws

The profile jaws, the heart of the machine, are milled from hardened tool steel.

Extremely hard wires made of spring steel, phosphor bronze or even nickel silver can destroy them. Therefore, in your interest, please only use wires made of brass, aluminum or other materials that are easy to roll. Excessive stress from the rolled material leads to breakouts in the profile jaw surface. Please do not use any lubricants on the profile jaws or the rolling material. Under no circumstances should the upper and lower profile jaws touch each other when they are pushed over one another.

Since only half the length of the profile surface is in use at a time, the jaws can be turned horizontally by 180 degrees if the profile surface is heavily worn. Replacement jaws are available. Jaws with a width of 20 mm and jaws with a left-hand thread are also possible as special designs. Please inquire if required.

maintenance

The threaded spindle for moving the guide should be lubricated from time to time.

The profile jaw surfaces only dry from possible abrasion with a soft brass brush clean. From time to time, dust-dry rubbing of the profile surfaces with petroleum can promote better rolling of the blank. All other lubricants clog the tread surfaces and lead to failures.

Height adjustment of the profile jaws

The upper and lower profile jaws overlap at the respective starting area by the material thickness of the blank. The height distance of the jaws corresponds to the thickness of the blank.

For fine adjustment, the lateral fastening screws and the vertical retaining screw of the upper jaw are slightly loosened. Now the wedge can be moved over the upper jaw using the spring-loaded adjustment screw and thus the distance between the upper jaw and the lower jaw can be adjusted. To test the setting, the jaws must be fixed using the retaining screws on the side. Only then can the setting be checked. The right distance is given when the upper jaw just takes the thread blank with it when rolling starts and the blank rotates.

Setting the end pointer

End pointer at the maximum position of the rolling process on the front edge of the lower profile jaw set. This setting prevents accidental touching of the two profile surfaces.

Caution: The lower inclined profile jaw must not slide completely under the upper profile jaw, especially with wire gauges smaller than 2.0 mm, otherwise the profile jaws will touch and damage each other. Therefore, always note the position of the end pointer!

thread rolling

Place the blank parallel to the stop. Lower profile jaws by turning the

Slide the handwheel under the upper jaws. Blank is detected and must rotate.

Don't use violence! The blank must rotate continuously until the end pointer is over the edge of the lower jaw. Then turn back again and remove the finished threaded wire.

If you have any further questions regarding handling, please contact us

We wish you many good threads with this machine.

Best regards

Johannes Weiblen

