

Frieseke & Hoepfner Microscope

An interesting model from a little-known maker.

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Very little is known about this producer, based in Erlangen, Bavaria. There is minimal information on the web, and even our colleagues in Germany were only able to provide a little more (1).

I acquired this instrument recently online. There is another of rather more unusual, and probably later, design to be seen on the web (2).

It is clearly a quality instrument and, even though the general configuration is fairly conventional for the period, some thought has been given both to the ergonomics and the style.

COMPANY HISTORY



In 1939, the company of Frieseke und Hoepfner was founded in Berlin, together with the takeover of the company Hofmann GmbH in Erlangen, with the purpose of producing aeronautical equipment.

In 1945, the various divisions were consolidated in Erlangen and the factory was briefly used by the Americans for repair and construction of military vehicles.

Then, in 1948, Frieseke und Hoepfner was restarted, producing principally hydraulics and control equipment: thickness gauges, radiation meters, etc.

Financial problems led to state intervention and takeover with partial integration into the FAG group in Schweinfurt in 1955, followed by complete integration in 1988. This group was involved in hydraulics, roller bearings, winding, radiometry, and the associated control technologies.

When F&H decided to venture into microscope production is unknown, but it is a fairly logical move for a company involved in gauges and meters. Presumably this branch of the business did not prosper since very few of their microscopes are known.

Whether they manufactured all components themselves or commissioned some parts from other companies is unknown to me. The objectives on this instrument are Rau-Optik, Wetzlar.

Judging by the appearance of the instrument and the company history, it can probably be dated between 1948 and 1955.

DESCRIPTION

The microscope comes in a very nicely made case with drop-down, lockable door. Inside there is a drawer for accessories and the instrument is held firmly in place by supports.

The drawer has dedicated places for 4 eyepieces in a flip-up holder, 7 objectives (without cannisters), 3 ground-glass stoppered bottles of liquid (xylene, Canada balsam and immersion fluid), and 2 generic places for other accessories or instruments.



The microscope itself (numbered 541) is solidly built (6.6 Kg, 14.5 lb.) with an inclinable steel and nickel body. The base, of unusual design, is painted black. The stage is fixed and separate coarse and fine focus operate on the head.



Coarse focus is with knobs either side just below the stage.

Fine focus is with the thumb wheel behind the limb, and there is a numeric readout.

OPTICS



The condenser (unmarked) is focused with the lower knob on the side of the base. It is inserted in a carrier which can be swung out of the optical path. The condenser diaphragm is decenterable by means of a small knob.

The four objectives which came with the microscope are marked Rau-Optik Wetzlar, and are in a standard magnification sequence: 5, 10, 45, 100.

The four eyepieces are marked 5X, 8X, 10X and 15X.

Needless to say, if anyone can provide further information, I would be most pleased to hear from them. Hopefully then, a revised version of this article would be possible, perhaps including pictures of other models.

REFERENCES

(1) Wolfgang Lehmann (www.leitz-ortholux.de), private communication.

(2) www.mikroskopie-forum.de

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