



SCS 044

S SCHWEIZERISCHER KALIBRIERDIENST
C SERVICE SUISSE D'ETALONNAGE
S SERVIZIO DI TARATURA IN SVIZZERA
S SWISS CALIBRATION SERVICE

PRECISION COMMUNICATING WATER-LEVEL / 77 SCHLAUCHWASSERWAAGE / 77



WYLER

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 **Swiss
Quality**



With 2 water-surface level measuring columns with 150 mm or 6 inch graduations. Total height: 250 mm (9 7/8 „). Sturdy wooden box with carrier handle.

Special depth micrometer for measuring with measuring pin on water surface level supplied extra. Rubber connection hose, if required, length as desired.

This water level is used with great advantage for levelling at big distances in machine construction, or when erecting lines of shafting or other work with widely separate bearings.

One particular point in its favour is that it can be used on curves or right around corners, i.e. it can measure simply and accurately between places where direct sighting is impossible.

It is also possible to keep one measuring column fixed at one place, and with the other column bring various points into relation with the first and determine their levels (fig. A).

The communicating water level „WYLER 77“ can, however, be used not only for flat surfaces but also for levelling big driving shafts, such as crankshafts, turbine shafts and stator shafts. For such purposes the underside of the bases of the water columns are provided with prismatic faces which can be set on the shafts. Care must be taken that the columns stand perfectly vertical, i.e. that their bases are levelled in accordance with the circular spirit level provided there (fig. B).

Since these water levels function according to the law of communicating pipes, it is absolutely necessary to attend to the simple instructions given in the prospectus, when filling the columns and the tubing with pure water. In order to obtain accurate measurements, there must be no air pockets or other places where air might remain in the columns or tubing, since such air would slowly escape during the measuring process and thus cause errors in the readings of the water level. It is therefore particularly important to allow the water to flow through properly, as described in the prospectus.

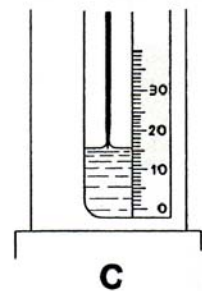
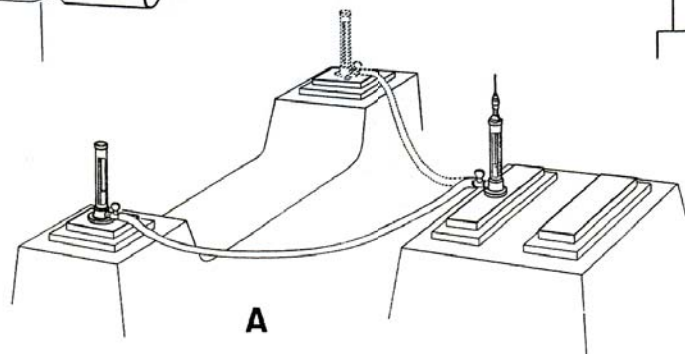
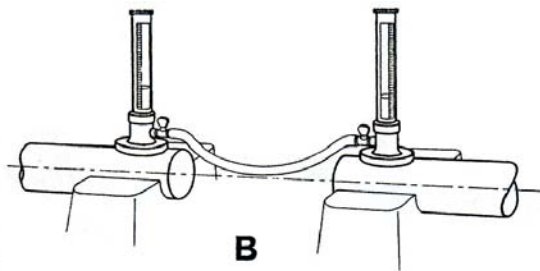
Because the two columns are provided with scales, which are adjusted accurately with respect to each other and agree with the underfaces of the bases and the prism there, the measuring itself can be carried out in two different ways:

The water level can be read accurately by eye to about 1/2 of a scale division.

For measurement of high precision a micro-feeler fitted with an adjustable feeler needle is used (supplied at an extra cost). Set the micro-feeler on the accurately adjusted closing nut. Bring the feeler needle as close as possible to the surface of the water and fix it in its position with the locknut. Now turn the micro-feeler carefully until the needle touches the surface of the water in the column. In order to get an accurate reading, turning must stop exactly at that moment. By keeping a careful watch, the operator will at once notice the sudden attraction of the water to the needle (fig. C).

These measurements should be made on both columns at least 2 - 3 times, and then the average calculated for each column. It is thus possible to attain 4 - 6 hundredth of millimetre, or 2 - 3 thousandths-of-inch measurements.

Of course, the feeler needle must be carefully dried after each measurement, in order to obtain faultless results.



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to change without notice

Änderungen sind ausdrücklich vorbehalten und
jederzeit ohne Ankündigung möglich

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Ihre lokale WYLER-Vertretung: