

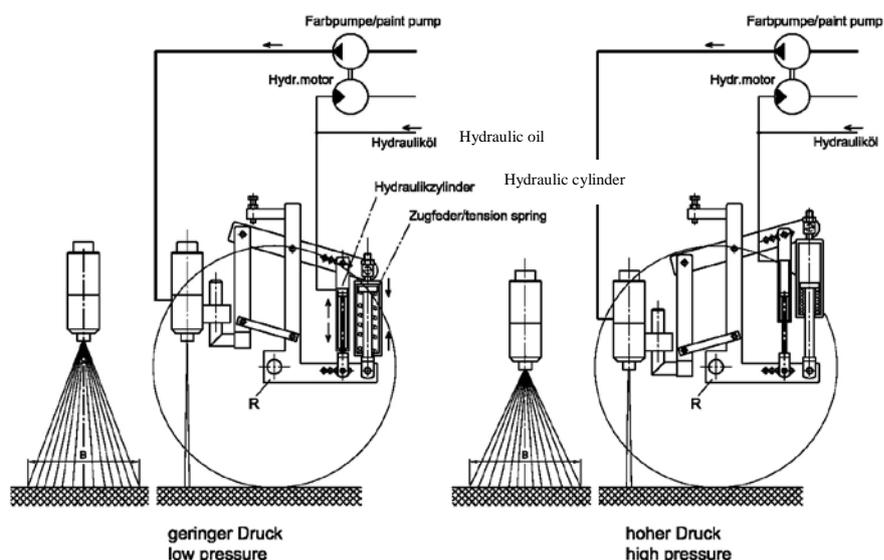
LINE WIDTH STABILIZER keeps variation in line width during path dependent Airless spraying method automatically in minimum ranges

The line width stabilizer is a further special feature and an option in the future for our larger airless machines.

Volume controlled HOFMANN metering pumps designed for Airless spraying permit variation of marking speed over a large range at a constant paint quantity per metre of line length (AMAKOS®). The paint quantity pumped by the pump is thus proportional to the speed of travel of the machine.

Hence, **as the speed increases**, so too does the quantity of paint that is pressed through the spraying nozzle per unit of time, accompanied by an increase of pressure in the paint pipe to the nozzle. It is well-known that an increase in the spraying pressure results in an **enlargement of the spraying angle**. With an **unchanged** distance between the gun and the road surface this results in an enlargement of the line width. This effect is dependent on the nozzle and the paint used. However, due to the pressure influence variator line width variation can be kept within minimum ranges in a large speed area.

The function principle is shown by the following illustration:



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The component marked by an R in the illustration is a frame that always moves parallel to the road surface. The pistol holder with the spray gun fastened to it is connected to the frame via articulated arms.

An electrical adjustment cylinder is attached between the frame R and the upper articulated arm and the operation of the same moves the spray gun upwards or downwards.

A pressure sensor P continuously records the actual spraying pressure of the paint and is transmitting the values to a control unit, which calculate the height of the spray gun in such a way that the line width almost remains constant even in case the spraying angle varies.

With **increasing marking speed**, i.e. with increasing paint pressure, the spray gun is pushed further and further **downwards** as a result of which the effect of the enlargement of the spraying angle on the **spraying width** is **compensated**.

HOFMANN GmbH

Low marking speed - low paint pressure -
pointer (spray gun) is higher



High marking speed - high paint pressure -
pointer (spray gun) is lower

