

# Users Manual for swaging machines Eckstein UPS 1 and UPS 3

## Machine description:

The UPS 1 and UPS 3 hose assembly swaging machines are all originally equipped with two sets of crimping dies for different hose sizes.

The smaller sets of dies in the UPS 1 and UPS 3 machines are for sleeves with outside diameters of 9-18mm, the bigger sets of dies are for sleeves with outside diameters of 19-30mm.

## Installation:

Fix the UPS 1 swaging machine with four strong 8mm bolts onto a sturdy working platform approximately 80 centimetres above floor level.

## Routine maintenance:

Ensure that moving parts are always lightly greased.

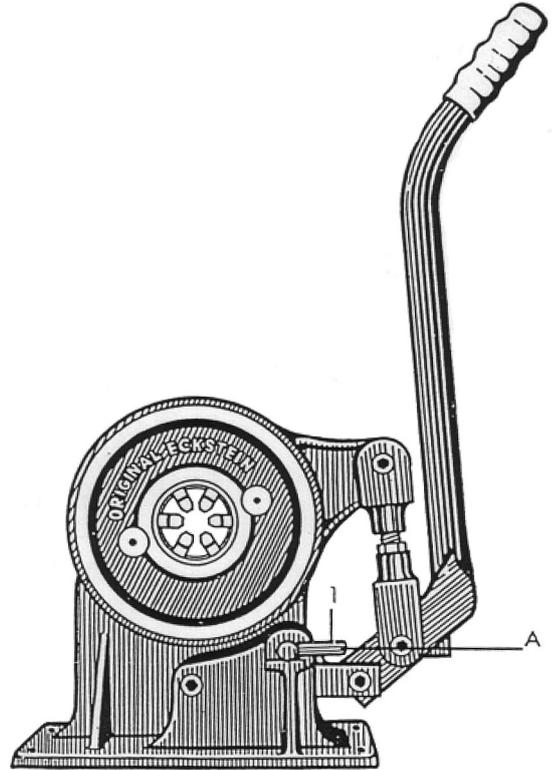
## Operating instructions:

To start the swaging process you first have to cut a hose to the necessary length and mount it with two fittings and two metal crimping sleeves, one of each on both sides of the hose. *To prevent damage to the machine, make sure that only properly heat treated sleeves and tension reduced sleeves are used* – for example, the original Eckstein sleeves marked <E>.

Check if the correct set of dies is already mounted in the machine. If not, you have to unscrew the two nuts (at the beginning and at the end of the letters 'Original Eckstein'), open the machine, take out all dies that are in the machine and replace them with the correct set of dies and close the machine again. It is *important that the little pin at the end of each die is put into the corresponding flute in the body of the machine*, so that the dies will be pulled back after the crimping process. If the pins are not placed correctly in the flutes, they will be cut off and destroyed when you do the first crimp!

The opening diameter of the machine can be adjusted with the little lever at the bottom of the main lever. For each set of dies, with the lever in the 3 o'clock and 9 o'clock position, smaller and larger hoses respectively can be produced. For dies and lever positions of the various sleeve diameters please refer to the table opposite.

By pulling the main lever with reasonable strength the complete crimping is finished.



Working range for the UPS 1 & 3 die sets:		
	Position 3:12	Position 9:12
Small dies (DN 3-8)	Sleeves OD 9-12 mm	Sleeves OD 13-18 mm
Large dies (DN 10-16)	Sleeves OD 19-22 mm	Sleeves OD 23-30 mm