



Pressure grouting machine SF25 open

The pressure grouting machine SF25 open – segment forming machine - is used for the pressing of components with pinch points, which cannot be inserted into other machines:

- cables with angle plugs
- sensors with larger clamping flange
- sleeves with longer tubes on both side
- angled pipes

The motorised press guarantees a form-fit connection which helps achieve, among other things, better strain-relief, anti-twist protection or shielding.

For workers of rotationally symmetric components the segment forming machine SF25 open represents a consistent enhancement of existing systems for the pressing of pipes, pipe ends, sleeves, shells, armatures and many other applications.

A typical example is the implementation of sensor sleeves which mechanically protect connection leads from being pulled out and seal them at the same time. This procedure also allows the crimping of plugs into sensor cases and much else. Suitable for wall thicknesses from 0.2 mm up to ca. 1.0 mm and a diameter of 3-25 mm, depending on the material.

Machine setup

The handling of the machine is very simple. The work piece is inserted into the opening. With this special form of segment forming machine, it is also possible to insert the work piece through an insertion slot at the side. The work piece is usually positioned with the help of a stopper, which assures that it does not move while the jaws move axially towards the work piece. The corresponding working parameters can be stored and managed in the machine control system. The user interface allows easy and logical operation. All essential processes are electronically monitored and the data is stored in the control system. This ensures high process safety and reproducibility.

more about the machine design of the SF25 open press machine

Basic machine

- basic module with fastening holes for the reception of all functional components consists of: base panel with carrier for servomotor, gearing and encoder
- forming head with lateral slot for easy insertion of component part
- $\bullet\,\,$ jaws (forming tools), flat and circular presses, possible number of jaws: 6 or 8

Protection measures

- covering of drive mechanism
- forming head protected on both sides by protective tube or cover
- · easy insertion of components for fast loading
- also available with light grid, insertion area only or complete
- emergency stop immediately stops all movements

Control system / Software

- VIPA Speed7 SPS with user panel Siemens TP700 comfort; S7 and TIA portal V13
- data sets selectable via user panel (by means of bar code scanner if desired)
- data bank for product specific parameters three access levels for machine control (user, service and administrator)
- language can be chosen as requested (default German and English, other languages with extra charge)
- control cabinet installed into frame

Frame

- holds all machine components
- welded and coated steel frame with 4 rotatable wheels, 2 with locking brake
- aluminium section optional

Machine documents

· documentation, hazard analysis, CE mark

Optional components - additions

The standard segment forming machine SF25 open can be equipped with different optional additions and functions to upgrade it, for example, to a semiautomatic press with process monitoring.

for more information on components and additions to pressure grouting machine SF25 open, see here

Model-SF25CNCopen

Manual positioning

- stopper is set into position manually
- one position per data set possible
- position reading via encoder and display on OP
- component position is registered by a sensor at the stopper
- machine is started automatically or via pedal switch



Motor-driven positioning

- data sequence freely programmable (max. 30 commands per data set)
- several press positions per data set programmable
- $\bullet \hspace{0.1in}$ stopper is motor-driven into position by selection of data set
- position displayed on OP
- component position is registered by a sensor at the stopper
- machine is started automatically or via pedal switch



Load-displacement monitoring

- load cell calculates load in lever
- graphic display of loads on separate measuring device
- OK and NOK evaluation



Height adjustable frame

- desktop mounted on height adjustable legs
- height adjustable up to 300 mm
- 4 rotatable wheels, 2 with locking brake



Light curtain

- protection of free access for loading of segment forming machine
- obstacle recognition
- initial inspection

Nonstandard models

- machine can be adjusted according to requirements
- integration of machine into entire machine complex possible
- further alternatives possible

Technical data

Measurements Standard 1.000 x 1.000 x 1.400 mm (length x width x height)

Die data number of jaws 6 / 8

jaws hardened possible press diameter 3-25 mm max. crimp lengt up to 30 mm

Power supply ${
m net}$ 3 x L / PE 400V / 50Hz

Output 3 kVACurrent 8,2 APre-fuse $\max. 16 \text{ A}$ Cable cross section $5 \times 2,5 \text{mm} \le 6$ Compressed air not required
Weight Ca. 350 kgRepeat accuracy $\pm 0,05 \text{mm}$ Cycle time $\pm 0,05 \text{mm}$

Fichter formtec GmbH Bruckmatten 6 DE-79356 Eichstetten Vertretungsberechtigte: Florian Eckerle + Pascal Spöri Tel.: +49 7663/914397-0 Email: info@fichter-formtec.de