

FINN-POWER

FP20

**POWERFUL SWAGERS
FOR SERIAL PRODUCTION
MAX. FITTING SIZE 1¼"**



FINN-P

FINN-POWER FP20 SWAGING MACHINES

The FP20 series of swaging machines fulfil the Finn-Power range of swaging machines for serial production. It offers a combination of several major benefits:

- Economical investment for serial production of small size hoses
- QC-tool for standard die sets
- extensive opening travel for easy swaging of specially shaped fittings
- fast, efficient and accurate swaging
- smooth operation through fast approach combined with slowed swaging
- free horizontal setting of control unit position for operator convenience



FP20 can be operated by push button, pedal (option), back stop device or using semi-automatic function.

POWER

FINN-POWER provides swaging capacity for most varied applications and production types. To ensure that specific application requirements are met, alternative control types are available.

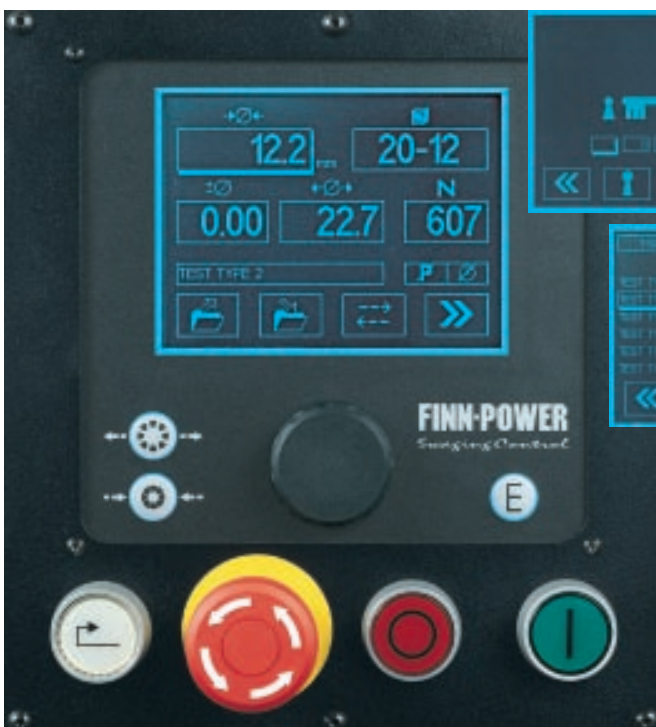


IS MODELS

IS control is ideal for serial swaging operations, but it can also be used for single piece manufacturing in special cases.

IS is an analogical control which features easy, stepless adjustment of swaging diameter. A multi-turn potentiometer is used for setting the swaging diameter and a single-turn potentiometer for the retraction diameter.

IS is a user-friendly, reliable solution for swaging control. Manual, semi-automatic or automatic control modes can be selected. Mode selector offers also swaging delay which occurs after the swaging diameter has been reached.



VS MODELS

VS control is a modern user interface based on icons, a selector and clear, visual indication of all swaging parameters. When the desired swaging diameter is given, the interactive VS automatically recommends a die set among those stored in its tool management memory.

Swaging parameters are specified at a tolerance of 0.1 mm. Fine adjustment can be done at a tolerance of 0.01 mm. Up to 200 combinations of retraction diameter/correction requirements/swaging-diameter/die set/delay adjustment, can be stored for immediate availability.

VS control makes set-up change a simple matter of seconds. For example, it gives step-by-step instruction for die set change. This means additional flexibility in the manufacturing of short, repeatable series.

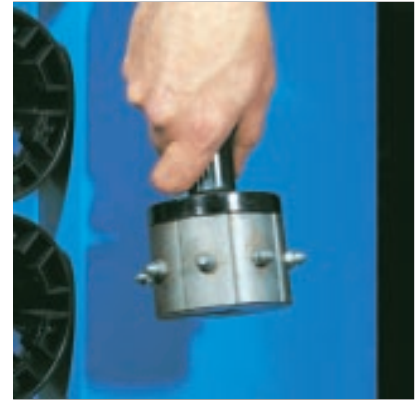
EASY INSTALLATION OF DIE SETS

The FP20 is supplied with a storage locker and quick change tool as standard.

The quick change tool allows the whole die set to be changed in one easy operation. The pins on the tool engage the holes in the dies. As the swaging head closes/opens the dies are secured to/released from the master dies. In this way the dies are kept in complete sets at all times and are always used in the same order.



The die set is taken from the rack



The tool holds the dies together as a complete set



Die set is positioned inside the swaging head



The head is closed and the dies are swaged together



Tool is removed: the swager is ready for operation

Technical specifications	FP20	Standard die sets
Hose size (inch)	1¼	Code Swaging diameter (mm) L (mm)
Swaging range (Ø mm)	4...68 (see table for standard die set data)	FP20-10 10.0 - 12.0 55
Die type	FP20 (see table for standard die set data)	FP20-12 12.0 - 14.0 55
Max opening (mm)	+68 (min. swaging dia of die set added by table value)	FP20-14 14.0 - 16.0 55
Master die shoe length (mm)	97	FP20-16 16.0 - 19.0 75
Motor (kW)	3	FP20-19 19.0 - 23.0 75
Standard voltages (V)	230 or 400 (other voltages upon request)	FP20-23 23.0 - 27.0 75
Swaging force (kN)	1500	FP20-27 27.0 - 31.0 75
Number of swagings/hour	2300 (theoretical with ½" hose ΔØ 10 mm)	FP20-31 31.0 - 36.0 75
Noise level (dB(A))	68	FP20-36 36.0 - 41.0 75
Protection class	IP54	FP20-41 41.0 - 47.0 75
Overall dimensions: length (mm)	630	FP20-47 47.0 - 54.0 85
width (mm)	665	In addition to the standard die sets, a wide range of special die sets for different diameter, length and form are available.
height (mm)	1400	
Weight without oil (kg)	600	

Subject to changes without prior notice.