

FINN-POWER

P51

**SINGLE PIECE AND
SMALL BATCH PRODUCTION
MAX. FITTING SIZE 2½" / 4"**



FINN-POWER P51 SWAGING MACHINES

The P51 series of swaging machines complements the Finn-Power range of tabletop machines. It offers a combination of several benefits:

- * no longitudinal movement of die set - easy positioning
- * extensive space behind dies - easy swaging of elbow fittings
- * more swaging force
- * larger swaging range, up to 120 mm, enables to swage up to 4" industrial hose (without the adapter dies)



FINN-POWER's P51 series swaging machines feature 2,800 kN of hydraulic swaging in an amazingly compact, yet extremely solid design.

User friendliness has always been a major feature in FINN-POWER's engineering tradition. The range of controls available allows you to choose just the solution for your application. As there is no longitudinal movement of the dies during the swaging, positioning is easy and accurate. Further, the control unit can be turned within 100 degrees to suit operator's preferences.

P51 - a compact, productive swaging solution by FINN-POWER.

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.

MS MODELS

In MS models, the diameter is set using a 10-turn vernier dial. One turn is equivalent to a 1 mm change in swaging diameter. The diameter can be set with an accuracy of 0.01 mm.

MS models are especially well suited for single piece production e.g. in repair shops.



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. Potentiometers are used for setting both swaging and retraction diameters.

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.

IS and VS models feature automatic back gauges as standard.

DIE SET CHANGE - SIMPLE AND EASY



Just a single hand movement is required for detaching or mounting a die.



The quick change tool, available as an option for the P51 series swagers, 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. The dies are held together by a magnet in the tool until the set is placed back in the rack. In this way the dies are kept in complete sets at all times and are always used in the same order.



P51 swagers can be mounted on a special base unit. Up to 16 die sets can be stored in a rack for operator convenience.

Technical data P51

Hose size	2½" (industrial hose 4")
Die type	32 (see table for standard die set data)
Swaging range Ø (mm)	4...120
Max opening (mm)	+46 (min. swaging dia of die set added by table value)
Master die shoe length (mm)	120
Motor (kW)	4
Standard voltages (V)	230 or 400 (other voltages upon request)
Swaging force (kN)	2800
Number of swagings / h	720 (theoretical with ½" hose ΔØ 10 mm)
Noise level dB(A)	71
Protection class	IP54
Overall dimensions	
length (mm)	680
width (mm)	510
height (mm)	780
Weight without oil (kg)	260

Standard die sets

Code	Swaging diameter (mm)	L (mm)
32-10	10.0 - 12.0	55
32-12	12.0 - 14.0	55
32-14	14.0 - 16.0	55
32-16	16.0 - 19.0	55
32-19	19.0 - 22.0	55
32-22	22.0 - 26.0	70
32-26	26.0 - 30.0	70
32-30	30.0 - 34.0	70
32-34	34.0 - 39.0	75
32-39	39.0 - 45.0	75
32-45	45.0 - 51.0	90
32-51	51.0 - 57.0	90
32-57	57.0 - 63.0	100
32-63	63.0 - 69.0	110
32-69	69.0 - 75.0	110
32-74	74.0 - 80.0	110
32-78	78.0 - 87.0	110

Options:

- foot pedal (IS/VS models)
- quick change tool and die set base or die set rack
- special die sets (in addition to the standard die sets, a wide range of special die set for different diameter, length and form are available)

Subject to changes without prior notice