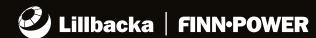




SERVICE LINE, CUTTING AND SKIVING MACHINES

## THE BEST FIT TO SOLVE SERVICE NEED





### HIGH QUALITY CRIMPING WITH OVER 40 YEARS OF EXPERIENCE

Each year Lillbacka Powerco Oy manufactures thousands of different types of crimping machines, as well as hose cutting and nut crimping machines. Approximately 95% of Powerco's production is exported through an international distributor network to more than 60 countries from the company factory in Finland. Finn-Power is known everywhere for its quality and long-lasting crimping machines, which are produced by Lillbacka Powerco with more than 40 years of manufacturing experience. We offer reliable, durable and accurate crimping machines to meet the requirements of different industries.

Finn-Power products offer the highest and most dependable quality thanks to the many years of experience in product design, engineering, development and manufacturing. Each machine is carefully tested and there's minimal need for calibration. The driving force behind the success of Finn-Power products lies in the many skilled professionals with customer service oriented attitude. Finn-Power machines represent high-quality Finnish engineering work at its best.

We make the quality for you!

## Dreams came true

Jorma Lillbacka, who grew up in the spacious nature of Ostrobothnia, has never gone with the flow. Already from childhood, Jorma has determinedly carried out his own dreams and built everything from powerful industrial ma chines to airplanes. Lillbacka's entrepreneurial spirit has made innovation, quality and service more than just words: they are a way of life. Lillbacka Group is strongly Finnish company whose main pillar of operations is the high quality of products. For over 40 years Lillbacka has proven to be successful, creative and diverse. At Lillbacka, dreams can indeed become reality.





## FINN-POWER SERVICE LINE

Finn-Power service line machines are simple and straightforward in construction, easy to operate and highly reliable. Finn-Power service line includes a range of hand-operated and air pressure powered machines to battery-powered solutions that provide the most suitable solution for service needs. These machines are also easy to carry anywhere thanks to their light weight and compact size.





PI6HP, PI6HPZ, PI6AP, PI6APZ

### **FAST AND RELIABLE** FOR FIELD SERVICE **REPAIRS**

Finn-Power P16 series crimping machines are compact, strong and reliable for any service crimping need. Their compact design allows efficient working and easy transport between any locations. P16 machines are easy to use and they produce high quality crimping day after day.

### CONTROL



### **AVAILABLE MODELS**





HP HAND PUMP FOR EASY FIELD SERVICE



AP AIR PRESSURE FOR EASY FIELD SERVICE

### DIE SET P16

Pno	Crimp. range	D	L	
18212/10	10.0 - 12.0	10	55	
18212/12	12.0 - 14.0	12	55	
18212/14	14.0 - 16.0	14	55	
18212/16	16.0 - 19.0	16	55	
18212/19	19.0 - 23.0	19	55	
18212/23	23.0 - 27.0	23	55	
18212/27	27.0 - 31.0	27	65	
18212/31	31.0 - 38.0	31	65	



### P16HP

- PORTABLE

Manually operated hydraulic crimping machine for repair workshops. Easy to use, lightweight and compact in size.



### P16HPZ

- FLEXIBLE

Machine is connected to pump with a flexible hydraulic hose that enables crimping in tight and difficult spaces.



### P16AP

- COMPACT

Suitable for workshops where compressed air is available. This lightweight machine can easily be carried by hand in need of relocation.



### P16APZ

- FLEXIBLE

Machine is connected to pump with a flexible hydraulic hose that enables crimping in tight and difficult spaces.

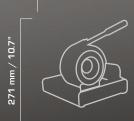
DIE SETS	P16	P16	P16	P16
CRIMPING RANGE (MM) (1	10 - 45	10 - 45	10 - 45	10 - 45
CRIMPING RANGE (INCH) [1	0.39 - 1.77	0.39 - 1.77	0.39 - 1.77	0.39 - 1.77
MAX OPENING (MM)	+20	+20	+20	+20
MAX CRIMPING FORCE (KN)	955	955	955	955
MAX CRIMPING FORCE (TON.)	95	95	95	95
NUMBER OF CRIMPS/HOUR [2]		-	-	_
PUMP	HAND PUMP	HAND PUMP	AIR PUMP	AIR PUMP
PUMP	HAND PUMP	HAND PUMP	AIR PUMP	AIR PUMP
WEIGHT (KG)	26	28	28	26
WEIGHT (LBS)	57	62	62	57

- With standard dies.
   Crimping range can be increased with special dies.
- 2) Theoretical with 10 mm cycle.

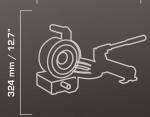
MEASUREMENTS

**FEATURES** 





331 mm / 13.1"



331 mm / 13.1"



241 mm / 9.5"





P20HP, P20HPL, P20AP, P20APL

## PORTABLE AND EASY WITH VERSATILE FEATURES

Medium-sized and efficient Finn-Power P20 machines are ideal for repair workshops and for various service production needs. P20 series introduces the ease of measuring the crimping operation by a light indication. Compact design enables easy transport to any location.

### CONTROL



MANUAL CONTROL



BEST SUITED FOR SINGLE-PIECE PRODUCTION \*

### **AVAILABLE MODELS**



EQUIPPED WITH ELECTRICAL MEASURING DEVICE



HAND PUMP FOR EASY FIELD SERVICE



AIR PRESSURE FOR EAS'
FIELD SERVICE

### **OPTIONS**

- QC-Too
- Mechanical backstop device
- \* MS control available for P20HPL and P20APL

### DIE SET P20

Pno	Crimp. range	D	L	
18013/10	10.0 - 12.0	10	55	
18013/12	12.0 - 14.0	12	55	
18013/14	14.0 - 16.0	14	55	
18013/16	16.0 - 19.0	16	55	
18013/19	19.0 - 23.0	19	55	
18013/23	23.0 - 27.0	23	55	
18013/27	27.0 - 31.0	27	70	
18013/31	31.0 -36.0	31	70	
18013/36	36.0 - 41.0	36	75	
18013/41	41.0 - 47.0	41	75	
18013/47	47.0 - 54.0	47	85	
18013/54	54.0 - 61.0	54	85	



2) Theoretical with 10 mm cycle.







	P20HP - COMPACT	P20HPL - SIMPLE	P20AP - PORTABLE	P20APL - ADVANCED
FEATURES	Portable and manually operated crimping machine for workshops. Suitable for medium-sized hoses.	Simple and easy to use in various crimping operations. Machine measures the crimping range and uses a light signal to indicate proper measurements for operation.	The most popular applications for these portable Finn-Power crimping machines are in repair workshops and in industrial maintenance units.	P20APL is an advanced version of P20 series and it is equipped with a compressed air appliance and a light signal to measure crimping quality.
DIE SETS	P20	P20	P20	P20
CRIMPING RANGE (MM) [1	10 - 61	10 - 61	10 - 61	10 - 61
CRIMPING RANGE (INCH) [1	0.39 - 2.40	0.39 - 2.40	0.39 - 2.40	0.39 - 2.40
MAX OPENING (MM)	+25	+25	+25	+25
MAX CRIMPING FORCE (KN)	1 370	1 370	1 370	1 370
MAX CRIMPING FORCE (TON.)	137	137	137	137
NUMBER OF CRIMPS/HOUR (2				
PUMP	HAND PUMP	HAND PUMP	AIR PUMP	AIR PUMP
PUMP	HAND PUMP	HAND PUMP	AIR PUMP	AIR PUMP
WEIGHT (KG)	66	66	59	59
WEIGHT (LBS)	146	146	130	130
MEASUREMENTS	487mm / 19.2"	487mm / 19.2"	583mm / 22.9"	583mm / 22.9"
With standard dies.     Crimping range can be increased with special dies.	389 mm / 15.4"	389 mm / 15.4"	13.6"	345 mm / 13.6"



P20CS. P32CS

### FOR FIELD SERVICE **AND EMERGENCY REPAIRS**

The portability and usability in demanding devices in different industries make CS series machines suitable for field services and emergency repairs. These machines are simple and compact in construction, easy to operate, and can be easily carried to anywhere. P20CS and P32CS are equipped with 12V or 24V power cords and can be connected to battery power. The most popular applications for these Finn-Power crimping machines are in repair vehicles and in industrial maintenance units. These models are available for left- or right-hand operation.

### CONTROL



MS BEST SUITED FOR SINGLE-PIECE PRODUCTION

### **AVAILABLE MODELS**





### **OPTIONS**

### DIE SET P20

Pno	Crimp. range	D	L	
18013/10	10.0 - 12.0	10	55	
18013/12	12.0 - 14.0	12	55	
18013/14	14.0 - 16.0	14	55	
18013/16	16.0 - 19.0	16	55	
18013/19	19.0 - 23.0	19	55	
18013/23	23.0 - 27.0	23	55	
18013/27	27.0 - 31.0	27	70	
18013/31	31.0 -36.0	31	70	
18013/36	36.0 - 41.0	36	75	
18013/41	41.0 - 47.0	41	75	
18013/47	47.0 - 54.0	47	85	
18013/54	54.0 - 61.0	54	85	

### DIE SET P32

Pno	Crimp. range	D	L
18506/10	10.0 - 12.0	10	55
18506/12	12.0 - 14.0	12	55
18506/14	14.0 - 16.0	14	55
18506/16	16.0 - 19.0	16	55
18506/19	19.0 - 22.0	19	55
18506/22	22.0 - 26.0	22	70
18506/26	26.0 - 30.0	26	70
18506/30	30.0 - 34.0	30	70
18506/34	34.0 - 39.0	34	75
18506/39	39.0 - 45.0	39	75
18506/45	45.0 - 51.0	45	90
18506/51	51.0 - 57.0	51	90
18506/57	57.0 - 63.0	57	100
18506/63	63.0 - 69.0	63	110
18506/69	69.0 - 75.0	69	110
18506/74	74.0 - 80.0	74	110
18506/78	78.0 - 87.0	78	110





### P20CS

- COMPACT

P32CS

- STRONG

FEATURES

Compact size makes it easy to transport and carry anywhere. Suitable for field repairs and emergency needs.

Bigger opening allows crimping of larger sizes in service vehicles. Strength and portability make it the ideal machine for larger industrial equipment.

DIE SETS	P20	P32
CRIMPING RANGE (MM) [1	10-61	10 - 87
CRIMPING RANGE (INCH) [1	0.39 - 2.40	0.39 - 3.42
MAX OPENING (MM)	+25	+33
MAX CRIMPING FORCE (KN)	1 370	2 000
MAX CRIMPING FORCE (TON.)	137	200
NUMBER OF CRIMPS/HOUR (2	250	150
MOTOR (KW) <sup>(3</sup>	1.6 / 2.2	1.6 / 2.2
MOTOR (HP) (3	2.1 / 3.0	2.1 / 3.0
WEIGHT (KG)	83	117
WEIGHT (LBS)	183	257

- With standard dies.
   Crimping range can be increased with special dies.
- 2) Theoretical with 10 mm cycle.
- 3) I-phase / 3-phase

MEASUREMENTS

583mm / 22.9"



626mm / 24.7"





# COMPROMISE NOTAN APTION



## FINN-POWER CUTTING MACHINES

Finn-Power offers a variety of cutting machines from service use to serial production. With Finn-Power cutting machines, cutting is fast and safe. These machines are efficient and they can provide optimal cutting speed for different hoses. Several cutting blade options provide solutions for the most challenging cutting operations. They can also be equipped with various accessories that are needed in the cutting processes.



CM30, CM35, CM30CS, CM30P

## ERGONOMIC AND SAFE CUTTING FOR SERVICE USE

Finn-Power cutting machines offer efficient, safe and fast cutting for service use in workshops and service vans. They are easy and simple to use and equipped with fume exhaust connections, which offer pleasant working environment. CM series machines are electric cutting machines designed for cutting up to 2" braided hoses. A serrated blade is also included in the standard shipment. CM30 machines are also available as 12V and 24V (CS version).

### **AVAILABLE MODELS**



BATTERY-POWERED MACHINE\*



PNEUMATIC FOOT PFDAL \*\*

### **OPTIONS**

- Smooth blade
- Brake
- Pneumatic foot pedal \*\*\*

 $^st$  Available for CM30 machines

\*\* Only available for CM30 and CM35 machine









СМЗОР

- HANDY

CM30

- FAST

Electric cutting machine for cutting

up to 2" braided hoses fast and

safely. Designed for workshops.

CM35 - ERGONOMIC

pedal for effortless cutting.

CM35 is designed for two-handed

operation with a mechanical foot

Manually operated and designed for service use in workshops and service vans. Easy and simple to

- SIMPLE

CM30CS

Same features as in CM30. In addition, CM30P has a pneumatic foot pedal for

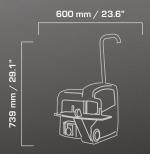
	Equipped with a fume exhaust connection and a serrated blade.		use and equipped with a fume exhaust connection.	two-handed operation.
HOSE CAPACITY, 1-2 WIRE	50,8	50,8	50,8	50,8
HOSE CAPACITY, 4 WIRE (MM)	31,75	31,75	31,75	31,75
HOSE CAPACITY, 1-2 WIRE		2	2	2
HOSE CAPACITY, 4 WIRE (INCH)	1 1/4	1 1/4	1 1/4	1 1/4
BLADE DIAMETER (MM)	300 x 3	300 x 3	300 x 3	300 x 3
SPEED OF BLADE, 50HZ (RPM)	2 750	2 750	2 750	2 750
SPEED OF BLADE, 60HZ (RPM)	3 370	3 370	3 370	3 370
AVAILABLE VOLTAGE (V)			12 / 24	_
MOTOR (KW) [3	2.2 / 3	2.2 / 3	2.2 4 / 1.5 4	2.2 / 3
MOTOR (HP) (3	3 / 4	4	3 4 / 2 4	3/2
WEIGHT (KG)	50	60	50 / 60	50 / 60
WEIGHT (LBS)	110	133	111 / 133	111 / 133
MEASUREMENTS				

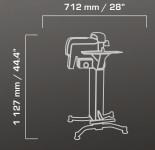
I) With standard dies. Crimping range can be increased with special dies.

- 2) Theoretical with 10 mm cycle.
- 3) I-phase / 3-phase

FEATURES

4) 12V / 24V. Overload controlled

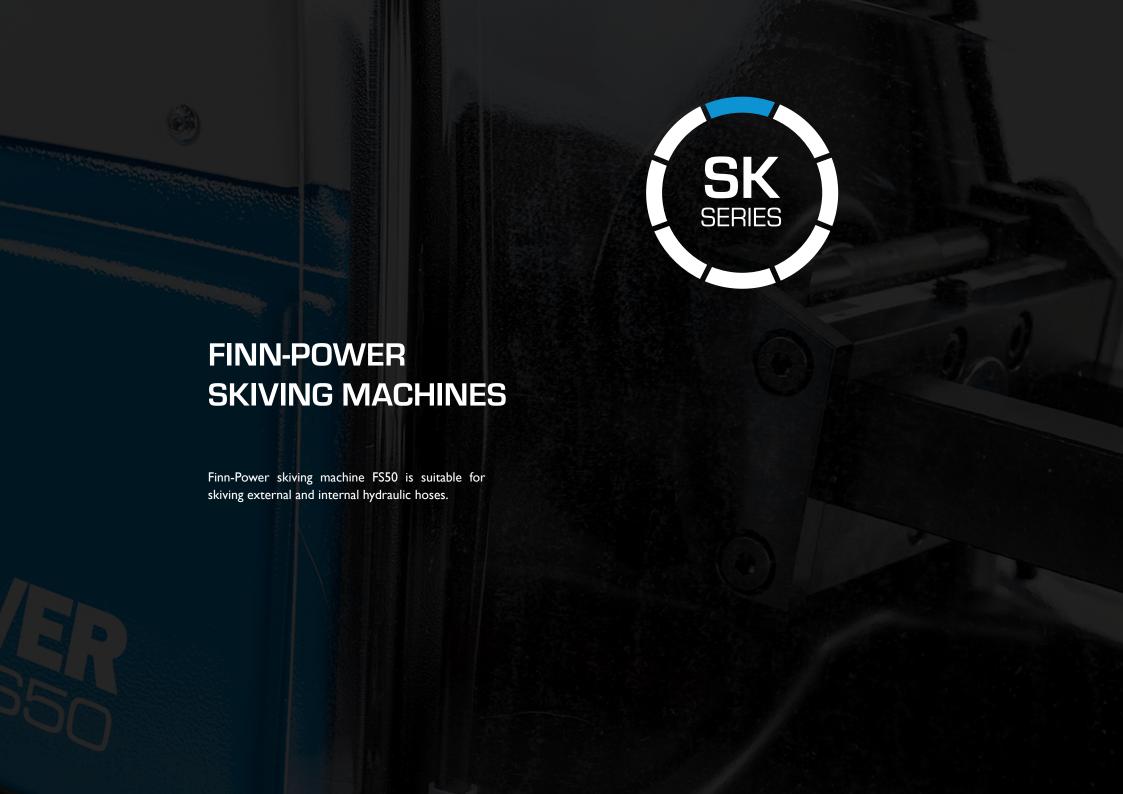








600 mm / 23.6"





FS50

### SKIVING MACHINES FOR QUALITY RESULTS

Finn-Power FS50 is a skiving machine that prepares hydraulic hoses for demanding crimping. The machine is ergonimically designed for efficiency and ease of use. It is equipped with a foot pedal and it is suitable for skiving external and internal hydraulic hoses from dimensions 3/16" to 2".



FS5

- EFFICIENT

Suitable for skiving external and internal hydraulic hoses from dimensions 3/16" to 2". Equipped with foot pedal.

HOSE CAPACITY EXT. (MM)	4.83 - 50.8
HOSE CAPACITY EXT. (INCH)	3/16-2
HOSE CAPACITY INT. (MM)	12.7 - 50.8
HOSE CAPACITY INT. (INCH)	1/2-2
SPEED OF TOOL ROTATION	100
MOTOR (KW) <sup>[1</sup>	0.75
MOTOR (HP) (1	1
WEIGHT (KG)	34
WEIGHT (LBS)	75

MEASUREMENTS

1) 3-phase

FEATURES

390 mm / 15.4"

366 mm / 14.4"

MANDRELS

Description	Pno	Size
Internal mandrels	707187	1/2"
	707182	5/8"
	707167	3/4"
	707166	Ι"
	707 79	1 1/4"
	707181	½"
	707184	2"
External mandrels	707660	3/16"
	707658	1/4"
	707657	5/16"
	707656	3/8"
	707038	1/2"
	707040	5/8"
	707042	3/4"
	70704 I	1"
	707070	1 1/4"
	707168	1/2"
	707169	2"
Tool rack	707253	

