

TECHNICAL BROCHURE · SCREW PRESSES

SP screw presses

New-generation presses for mechanical vegetable-oil pressing: up to +40% capacity within the same footprint.

**up to +40%**

capacity gain after upgrade

60–700

t/day, first-pressing presses

2.5–3×

longer equipment service life

Compared with analogues, D.ENERGY presses have design features that raise capacity by up to 40% within the same dimensions, with no change in pressing quality or energy consumption.

Presses are used for mechanical extraction of vegetable oils. Besides oil yield, the reliability and ease of operation of the equipment are decisive — they raise the profitability of the press.

Many years of experience of a close-knit team of specialists, together with modern technologies and materials, allow us to build a new generation of presses with technical advantages over analogues on the market.

The priorities of our equipment

- Ease of operation and safe use
- High pressing efficiency
- Wear resistance of components
- Minimal maintenance costs



SP press size range 7

Model	Sunflower seed capacity, t/day	Cage chamber diameter, mm	Internal volume, m ³
SP.100	50–75	200	0.055
SP.150	100–150	250	0.09
SP.200	150–200	280	0.15
SP.300	250–350	300	0.17
SP.600	400–600	350	0.26
SP.800	650–800	400	0.41
SP.1000	850–1000	420	0.5

Capacity is given for sunflower seed.

First-pressing presses

Presses of this design are intended for pre-pressing followed by solvent extraction, or as a preliminary stage before second pressing. The chamber walls consist of bars (cage bars) arranged so that narrow gaps remain between them for the pressed oil to escape. The screw shaft is made of separate flights divided by intermediate washers and spacers.

As the volume of material in the press module decreases, pressure rises and squeezes the oil out of the mash. The oil flows through the gaps around the perimeter of the cage and goes to purification, while the cake leaves the screw press through the discharge sleeve. The press is designed for hot pressing of oilseeds — above all rapeseed, sunflower and other oil crops.

Specifications of first-pressing presses

Parameter	SP-02.10	SP-03.10	SP-05.10	SP-30	SP-01
Capacity, t/day (sunflower seed)	60–80	90...100	160–200	250–350	500–700
Oil content in cake	13...17%	13...17%	13...17%	18...22%	18...22%
Product (mash) temperature, °C	90–95	90–95	90–95	90–95	90–95
Motor power, kW	55	55	132	250–315	400
Motor speed, rpm	1460	1460	1460	1500	1460
Overall dimensions, mm	4500 × 1335 × 1200	4900 × 1335 × 1176	5850 × 1500 × 2170	6700 × 1600 × 1530	7000 × 1650 × 1860
Weight, kg	5500	6450	13,500	17,500	20,000

Second-pressing presses

Second-pressing presses are designed for final pressing without further solvent extraction. They can also be converted at little cost.

Pressure rises as the volume of material in the press module decreases. The pressed oil flows through the gaps around the chamber perimeter and goes to purification. The cake leaves the screw press through the discharge sleeve.

Specifications of second-pressing presses

Parameter	SP-02	SP-05
Capacity, t/day (by cake)	12–15	30–40
Oil content in cake	6...7.5%	6...8%
Motor power, kW	37	75–90
Motor speed, rpm	980	980
Overall dimensions, mm	4500 × 1335 × 1200	5930 × 1500 × 2170
Weight, kg	5500	13,300



Press equipment modernization

Our innovative solutions let us design and manufacture parts and modernize a press of any make — to raise capacity and pressing efficiency and extend equipment life by 2.5–3 times.

Advantages of press modernization by D.ENERGY

- Capacity increase of up to 40%
- High pressing efficiency
- Lower product (mash) temperature improves the quality of the oil
- Equipment life extended 2.5–3 times
- Ease of operation and safe use
- Less production downtime caused by equipment maintenance

These results come from two solutions: eliminating the shortcomings of typical cage bars (D.ENERGY cage bars) and the innovative features of D.ENERGY screw sets.

ETP-20 press: before and after modernization

Parameter	Before	After
Capacity, t/day (by cake)	60	90–110
Oil content in cake	15...18%	13...19%
Product (mash) temperature, °C	100–110	90–105
Motor power, kW	55	55
Motor speed, rpm	1460	1460
Overall dimensions, mm	5000 × 950 × 1200	5000 × 950 × 1200
Weight, kg	6180	6180

Need a calculation or a quotation?

Send us your requirements — we will select the model for your raw material and capacity.

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