

Make more of your compressor: The external BOGE DUOTHERM heat recovery system saves you real money because it can recover up to approx. 72 percent of the input energy used in compression in the form of heat. This can be utilised to supplement your heating or for pre-heating water for use in an industrial process. With a small amount of effort your compressor can be transformed into an energy saving machine: Use this energy saving license to upgrade your screw compressors now!



RAPID PAYBACK.

Savings of more than 9.000 Euros a year – this is how investing in a BOGE DUOTHERM external heat recovery system rapidly pays back.

EXAMPLE OF AN OIL INJECTED S 150 SCREW COMPRESSOR

Rated power of the drive motor:	110 kW
Total power consumption:	123.4 kW
Motor efficiency:	95 %
Use/year:	120 days
Compressor operation:	8 hours/day
Heating fuel price:	0.80 €/l
Calorific value of fuel:	9.861 kWh/l
Heating efficiency:	70 %
Usable amount of heat:	72 %
(oil cooler)	

usable energy x total power consumption
= heating recovery

Usable energy in oil circuit:

$0.72 \times 123.4 \text{ kW} = 88.8 \text{ kW}$

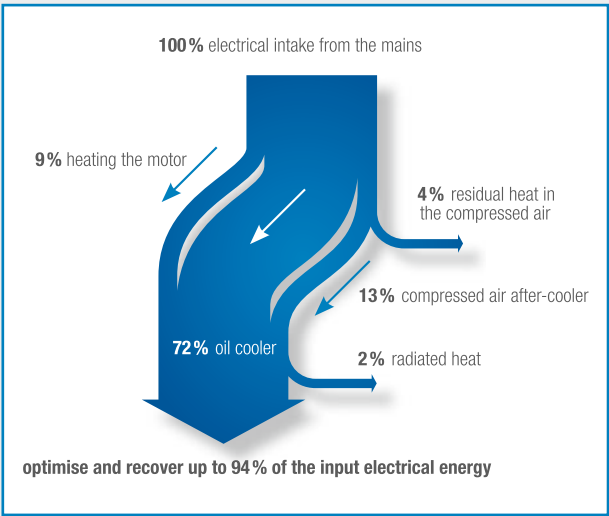
Savings potential:

$$= \frac{\text{Usable energy} \times \text{operating hours} \times \text{heating fuel price}}{\text{calorific value of fuel} \times \text{heating efficiency}}$$

$$= \frac{88.8 \text{ kW} \times 960 \text{ Oh} \times 0.80 \text{ €/l}}{9.861 \text{ kWh/l} \times 0.7}$$

$$= \text{9880 €} \text{ at } 960 \text{ operating hours}$$

Payback on assumed investment costs of 5,000 Euros for DUOTHERM external heat recovery system: < 1 year!



The estimates used in the examples are approx. values.

OVERVIEW OF BOGE DUOTHERM EXTERNAL HEAT RECOVERY 15 TO 150

	DUO-THERM 15	DUO-THERM 30	DUO-THERM 60	DUO-THERM 100	DUO-THERM 150
Max. possible amount of heat (kW)	6.1–8.9	12.1–17.8	17.8–36.3	36.3–60.6	60.6–88.8
Rated motor power IP55/ISO F (kW)	7.5–11	15–22	22–45	45–75	75–110
Suitable for S10 – S150 series as well as external compressors					
S 10 – S 15	●				
S 20 – S 29		●			
S 31 – S 50			●		
S 60			●		
S 61 – S 75				●	
S 90 – S 100				●	
S 101 – S 150					●
External compressors	●	●	●	●	●

$t_{\text{max,OUT}} = 70^{\circ}\text{C}$