Cut down on your energy costs with BOGE

How to save energy	Average potential saving	Compressor Output 11 kW	22 kW	45 kW	75 kW	110 kW	
Leakage prevention	16%	933	1829	3659	6123	8960	*
Lowering of the pressure (by 1 bar)*	6 -10% per each bar of pressure reduction	467	915	1829	3061	4480	*
Plant design/Idle state minimisation	Idle state costs halved	417	817	1633	2733	4000	*
Heat recovery	Utilisation of some 81% of the electrical capacity	643 1930	1287 3860	2632 7896	4387 13161	6434 19302	** ***
Renewal of the compressors	3%	175	343	686	1148	1680	

* £/a **£/a at 1000 op. hours/year ***£/a at 3000 op. hours/year

Leakage prevention

Plugging of leakages, separating the compressed air network system at night and at the weekend

Pressure reduction

General reduction of the operating pressure on the compressor to the lowest pressure required, preventing pressure loss during precessing, for example in filters or pipes

Plant design/idle state minimisation

Smart system design, correct sizing of compressors and air receivers, use of variable speed drives and intelligent control systems

Heat recovery

The compression heat is utilised in a smart manner, if possible over a long period of time each year, while heat recovery is effected via the exhaust air or by means of the oil circuit: approx. 81% utilisable heat resulting from the compressor's operation
Heating value of oil: 9.861 kWh/l
70% thermal efficiency
Heating oil price 0.5 £/l

Renewal of the compressors

Replacing outdated, inefficient compressors with new, efficient ones

Basis for calculation

6,000 h/a overall lifetime of the compressor
4,000 h/a total hours under load of the compressor
2,000 h/a idle time hours of the compressor
Price of electricity 0.10 £/kWh

Rated drive power kW	Input power kW	Energy costs £/a
11	12.5	5833
22	24.5	11433
45	49.0	22867
75	82.0	38267
110	120.0	56000

BOGE COMPRESSED AIR SYSTEMS

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