



CAC- Compressed Air Control

Productdescription

The average gives the world its existence,
the extraordinary their value.
(Oscar Wilde)



Compressed air costs

Compressed air is the most expensive source of energy in industrial use. The operating costs of a compressed air system with compressors and line network are made up of three factors:

1. Capital service (interest and repayment of the capital tied up in the investment objects)
2. Maintenance and repair costs (technicians, spare parts, operating and auxiliary materials)
3. Energy costs (electricity, etc.)

The average operating hours of a print plant are 7500h / a. With this workload, the costs are divided into the following three factors:



The cost of capital service as well as maintenance and repair are negligible compared to the energy costs.

In order to effectively reduce these costs for compressed air, one has to start with the energy costs and thus with the consumption of the air volumes.

The systems required for generation and provision are both expensive to buy and costly to maintain. In addition to leaks, which cause unwanted loss of compressed air and should therefore always be eliminated immediately, blowing and spray air nozzles represent enormous consumers in a printing line.



Depending on the diameter of a blowing air nozzle, such as those used in conveyor controls, the following costs **per nozzle and year** result:

Ø mm	ausströmende Luftmenge l/min	Energie kW	Betriebsstunden	Stromkosten €/ kWh	Stromkosten €/ Jahr
1	75	0,6	8000	0,12	576
1,5	150	1,3	8000	0,12	1248
2	260	2	8000	0,12	1920
2,5	410	3,1	8000	0,12	2976
3	600	4,4	8000	0,12	4224
3,5	830	6,4	8000	0,12	6144
4	1100	8,8	8000	0,12	8448
4,5	1360	11,2	8000	0,12	10752
5	1700	13,2	8000	0,12	12672
5,5	2350	18,1	8000	0,12	17376

CAC - Compressed Air Control, avoid waste, reduce costs

Blowing, spraying and rinsing nozzles have their right to exist during the production phase as tools for process security. Most of the time, the compressed air to these nozzles is not shut off if:

1. a new is in preparation
2. there is no job on the machine
3. the press or other component is fault
4. production only on one belt
5. Other paper paths is in use
6. The dryer is in standby or off

CAC - Compressed Air Control notes the status of your production line and releases the compressed air only for the nozzles that are currently needed for production. This saves you costs and at the same time reduces the wear on your compressed air supply.

CAC can be used on printing presses from all manufacturers and is also suitable for further processing and bookbinding.



Example:

compressed air dryer 1.920 €/a
Corner drive 1 upper delivery 6.144 €/a
Corner drive 1 lower delivery 6.144 €/a
Cutter 1 upper and lower delivery 1.248 €/a
Corner drive 2 upper delivery 6.144 €/a
Corner drive 2 lower delivery 6.144 €/a
Cutter 2 upper and lower delivery 1.248 €/a
Stacker 1 1.248 €/a
Stacker 2 1.248 €/a
Two more blowing points in conveyor technology 8.448 €/a

total consumption 39.936 €/a

Savings in annual utilization 75% 9.984 €/a
Savings in annual utilization 70% 11.980 €/a

If you have any further questions, please contact:

mematech GmbH

Westendstraße 1

45143 Essen

Telefon +49 201 490394 50

Telefax +49 201490394 57

info@mematech.de

www.mematech.de