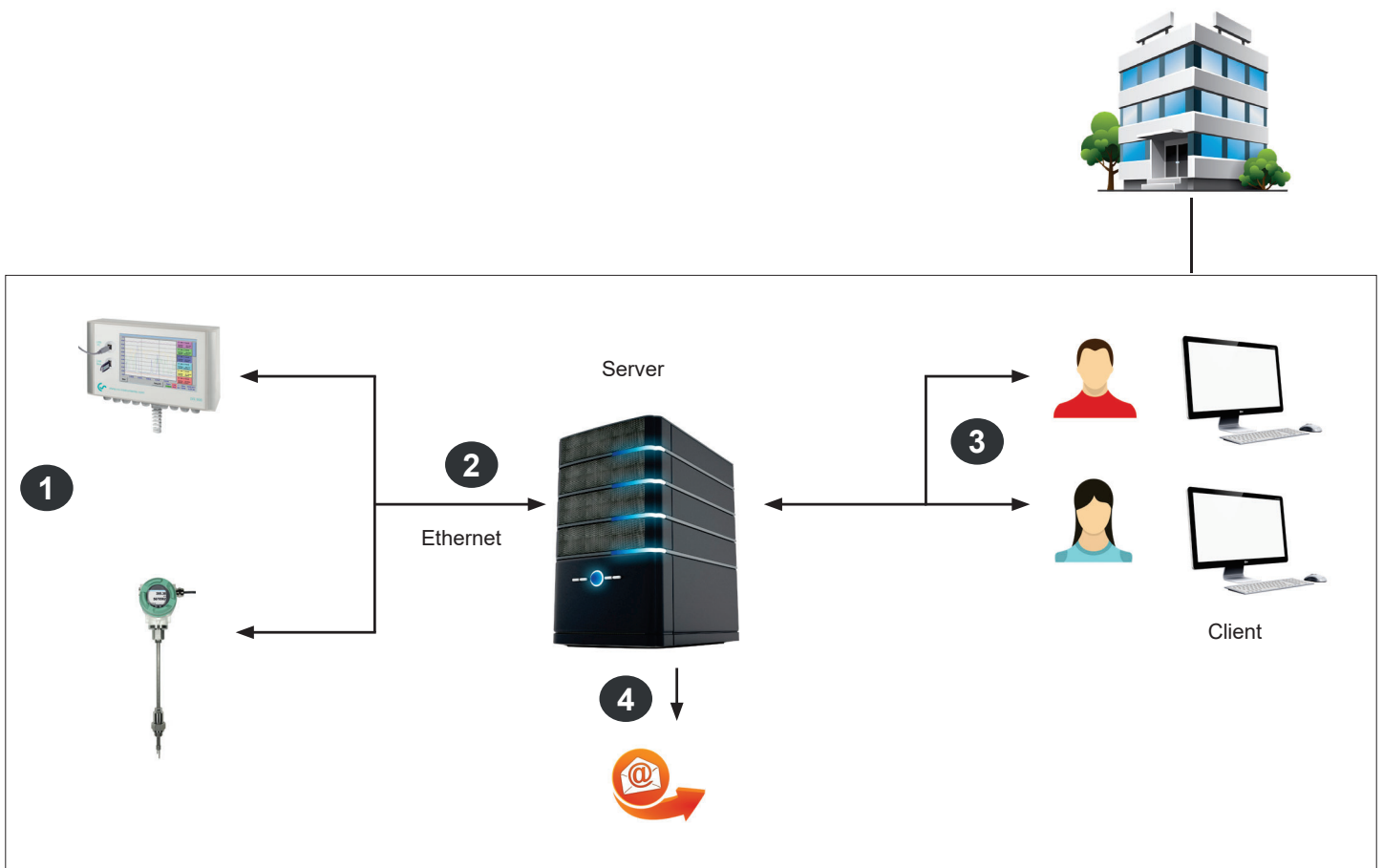


CS Network

Energy monitoring for compressed air and gases in an enterprise

The CS Network is a client-server solution. The server software automatically collects the measured values of all chart recorders and sensors embedded in the company's computer network and stores them in a database. The evaluation/analysis of the measured data is carried out via the evaluation software (client) at any number of workstations.

- Display real-time data in individual dashboards
- Automatic reporting for consumption: Weekly, monthly, annually
- Automatic alarm by e-mail if limit value is exceeded or not reached
- Alarm history



- 1** Single sensors with Ethernet connection or chart recorders with several sensors measure the compressed air and gas consumption of all departments/cost centres in an enterprise.
- 2** The CS Network (Server Installation) automatically collects the measured values of all CS chart recorders and CS sensors which are connected to the computer network in an enterprise and stores them in a database.
- 3** The evaluation/analysis of the measured data is carried out via the evaluation software (Client) at an unlimited number of workstations.
- 4** In case of an exceeding of the limit values (freely adjustable), there will be an automatic alarm via e-mail

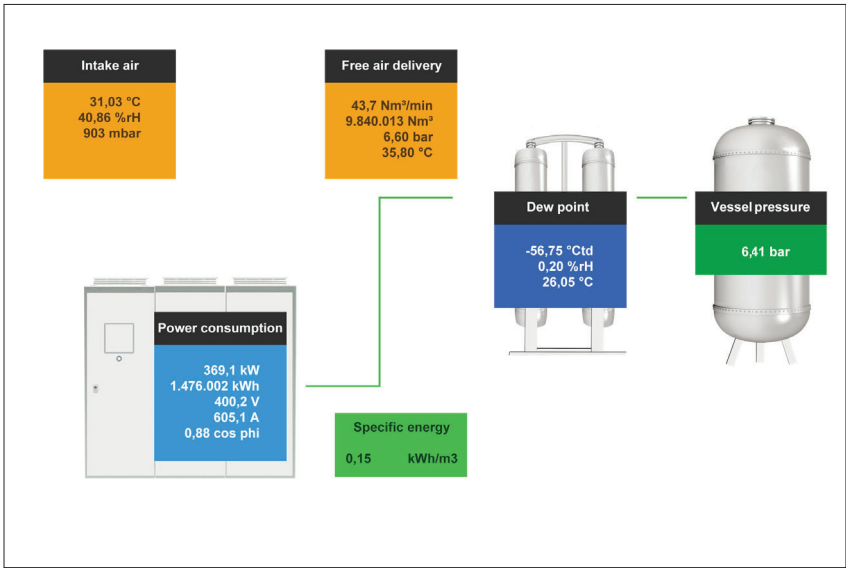
CS Network

Example – Dashboards



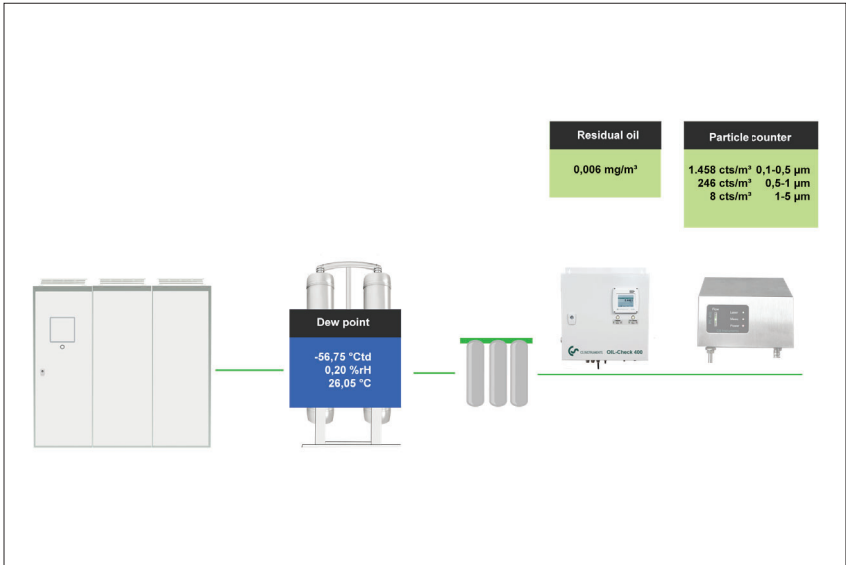
Energy monitoring

Monitoring of consumption and leakage of the entire site, individual departments or systems



Compressor efficiency

Monitoring of the intake controls, power consumption and free air delivery of the compressors



Quality monitoring

Monitoring of compressed air treatment and required ISO 8573-1 quality classes – particles, residual oil and dew point

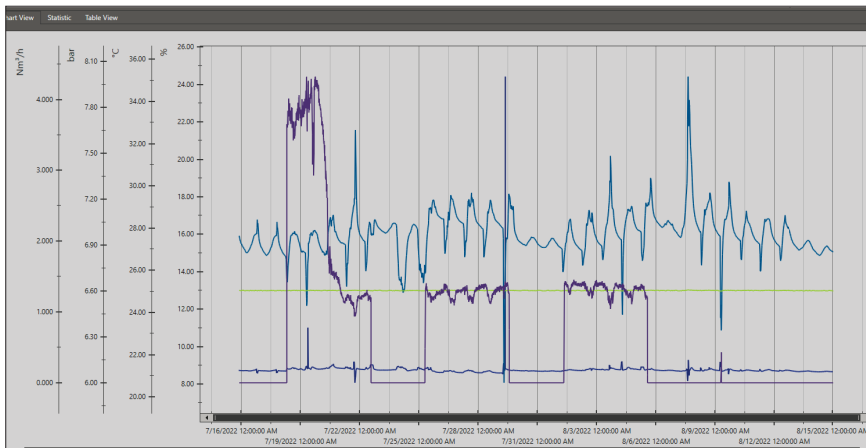
CS Network

Evaluations

Channel	Unit	Description	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Demobereich Vertrieb										
Frühschicht (06:00:00-14:00:00)										
Consumption compressed air Site 1 production - Tarif "Standardtarif" 00:00:00 - 23:59:59 : 5 € per m³										
m³		start count		7675.00	7865.00	8074.00	8271.00	8329.00	8329.00	
m³		end count		7729.00	7935.00	8147.00	8329.00	8329.00	8329.00	
m³		total		54.00	70.00	73.00	58.00	0.00	0.00	255.00
m³/h		average		8.5	8.7	9.1	7.3	0.0	0.0	5.6
m³/h		min		7.6	0.0	0.5	0.0	0.0	0.0	
m³/h		max		9.0	9.3	13.4	8.2	0.0	0.0	
€		costs		270.00	350.00	365.00	290.00	0.00	0.00	1275.00
Consumption compressor station - Tarif "Standardtarif" 00:00:00 - 23:59:59 : 5 € per Nm³										
Nm³		start count		26659.00	26667.00	26676.00	26788.00	26841.00	26851.00	
Nm³		end count		26660.00	26670.00	26683.00	26835.00	26845.00	26854.00	
Nm³		total		1.00	3.00	7.00	47.00	4.00	3.00	65.00
Nm³/h		average		0.4	0.4	1.0	6.0	0.4	0.4	1.4
Nm³/h		min		0.4	0.4	0.4	0.4	0.4	0.4	
Nm³/h		max		0.6	0.8	6.9	7.3	0.4	0.4	
€		costs		5.00	15.00	35.00	235.00	20.00	15.00	325.00

Weekly report

Have consumption reports created automatically and sent by e-mail. This way you always have an overview of your consumption and costs and have them under control. You can choose between monthly, weekly or annual reports. The comparison function allows you to compare different time periods so that you can recognise irregularities in your consumption, among other things..



Graphic evaluation

All measurement curves are indicated in colour. All necessary functions like free zoom, selection/deselection of single measurement curves, free selection of periods, scaling of the axes, selection of colours and so on are integrated: Different data can be merged into one common file. This view can be saved as a PDF file and sent as a mail.

Time	Demobereich Vertrieb_DS 500 CS Network_A3b: RelHumid_ [%]	Demobereich Vertrieb_DS 500 CS Network_A3c: Temperatur_ [°C]	Demobereich Vertrieb_DS 500 CS Network_B1a: Druck_[bar]	Demobereich Vertrieb_DS 500 CS Network_B2a: Flow_[Nm³/h]
7/19/2022 3:57:00 PM	8.89	27.87	6.60	3.300
7/19/2022 4:06:00 PM	8.89	27.84	6.60	2.933
7/19/2022 4:15:00 PM	8.88	27.84	6.60	2.925
7/19/2022 4:24:00 PM	8.88	27.84	6.60	3.125
7/19/2022 4:33:00 PM	8.88	27.84	6.60	3.039
7/19/2022 4:42:00 PM	8.88	27.84	6.60	3.232
7/19/2022 4:51:00 PM	8.87	27.84	6.60	4.058
7/19/2022 5:00:00 PM	8.85	27.86	6.60	4.144
7/19/2022 5:09:00 PM	8.85	27.88	6.60	4.055
7/19/2022 5:18:00 PM	8.86	27.86	6.60	4.190
7/19/2022 5:27:00 PM	8.84	27.89	6.60	4.129

Table view

All measuring points are listed with exact time interval. The desired measuring channels with the name of the measuring place can be selected via the diagram explorer.

Area name: Demobereich Vertrieb						
Part name: DS 500 CS Network						
ID	Channel	Unit	Value	Value	Time	Time
11	A3b: RelHumid	%	8.73	8.06	7/21/2022 7:06:00 PM	
12	A3c: Temperatur	°C	27.73	20.66	7/29/2022 7:42:00 AM	
13	B1a: Druck	bar	6.6	6.59	7/29/2022 7:51:00 AM	
14	B2a: Flow	Nm³/h	0.719	0	7/15/2022 9:39:00 PM	

Statistics

All required statistic data are visible at a glance. So the user can see very quickly which minimal or maximal measured values occurred when and for how long.

DESCRIPTION	ORDER NO.
CS Network – Energy monitoring with client/server solution (max. 20 measured values of different sensors/devices)	0554 8041
CS Network – Energy monitoring with client/server solution (max. 50 measured values of different sensors/devices)	0554 8042
CS Network – Energy monitoring with client/server solution (max. 100 measured values of different sensors/devices)	0554 8043
CS Network – Energy monitoring with client/server solution (max. 200 measured values of different sensors/devices)	0554 8044