

## limit values report

<i>birim</i>	<i>AVG</i>	<i>saat</i>	<i>MIN</i>	<i>saat</i>	<i>MAX</i>
kW	1366	18:34:08	482	07:42:19	2573
°C	508	05:07:57	503	15:14:46	515
kW	5108	15:06:08	4864	05:30:32	5335
bar	21	16:43:18	14	23:36:01	35
mbar	1010	22:18:55	1005	00:00:01	1013
bar	11	15:36:36	11	00:00:00	11
°C	7	06:00:17	1	13:43:21	13
bar	11	15:39:55	11	00:00:00	11
kg/m3	1812	14:41:43	1751	06:02:44	1871

## Requirement

In SCADA applications, on-line monitoring and historical trending are provided for values retrieved from PLC or similar devices. Some additional properties for monitoring may be needed for operators. One major need is reporting the minimum, maximum and average values of data in a period of time.

## Solution

The minimum, maximum and average values are reported in an Excel sheet for some certain data. Shiftly and daily reports are generated automatically for this purpose.

# Application Notes

## Co-generation Plant LIMIT VALUES Report

### GAS TURBINE

date: 18.11.2004

<i>Explanation</i>	<i>Unit</i>	<i>AVG</i>	<i>time</i>	<i>MIN</i>	<i>time</i>	<i>MAX</i>
Import-Export Active Power	kW	1366	18:34:08	482	07:42:19	2573
T7 Average Value	°C	508	05:07:57	503	15:14:46	515
Active Power	kW	5108	15:06:08	4864	05:30:32	5335
Inlet Air Filter Differential Pressure	bar	21	16:43:18	14	23:36:01	35
Outside Ambient Pressure (P0)	mbar	1010	22:18:55	1005	00:00:01	1013
Compressor Outlet Air Pressure (PCD)	bar	11	15:36:36	11	00:00:00	11
Compressor Inlet Air Temperature (T1)	°C	7	06:00:17	1	13:43:21	13
Main Manifold Gas Pressure	bar	11	15:39:55	11	00:00:00	11
Gas Flow	kg/m3	1812	14:41:43	1751	06:02:44	1871
Gas Pressure	bar	16	13:14:42	15	15:30:25	16
Compensated T5 Average	°C	704	15:37:30	703	15:39:31	706
Oil Pressure	bar	4	15:39:55	4	15:36:36	4
Oil Temperature	°C	62	05:38:29	55	13:25:24	65
Turbine Vibration	m/se	3	15:39:31	3	01:59:30	4
Reductor Vibration	m/se	4	12:14:25	3	16:33:24	5
Generator Vibration	m/se	0	15:38:09	0	15:39:23	0

### BOILER

Boiler Steam Pressure	bar	16	15:36:36	16	15:39:31	16
Water Flow	m3/s	12	12:57:28	0	23:27:40	16
Steam Flow	ton/s	11	09:22:34	9	09:31:39	12
Water Conductivity	mS/cm	2619	00:04:13	2313	16:05:35	2868
Boiler Damper Position	%	18	09:32:36	0	17:35:37	35
Boiler Gas Inlet Pressure	°C	501	06:32:10	497	13:07:55	507
Eko Gas Inlet Temperature	°C	227	17:36:24	225	09:35:45	229
Eko Gas Outlet Temperature	°C	167	18:39:55	160	09:34:38	174
Eko Water Inlet Temperature	°C	106	12:59:19	90	04:21:07	108
Eko Water Outlet Temperature	°C	200	18:43:35	195	09:33:49	204
Boiler Water Level	%	60	17:36:31	48	00:33:29	64