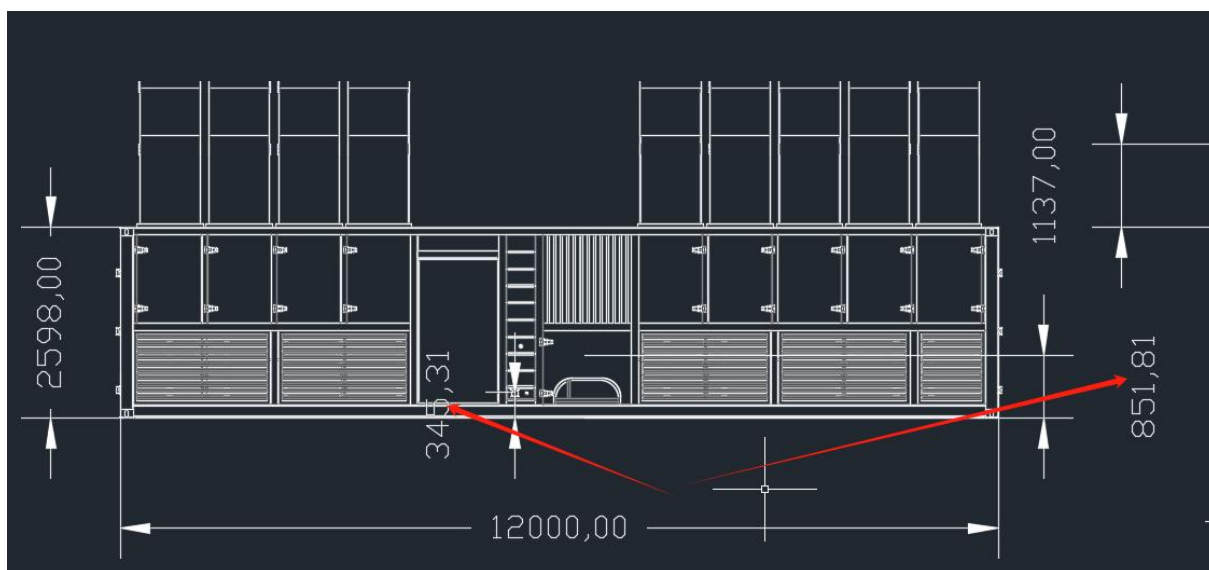
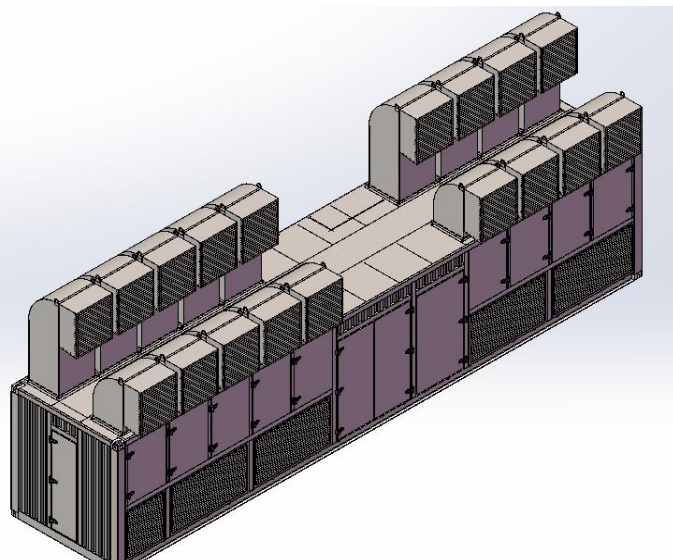




**5000KW 20kV Resistive Load Bank**

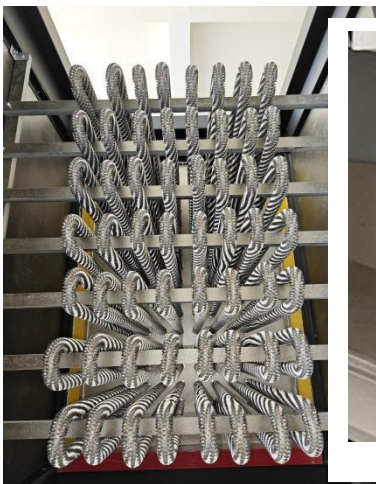
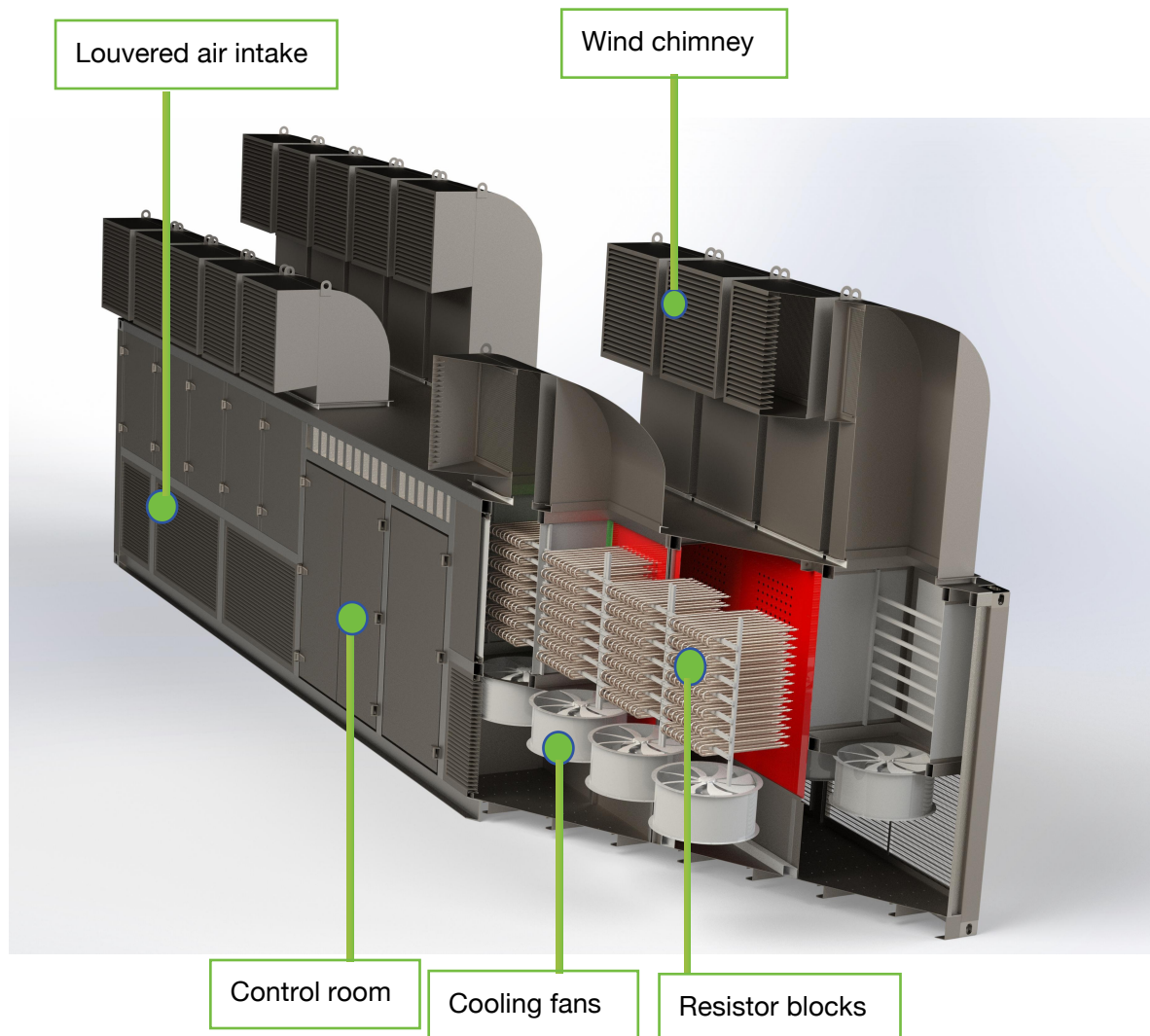
**Containerized +Wind Chimney**

**Application: Wind energy power grid balancing**

**Site: Tampere Finland**

| Description                                |                                                        |
|--------------------------------------------|--------------------------------------------------------|
| Model No.                                  | S5000L                                                 |
| Country of origin                          | China                                                  |
| Rated power capacity(PF 1.0)               | 5000 kW                                                |
| Rated testing voltage                      | 20KVac                                                 |
| Frequency                                  | 50Hz.                                                  |
| Phases                                     | 3                                                      |
| Wires(Star connection)                     | 4                                                      |
| Load step resolution                       | 1000kW                                                 |
| Load step                                  | 1000KW+1000KW+1000KW+2000KW                            |
| Voltage Tolerance (Short Term Operation)   | +5%                                                    |
| Load Element Tolerance                     | ≤+2.5%                                                 |
| Insulation Test                            | 35KVac                                                 |
| Load Connections                           | Copper busbars                                         |
| Protection                                 | Thermal emergency cut out                              |
|                                            | Air flow switch                                        |
|                                            | Fan overload protection                                |
|                                            | Emergency stop                                         |
| Control voltage(Auxiliary power supply)    | 400VAC 50/60HZ.                                        |
| Airflow volume(Approx. CMM)                | 2700 CM/H * 12                                         |
| Airflow direction                          | Vertical upwards air forced cooling                    |
| Fans Nos.                                  | 12 pcs . (4kW each)                                    |
| Load switching contactor type              | 3 pole AC contactors                                   |
| Rated maximum ambient temp. operation      | +50°C / +104°F                                         |
| Rated minimum ambient temp. operation      | -20°C / -4°F                                           |
| Altitude rating                            | ≤2000 [m.a.s.l] or customized                          |
| Control chamber IP rating                  | IP 54 outdoor                                          |
| Enclosure material                         | Containerised carbon steel with marine grade painting. |
| Portability                                | Standard ISO lifting points                            |
| Enclosure dimentions                       |                                                        |
| Length(mm)                                 | 12000                                                  |
| Width(mm)                                  | 2438                                                   |
| Height(mm)                                 | 2591                                                   |
| Weight of load bank with wind-shields (KG) | 16,000 Maximum                                         |

## Brief intro. about 5mW RESISTIVE LOAD BANK





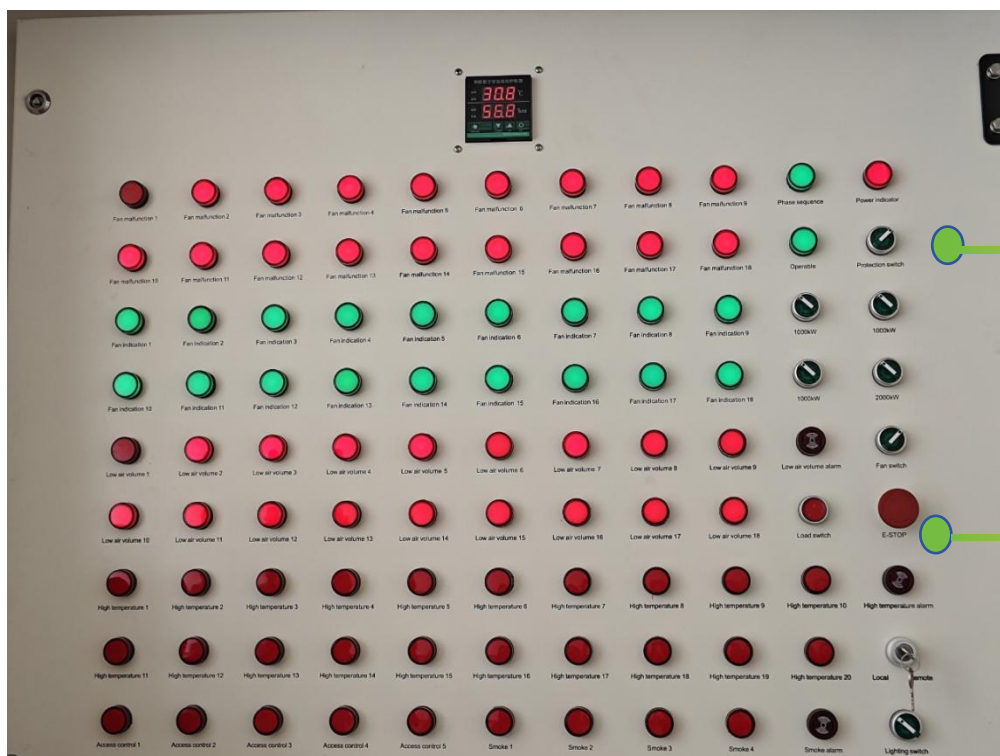
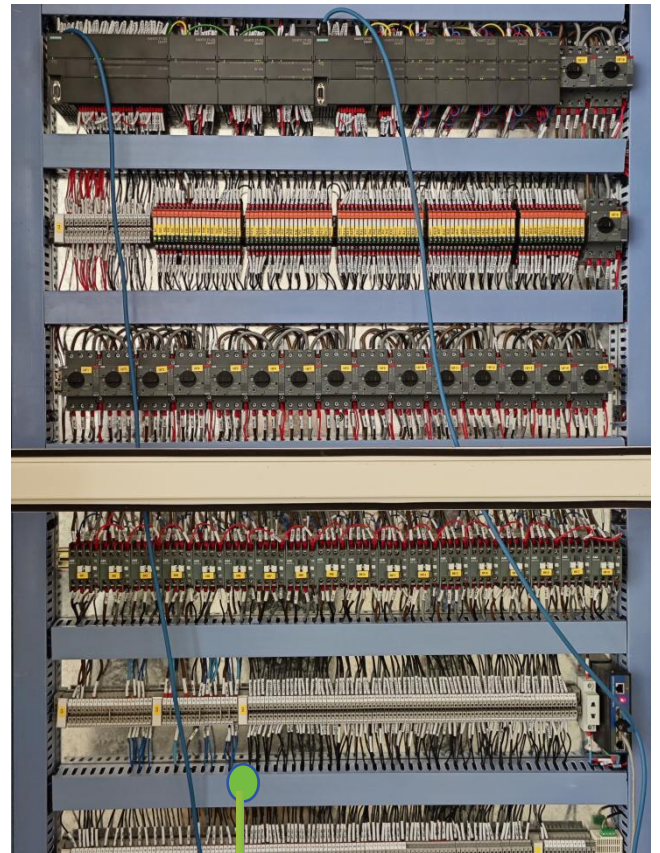
Smoke alarm



Resistor holding board  
Material:Epoxy resin

Maintenance lane=520mm

Control circuit



Manual control panel

Emergency stop





**Customer acceptance  
at factory**



**Packaging**

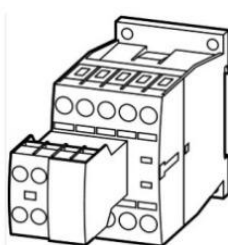


**Installation at customer's site**

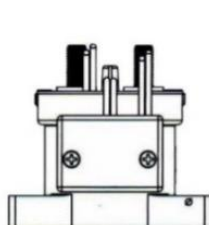
## Understanding components of load banks

Load banks are assembled with various quantities of components . for example , Load element- resistors , PLC ,AC/DC contactors, fuses, circuit breakers, temperatures sensors, relays, switchingmode power supply ,voltage/current transformers ,limit switches, terminal connectors, LEDs, push buttons/toggles, cables, busbars etc.

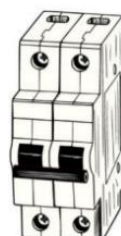
Pics for reference:



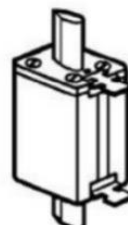
AC contactor



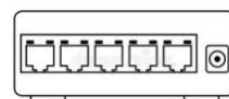
DC contactor



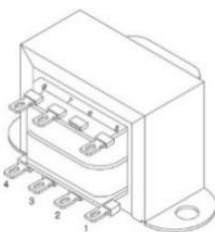
Circuit breaker



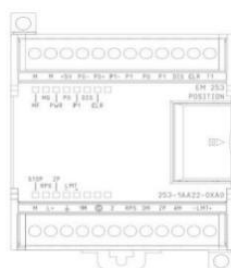
Fuse



Ethernet Switch



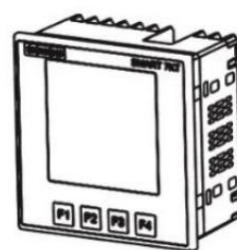
Transformer



PLC module



SMPS



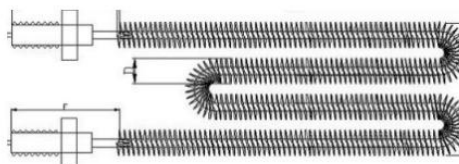
Multi-function meter



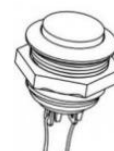
Smoke alarm



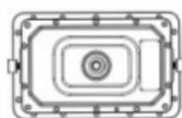
Axial fans



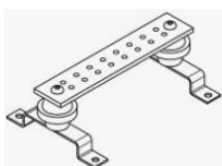
Finned heating resistor



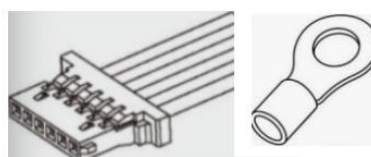
Push buttons&indicators



Explosion proof LED



Copper busbar



Terminal connector



Cable