TVP 300

Production and distribution of steam

The production and distribution of steam bench is supplied complete, with technical manual and practical work.

The didactic interest is directed towards various levels of study power engineering training and maintenance.

Pedagogical applications

⇒ Practical manipulations of real elements of production and distribution of steam

- Study of a steam production and distribution system
- Pre control, Commissioning adjustment
- Conducting a steam installation
- Optimization of operating parameters
- Research and identification of components
- Study of steam technologies (separator, automatic bleed valves, regulators, regulating valves ...)
- Preventive maintenance and monitoring of the quality of water
- Study of thermal exchanges
- Study of the transformation cycle of the steam
- Approach of safety aspects of a thermal installation

⇒ Use of the instrumentation

- Balances, yields powers
- Measure of the pressures, flow rate, level and temperature
- Combustion gases analysis
- Control and regulation of the output temperature of the heat exchanger
- Water hardness analysis at the input and output of the softener

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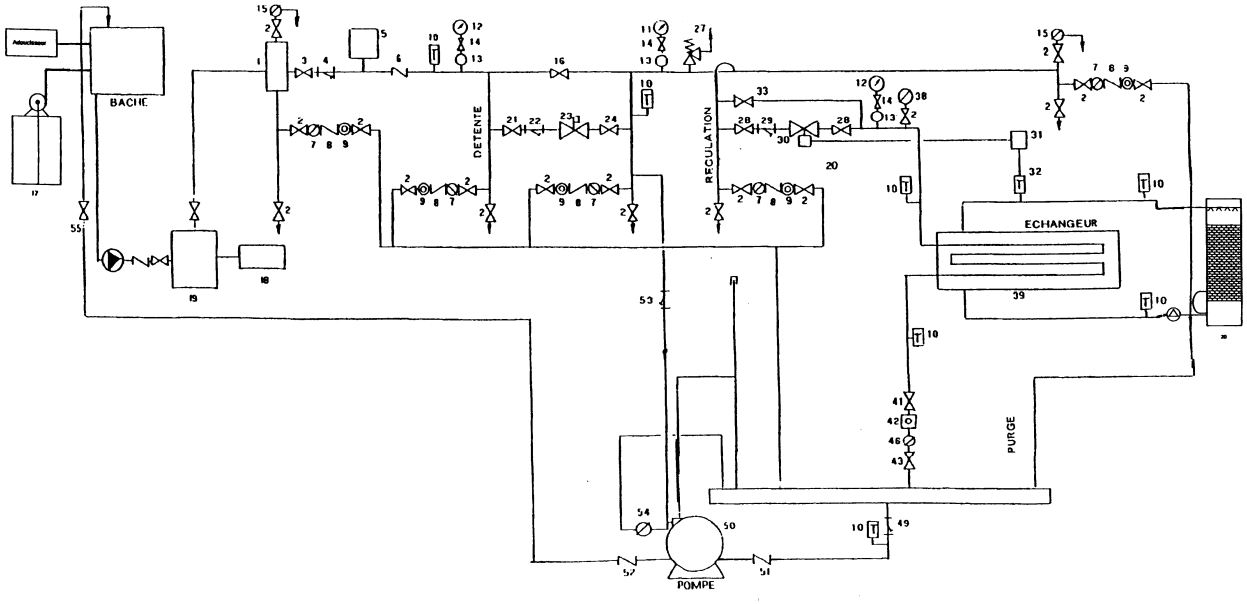
Description



1	Flanged steel separator
2	Isolating valve
3	Tap isolating valve bellows in cast iron flanges
4	Filter cast iron flanges
6	Non return valve
7	Thermodynamic steam trap with vent disc
8	Check valve
9	Circulation controller
10	Range thermometer 0/200 °C with copper thermowell
11-12	Manometer
13	Lyre acier 1/2” for manometer
14	Steel valve for manometer 1/2”
15	Air vent 1/2”
16	Valve of bypass piston type in cast iron with flange DN 15
17	Water treatment
18	Tank of fuel
19	Boiler steam
20	Cooling tower or unit heater
21	Isolation valve with piston in cast iron 3/4"
22	Filter cast iron
23	Autonomous regulator with direct action1/2”
24	Isolation valve with piston cast iron 1”
27	Bronze valve with taring lever 2 bars DN 3/4”
28	Tap isolating valve / bellows with cast iron flangesDN 25
29	Filter cast iron flanges DN 25
30	Electric temperature regulating valve 220 V 50 Hz DN 15
31	Electronic controller- output 4-20 mA – input Pt 100 □
32	Probe Pt 100 □ 3 wires 1/2”
33	Tap bypass piston of cast iron flanges DN 15
38	Vacuum breaker1/2”
39	Tubular heat exchanger in a horizontal U
41	Steam trap isolating valve 1/2 "
42	Threaded detection chamber - Box indicator
43	Brass check valve 1/2"
44	Float drain inverted bucket 1/2"
48	Float steam trap closed 1/2”
49	Filter 1”
50	Pump
51	Swing check valve input for pump 1 "
52	Threaded output valve 1”
53	Filter 3/4”
54	Steam trap 1/2”
55	Isolating valve 1”

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Dimensions

Adaptable to different configurations of workshop

Length : 6 m
Width : 5 m
Height : 2,3 m
Weight : 3,2 t

Utilities

Water: Water of the network 3bar-15L/min
Gas: Natural gas 300mbar
Or oil (250L)
Electricity: 400V three phase+neutral+earth-32A
Fireplace: smoke evacuation
Sewage disposal to the ground
The utilities must be with a maximum of 2.5 m from the facility