

EQUIPMENT FOR FAST OIL AND SORBENT REGENERATION



Areas of Application

Regeneration of transformer oil and sorbent using HF magnetic field, in power engineering

Advantages

As compared with the method for heater or hot air drying, the equipment enables to increase the zeolite initial sorption capacity by 15–20%; to increase the number of cycles of zeolite use from 3–4 to 8–10; to decrease the time of sorbent regeneration from 15–20 h to 4–6 h; to decrease the total energy consumption about 4 times (the sorbent regeneration mode)

Specification

Oil regeneration mode (after one pass)

Performance, m ³ /h	1.5
Moisture content, mg/kg	5
Contamination, mg/kg	10
Power of oil heater, kW	30
Maximum total power consumption, kW	35

Sorbent regeneration mode

Weight of NaA zeolite in the cartridge, kg	40
Time of regeneration, h	6–7
Temperature of regeneration °C:	
new	300
used	180
Air pressure in the cartridge, kPa	10
Residual moisture, %	0.4
Microwave power, kW	≤2
Total power consumption, kW	6

Stage of Development. Suggestions for Commercialization

IRL7, TRL8
Manufacture, delivery, warranty service, and staff training, upon request

IPR Protection

IPR1, IPR3

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