GlobeCore

OIL PROCESSING EQUIPMENT

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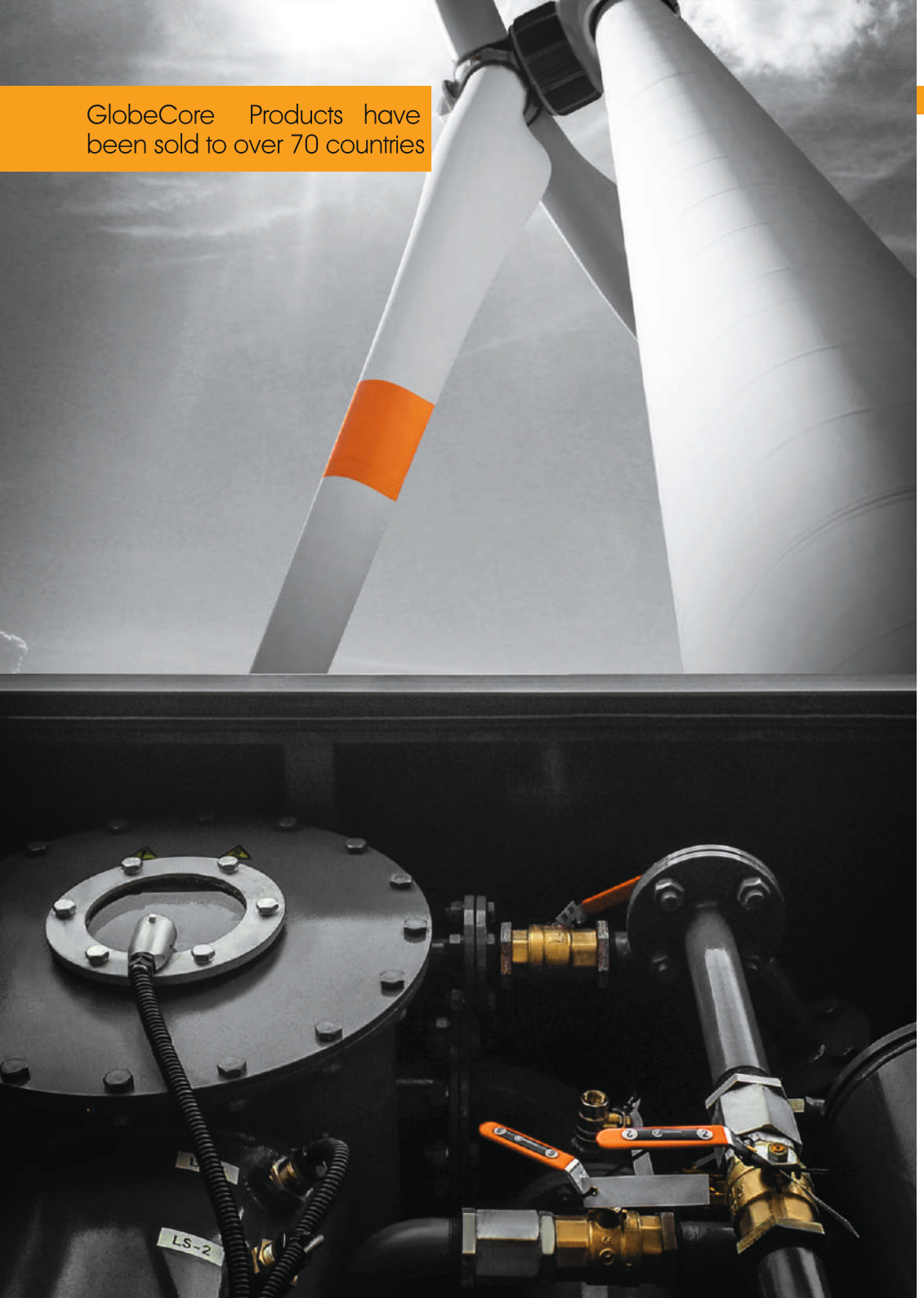


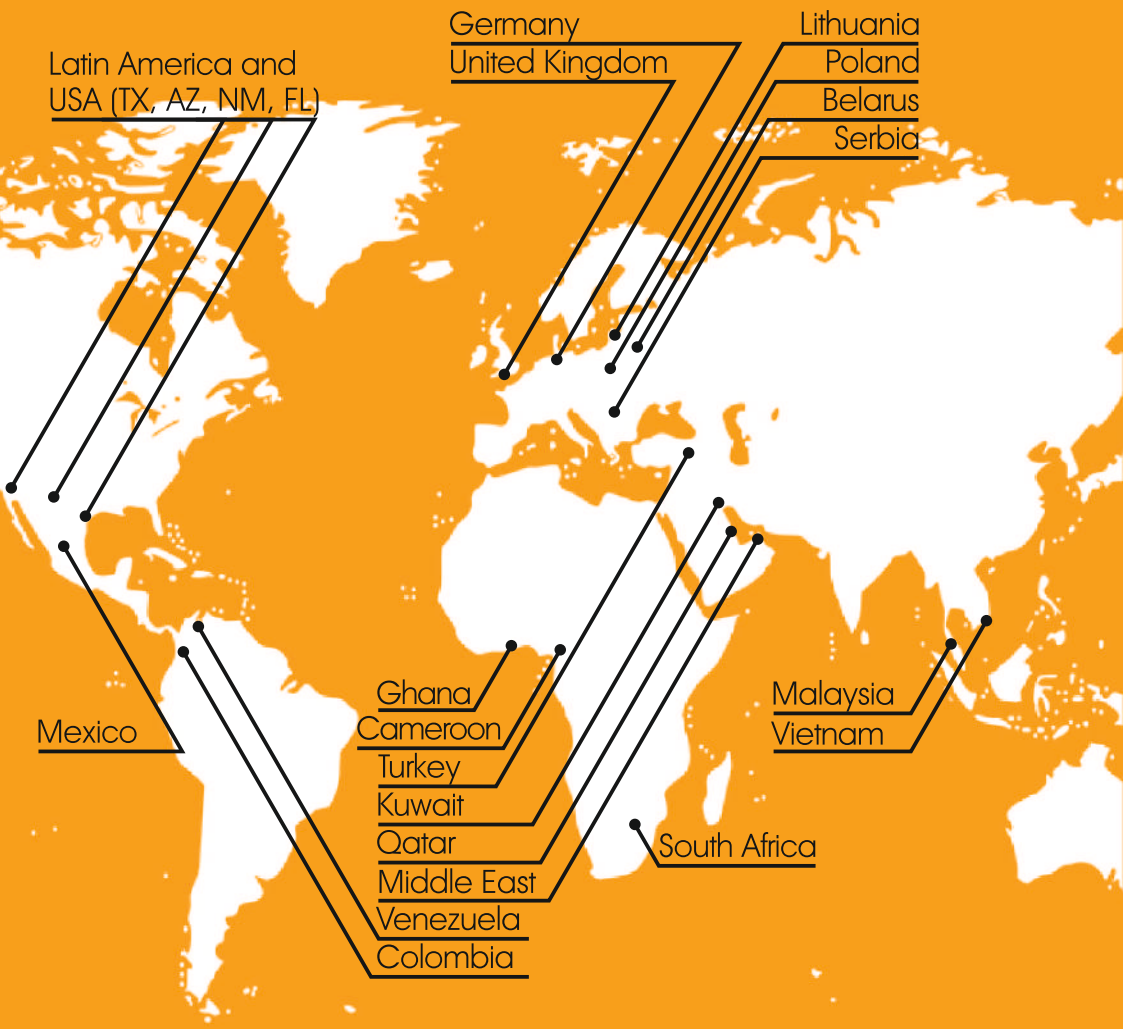
GlobeCore Products have been sold to over 70 countries

Introduction:

Modern power transformers are an essential link in long-distance transmission of electricity. This is why servicing of transformers throughout their lifecycle (filling with oil, vacuumizing, purification and regeneration of oil, drying etc) must be performed professionally and to the highest standard.

GlobeCore manufactures a wide range of equipment to maintain transformers during their entire service life.

OUR REPRESENTATIVES AND DEALERS



What GlobeCore Offers

Insulation (paper and oil) damage, contamination and moisture account for approximately 37% of power transformer failures.

The GlobeCore regeneration technologies allow complete restoration of transformer oil to bring its performance to the required quality specifications.

Timely regeneration guarantees reliable protection of paper insulation, extends transformer lifetime and saves on new oil purchases. Beside regeneration systems, this catalogue offers a choice of other equipment for power transformer servicing.

CMM-R

CMM-R

Full automation

Degassing and drying

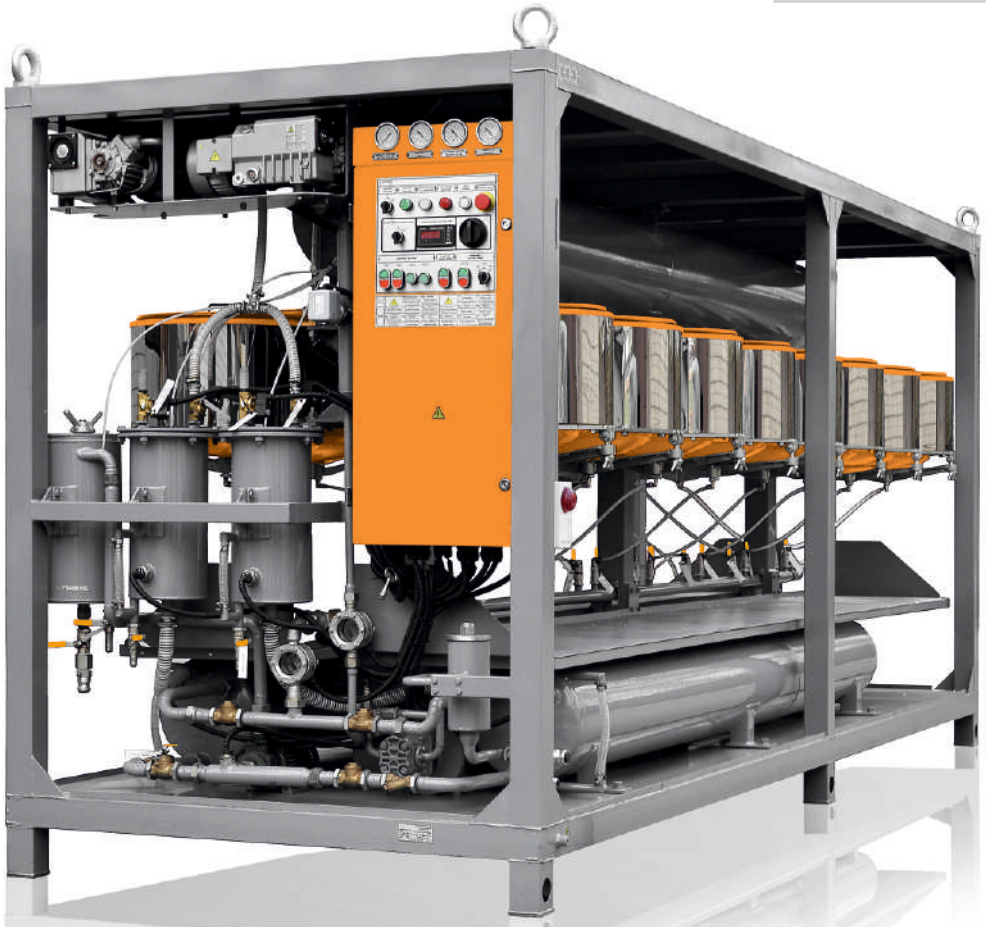
Regeneration

Transformer restoration

Competitive pricing

GlobeCore regeneration makes it possible to use transformer oil which previously required disposal, and use the same transformer oil throughout transformer service life without change.

In the regeneration process, the products of aging and acids are removed from the oil; the oil's color is improved, along with oxidation stability and gas solubility.



UVR

The UVR units are designed for regeneration and purification of oil and fuel.

The unique feature of the UVR is its capability to process any mineral oil or fuel.

With the GlobeCore UVR regeneration technology, the unit can be set to process any type of oil or fluid. Switching from one type of processed fluid to another does not require changing the design of the unit.

The UVR unit purifies and clarifies darkened diesel and furnace fuel, removing sulfur and sulfuric hydrogen compounds, easily clarifies gas condensate, removing tar and contamination, bringing the fuel to a high standard of purity and removing unpleasant odors, such as hydrogen sulfide etc.

After regeneration, purification and clarification, the processed oil products remain stable and do not darken.

The regeneration units successfully process transformer, turbine and industrial oil, furnace and diesel fuel at dozens of facilities around the world.

The unit can be operated at any location, does not require special placement, is easy to transport and virtually noiseless.

A special type of sorbent is used in the unit, combining low cost and high efficiency.

CMM-RP

CMM-RP


Low power consumption


Exclusivity


Regeneration


Full automation

The unit is designed for reactivation of sorbent (Fuller's earth, bleaching clay), used in regeneration columns of oil reactivation systems.

After reactivation, the sorbent can be reused for oil regeneration.

Parameter		Value
Capacity, kg/20 hours		480
Sorbent reactivation time, hours		20
Max power consumption, kW		18
Total electric power consumption per one cycle of reactivation, kWh		70
Power voltage		Customizable
Dimensions, mm	length	2800
	width	2150
	height	2150
Weight, kg		2200

UVM

The UVM unit is designed for removal of solved gases, free and solved water and particulate matter from oil, as well as for heating transformer oil before filling power transformers and other electrical systems.

The UVM units are used during installation and repairs of power transformers.

The UVM is a comprehensive solution for transformer manufacturers and servicing facilities.

Parameter		Value	
		UVM -4/7	UVM -6/7
Capacity	Degassing mode, m^3/hour	4	6
	Heating and filtration mode, m^3/hour	7	7
Oil heater power, kW		50	100
Max power consumption, kW		65	115
Power supply parameters		Fully customizable	
Dimensions, max, mm	Length without trailer / with trailer	2100 3250	2100 3250
	Width without trailer / with trailer	1250 1840	1250 1840
	Height without trailer / with trailer	1500 1940	1500 1940
Weight, kg, without trailer / with trailer		800 1300	900 1400


oil overheating protection


high maneuverability


degassing and dehydration


large wheels for better rough road mobility


transformer vacuumizing


corrosion protection

UVM - 10


oil overheating protection


high maneuverability


degassing and dehydration


large wheels for better rough road mobility


transformer vacuumizing


corrosion protection

The secret of the high efficiency of GlobeCore units are activators which promote near-instant release of gases and evaporation of water from oil.

The UVM units are equipped with a special oil heater which prevents oil burning due to low mean surface power and prevents oil overheating after the machine is stopped.

Beside being highly reliable, the machines are compact and highly mobile.

Parameter		Value	
		UVM-10A	UVM-15A
Capacity	Degassing mode, m^3/hour	10	15
	Heating and filtration mode, m^3/hour	15	15
Oil heater power, kW		150	200
Max power consumption, kW		185	235
Power supply parameters		Fully customizable	
Dimensions, max, mm	Length without trailer / with trailer	2800 4365	2800 4365
	Width without trailer / with trailer	1495 1950	1495 1950
	Height without trailer / with trailer	1600 2300	1600 2300
Weight, kg, without trailer / with trailer		2100 3300	2300 3500

GlobeCore has offices in the USA, the UAE and the South African Republic. Customer support is offered by 17 dealer representatives around the world.

GlobeCore also manufactures equipment for operation on ships and maritime vessels, off-shore drilling rigs and wind farms.

GlobeCore has manufactured over 2500 units, now successfully operated the world.

OIL FILTRATION TRAILER

OIL FILTRATION TRAILER

This system includes all transformer servicing components:

1 Oil degassing;
2 Pumping, filtration, heating;
3 Pulling vacuum;
4 Transformer winding dehydration;
5 Low temperature condensation of water from a transformer;
6 Supply of hot air to a transformer.


All in one solution


On-board generator


Full automation


Air conditioned operator room

Parameter		Value
Max oil degassing rate, l/h		11000
Max oil temperature, °C		95
Nominal output pressure, bar		2,5
Input oil heater power, kW		200
Max power, kW		250
Nominal vacuum system suction rate, m^3/hour		2100
Power supply		Custom
Dimensions, mm	length	16500
	width	2500
	height	4000

OIL FILTRATION TRAILER


oil heating


fine filtration


high maneuverability


high dielectric strength


oil overheating protection


dehydration

CMM - 0,6

The CMM units are designed for removal of water and particulate matter from electrical insulation and lubrication oils.

The CMM units are used during installation and repairs of power transformers and for washing and filling of hydraulic systems.

The CMM units feature simple design, making them easy to operate and service.

Beside being highly reliable, the units are compact and highly mobile.

Parameter		Value			
		CMM - 0,4/0,6	CMM-1H	CMM-2D	CMM-4D
Capacity in dehydration mode, m^3/hour		0,4/0,6	1	2	4
Oil heater power, kW		10	22	50	50
Max power consumption, kW		12,5	25	57	57
Moisture content, g/t (ppm)		10			
Dielectric strength after processing, kW		>65			
Nominal filtration fineness, μm		5 (optionally – 1 μm)			
Electric power supply parameters		Fully customizable			
Dimensions, max, mm	Length without trailer / with trailer	780	1250	2100	2100
			3450	3250	3250
	Width without trailer / with trailer	570	1225	1250	1250
			1760	1840	1840
	Height without trailer / with trailer	1510	1490	1500	1500
			1865	1940	1940
Weight, kg, without trailer / with trailer		205/210	750	800	800
			1400	1400	1400

ZP-260 Sorbent Cartridges

ZP - 260


low power requirements


dielectric strength after processing


filtration


dehydration


competitive price

Sorbent cartridges are used to dry oil with zeolite. The sorbent cartridge unit is equipped with hatches for rapid loading and unloading of the sorbent. The unit can be filled not only with zeolite, but also with other sorbents, such as Fuller's earth or silica gel. This allows the unit to be used for reduction of oil acidity and oil regeneration.

Parameter		Value
Throughput, m^3/hour		4
Total volume of vessels, liters		260
ISO 4406 purity class		-/14/12
Nominal filtration fineness, μm		5 (optionally – 1 μm)
Vessel operation modes		- parallel - consecutive
Max input oil temperature, °C		40
Dimensions, mm	length	1100
	width	1000
	height	2190
Weight, kg		570

BRZ Zeolite Regeneration Unit

BRZ - 100

The BRZ zeolite regeneration units restore performance of zeolite in sorbent cartridges, such as ZP-260.

With a stream of hot air, moisture is removed from the sorbent, restoring its absorption properties.

BRPS is a modified version of the BRZ with a steam generator. The steam purges the sorbent and removes dust from zeolite.

The unit is designed for the power industry and any facility which uses zeolite to dry electrical insulation or lubrication oil.

Parameter		Value	
		BRZ	BRPS
Oil heater power, kW		10,8	
Zeolite drying mode parameters	Air blower capacity, m^3/hour	140	
	Hot air temperature	250	
Vacuum mode parameters	Evacuation rate, liter/sec	6,6	
	Residual pressure, mbar	250	
Nominal power, kW		13,2	16,2
Electric power supply parameters		Fully customizable	
Dimensions, mm	length	1100	1100
	width	650	650
	height	1250	1250
Weight, kg		220	250

zeolite regeneration | wheels for better mobility | high maneuverability | vibration stability | competitive price

CFU

competitive price

vibration stability

high maneuverability

filtration

universal filters
100 μm
40 μm
25 μm
5 μm

CFU

The CFU units are designed for filtration of lubrication and electrical insulation oils.

The units are used for filling and cleaning of gearboxes, hydraulic systems, transformers and in other areas where filtration is required.

These units are equipped with universal filter casings. Required filtration fineness can be specified by the customer.

Parameter		Value		
		CFU-1	CFU-2	CFU-4
Capacity, m^3/hour		1	2	4
Nominal filtration fineness, μm		5 (optionally – 1 μm)		
ISO 4406 purity class		-/14/12		
Power consumption, max, kW		0,75	1,1	1,5
Oil output pressure, bar		5		
Electric power supply parameters		Fully customizable		
Dimensions, mm	length	580		
	width	560		
	height	1115		
Weight, kg		70	80	90

UVD Vacuum Oil Filling Unit

competitive price

dielectric strength after processing

high maneuverability

wheels for better mobility

transformer vacuumizing

UVD

The UVD vacuum oil filling unit is designed for preparation (degassing), storage, transportation and adding transformer oil into high voltage inputs of transformers and switches.

Parameter		Value
Amount of prepared oil, liters		30
Amount of oil in the tank, liters		4
Residual pressure in degassing section, mbar		250
Oil supply pressure, bar		4
Max power consumption, kW		0,25
Max input oil temperature, °C		Fully customizable
Dimensions, mm	length	900
	width	780
	height	1500
Weight, kg		80

PPM-70

oil overheating protection

custom application design

oil heating

competitive price

The PPM continuous oil heater is designed for heating of transformer oil during filling or change of the oil and drying of transformers. The unit can heat mineral, industrial, turbine and other oil types.

The unit can be used in transformer manufacturing and servicing facilities, power plants and oil processing facilities.

Parameter		Value		
		PPM-18	PPM-50	PPM-70
Capacity with input line pressure 2 bar, m^3/hour, max		2,2	4	4
Output pressure, bar		6	4	2,5
Max power consumption, kW		19,5	56	74
Electric power supply parameters		Fully customizable		
Dimensions, mm	length	800	1180	1220
	width	660	800	820
	height	1830	1870	1900
Weight, kg		180	400	500

BV-2000

This GlobeCore vacuum unit is designed for pulling vacuum on transformers and other electrical systems.

The BV vacuum unit is a double stage vacuum system. The first stage creates preliminary vacuum up to 0.5 mbar. It is equipped with a rotary vane vacuum pump. The second stage brings vacuum to 0.01 mbar. This stage is equipped with a Roots vacuum blower.

Parameter		Value				
		BV-200	BV-280	BV-500	BV-1000	BV-2000
Rate of evacuation, m^3/hour		200	280	500	1000	2000
Highest vacuum, mbar		0,01				
Power supply parameters		Fully customizable				
Dimensions, mm	length	950	950	1200	1400	1500
	width	660	660	890	955	1000
	height	1330	1330	1400	1400	1610
Weight, kg		300	300	650	750	1300


transformer vacuumizing


corrosion protection


lower power consumption


quiet operation


transformer winding dehydration

UVV

The vacuum cold trap units are designed for vacuumizing and drying of transformer solid insulation.

Due to the unique design, these units can achieve temperatures as low as -70°C. With such temperatures, the moisture from transformer windings condenses in the unit, improving efficiency of transformer drying.

The machine is available is a separate unit (UH-70), which can be used with BV transformer vacuum units, or as a UVV unit with a built-in vacuum system.

Parameter		Value	
		UH-70	UVV
Air evacuation rate, m^3/hour			2000
Temperature of water vapor condensation surface, °C		-70	
Residual solid insulation moisture content achieved, %		1,0	
Cold capacity, W		600	
Condensation surface area, m^2		6,1	
De-frosting system power consumption, kW		2,1	
Nominal power, kW		3,5	21
Electric power supply parameters		Fully customizable	
Dimensions, mm	length	1700	1550
	width	1600	1350
	height	1950	1850
Weight, kg		650	1500


full automation


transformer vacuumizing


lower power consumption


drying of transformer windings

MOHAVE HEAT

Mohave Heat Air Drying Units

Mohave Heat

The Mohave Heat is designed for purging of transformer tanks and electrical systems with hot dry air to prevent moisturizing of windings during transformer servicing or assembly.

Air is dried by a synthetic sorbent. The Mohave Heat unit can regenerate the sorbent multiple times, eliminating the costs of unit maintenance and refills.

Parameter		Value	
		Mohave Heat 0,7	Mohave Heat 4
Dry air capacity, m^3/hour		100	150
Dry air dew point, °C		- 50	
Dry air pressure, bar		0,18	0,25
Max dry air temperature, °C		90±15	90±15
Adsorbent load, kg		190	
Number of adsorbent cartridges		1	2
Zeolite regeneration temperature, °C		430	
Air heater power, kW		24	
Power consumption, kW	Air drying (nominal operation)	1	5,5
	Regeneration of adsorbent in one cartridge	25	30
	Regeneration of adsorbent in two cartridges	-	55
Electric power supply parameters		Fully customizable	
Output air temperature for regeneration of adsorbent in external equipment, °C		430	
Dimensions, mm	length	1350	1500
	width	800	1200
	height	1700	2100
Weight, kg		550	1050


air filtration


air heating


transformer winding drying


full automation


regeneration


quiet operation

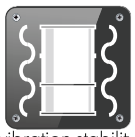
UDM-1

The UDM-1 oil filling unit is designed for pumping, storage, transportation and supplying transformer oil. Oil can be supplied from the unit by manually or electrically driven pumps the unit is equipped with.

Parameter		Value
Tank volume, liters		1000
Electric pump capacity, m^3/hour		1
Manual pump capacity, m^3/hour		1,8
Nominal power, kW		1,1
Electric power supply parameters		Fully customizable
Dimensions, mm	length	3575
	width	1805
	height	1705
Weight, kg		850

custom application design

large wheels for better rough road mobility



vibration stability

high maneuverability

Timely regeneration of transformer oil extends power transformer life by at least 20 years.

Options for the Oil Processing Units

Upgrades	Controls	Custom application design		Extra options	
Auxiliary vacuum system	Manual	Ex-proof design	Insulated container	Moisture sensors	Hose storage drums
Refrigeration vapor condenser, -70°C	Semi-automated	Designed for operation at off-shore oil rigs	Metal container	Particle sensors	Mechanical oil flow meter
Refrigeration vapor condenser, -35°C	Automated	Built with stainless steel	Container with air-conditioned operator workstation	TSS transformer oil level control system	Digital oil flow meter
	Automated with remote monitoring		Stainless steel sheet plating	Online transformer content monitoring	Operation with oil regeneration unit