Trouble shooting

CAUTION

Operate the stop of the equipment before working in the check. And, after the confirmation in the full stop of the equipment. Check after making a breaker "OFF" and heating part temperature's falling to the temperature that doesn't get a burn.

Descriptions of malfunctions in this chapter.

Malfunction part	Contents	Carrying page
	The blower does not rotate.	54
Convey blower	The blower does overloaded operation and the thermal relay trips.	56
	A little air flow rate of the blower.	57
	The blower does not rotate.	54
Dry blower	The blower does overloaded operation and the thermal relay trips.	56
	A little air flow rate of the blower.	57
Day to men anotyma	The change of the dry temperature is large.	57
Dry temperature	The dry temperature doesn't up and down.	58
Dry inferior	The moisture content of resin does not go down.	59
Controller	The indicator with the PV value of the controller doesn't display the condition of "ON" in primary power.	60
Power breaker	The power breaker trips.	60
Overheat	The overheat alarm occurs.	60
	The thermal setting value of every model.	61

Of the checkpoint and disposing method specified from the next page. Examine before the repair request.

Yet, as for the removing method of a filter, refer to CHAPTER 6. Maintenance.

The Convey blower does not rotate.		
Check point	Remedy	Note
Confirm whether or not the indicator of the controller lights up.	Set the primary power and a front power breaker in "ON". Press CONTROL ON switch.	When the following disposal doesn't correct dispose by page 53 [The indicator with the PV value of the controller doesn't display the condition of "ON" in primary power].
Confirm whether or not the "Feeder" indicator of the controller lights up.	If lamp is not lighting up, press Feeder switch. When the indicator doesn't light up even if it pushes the switch, exchange the controller.	Inspection and replacement by persons who have not enough knowledge about electricity may cause failure and danger. Ask our service department to inspect and replace.
Open the door of control panel and look at the magnet point of the electromagnetic switch unit, and with power "ON", check the opening and closing motion for the contactor.	When the dissolving, the consumption condition, and the normal operation are impossible, exchange the electromagnetic switch unit.	Life Expectancy: 2.000.000 cycles
Confirm whether or not the malfunction character of "E3" isn't displayed at the controller indicator.	In the cause of the over load of blower, after repair, open the control panel door and press the reset button of thermal relay.	As for the overloaded cause of the blower, refer to page 49 [The blower does overloaded operation and the thermal relay trips].
Confirm whether or not the limit switch of jet clone at the end of convey doesn't become "ON" in spite of not being in the full material condition.	When turning "ON", refer to page 38 and adjust the limit switch.	When a right adjustment isn't performed, the convey stop becomes impossible in the full material condition. Therefore, be careful.
Confirm the sensitivity of the level switch of the end convey hopper.	Refer to page 36,37 and perform the sensitivity adjustment of the level switch.	When a right adjustment isn't performed, the convey stop becomes impossible in the full material condition. Therefore, be careful.

The drying blower does not rotate.			
Check point	Remedy	Note	
Confirm whether or not the indicator of the controller lights up.	Set the primary power and the front power breaker in "ON".	When the following disposal doesn't correct dispose by page 53; [The indicator with the PV value of the controller doesn't display the condition of "ON" in primary power].	
Confirm whether or not the "Dryer" indicator of the controller lights up.	If lamp is not lighting up, press Dryer switch. When the indicator doesn't light up even if it pushes the switch, exchange the controller.	When the start timer is set, after the setting time, the dry operation is started.	
Open the door of control panel and look at the magnet point of the electromagnetic switch unit, and with power "ON", check the opening and closing motion for the contactor.	When the dissolving, the consumption condition, and the normal operation are impossible, exchange the electromagnetic switch unit.	Life Expectancy: 2.000.000 cycles	
Confirm whether or not the malfunction character of "E2" is displayed on the controller indicator.	In the cause of the over load of blower, after repairing, open the control panel door and press the reset button of thermal relay.	As for the overloaded cause of the blower, refer to page 49; [The blower does overloaded operation and the thermal relay trips].	

The blower is overloaded and the thermal relay trips.			
Check point	Remedy	Note	
Remove the cartridge filter in the filter case of the convey line and check the filter condition.	When there are dirt and stuff, blow the clean dry air into the cartridge filter and remove the clinging particles.	When the degradation of cartridge filter progresses and it isn't possible to remove clinging particles, exchange it with a new cartridge filter.	
Remove the dry filter and check the filter condition.	When there are dirt and stuff, blow the clean dry air into the filter and remove the clinging particles.	When the degradation of filter progresses and it isn't possible to remove clinging particles, exchange it with a new filter.	
Open the door of control panel and are there not dissolving and consumption of the magnet point of the electromagnetic switch unit, and At the time of power "ON", check the opening and closing motion for the magnet.	When the normal operation are impossible, exchange the electromagnetic switch unit.	Life Expectancy: 2.000.000 cycles	
Check whether or not the thermal in control panel is set to the standard value.	Refer to [The thermal setting value of every model] and set a thermal to the standard value.	Work after setting primary power to "OFF".	

The air -flow of the blower is decreased.			
Check point	Remedy	Note	
Remove the cartridge filter in the convey filter case and check the filter condition.	When there are dirt and stuff, blow the clean dry air into the cartridge filter and remove the clinging particles.	When the degradation of cartridge filter progresses and it isn't possible to remove clinging particles, exchange it with a new cartridge filter.	
Remove the cartridge filter in the dry filter case and check the filter condition.	When there are dirt and stuff, blow the clean dry air into the cartridge filter and remove the clinging particles.	When the degradation of cartridge filter progresses and it isn't possible to remove clinging particles, exchange it with a new cartridge filter.	
Check whether there is not damaging and connection's loosening the connection hose in the dehumidifying unit and in the connection hose between the dehumidifying unit and the dry hopper.	When the hose damages, exchange it with a new hose. When there is loosening in the hose connection, tighten up a hose band surely.	After confirm the place of air leak, and stops the unit. Then, perform working if falling to the range where the temperature of the heating part doesn't get a burn.	

The drying temperature is unstable.			
Check point	Remedy	Note	
Remove the cartridge filter in the dry filter case and check the filter condition.	When there are dirt and debris, blow the clean dry air into the cartridge filter and remove the clinging particles.	When the degradation of cartridge filter progresses and it isn't possible to remove clinging particles, exchange it with a new cartridge filter.	
Remove the regeneration filter and check the filter condition.	When there are dirt and stuff, blow the clean dry air into the cartridge filter and remove the clinging particles.	When the degradation of filter progresses and it isn't possible to remove clinging particles, exchange it with a new filter.	
Refer to the technical manual and confirm each setting of a controller special mode.	When mistaking by the setting value, change to the right setting value.		

The dry temperature doesn't up and down.			
Check point	Remedy	Note	
Check whether there is not damaging and connection's loosening the connection hose in the dehumidifying unit and in the connection hose between the dehumidifying unit and the dry hopper.	When the hose damages, exchange at the new hose. When there is loosening in the hose connection, tighten up a hose band surely.	After confirm the place of air leak, and stops the unit. Then, perform working if falling to the range where the temperature of the heating part doesn't get a burn.	
Check the cooling water flow and water volume lack. (MJ3-100~300)	When cooling water isn't flowing, confirm the open condition of each valve.	The air temperature that is discharged from the dehumidifying unit on operating unit becomes hot and the dry temperature sometimes can not be set to 80~90°C. In this case, always pass cooling water.	
Check that the dry heater is broken.	When the heater is broken, replace the heater.	After the unit stop and perform the power breaker "OFF". After falling to the range that the heating part temperature doesn't get a burn, and perform working.	

The moisture content of resin does not go down.		
Check point	Remedy	Note
Check whether or not the cooling fan of air-cooled type after cooler doesn't stop and the gas ingredient isn't adherent much. (MJ3-15~75)	Remove the outer jacketing lagging and confirm whether or not cooling fan (2 pcs.) doesn't stop. In case of the gas ingredient, perform cleaning as instructed in Chapter 6. Maintenance.	Confirm whether the ambient temperature of main unit is abnormally high.
Check the cooling water flow and water volume lack. (MJ3-100~300)	When cooling water isn't flowing, make sure all water valves are open.	Don't set the water supply pressure for more than 0.49MPa.
Remove the cartridge filter in the dry filter case and check the filter condition.	When there are dirt and debris, blow the clean dry air into the cartridge filter and remove the clinging particles.	When the degradation of cartridge filter progresses and it isn't possible to remove clinging particles, exchange it for a new cartridge filter.
Remove the regeneration filter and check the filter condition.	When there are dirt and debris, blow the clean dry air into the cartridge filter and remove the clinging particles.	When the degradation of filter progresses and it isn't possible to remove clinging particles, exchange it with a new filter.
Check whether there is no damaged and/or loosen connection hose at the dehumidifying unit and between dehumidifying unit and the dry hopper.	When the hose is damaged, exchange it for a new hose. When hose connection is loose, tighten the hose band securely.	After confirming the location of the air leak, stop the unit. Then, wait for the temperature to drop to avoid any burns, then start to perform repair.
Check if the regeneration heater is broken.	Perform an ohm check with power off. If the heater is broken, replace the heater.	After the unit stop and perform the power breaker "OFF". Wait for the temperature to drop to avoid any burns, then start to perform repair.

The indicator of the PV value on the controller doesn't come "ON" with primary power, even after pushing the "CONTROL ON" switch.

Check point	Remedy	Note
Check whether or not the front power breaker of the control panel is "ON".	When not "ON", turn the power breaker "ON", and press the CONTROL ON switch once again.	Durable switching times: 10,000 If switching function does not operate properly, replace power breaker.
Check whether or not the circuit protector (CP-1) of the control panel does not go "OFF".	After checking the electric wiring and the part in the control panel, set it to "ON".	After setting the primary power and the front power breaker to "OFF", check.

The power breaker trips.		
Check point	Remedy	Note
Check whether or not the circuit does not the short circuit.	Remove the short circuit.	Inspection and replacement by persons who have not enough knowledge about electricity may cause failure and danger. Ask our service department to inspect and replace.

The overheat alarm occurs.		
Check point	Remedy	Note
Please checked whether or not the dial setting value of the dry overheat thermostat unit (inside the control panel) is adjusted to the correct set point.	When there is an incorrect setting value, set it to the right value.	Check after turning the power breaker to "OFF", and unplugging the unit, for shock prevention.
The dry overheat thermostat setting value: Dry temperature +20°C (36° F)		
Remove the cartridge filter in the dry line filter case and check the filter debris.	When there is dirt and debris, blow clean, dry air into the cartridge filter to remove any clinging particles.	When the degradation of cartridge filter progresses and it isn't possible to remove clinging particles, exchange it with a new cartridge filter.
Remove the regeneration filter and check the filter debris.	When there is dirt and debris, blow clean, dry air into the cartridge filter to remove any clinging particles.	When the degradation of filter progresses and it isn't possible to remove clinging particles, exchange it with a new filter.
The output of the solid state relay goes out.	There is a possibility of a problem in the solid state relay. After checking, replace if needed.	Check after turning the power breaker to "OFF", for shock prevention.

Check point	Remedy	Note
Open the door of the control	Replace the drying heater	Switching endurance:
panel, and inspect whether the	output relay (RY2).	<u>5 million times or 1 year</u>
drying heater output relay (RY2)		
in the main circuit board located		
on the backside of the controller		
is operating normally.		

The thermal setting value of every model (A)

Model	MJ3-10A			
	Dry blower	Convey blower		
Power	OCR-1	OCR-2		
AC200V 50/60Hz	0.8/1.0	4.8/6.0		
AC220V 60Hz	0.9	5.8		
AC380V/ AC400V/ AC415V 50Hz	0.4/0.5/0.5	2.8/2.9/3.1		
AC440V 60Hz	0.5	3.1		

Model	MJ3-15A,25A		MJ3-50A,75A		MJ3-100A,150A	
	Dry blower	Convey blower	Dry blower	Convey blower	Dry blower	Convey blower
Power	OCR-1	OCR-2	OCR-1	OCR-2	OCR-1	OCR-2
AC200V 50/60Hz	1.7/1.9	4.8/6.0	4.3/5.0	4.8/6.0	7.4/8.2	4.8/6.0
AC220V 60Hz	1.9	5.8	4.6	5.8	7.6	5.8
AC380V/ AC400V/ AC415V 50Hz	1.1/1.2/1.4	2.8/2.9/3.1	2.5/2.6/2.8	2.8/2.9/3.1	4.4/4.5/5.1	2.8/2.9/3.1
AC440V 60Hz	1.2	3.1	2.5	3.1	4.3	3.1

Model	MJ3-200A			MJ3-250A,300A		
Power	Dry blower OCR-1	Convey blower OCR-2	Regeneration blower OCR-3	Dry blower OCR-1	Convey blower OCR-2	Regeneration blower OCR-3
AC200V 50/60Hz	10.8/8.2	13.1/10.0	0.70/0.75	6.9/6.5	13.1/10.0	0.70/0.75
AC220V 60Hz	7.6	9.2	0.78	6.0	9.2	0.78
AC380V 50Hz	5.8	7.3	0.4	3.3	7.3	0.4