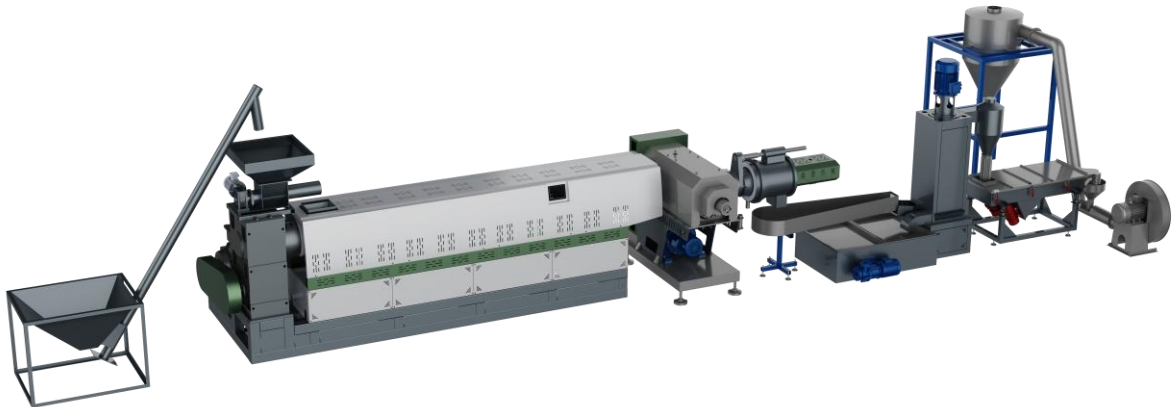


RHDJ150 Instructions Guide



Preface

Thank you for choosing our products. Before using them, please carefully read and understand all the contents in this manual to use the equipment correctly and reasonably. Incorrect usage may lead to dangerous accidents, cause malfunctions and shorten the service life of the machine.

I. Overview

1.The composition of water ring granulation production line:

Screw loader – Ration feeder - Extrusion system – Laser filter- Pelletizing system - Cooling and dehydration system - Air discharge conveying system

2. Application Scope:

It is mainly applicable to processing PE plastic granules, such as Washed or crushed HDPE flakes, PP flakes, etc.

3. Features:

The gearbox adopts a high-torque design, achieving noise-free operation and smooth performance. The special design of the screw tube and screw, after special hardening treatment, has excellent wear resistance and mixing performance, saving the time for hydraulic screen replacement, resulting in higher production capacity and lower power consumption. The design of vacuum exhaust or ordinary exhaust port can remove moisture and exhaust gas during the production process.

II. Technical Specifications

Model	100	120	150	180
Main extruder				
Screw Diameter	100mm	120mm	150mm	180mm
L/D (28-33:1)				
Power	75kw	90kw	132kw	185KW
Output	150~200kg/h	200~250kg/h	450~500kg/h	600~800kg/h

Note: Output is subject to the raw materials.

Motor power depends on the materials.

III. Common Faults & Troubleshooting

1. Extruder fails to rotate

Causes: Metal foreign objects enter the screw; barrel temperature set too low.

Solutions: Remove and clean the screw; raise the heating temperature.

2. Temperature cannot rise to target value

Causes: Damaged heating ring; single-phase switch in electrical cabinet off; broken thermocouple.

Solutions: Replace the heating ring; close the single-phase switch; change the thermocouple.

3. Material overflow at vent port

Causes: Impure raw materials; clogged screen changer; excessively low die head temperature; blocked die lip.

Solutions: Replace filter screen; raise die head temperature; clean the die lip; remove and clean the screw.

4. Pellets clump and cannot separate

Causes: Excessive gap between cutter and die lip; notches on cutter blade; overly high water temperature; insufficient water flow.

Solutions: Dismount and readjust the cutter to fit tightly against the die lip; lower water temperature or increase water supply.

5. Uneven pellet size

Causes: Excessively high main extruder speed leading to unstable material discharge.

Solutions: Reduce main machine speed and maintain a sufficient material level at the feed throat.

VIII. Safety Precautions

1. Improper operation may trigger hazardous conditions, resulting in fatal injury, severe personal harm or property loss.
2. Lubricate all bearings regularly and replace gear oil in reduction boxes periodically.
3. When the metal detector alarms, inspect the belt conveyor and restart the detector only after all metal contaminants are removed.
4. If the pressure gauge shows zero pressure after the vacuum pump starts: first check if the water inlet (yellow air pipe) has sufficient water; inspect exhaust pipes for blockages; check the sealing of the exhaust port cover plate.
5. Screen replacement for main extruder: Prepare to change screens when the main machine pressure alarm activates. Stop the belt conveyor first, reset the compactor bin potentiometer to zero and shut down the bin; reset the main extruder potentiometer to zero and stop the extruder; start the oil pump, then press the lift/lower button to replace the filter screen.
6. Operators must wear protective gear to prevent scalding during screen replacement.
7. High-temperature gloves are mandatory when disassembling molds and screws.
8. Operators shall wear gloves and goggles when inspecting the vacuum vent to avoid steam burns.
9. Do not touch rotating parts or high-temperature areas with hands or any body parts while the machine is running.
10. Cut off power supply completely before inspecting or repairing electrical components.
11. If the machine has been idle for a long time, clean contactors thoroughly before startup to prevent sparks caused by dust and oxide layers, which may burn electrical parts and trigger fires.
12. Reliable earthing protection of the equipment is compulsory; failure to do so may cause fatal injury, severe personal harm or property loss.
13. Operate the frequency converter strictly in accordance with its dedicated operation manual.
14. Do not stand directly facing the die lip discharge opening during startup to avoid fatal accidents.
15. Cut off all relevant power supplies before entering the compactor bin for inspection or maintenance to prevent casualties.