

H & H Industries, Inc.

STANDARDS FOR THE REMANUFACTURING OF SEMI-HERMETIC & OPEN DRIVE COMPRESSORS

RECEIVING & DISASSEMBLY

Upon receipt of a compressor the nameplate data and accessory devices attached are recorded. As the unit is being disassembled the condition of the parts are noted so the cause of failure can be determined. The oil is drained into a container to ascertain the condition of the oil. A tear down report describing the condition of the parts is prepared if requested by the customer.

CLEANING

After the unit is totally disassembled all parts are placed into a high pressure washer where they are cleaned using a water based cleaning material. After the high pressure washer has removed all grease and paint from the unit it is then thoroughly washed to be certain that no cleaning chemical remains on or entrapped in the unit body or parts. After the second cleaning the unit body and parts are totally immersed in a vat containing a rust preventative.

PARTS INSPECTION

Each part of the compressor is thoroughly inspected visually and with instruments as required to determine that they are within industry tolerances and free from defects. The body is inspected for scored cylinder walls, bore size, clear passages and cracks. Pistons are checked for proper tolerance, worn ring grooves and worn pin fit. Connecting rods are checked for proper pin fit, crankshaft fit and straightness. The crankshaft is checked for straightness, proper tolerances and wear grooves. Oil pumps are tested in both directions for performance within manufacturers specifications.

ANY PARTS NOT PASSING ALL INSPECTIONS ARE DISCARDED AND REPLACED WITH NEW PARTS.

MOTOR INSPECTION

The motor stator is visual inspected after cleaning and given a megger check. The rotor is tested if there is reason to suspect rotor problems.

ANY MOTORS THAT DO NOT PASS INSPECTION OR APPEAR TO BE MARGINAL ARE REPLACED WITH REWOUND OR NEW MOTORS.

REASSEMBLY

Reassembly of the unit is performed in our clean room. The unit is assembled using manufacturers specifications or ICRA specifications when manufacturers original specifications are not available. All bearings, piston wrist pins and piston rings are replaced with new parts. Any pistons, rods, oil pumps, inserts or other parts not passing inspection are replaced with new parts. All valve plates are surface ground to factory specifications and the valve springs and valve reeds are replaced with new units. The crankshaft is polished or reground depending on individual unit requirements. All bolts are torqued to industry specifications. All gaskets, seals and compression type terminals are replaced with new units to assure proper sealing.

The unit is then charged with industry standard oil.

TESTING

All units are test run under properly monitored voltage and amperage. While running they are checked to be certain that the oil pressure is within factory specifications, the suction and discharge valves function properly and the unloaders work correctly.

The unit is then pressure tested.

FINISHING

The unit is sealed with a positive holding charge of dry nitrogen and painted. A new data plate is prepared showing the serial number, model number and voltage. A plastic wrap is used to insure that the completed compressor remains clean.