



Assembly Inspections And Tests

During the assembly process, all units are subjected to a series of inspections to ensure mechanical soundness (reference ER-5.3). These include:

- Measurement and recording of critical values such as crankshaft end clearances, connecting rod side clearances, rod runout, and bearing jack clearances.
- Check operation of lubrication system components including shutdowns, pump(s), passages and fittings.
- Verify critical torque values.
- Check freedom of movement of crankshaft and connecting rod pins.

All mechanically complete units (excluding valves) are to be run tested for at least 4 hours, during which time operating parameters will be monitored and recorded on the Production Test Log (ER-5.3.1).

After the run test additional inspections are performed on the unit including:

- Measure and record temperatures of main bearing caps and connecting rods (at split lines), within 5 minutes of completion of run test.
- Visually inspect bores, piston rods, crosshead shoes and slides for any scoring or unusual wear patterns.
- Crankshaft end clearances are measured and recorded.
- Critical torques and set screws are checked and adjusted when required.
- After passing all previous inspections the unit is prepared for shipment. Final visual checks of unit and associated paperwork is performed by Quality Control.