that the tong jaws are replacable in case they are bent or broken.

At regular intervals a quality control man takes a crankshaft from the restrike for a routine check, after which it goes back on the cooling line if the check shows no flaws.

From the cooling line the forging is transferred to the heat treat line, where employees wear steel foot-guards.

Three sets of gas-fired furnaces process the forging through hardening and stress-relieving cycles. Each furnace is controlled by pyrometers and guarded by safety valves, which close on gas, combustion air, electrical failure, etc.

After passing through the hardening furnace, the forging is quenched in water. At this point a crankshaft is removed for a hardness test by a quality control man. Records are kept of the readings.

From the hardening furnace, the forging moves into the stress-relieving furnace, after which a sample is taken for another test.

The forging is taken from the conveyor after stress relieving, and placed on a conveyor, where it is transported to a wheelabrator for removal of scale.

Our sample forging is now centered, and marked for a location point for the engine plant who will machine it. The operator stamps an identification mark on the crank which makes him responsible for the work done on the locating spot.

The crank is now checked again by placing it in a fixture equipped with a dividing head. This check completes the inspection of the crank except for a visual check just before the loaded container is shipped to the machining plant where the engine is made.

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