

Case History: Two (2) bench cylinder head casting system (FRANCE)



Project Requirement:

The customer had a yearly requirement of 80,000 cylinder heads.

Our Solution:

The proposed solution was for a two (2) casting bench system able to produce approximately 80,000 good cylinder heads per year when operating over three (3) shifts per day.

Scope of work:

The Scope of Supply for the system includes:

- a device to prepare core packs by automatic assembly of the top core onto the bottom core;
- a coresetter using a rotating device on board the casting bench to place the core pack into the mold;
- a pouring/unloading robot with quick connects on its wrist to change over from pour ladle to unload gripper.
- a special three minute (3') cooling buffer at the unloading station, handled by the unloading robot, separates the casting area from the pre-finishing area.
- the unloading robot moves the casting from the end of the cooling buffer to an hydraulically operated device to break off the external core butts;
- The casting are then sent to a forced-air cooling tunnel;
- The pouring sprue and casting runners are cut off by hydraulically-operated knives at the outlet of the cooling tunnel.