

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

PACIFIC FURNACE
6633 Canoga Avenue
Canoga Park
Los Angeles County
California

HAER CA-2280

INDEX TO BLACK AND WHITE PHOTOGRAPHS

Jet Lowe, photographer, 2011

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| CA-2280-1 | View of the east elevation, or what is considered the back side of the furnace, with the furnace in the closed position. |
| CA-2280-2 | View looking along the north side of the furnace. Note the vee shaped piping that is allowed to collapse into a folded position as the north half of the furnace moves into its open position. Also note the black canister in the background, that is a retort into which an article to be brazed would be placed and sealed into to precisely control the brazing environment. |
| CA-2280-3 | View of the north elevation with the furnace in the closed position. |
| CA-2280-4 | General view looking along the south side of the furnace showing a close up view of piping system that is designed to collapse into a folded position when the furnace is opened. |
| CA-2280-5 | View of the south elevation of the furnace with the furnace in the closed position |
| CA-2280-6 | Oblique view of the south and west elevation with the access stairs to the furnace control valve pit in the foreground of the view. |
| CA-2280-7 | Detailed view of the south exterior wall of the furnace room, adjacent to the furnace showing the louvers used for venting and dissipating the ambient heat generated by the furnace operation. |

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- CA-2280-8 General view of the furnace room looking at the west elevation, or what is considered the front of the furnace, with the furnace in the closed position. Also in the view, image left is the retort into which an article to be brazed would be placed and sealed into to precisely control the brazing environment. In the image right background is the louvered exterior wall, foreground is the corner of a hoisting frame, used in conjunction with the overhead beam crane to move articles into position during preparation for brazing.
- CA-2280-9 Oblique and elevated view looking at the top, north and west sides of the furnace in its closed position.
- CA-2280-10 Oblique and elevated view looking at the top, north and west sides of the furnace in its open position.
- CA-2280-11 Oblique and elevated view looking at the top, north and west sides of the furnace in its open position. The camera angle is shifted a bit more to the north from image HAER CA-2280-10 to capture more of the furnace.
- CA-2280-12 General view looking east with the furnace in the open position showing the hearth on which the retort is placed and sealed onto for the brazing process.
- CA-2280-13 View looking north showing a close-up view of the furnace hearth and the interior of the north half of furnace with its insulating material in the background. The small holes in the insulated surface are natural gas burners to supply the heat for the brazing process. There are twelve burners on each half of the furnace for a total of twenty four burners.
- CA-2280-14 View of the west elevation with the furnace in the closed position
- CA-2280-15 Detail of one of the hydraulic locking and cinching mechanism to seal the furnace shut.
- CA-2280-16 Photo one in a series of seven demonstrating the hoisting and positioning of the retort onto the furnace hearth. In this image the beam crane is lifting the hoisting frame from its stowage position.
- CA-2280-17 Photo two in a series of seven demonstrating the hoisting and positioning of the retort onto the furnace hearth. In this image the beam crane has moved the hoisting frame to a more central location in the furnace room.
- CA-2280-18 Photo three in a series of seven demonstrating the hoisting and positioning of the retort onto the furnace hearth. In this image the hoisting frame is being laid down for repositioning of the hoist on the frame.

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- CA-2280-19 Photo four in a series of seven demonstrating the hoisting and positioning of the retort onto the furnace hearth. In this image the beam crane has moved the hoisting frame to a more central location in the furnace room.
- CA-2280-20 Photo five in a series of seven demonstrating the hoisting and positioning of the retort onto the furnace hearth. In this image the hoist has been realigned on the hoisting frame and is lifting the frame parallel to the floor.
- CA-2280-21 Photo six in a series of seven demonstrating the hoisting and positioning of the retort onto the furnace hearth. In this image, the retort has been lifted by the hoist and hoisting frame and is being placed onto the furnace hearth.
- CA-2280-22 Photo seven in a series of seven demonstrating the hoisting and positioning of the retort onto the furnace hearth. In this image the retort is in position on the furnace hearth and the furnace halves remain open.
- CA-2280-23 General view of the west wall of the control valve pit beneath the furnace showing the control valves and supply lines for hydrogen, argon and nitrogen
- CA-2280-24 General view from the northeast corner of the control valve pit looking at a draft blower, combustion air supply lines and natural gas supply lines for the burners underneath the hearth. Also note the support columns for the furnace hearth above.
- CA-2280-25 General view of the control valve pit looking southwest at vacuum lines combustion air and natural gas supply lines in addition to the structural columns supporting the furnace hearth above.
- CA-2280-26 General view of the control valve pit looking east with the operators desk in the foreground and hydraulic lines connected to old control valves. These controls have moved to the control room on the main furnace room floor. During the early years a valve operator would have to be in the control valve pit during furnace operations.
- CA-2280-27 General view from the northwest corner looking toward the southeast corner of the control valve pit beneath the furnace. Note the pair of vacuum pumps, the operators desk and the stairs leading up to the main furnace room floor.
- CA-2280-28 Detail view from inside the furnace control room looking at the furnace drive panels that control the opening and closing of the furnace.

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- CA-2280-29 General view of the furnace control room looking at vacuum pump valves, furnace drive panel and flow meters to control and monitor the furnace operations.
- CA-2280-30 General view of the furnace control room looking at flow recorders in the center of the image and power panels on the right of the image.
- CA-2280-31 Wide general view of the furnace control room looking at the north and east walls.
- CA-2280-32 Detailed view of the main gas metering and control panel located along the east wall of the furnace control room.
- CA-2280-33 Detail view of a pump used for evacuating exhaust gasses generated from the brazing process and safely venting them.
- CA-2280-34 Oblique exterior view of the south and west louvered facades of the furnace room.
- CA-2280-35 Close up view of an exterior tank farm used to supply gaseous hydrogen.