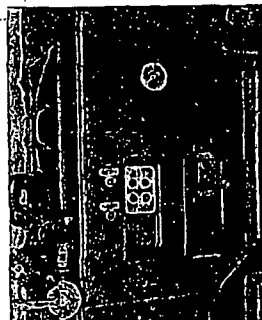


NEW PLANT EQUIPMENT



Dual-Fuel-Engine Control E331

OPERATION OF DUAL-FUEL ENGINES has been simplified by development of automatic electric controlled accessories operated by two pushbuttons. With this system, indicator lights above buttons indicate which fuel is being burned. All mechanical operations required to change from one fuel to the other are made automatically when the proper button is pushed.

Superior dual-fuel engines are started and stopped in the conventional manner by means of a "stop-run" lever and a separate "air-starting" pull handle. After engine starts, governor and special controls regulate engine automatically. Mounted on the governor housing, the pushbutton-control panel is used only when engine is running. Button marked "oil" has an amber indicator light, while "gas" button has a white one. Pushbutton controls are connected with an automatic alarm and safety system and, through electric relays, operate a solenoid valve in the gas line. The amber light is on when engine starts and stays on after pushing the "gas" button until governor regulates gas flow and reduces oil flow to pilot volume.

Before converting to dual-fuel operation, a hand-operated shutoff valve in the gas line must be opened. When "gas" button is pressed, white light glows and control shaft admits gas into each cylinder through feather valves that are held closed by light springs and opened by action created by flow of air into cylinders. At the same time, governor moves back to hold fuel-pump racks in pilot-oil position and to regulate position of gas butterfly valve as required by engine load.

If gas supply is inadequate for engine

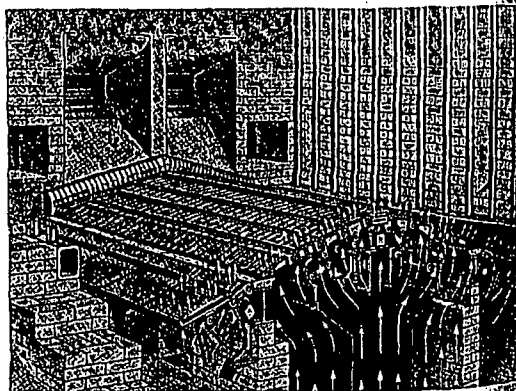
load, governor automatically increases oil injection and amber light glows again. If load then decreases or if gas supply increases beyond load needs, oil injection is reduced automatically to pilot volume and amber light goes out.

If it is desired to operate engine on less than full-load gas requirements, hand-operated valve in gas line may be set on its graduated dial to restrict gas flow to desired amount. Governor then automatically increases oil injection as needed.

To change back from dual-fuel to oil operation, the "oil" button is pressed. The engine may be stopped simply by moving standard control lever to "stop" position. Superior Engine Div., National Supply Co., Springfield, Ohio.

Welding Rod E332

SMALLER DIAMETER ROD for steel torch welding is designed to low-hent weld all steels. Eutectic 16, 3/16 in. dia., may be used in ring form, preplaced and heated, either by torch or induction heating. Eutectic Welding Alloys Corp., 40 Worth St., New York 13, N. Y.



Spreader Stoker E335

COMPLETE ECONOMICAL COMBUSTION of any grade of coal, even lignite, is possible, maker claims, with new Centrafire spreader stoker. Coal is projected by an air-cooled

Air Vent E333

HIGH-PRESSURE AIR VENT uses large diameter phosphor-bronze helical bellows to permit states the manufacturer, oversize valve faces at pressures from 0 to 200 psi.

Available in vertical and angle patterns, 8 to 14 in. dia., these vents have renewable stainless-steel heads, bodies and bonnets cast brass, cast iron or semi-steel, depending upon size and pressure. Sareco Co., Empire State Bldg., New York 1, N. Y.

Electrical Insulation E334

KNOWN AS QUINTERRA, this new installation has an asbestos base and is completely organic. In appearance it resembles paper and is furnished in long lengths in roll tape form.

Quinterra is a closed structure, has no holes or interstices as compared with woven or open structure of painted or glass cloth.

This insulation is non-flammable, and remains unaffected by heat even when exposed to high temperatures for a prolonged period of time. At room temperature minimum dielectric strength is about 500 per mil. In contrast to other electrical solutions, this value increases with continued exposure to high temperatures, coming 400+ per mil at 300 C.

It is available in tape form from 1/16 to 3/16 in. rolls. Johns-Manville Corp., 22 40th St., New York 16, N. Y.

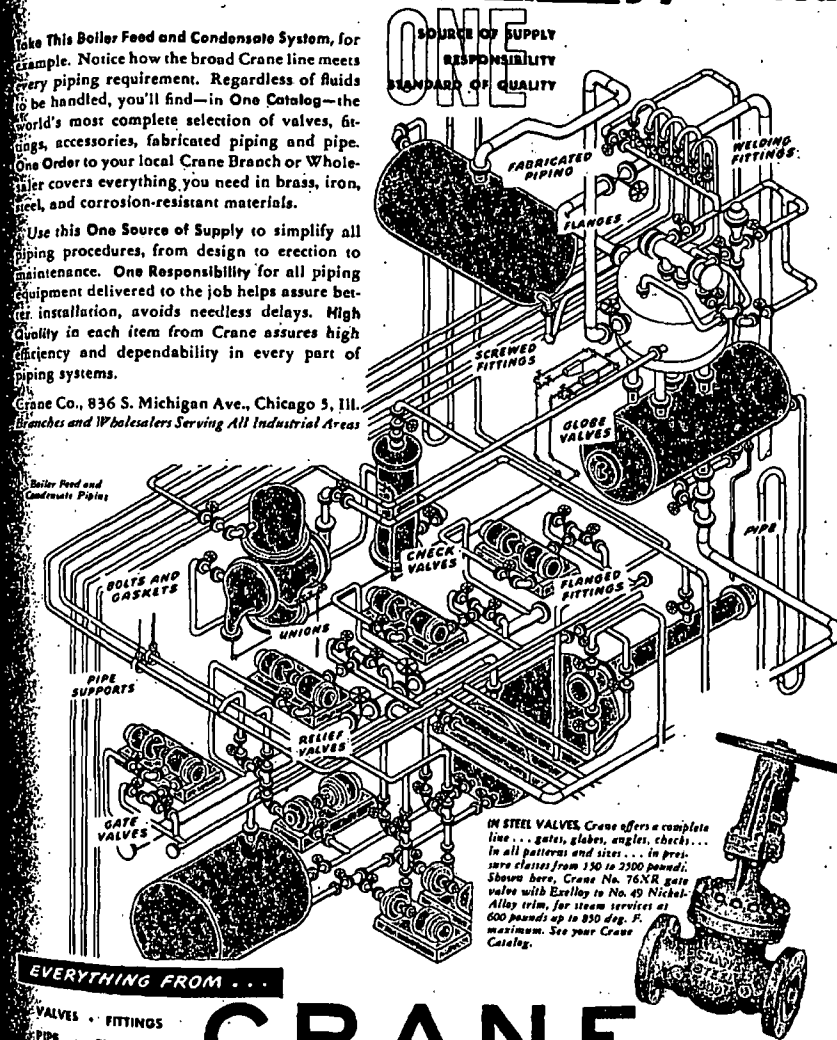
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