NATIONAL AIROIL

"SA"

TYPE STEAM ATOMIZING OIL BURNER



VIRTUALLY IMPOSSIBLE FOR ANYTHING TO CLOG OR GO WRONG . . .

. . . SEE FOR YOURSELF!

The popular NATIONAL AIROIL Steam Atomizing Oil Burner *thoroughly atomizes* and *completely burns* the lowest and cheapest grades of fuel oil or tar . . . requires only minimum supervision and maintenance. Only slight oil pressure and temperature is needed . . . and internal atomizing venturi feature assures low steam consumption . . . usually as little as 1%! NATIONAL AIROIL Type "SA" Oil Burner is adaptable to all types of industrial heating, power or process furnaces . . . is suitable for firing above stoker grates on conversion to oil.

Other "SA" modifications designed for: the burning of Colloidal fuel ("SAR")—Large capacity operation ("SAL")—Sludge burning ("SAD")—Combined steam and mechanical atomization (Dual Stage).

WRITE FOR BULLETIN 21

OIL BURNERS and GAS BURNERS for industrial power, process and heating purposes
STEAM ATOMIZING OIL BURNERS
MOTOR-DRIVEN ROTARY OIL BURNERS
MECHANICAL PRESSURE ATOMIZING OIL BURNERS
LOW AIR PRESSURE OIL BURNERS
AUTOMATIC OIL BURNERS, for small process furnaces and heating plants
GAS BURNERS
COMBINATION GAS & OIL BURNERS
FUEL OIL HEATERS
FUEL OIL PUMPING and HEATING UNITS
FURNACE RELIEF DOORS
AIR INTAKE DOORS
OBSERVATION PORTS
SPECIAL REFRACTORY SHAPES

NATIONAL AIROIL BURNER CO., INC.

1250 EAST SEDGLEY AVE., PHILADELPHIA 34, PA.
Southwestern Division: 2512 South Boulevard, Houston 6, Texas
INDUSTRIAL OIL BURNERS, GAS BURNERS, FURNACE EQUIPMENT

NEAL STATION

Continued from page

wg pressure, which flows through
lignite. The heated air is taken
the boiler air preheaters. Dampers
the duct help control air temperatu
The closed bunkers are vented thro
a roof ventilator. Steam smother
lines function to put out fire.

This arrangement prevents wet
freezing into large chunks. Temper
ture of delivered lignite will be as low
–20 F during the winter. The heat
air also drives off combined moistu
If moisture can be reduced even
10%, considerable saving in pulveriz
power will be realized. Laborato
studies have been made, but not enou
practical experience has been accum
lated to evaluate this saving.

Electrical. Neal Station sends
energy at 115,000 v to the Bureau
Reclamation and at 41,600 v to the On
Tail Power Co and the Verendrye Coo
Generation at 13,800 v steps up to 11
000 v. The 41.6-kv yard is fed from th
115,000-v yard through a transform
equipped for tap changing under loa

Station power comes directly fro
generator terminals. A standby sour
comes from the 41.6-kv yard. Regul
auxiliary power is taken from a dr
type transformer in an indoor subs
tion. All auxiliaries are 440 v. Th
switchyard at Neal is both a transm
ting station and a distribution statio
Metering and protective equipment
more complicated than is usual in
station this size.

MARMADUKE

Continued from page

greased the customs officials for it
trip before.

"Grogan grumbled loud and lo
about being 'crossed up' by the captai
'I'll show that deck swabber that
can't monkey with an engineer,'
threatened.

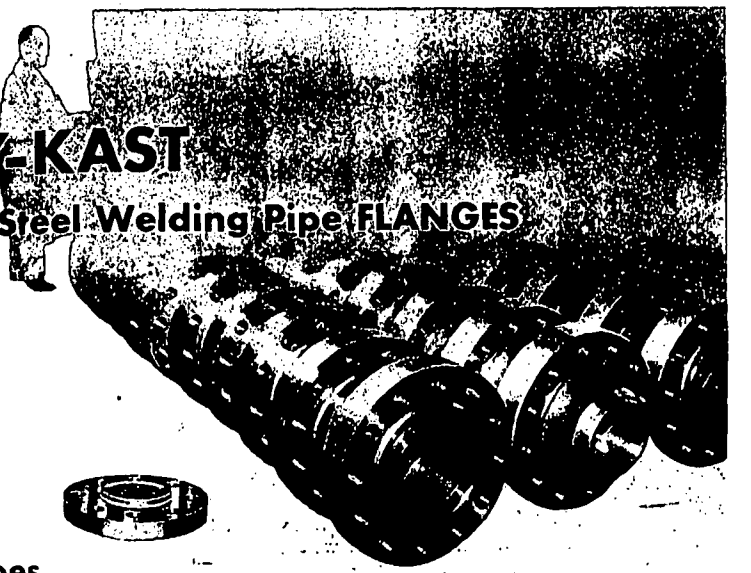
"As usual Grogan had my work le
out when we pulled into port. The ch
ers and myself had the port engi
opened up shortly after shutting dow
that evening. Grogan stayed arou
long enough to see the work start
About midnight, he had a cargo cl
lower three heavy suitcases into a wa
ing sampan below his room, on portsi

"We worked away and were ready
close up the engine a few hours befo
sailing, two days later. Then I disco
ered that a very important part of th
engine was missing. We searched th
engine room, the fire room and even th
store rooms. We looked all through th
bilges and even poked around in th
coal bunkers.

"When the captain heard that

KEY-KAST

Alloy Steel Welding Pipe FLANGES



all shapes
sizes
schedules

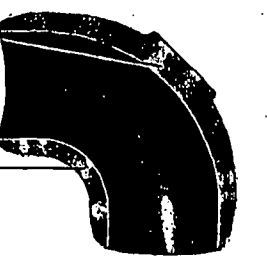




ENGINEERED FOR LONGER LIFE!

- Controlled quality . . . through rigid metallurgical control . . . produced, inspected and tested in one plant.
- A.S.M.E., A.S.T.M., A.S.A. code.
- Low and intermediate alloys and various stainless steels.
- Lower unit cost . . . plus prompt deliveries.
- Machined surface.

Key-Kast welding fittings . . . the strongest joint of any piping system!



Greater wall thickness throughout — for increased structural strength.

Extra thickness in critical areas —for greater allowance against corrosion and erosion.

key company

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