

Largest "S" Monel Pump Impeller ever cast at Inco's foundry. This 3,023-pound impeller is installed in an 84-inch Morris Vertical Axial Flo pump, at a generating plant of DOW CHEMICAL COMPANY, Velasco, Texas. The pump was built by the MOORE MACHINE WORKS, Baldwinville, N. Y., and is capable of handling 120,000 gpm at a total discharge head of 10.5 feet. It will operate in brackish water taken from the Gulf of Mexico. Because of Dow's experience with these corrosive conditions they selected "S" Monel for the impeller as a precaution against costly shut-downs. And for added protection, they also specified centrifugally cast pump sleeves of Monel.



"S" Monel...

an extra-hard casting alloy
for parts subject to
the severe conditions
of power plant service

A time usually comes when you need a corrosion-resisting alloy of above-average strength and hardness.

Then it pays to remember "S" Monel.

This member of the Monel family is one of the strongest and hardest of the non-ferrous alloys available in cast forms. Because of its hardness, of course, "S" Monel is highly resistant to abrasion and erosion. What's more, it combines the excellent corrosion-resistance of Monel with two particularly valuable features:

- extra hardness at high temperatures
- resistance to galling and seizing

Worth keeping in mind, too, is that "S" Monel maintains a hardness nearly as great as heat-treated steel. Temperatures as high as 1000°F. have but slight effect on its hardness.

And "S" Monel is machinable as cast. Where extensive machining operations are called for, the coating may be annealed. Age-hardening later

will develop maximum hardness.

It is this combination of exceptional properties that makes "S" Monel so useful in valve discs and seats, wearing rings, bushings, sleeves, ejector nozzles, pump liners and impellers.

In your own plant, there are probably many places where Inco-Cast "S" Monel parts could contribute to the improved performance of parts subject to high stress, high temperature and severe friction under corrosive conditions. You can get complete information on "S" Monel—and assistance on actual problems, too—simply by writing to Inco's Technical Service Section.

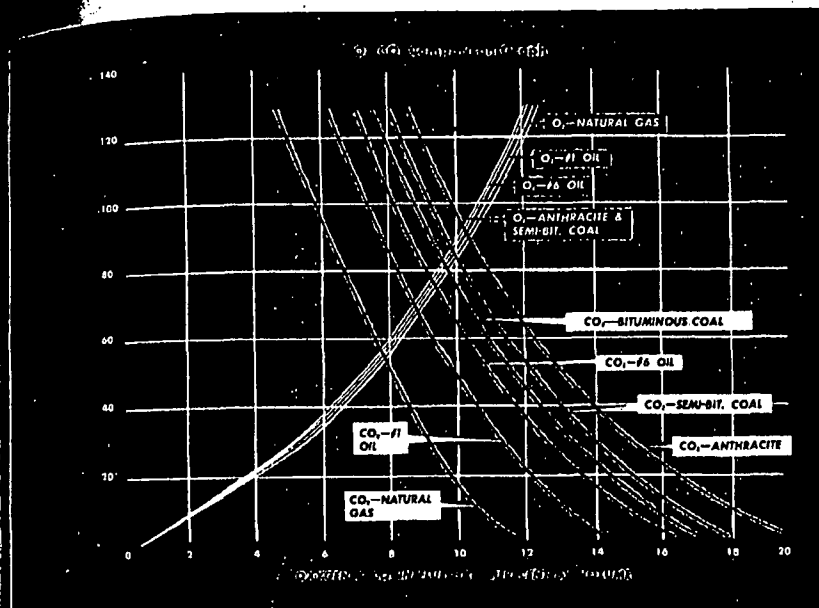
It is advisable to place equipment orders with your supplier well in advance of scheduled use. Distributors of Inco Nickel Alloys can supply the latest information on availability from ware house and mill.

THE INTERNATIONAL NICKEL COMPANY, INC.
67 Wall Street, New York 5, N. Y.



Inco Nickel Alloys

MONEL® • "K" MONEL • "N" MONEL • "X" MONEL • "S" MONEL
INCONEL® • INCONEL "X" • INCONEL "W" • INCOLOY® • NIMONIC® ALLOY
NICKEL • LOW CARBON NICKEL • DURANICKEL®



HOW TO BURN Multiple Fuels EFFICIENTLY

When switching from one fuel to another or burning more than one fuel at the same time, you can realize large savings with a continuous indication of Oxygen content in your flue gas—because Oxygen and Oxygen alone gives you an undistorted picture of the amount of excess air present.

This fact is borne out by the graph showing the relationship of excess air to CO₂ and O₂ in the flue gas of five common fuels. While the O₂ curves nearly coincide (especially in the important 30% excess air range) the CO₂ curves diverge widely.

Large savings possible

This deviation was costing a medium sized refinery in Michigan \$35-40 per day in boiler room fuel costs. Burning a combination of oil and gas they found that a combustion control system to handle their multiple fuel firing conditions would cost more than their small boilers.

With the purchase of a Hays Magno-Therm Oxygen Recorder, they found that they were able to reduce fuel costs enough to pay for the instrument in 40 days.

Oxygen and Oxygen alone gives you an undistorted picture of the amount of excess air present.

With the Hays Magno-Therm Oxygen Recorder you get:

- Continuous, highly accurate indication and recording.
- Complete compensation for temperature and pressure effects.
- Freedom from chemicals or hazardous fuel burning in the analyzing process.
- Swift, sure electronic operation.

Automatic Combustion Control
Boiler Panels • Hays-Pace Flowmeters
Ventilator Motors and Valves
Gas Analyzers • Draft Gages
Combustion Test Ben. • CO₂ Recorders
Electronic Oxygen Recorders
Electronic Flowmeters
Electronic Feed Water Controls
Miniature Remote Indicators

hays

CORPORATION

MICHIGAN CITY 3, INDIANA



If you are facing the problem of multiple fuel combustion, you will want a detailed copy of this O₂-CO₂ Comparison Graph as well as Hays Bulletin 53-229-56—describing the Magno-Therm Oxygen Recorder. Write for this free information.

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