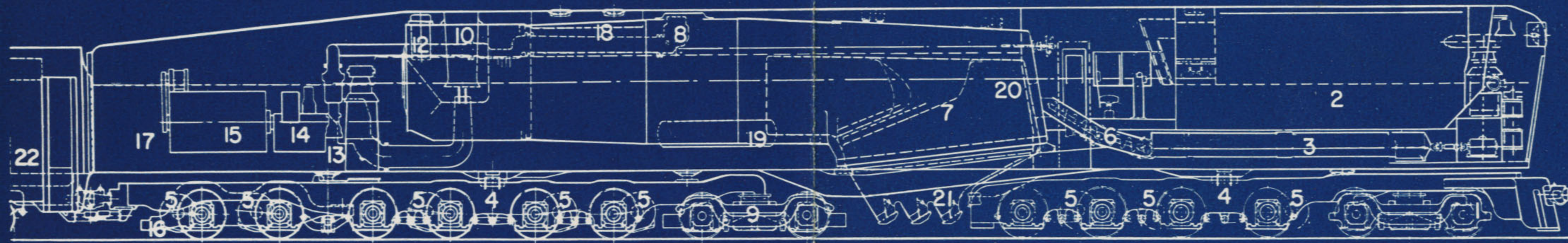
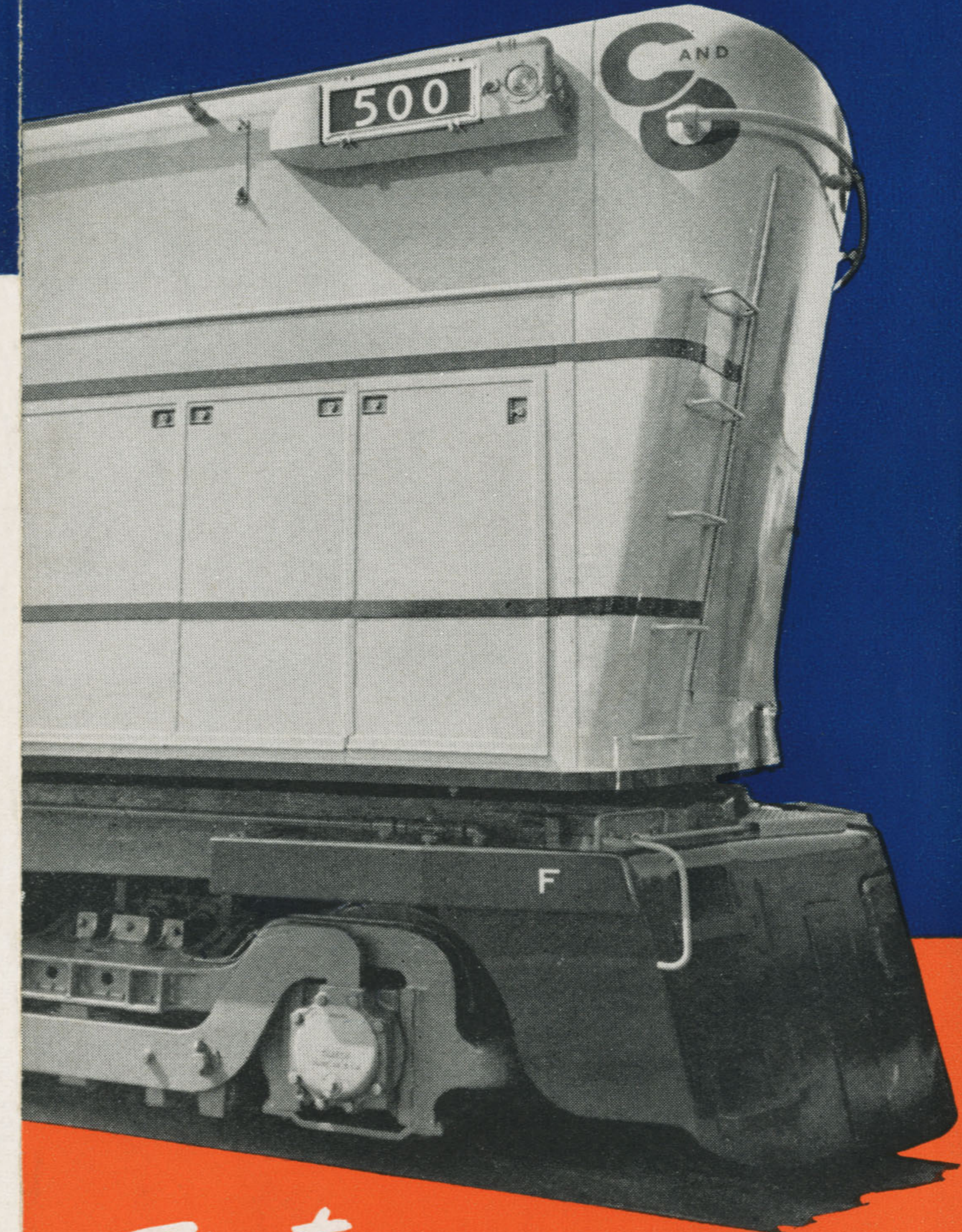


FACTS ABOUT THE C&O "500"



*Chesapeake and Ohio
Railway*

PRESENTS THE "500"



PRINCIPAL PARTS

1. Engine truck
2. Coal bunker
3. Stoker conveyor
4. Center pins (2) (Main frames)
5. Traction motors (8)
6. Stoker elevator pipe
7. Boiler
8. Steam shut-off valve and handle
9. Intermediate truck
10. Exhaust stack
11. Exhaust nozzle
12. Feedwater heater
13. Main turbine
14. Reduction gearing
15. Generators (2)
16. Trailing truck
17. Control compartment
18. Sand box (2)
19. Smoke consumer turbine
20. Smoke consumers
21. Ash pan
22. Tender

GENERAL SPECIFICATIONS

Rated horsepower	6000
Working steam pressure . . .	310 lbs. sq. in.
Driving wheels	40 in. dia.
Overall length, engine and tender	140'-3 ³ / ₄ "
Weight, total engine	823,000 lbs.
Weight of tender	371,800 lbs.
Tank capacity (water)	25,000 U. S. gal.
Fuel capacity (coal)	29 ¹ / ₄ tons
Total pairs of wheels under engine	20

First COAL-BURNING
STEAM TURBINE-ELECTRIC

LOCOMOTIVE
ON EXHIBITION
CHICAGO RAILROAD FAIR

The "500"

WORLD'S *LARGEST* PASSENGER LOCOMOTIVE

ON EXHIBITION CHICAGO RAILROAD FAIR

THE Chesapeake and Ohio Railway's "500" is the first coal-burning steam turbine-electric locomotive ever built and the largest passenger locomotive in the world.

It is revolutionary in design, combining three well-tested principles—the conventional steam boiler, the steam turbine and electric drive.

Considered separately, none of these principles is new. It is the combination of them that makes this locomotive radically different from other coal-burners.

Briefly, the "500" operates in this manner: Its coal-fired boiler produces steam that is conducted to the turbine. The 6,000 horsepower turbine drives twin generators which produce 4,000 kilowatts of electrical

energy. These generators power eight motors which deliver a total of 4,960 horsepower to the 16 driving wheels.

The new giant of the rails differs radically in size, weight and arrangement from the standard reciprocal drive steam locomotive.

The "500" is 140 feet, 3-3/4 inches long, including locomotive and water tender. The engine alone weighs 411-1/2 tons, and is geared for a top speed of 100 miles per hour.

The arrangement of the "500" is like nothing else on the rails. The usual coal-burning locomotive has the boiler in front of the cab and the coal bunker in the tender at the rear. The "500" has a 29-1/4-ton coal bunker ahead of the cab, the boiler at the rear, and a 25,000-gallon water tender coupled back of the locomotive. An automatic stoker feeds coal from the bunker, passing it under the cab into the fire box immediately behind the cab.

This locomotive has many operational advantages over its predecessors. Its electric drive assures operating flexibility, smooth starting and full power at all operating speeds.

The C & O "500", together with its companion locomotives, numbers "501" and "502", comprise Chesapeake and Ohio's powerful new fleet of steam turbine-electric locomotives.

