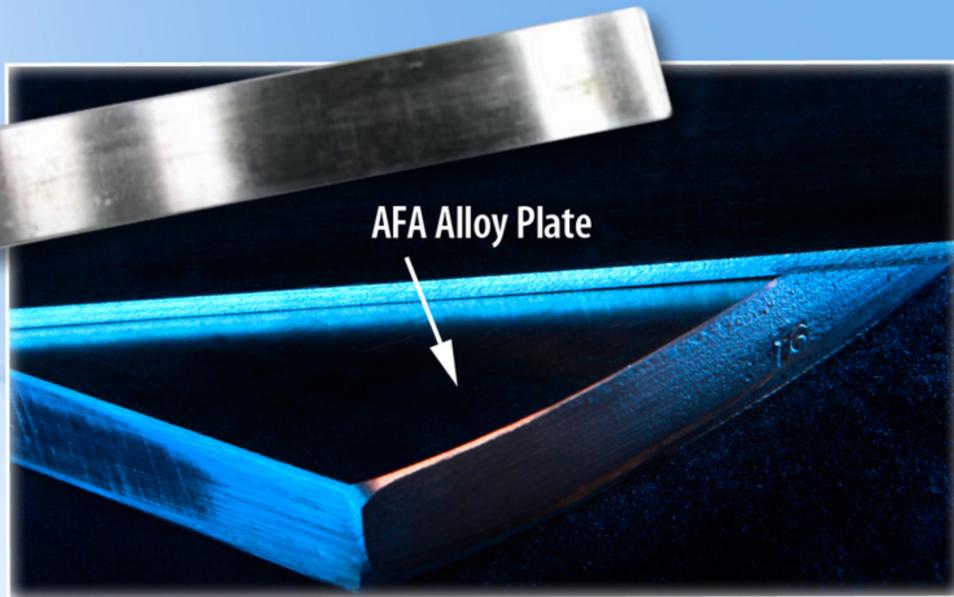


# 2009 R&D 100 Award Winner

## AFA: Alumina Forming Austenitic Stainless Steels

Iron-base AFA alloys deliver superior high-temperature corrosion resistance at 2-3 times lower cost than conventional nickel-base alloys.



*Developed by* Oak Ridge National Laboratory

*Sponsored by* U. S. Department of Energy's Office of Fossil Energy, Advanced Research Materials Program; Energy Efficiency and Renewable Energy, Industrial Technologies Program; and Oak Ridge National Laboratory's Directed Research and Development Program

*Recipients from left to right:*

Bruce Pint, Dave Stinton, Ian Wright, Mike Brady, Vinod Sikka, Phil Maziasz, Jim Keiser, Mike Santella, and Yukinori Yamamoto. Team members not pictured: Chain Liu and Zhao-Ping Lu



AFA alloys are of interest for hot components in applications ranging from gas turbines and power plants to chemical and petrochemical processing equipment.

Fossil-Fired Steam Turbines



Chemical Process Tubing



Gas Turbine Heat Exchangers