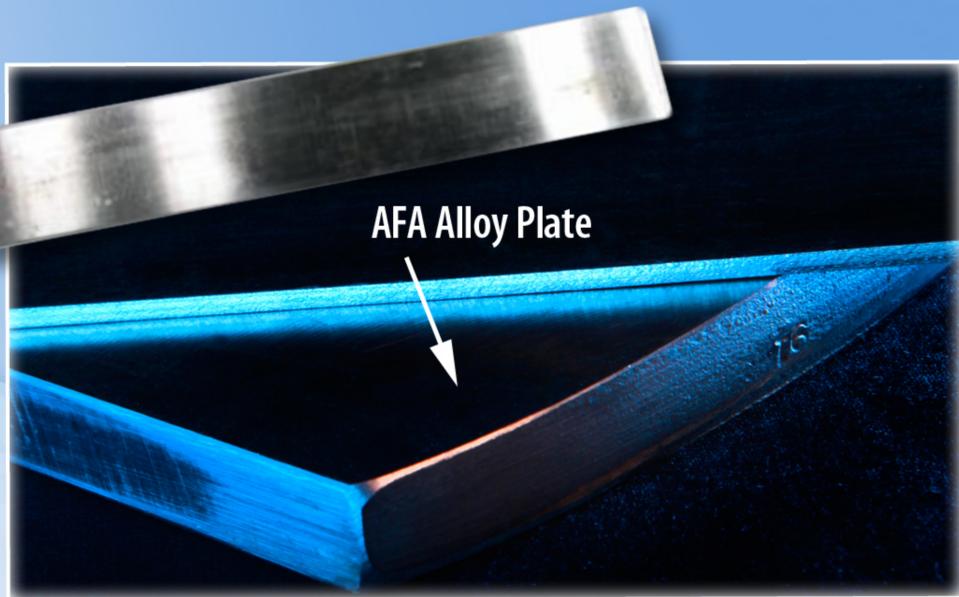


2009 R&D 100 Award Winner

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 US Department of Energy's Office of Fossil Energy, Advanced Research Materials Program; Energy Efficiency and Renewable Energy, Industrial Technologies Program; and Oak Ridge National Laboratories 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