



## Testing

NeoNickel offers European metallurgical assistance. With a full metallurgical lab, we offer alloy corrosion testing and high temperature oxidation studies. With over 30 years' experience in the heat treat industry the metallurgists have performed dozens of long term high temperature oxidation studies. With a global emphasis on corrosion resistant alloys and duplex stainless steels, we have performed various corrosion studies on iso-corrosion curves in acids, critical pitting, crevice corrosion and stress corrosion cracking tests. Additional laboratory services include multiple optical microscopes and SEM equipment. NeoNickel can help you find the best alloy suited for your application.

## Material Analysis

NeoNickel employs a group of applications engineers who work directly with fabricators, engineering companies and end users to decide which material is best suited for each application. Often times, this decision starts with a previously failed piece of equipment. With polishing equipment, digital microscopes and full failure analysis reports, NeoNickel can assist you in determining modes of failure and even data on other alloy options to increase life expectancy and minimize costs. Please contact a metallurgist if you need a full analysis. NeoNickel has even done material testing and design to develop custom ZERON® 100 (UNS S32760) forgings for sub-sea applications as well as corrosion and fatigue testing of high strength ZERON® 100 (UNS S32760) slick line used in offshore oil and gas drilling.

## Material Identification

A simple, yet important, service that NeoNickel offers is positive material identification (PMI) using Niton XRF & Olympus analysers. Every NeoNickel stocking facility has a hand held analyser to verify quality and accuracy of material shipped. We have also used these analysers for identifying material that has been in service. This can help you confirm materials for reconstruction or even justifying alloy scrap credits.

## Sample Materials

Lab test data cannot always simulate the actual environments in many applications. Whenever possible, it is best to test various sample materials in a live process. For this reason NeoNickel inventories free sample coupons for testing purposes. Generally we inventory 4" x 4" coupons in a variety of thicknesses. Some custom sizes are also available upon request. In addition to application testing, these coupons along with sample MIG and TIG wire can be used for weld qualification testing. Please contact a metallurgist for more information about obtaining a material sample.