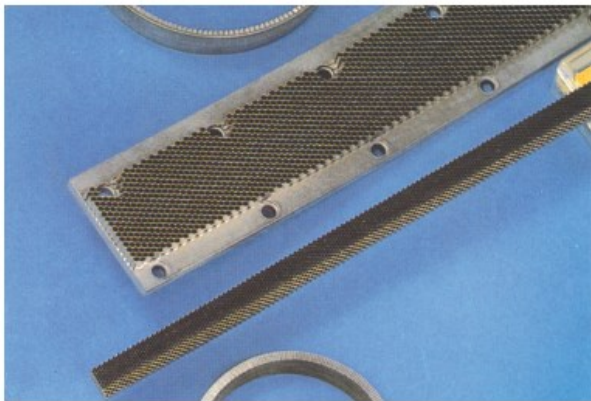


HAYNES[®] 214[®] alloy

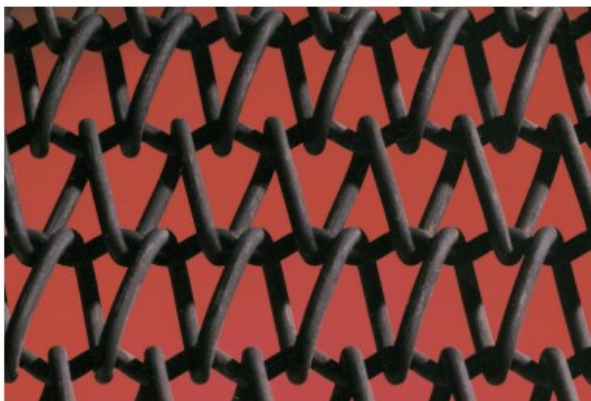
Applications



HAYNES[®] 214[®] alloy is gaining rapid acceptance for use in honeycomb seals because of its outstanding oxidation resistance. The seals are made of thin gage foil and are used to prevent leakage between different stages in gas turbine engines. Such seals contribute to an engines fuel efficiency.



This 214 alloy flamehood remained in service for 16 months in an application where other nickel alloy hoods required replacement every three to four months. The alloy component was subjected to direct flame impingement during the entire period in an automotive products plant.



Section of a 214 alloy belt which was removed after 3,000 hours at 1800°F (980°C) in a chinaware decorating kiln. The belt showed only minimal wear and oxidation attack. Use of 214 alloy in this application has helped reduce the time of the operation from eight or twelve hours, to less than 30 minutes.



The burner assembly at left failed after 450 cycles between minus 55 and 2000°F (minus 50 and 1095°C.) A 214 alloy burner was still in good shape after 2000 cycles in the same test. The burners were cycled from low to high temperatures in about five minutes, held for a 15-minute burn, and then rapid-air cooled.