Allo C-276 (UNS N10276) i.-an a.\_eni ic nickel-mol bden\_mchromi\_m allo i h a .mall addi ion of \_ng.-en. I i.-one of he premier corro.ion re.i.-an ma erial.-a ailable for proce.-ind\_\_rie.- Allo C-276 ha.e cellen corro.ion re.i.-ance in bo h o idi ing and red\_cing en ironmen --

The combina ion of he high mol bden m and chromi m con en , along i h he addi ion of \_\_ng\_\_en, make Allo C-276 highl re\_i\_an o chloride \_\_re\_\_\_ corro\_ion cracking, pi ing, cre ice corro\_ion and general corro\_ion.

Allo C-276 can opera e in o idi ing a mo.phere...n o 1900 F (1038 C), ho e er, he allo lack... ...fzcien chromi.m con en o opera e ...cce..f.ll in he mo... ..rongl o idi ing en ironmen ...like ho, concen ra ed ni ric acid.

The lo carbon con en of Allo C-276 enable.- he allo o be - ili ed in he a.- elded condi ion. I canno be hardened b hea rea men, b. can be hardened b cold orking. The allo ha.- a higher

# M. A.A. R MANA

• 68 F (20 C)



Allo C-276 i.-one of he premier corro-ion re-i.-an ma erial.- ha perform.e cep ionall ell in bo h o idi ing and red-cing en ironmen -- I re-i.-. chloride --re--corro-ion cracking, pi ing, cre ice and general corro-ion. The allo i.-al-o re-i.-an o carbide precipi a ion d-ring elding enabling i o be --ili ed in he a.- elded condi ion.

In chemical proce---ing applica ion--, he allo ha--e cep ional re-i-ance o ---fric, h drochloric, formic, ace ic and pho-phoric acid-- Allo C-276 perform-- ell in en ironmen --con aining acid chloride--, -ol en --and ace ic anh dride, The allo i--one of he fe grade-- ha i h--and-- e chlorine ga--, h pochlori e and chlorine dio ide -ol--ion--

Allo C-276 i,-highl re,i,-an o concen ra ed ol. ion.-of o idi ing al -incl. ding iron and copper chloride. I al o perform.- ell in ea a er, e.peciall .-nder cre ice condi ion.- here o her freq.en I \_\_\_ed allo ---ch a---ainle----eel, Allo 400 and Allo 625 fail.

The opera ing condi ion...of \_\_\_\_\_ga.\_de.\_\_lf\_ri\_ a ion \_\_\_\_em.\_offer a challenging en ironmen for corro.ion re.i.\_an ma erial... Scr\_\_bber liq\_or\_\_and ga.\_conden.a e.\_of en con ain chloride... Allo C-276 ha.\_been ...ho n o i h.\_and higher chloride le el.\_ han o her grade.\_before he on.e of locali ed

corrotion in hete to the empty

Allo C-276 i...ed e en.i el in he reco er and proce...ing of .o.r na\_ral ga.- hich con ain.-h drogen ... Izde along i h carbon dio ide and chloride... Carbon and allo .-eel.-canno i h.-and hi.-corro.i e en ironmen. The are ... biec o fail.re b ....Izde .-re..-cracking or .-re..corro.ion cracking. The rich chemi.-r of Allo C-276 make.-i re.i.-an o .o.r en ironmen .-e en a high empera\_re.-in deep ell..

#### ~D F.

Allo C-276 can be ea-il elded and proce ed ing and ard hop fabrica ion prac ice\_for a\_eni ic -ainle---eel-and nickel balled allo

# H.F.m<sup>A</sup>

The ho - orking empera range for Allo C-276 i 1600 2250 F (870 1230 C). The allo -ho d be a er q enched af er ho orking. Hea rea men i-recommended af er ho orking o en. re ma im m corro-ion re-i-ance.

### С

 $F \cdot m^{n}$ Allo C-276 to d be in he annealed condi ion for cold orking. The allo ha,-a higher orkhardening ra e han he a eni ic aken in o con-idera ion. An in-proce\_\_\_anneal ma be nece\_\_ar

i h a high degree of cold orking. If he allo \_\_\_\_\_grea er han 15% deforma ion during cold orking, a ol ion anneal ma be

nece...ar .

\_^

Allo C-276 can be readil elded b mo----andard proce---e-incl\_ding GTAW (TIG), PLASMA, GMAW (MIG/MAG) and SMAW (MMA). A po-- eld hea reamen i--no nece--ar . Br\_hing i h a --ainle----el ire br\_h af er elding ill remo e he hea in and prod. ce a ... rface area ha doe...no req. ire addi ional pickling.

## $M \rightarrow \gamma \gamma \gamma$

Allo C-276 hold preferabl be machined in he annealed condi ion. Since Allo C-276 i,-prone o ork hardening, onl lo c.\_\_ing .peed.\_ .ho.ld be \_\_\_\_ed and he c\_\_\_ing ool .ho.ld be engaged a all ime... Adeq a e c dep h i nece ar o a...re a oiding con ac i h he pre io\_\_\_\_ formed ork-hardened , one.

The informa ion and da a in hi.-prod.c. da a .hee are acc.ra e o he be.- of o.r.kno ledge and belief, b. are in ended for informa ional p.ro.e.-onl, and ma be re i.ed a an ime i ho. no ice. Applica ion.-...age.-ed for he ma erial.-are de.cribed onl o help reader.-make heir o n e al.a.ion.-and deci.ion.-, and are nei her g.aran ee.-nor o be con.-r.ed a.-e pre...or implied arran ie.-of ...iabili for he.e or o her applica ion.-