# Continuous-Cast Application Cross Reference

Application	Recommended Alloys (Copper Alloy UNS No.)							
acid resisting applications	C93800							
acid-resistant pumps	C95200							
air actuators	C83600							
air line fittings	C84800							
air/gas/water fittings	C83800							
aircraft components	C95500							
applications requiring acid resistance to sulfite fluids	C93700							
automotive fittings	C93200							
automotive synchronizer rings	C92500							
backing for babbitt-lined bearings	C93500							
backs for lined bearings	C89320	C93600						
backs for lined journal bearings for locomotives	C93800	000000						
backs for lined journal bearings for passenger cars	C93800							
bearing cage blanks	C86400							
bearing liners	C95200							
bearing segments for steel industry	C83600	C95300	C95400					
bearings segments for steer industry	C86400	C86700	C90300	C90500	C90700	C90810	C91000	
bearings	C91100 C93400 C95200	C91300 C93500 C95400	C91600 C93700 C95410	C92200 C93800	C92300 C93900	C92700 C94700	C93200 C94800	
bearings for cranes	C93200							
bearings for heavy loads and relatively slow speeds	C90700							
bearings plates	C93700							
bearings requiring abrasion resistance /good ductility/retention of hardness at moderate temperatures	C95510							
bells	C91300							
boat parts	C84400	C86200	C86300	C86400	C86500			
brackets	C86200	C86300	C86500	C86700	C93700			
bridge pins	C86300							
bushings	C83600 C90300 C92700 C95410	C83800 C90500 C92800 C95500	C84200 C91100 C93200 C95510	C86200 C91300 C93400 C95800	C86300 C91600 C93700	C86400 C92200 C95200	C89325 C92300 C95400	
bushings for corrosion/lubrication/pressure	C93600							
bushings for high speed and heavy pressure	C93700							
cable connectors	C95600							
cam bushings for diesel engines	C89320	C93600						
cams	C86200	C86300	C86400	C86700	C92900			
cases for dead bolt locks	C84400	000000	000100	000700	002000			
circuit breaker parts	C94700							
clamps	C86200	C86300	C86500	C90500				
cocks	C84800	000000	000000	000000				
cold rolling metal dies and guides where a hardness minimum is specified	C380							
compressors	C86500							
connectors	C90500	C95300						
cooling equipment	C83600	C84400	C92200					
corrosion-resistant castings	C92800	C93400	C93500	C93700				
corrosion-resistant/pressure-tight castings	C89831	C89833	230000	230.00				
couplings	C83600	C84200						
covers for marine hardware	C86300 C95800	C86400	C86500	C95200	C95300	C95400	C95500	
crank shafts	C93700							
crankshaft main bearings	C89320	C93600						
cryogenic valves	C92200							
dead bolt locks	C84400							
deep well pump bowl bushings	C89320							
deep well pump line shaft bearings	C89320	C93600						
die components	C95900	223000						
	230000							



Application diesel engine wrist pin bushings	Recommended Alloys (Copper Alloy UNS No.)								
	C93200								
door hardware for prisons	C84400	C85700	C86500						
elbows	C84200	C95800							
elbows/flanges/pump bodies/valves used for sea water corrosion	C96400								
resistance									
electric motor bearings	C89320	C93600							
electrical components	C86300	C86400							
electrical equipment	C86400								
electrical hardware	C86500	C95200	C95500						
electrical parts	C99500								
expansion bearings	C90500								
faucets	C83600	C84800	C87850	C89835					
feeding mechanisms	C94700								
finishing dies for wood pulp industry	C90500								
fittings	C84800	C86400	C86700	C91600	C93200	C96400			
fittings for dairy and food processing	C97800								
fittings for oil lines	C84200								
fittings used to 550 °F	C92200								
fittings/valves for potable water	C89844								
fixtures	C83600	C84400	C86400						
flanges	C85700								
flow monitor valves	C93600								
forging press toggle lever bearings	C93200								
forming dies for wood pulp industry	C86300	C86500							
frames	C86200	C86300	C86500						
freight car bearings	C93800								
fuel pump bushings	C93200								
furnaces	C83600								
gas line fittings	C84800								
gear blanks	C90300	C90500							
gear boxes	C90700								
gear components	C94800								
gears	C86200 C91700 C95200 C95900	C86300 C92200 C95300	C86500 C92300 C95400	C90500 C92500 C95410	C90700 C92700 C95500	C90810 C92900 C95600	C9160 C9470 C9580		
gears for mining equipment	C99500								
general hardware	C84200	C84800							
general purpose bushings	C93200								
general service bearings for moderate pressure	C93800								
general utility bearings	C89320								
general-service bearings	C92900								
gibs	C86300	C95900							
glands	C95500								
glass molds	C95500								
government fittings	C95400	C95500							
guide bushings for piston rods	C89320	C93600							
guide bushings for valves	C89320	C93600							
gun mounts	C86200	C95200							
gun slides	C95200								
handgun recoil mechanisms	C95500								
handles for dental equipment	C83600								
hardware	C83600	C83800	C84400	C84800	C97600	C97800			
heating equipment	C83600	C84400	C92200						
heavily loaded worm gears	C95400								
heavy construction equipment	C90300	C90500							



Application	Recommended Alloys (Copper Alloy UNS No.)							
heavy load/relatively slow-speed bearings	C91700							
heavy-duty bearings	C92700							
high pressure hydraulic equipment	C92300							
high speed/heavy load bearings	C93700							
high-pressure steam equipment	C92300							
high-speed bearings for light loads	C94000	C94300						
high-speed/high-pressure bearings	C89325	C89831						
high-speed/light-load bushings	C93500							
high-speed/light-to-medium-pressure bushings	C94000	C94300						
high-strength clamps	C95200	C95300	C95400					
high-strength machine parts	C86200	C86300						
high-temperature applications	C95300							
hollow conductors	C91100							
hooks	C86200	C86300	C86500					
hot mill guides	C95200	C95500						
housings	C89835							
hydrant parts	C95200							
hydraulic cylinder parts	C86300							
hydraulic gland seals	C89320	C93600						
hydraulic press main lining	C93200							
hydraulic press stuffing box	C93200							
hydraulic seal components	C95510							
impellers	C83600	C89831	C89833	C93700				
impellers for mine water	C92900							
industrial centrifuges	C93800							
insert bearings	C93200							
landing gear bushings and bearings	C95510							
landing gear parts	C95400	C95500						
large bearings for ships	C93700	C93800						
large gear parts	C95200							
large hold-down screws	C83600	C95300	C95400					
large valve stems	C86300							
lead screw nuts	C92700							
lever arms	C86400	C86500	C86700					
light-duty gears	C86400							
lightning protection	C83600							
linkage bushings for presses	C93200							
locomotive bearing parts	C93600							
low pressure fittings	C84400							
low pressure valves	C83600	C84200	C84800					
low-friction/moderate pressure bushings	C93800							
machine parts	C93800	C95400	C95500					
machine tool bearings	C93200	05-5						
machinery	C86500	C95800						
machinery parts	C86400	C86700	C93200	C93700	C94800			
machinery parts (substituted for steel and malleable iron)	C86500							
machinery parts requiring high strength	C86500	000000						
main bearings for presses	C89320	C93600						
main spindle bearings	C93200							
marine applications	C95500	000000						
marine castings	C86200	C92200						
marine engines	C95200							
marine equipment	C95300							
marine fittings	C86400							
marine furniture	C97600							



Application	Recommended Alloys (Copper Alloy UNS No.)							
marine hardware	C84400 C95800	C85700	C86300	C86400	C86700	C95200	C95500	
marine products	C83600	C87850						
marine racing propellers	C86200							
mechanical components where aesthetics are important	C85700							
medium-pressure hydraulic equipment	C92200							
medium-pressure steam equipment to 550 °F	C92200							
mild acidic applications	C93500							
mild alkali applications	C95200							
mining machine parts	C95300							
moderate-duty gears	C86700							
motion translation devices	C94800							
musical instrument components	C97800							
musical instruments	C84400	C85700	C86400	C95500				
nozzles	C94700	000700	000400	000000				
nuts	C92200 C93700	C95200	C95400	C95800	C90500	C91600	C92300	
nuts for transducers	C84400							
ornamental castings	C97300	C97600	C97800	C92200				
ornamental fixtures	C83600	C84400						
ornamental hardware	C85700							
outboard marine components	C99500							
parts for boats	C83600							
parts for steel maintenance	C93700							
pawl	C95400							
piano keys	C86400	C95500	C97600					
pickling baskets	C95300	C95410	037000					
pickling equipment	C95200	C95500	C95800					
pickling hooks	C95300	C95400	C95410					
pickling tanks	C95200	033400	033410					
pipe fittings	C83600	C84200	C84400	C89835				
	C94700	004200	004400	003033				
piston cylinders	C95500							
piston guides	C89320	C93600						
piston pin bearings			001000	C91100	001200	C91600		
piston rings	C90300 C84200	C90500	C91000	691100	C91300	69 1000		
plugs		000500	001000	001100	001000	001000		
piston rings	C90300	C90500	C91000	C91100	C91300	C91600		
plugs	C84200	000000	001000	001100	001000	001000		
piston rings	C90300	C90500	C91000	C91100	C91300	C91600		
plugs piston rings	C84200 C90300 C92300	C90500 C92800	C91000	C91100	C91300	C91600	C92200	
plugs	C84200	032000						
plumbing	C84200							
	C89520							
plumbing castings	C84800	C070E0						
plumbing fittings		C87850						
plumbing fixtures plumbing goods	C84800	C83800						
	C89835							
plungers	C95200							
press dies	C86200							
pressing dies for wood pulp	C86500	005000	005455					
pressure blocks for steel industry	C83600	C95300	C95400					
pressure-tight castings	C93700							
printing presses	C83600							
propeller blades	C95800							
propeller hub	C95800							



Application		Recommended Alloys (Copper Alloy UNS No.)							
propeller wheels	C99500						Ĭ		
propellers	C86300	C86400	C86700	C95200					
propellers for salt and fresh water	C86500	000.00	000.00	000200					
pump bodies	C90300	C90500	C92900	C93900	C96400				
pump bodies for acid mine water	C93800	030300	032300	033300	030400				
pump components	C89835								
pump fixtures	C83600	C83800	C84400	C86400	C93200	C96400			
	C95500	003000	G04400	G00400	693200	C90400			
pump fluid ends	C90300	C90500	C91600	C92200	C92300	C92700	C93200		
pump impellers	C93400	C93500	69 1600	U92200	692300	692700	C93200		
pump impellers for acid mine water	C93800								
pump impellers for mine water	C93900								
pump parts	C83600	C92300	C95200	C95400					
pump pistons	C92700	032000	030200	000400					
pump rods	C95200								
pump sleeves	C89320	C93600							
pumps	C83600	C89831	C89833	C93200	C93700	C93800	C97600		
pumps used to 550 °F	C92200	003031	003033	033200	033700	033000	097600		
railroad applications	C93800	C94000	C94300						
railroad catenary fittings	C83800	694000	694300						
railroad engine casings	C93800								
restaurant equipment	C90700								
rings	C83600	00000							
rod bushings	C89320	C93600							
roll neck bearings	C93200								
roller bearings	C86400								
rolling mill bearings	C89320	C93200	C93600						
rudders	C86200	C86300	C86500						
sanitary fittings	C97600								
screw down nuts	C86300	C86200	C86400	C86700					
seal rings	C90500								
seals	C89320	C93600							
sewage treatment applications	C95500								
shafts	C86200	C90810	C95800						
shift forks	C94700								
ship building	C95400	C95500	C95800						
ship trim	C85700								
sleeve bushings	C89320								
sleeve bushings (for cranes, etc.)	C93600								
slide bars	C93400								
slide guides for steel mills	C93700								
slow-speed/heavy-load bearings	C86300								
small gears	C83600	C84200	C89835						
small pump castings	C84200		113000						
soft bushings	C94000	C94300							
soft metal applications	C94000	C94300							
spacer bushings	C89320	00-1000							
spacer bushings (for pumps, etc.)	C93600								
speed reducers	C90700	C90800							
•	C95400	C95410							
spur gears statuery		U304 IU							
statuary	C97300								
steam castings	C91600	000500	000700	000400					
steam fittings	C90300	C90500	C92700	C96400					
steel mill bushings	C93600								

