

Continuous Casting Alloys

Page 1 of 7

- The following list gives indication of some metals and alloys which are possible to continuously cast through continuous casting systems designed and built by CONTICAST LIMITED.
- The list is by no means exhaustive as other alloys of the same or allied families may also be successfully produced.
- Casting characteristics of the different alloys will vary according to the material's composition, strand dimension & the mode of casting. This will influence the limiting dimensions of the sections which may be cast, casting output production rates and die longevity.
- !WARNING! Certain alloy constituents may require health and safety issues to be addressed in the processing of melts containing these constituents!
- Some alloys, particularly the precious metals alloy compositions, may be subject to patent protection.

Alloy type Description, ISO	Spec'n Ref	BS EN	CDA
	Note		
	CR=unwrought spec.	CW = Wrought spec.	
Copper oxygen free HC Cu-OF1	CR007	CW007	C10200
Copper OF electronic HC Cu-OFE	CR009	CW009	C10100
Copper OF electronic HC Cu-OF	CR008	CW008	C10200
Copper high P deoxidised copper Cu-DHP	CR024	CW024	C12200
Copper silver – bearing oxygen free CuAg0.04	CR017	CW017	C10400
Copper silver – bearing oxygen free CuAg0.07	CR018	CW018	C10500
Copper silver – bearing oxygen free CuAg0.10	CR019	CW019	C10700
High copper alloy copper-silicon CuSi1		CW115	C65100
High copper alloy copper-silicon CuSi3Mn		CW116	C65500
High copper alloy copper-silicon CuSi3			C65600
High copper alloy copper-silicon CuSi0.3Sn0.8Mn0.2			C18900
High copper alloy copper-tellurium CuTe0.3P		CW118	C14500
High copper alloy copper-sulphur CuS0.35			C14700
High copper alloy copper-tin CuSn0.15		CW117	
High copper alloy copper-zinc CuZn0.5		CW119	
High copper alloy copper-tin CuSn0.5			C50100
High copper alloy copper-tin CuSn1			C50500
High copper alloy copper-magnesium CuMg0.1			
High copper alloy copper-magnesium CuMg0.4			
High copper alloy copper-magnesium CuMg0.7			
High copper alloy copper-cadmium CuCd1			C16200
High copper alloy copper-cadmium CuCd0.8			C16500
Copper-aluminium 8% aluminium bronze CuAl8Fe3		CW303	C62300
Copper-aluminium 10% aluminium bronze CuAl10Ni5Fe4		CW307	C63200
Copper-aluminium 5% aluminium bronze CuAl5			C60800
Copper-aluminium coinage aluminium bronze CuAl6Ni2			

Continuous Casting Alloys

Page 2 of 7

Alloy type Description, ISO	Spec'n Ref	BS EN	CDA
Copper-aluminium 7% aluminium bronze			C61400
Copper-aluminium 9% aluminium bronze			C62300
Copper beryllium CuBe0.4			C17400
Copper beryllium CuBe0.5			C17500
Copper beryllium CuBe0.4Ag1			C17600
Copper chromium CuCr1			C18200
Copper chromium CuCr1LiZnAs			C18400
Copper-nickel copper-nickel-tin CuNi9Sn2		CW351	C72500
Copper-nickel 90/10 copper-nickel-iron CuNi10Fe1		CW352	C70600
Copper-nickel 75/25 coinage alloy CuNi25Mn1		CW350	C71300
Copper-nickel-zinc 10% nickel silver CuNi10Zn2		CW401	C74500
Copper-nickel-zinc 12% nickel silver CuNi12Zn2		CW403	C75700
Copper-nickel-zinc leaded 10% nickel silver Cu61.5Ni12Pb1Zn		CW404	C79200
Copper-nickel-zinc nickel silver Cu58.5Ni12Zn		CW405	
Copper-nickel-zinc nickel silver Cu57Ni12Pb1Zn		CW406	C79000
Copper-nickel-zinc nickel silver Cu60.5Ni18Pb1Zn		CW408	C67300
Copper-nickel-zinc 18% nickel silver Cu61.5Ni18Zn		CW409	C75200
Copper-nickel-zinc nickel silver Cu54.5Ni18Zn		CW410	C77000
Copper-nickel-zinc nickel silver Cu48.5Ni7Mn2Zn		CW400	
Copper-nickel-zinc leaded 10% nickel brass Cu46.5Ni10Pb1.5Zn		CW402	C79830
Copper-nickel-zinc nickel silver Cu43.5Ni12Pb1.5Zn		CW407	
Copper-zinc 95/5 brass CuZn5		CW500	C21000
Copper-zinc 90/10 brass CuZn10		CW501	C22000
Copper-zinc 85/15 brass CuZn15		CW502	C23000
Copper-zinc 80/20 brass CuZn20		CW503	C24000
Copper-zinc 72/28 brass CuZn28		CW504	
Copper-zinc 70/30 brass CuZn30		CW505	C26000
Copper-zinc 67/33 brass CuZn33		CW506	C26800
Copper-zinc 2/1 brass CuZn36		CW507	C27200
Copper-zinc common brass CuZn37		CW508	C27400
Copper-zinc 60/40 brass CuZn40		CW509	C28000
Copper-zinc-lead leaded brass 62/3 CuZn36Pb3		CW603	C36000
Copper-zinc-lead leaded brass 58/4 CuZn38Pb4		CW609	C38500
Copper-zinc-lead leaded brass 58/3 CuZn39Pb3		CW614	C38500
Copper-zinc-lead leaded brass 58/2 CuZn40Pb2		CW617	C37700
Copper-zinc-lead leaded brass 62/2 CuZn37Pb2		CW606	C35300
Copper-zinc-lead leaded brass 60/2 CuZn38Pb2		CW608	C35600
Copper-zinc-lead leaded brass 59/2 CuZn39Pb2		CW612	C37710
Copper-zinc-lead leaded brass 64/1 CuZn35Pb1		CW600	C34000
Copper-zinc-lead leaded brass CuZn35Pb2		CW601	C35600
Copper-zinc-lead leaded brass 60/1 CuZn38Pb1		CW607	
Copper-zinc-lead leaded brass 60/0.5 CuZn39Pb0		CW610	C36500
Copper-zinc-lead leaded brass 60/1 CuZn39Pb1		CW611	
Copper-zinc-lead leaded brass DZR CuZn36Pb2As0.1		CW602	
Copper-zinc-lead leaded brass CuZn43Pb2		CW623	

Continuous Casting Alloys

Page 3 of 7

Alloy type Description, ISO	Spec'n Ref	BS EN	CDA
Copper-zinc-lead leaded brass CuZn39Pb2Sn0.35		CW613	
Copper-zinc-lead leaded brass CuZn40Pb2Sn0.35		CW619	
Copper-zinc-lead leaded brass CuZn39Pb3Sn0.35		CW615	
Copper-zinc-lead leaded brass CuZn37Pb0.5		CW604	
Copper-zinc-lead leaded brass CuZn37Pb1		CW605	
Copper-zinc alloy aluminium brass CuZn20Al2As0.05		CW702	C68700
Copper-zinc alloy admiralty brass CuZn28Sn1As0.05		CW706	C44300
Copper-zinc alloy 70/30 arsenical brass CuZn30As		CW707	
Copper-zinc alloy naval brass CuZn36Sn1Pb0.4		CW712	C46000
Copper-zinc alloy Corrosion resistant Alloys CuZn37Sn0.7Pb1		CW714	C48200
Copper-zinc alloy naval brass - uninhibited CuZn39Sn1		CW719	C46200
Copper-zinc alloy high tensile brass CuZn23Al6Fe3		CW704	
Copper-zinc alloy high tensile brass CuZn25Al5Fe2		CW705	C67000
Copper-zinc alloy high tensile brass CuZn40Mn1Fe1Al1		CW721	C67500
Copper-tin alloy 4% phosphor bronze CuSn4 P0.2		CW450	C51100
Copper-tin alloy 5% phosphor bronze CuSn5P0.2		CW451	C51000
Copper-tin alloy 6% phosphor bronze CuSn6P0.2		CW452	C51900
Copper-tin alloy 8% phosphor bronze CuSn8P0.2		CW453	C52100
Copper-tin alloy 8% phosphor bronze CuSn8P0.3		CW459	
Copper-tin alloy free machining phosphor CuSn4Pb2		CW455	C53400
Copper-tin alloy free machining phosphor CuSn4Te1		CW457	
Copper-tin alloy leaded 5% phosphor bronze CuSn5Zn4Pb4P		CW458	C54400
Copper-tin alloy phosphor bronze CuSn8PbP		CW460	
Copper-tin alloy phosphor bronze CuSn3Zn9		CW454	
Copper-tin alloy phosphor bronze CuSn4Pb4		CW456	
Copper-tin alloy "Telfos" CuSn5Te0.5			
Continuous Cast copper-zinc CuZn25Al5		CC762	
Continuous Cast copper-zinc CuZn35Al1Fe1Mn		CC765	
Continuous Cast copper-tin (Phos-bronze) CuSn10-C		CC480	C90700
Continuous Cast copper-tin (Phos-bronze) CuSn11P-C		CC481	
Continuous Cast copper-tin (Phos-bronze) CuSn11Pb		CC482	
Continuous Cast copper-tin (Phos-bronze) CuSn12-C		CC483	C90900
Continuous Cast copper-tin (Phos-bronze) CuSn12Ni2		CC484	
Continuous Cast copper-tin-lead (Gunmetal) CuSn3Zn8		CC490	C83800
Continuous Cast copper-tin-lead (Gunmetal) CuSn5Zn5		CC491	C83600
Continuous Cast copper-tin-lead (Gunmetal) CuSn7Zn2		CC492	
Continuous Cast copper-tin-lead (Gunmetal) CuSn7Zn4		CC493	
Continuous Cast copper-tin-lead CuSn5Pb9-		CC494	C94400
Continuous Cast copper-tin-lead CuSn10Pb		CC495	C93700
Continuous Cast copper-tin-lead CuSn7Pb1		CC496	C93900
Continuous Cast copper-tin-lead CuSn5Pb2		CC497	C94500
Continuous Cast copper-aluminium bronze CuAl10Fe2		CC331	
Continuous Cast copper-aluminium bronze CuAl10Ni3Fe2		CC332	
Continuous Cast copper-aluminium bronze CuAl10Fe5		CC333	
Continuous Cast copper-nickel CuNi10Fe1		CC380	

Continuous Casting Alloys

Page 4 of 7

Alloy type Description, ISO	Spec'n Ref	
Aluminium	Al100	
Aluminium tin alloy	Al79Sn20Cu1	
Aluminium-copper Alloy (Duralumin)	AlCu4	
Copper brazing alloy copper-phosphorus CuP8	CF222	
Copper brazing alloy copper-zinc CuZn40FeSi	CF724	
Copper brazing alloy copper-zinc CuZn40FeSi	CF725	
Copper brazing alloy copper-zinc CuZn40FeMn	CF726	
Copper brazing alloy copper-phos BS 1845 CuP4.5Ag15	C5528 CuP-5	
Copper brazing alloy copper-phos BS 1845 CuP6Ag5	C5528 CuP-3	
Cadmium	Cd100	
Cast Iron – grey,	Grades 14 and 17	
Cast Iron – malleable,	SG and Meehanite types	
Lead	Pb100	
Lead-indium alloy lead-indium	Pb92.5In5Ag2.5	
Lead-tin alloy lead-tin	Pb97Ag1.5Sn1.5	
Lead-tin alloy lead-tin	Pb97.5Ag1.5Sn1	
Lead-tin alloy lead-tin	Pb95Ag2.5Sn2.5	
Lead-tin alloy lead-tin	Pb95Sn5	
Lead-tin alloy lead-tin	Pb92.5Sn5Ag2.5	
Lead-tin alloy lead-tin	Pb90Sn10	
Lead-tin alloy lead-tin	Pb88Sn10Ag2	
Lead-tin alloy lead-tin	Pb63Sn37	
Lead-tin alloy lead-tin	Pb60Sn40	
Gold (fine gold) 24 carat	Au100	
Gold Alloy gold-Si electronic “doped” bonding wire	Au99.9995Si0.0005	
Gold Alloy gold-Be electronic “doped” bonding wire	Au99.9992Be0.0008	
Gold Alloy gold-silicon electronic packaging solder alloy	Au98Si2	
Gold Alloy gold-germanium electronic packaging solder alloy	Au88Ge12	
Gold Alloy gold-tin electronic packaging solder alloy	Au80Sn20	
Gold Alloy gold-platinum	Au80Ag9Cu8Pt3	
Gold brazing alloy BS 1845	Au80CuFe1	BAu1
Gold brazing alloy BS 1845	Au63Cu	
Gold brazing alloy BS 1845	Au375Cu	
Gold brazing alloy BS 1845	Au30Cu	
Gold alloy 23 carat	Au96Ag0.5Cu3.5	
Gold alloy 22 carat	Au91.6Cu8.4	
Gold alloy 22 carat	Au92Cu5Ag3	
Gold alloy 18 carat	Au75Ag15Cu9.5	
Gold alloy 18 carat	Au75Cu12.9Zn3	
Gold alloy 18 carat	Au75Cd8.5Zn8	
Gold alloy 18 carat	Au75Ag12.9Ni9	
Gold alloy 18 carat	Au75Ag5.4Cu3	

Continuous Casting Alloys

Page 5 of 7

Alloy type Description, ISO	Spec'n Ref
Gold alloy 18 carat-yellow	Au75Cu25
Gold alloy 18 carat	Au75Ag12.5Cu12.5
Gold alloy 18 carat	Au75Ag7Cu18
Gold alloy 18 carat	Au75Ag9Cu16
Gold alloy 18 carat	Au75.1Cu22.9Ag2
Gold alloy 18 carat	Au75Ag3.6Cu21.4
Gold alloy 18 carat	Au75Ag8.3Cu16.6
Gold alloy 18 carat	Au75Ag16.7Cu8.3
Gold alloy 18 carat	Au75Ag21.4Cu3.6
Gold alloy 18 carat	Au75Ag25
Gold alloy 14 carat	Au58.5Ag6Cu35.5
Gold alloy 14 carat	Au58.5Ag10.5Cu31
Gold alloy 14 carat	Au58.5Ag13.75Cu27.75
Gold alloy 14 carat	Au58.5Ag20.7Cu20.75
Gold alloy 14 carat	Au58.5Ag27.7Cu13.8
Gold alloy 14 carat	Au58.5Ag31.1Cu10.4
Gold alloy 14 carat	Au58.5Ag35.5Cu6
Gold alloy 14 carat	Au58.5Ag13Cu28.5
Gold alloy 14 carat	Au58.5Co0.5Cu41
Gold alloy 14 carat-yellow	Au58.3Ag5Cu36.4
Gold alloy 14 carat-white	Au58.3Cu23.3Ni11.9
Gold alloy 14 carat	Au58Cu28Ag6
Gold alloy 14 carat	Au58Cu24Zn6
Gold alloy 14 carat	Au58Cd25Cu8
Gold alloy 14 carat	Au58.5Cu41.5
Gold alloy 51.9%Au	Au51.9Cu40.7Zn7.4
Gold alloy 50%Au	Au50Cu50
Gold alloy 10 carat	Au41.6Cu54.5Ag2.9
Gold alloy 10 carat	Au41.6Cu39Ag6
Gold alloy 10 carat	Au41.6Cu42.6Ag8.5
Gold alloy 10 carat	Au41.6Cu42.6Ag11
Gold alloy 10 carat	Au41.6Cu48.2Ag6.6
Gold alloy 10 carat	Au41.6Cu43.5Ag15
Gold alloy 9 carat-pale yellow	Au37.5Ag20Cu37.5
Gold alloy 9 carat-deep yellow	Au37.5Ag17.5Cu42
Gold alloy 9 carat-pale yellow	Au37.5Ag15.5Cu41.5
Gold alloy 9 carat-soft yellow	Au37.5Ag11Cu51.5
Gold alloy 9 carat-rich yellow	Au37.5Ag10.5Cu45
Gold alloy 9 carat-light red	Au37.5Ag7.5Cu55
Gold alloy 9 carat-light red	Au37.5Ag6Cu55
Gold alloy 9 carat-rich red	Au37.5Cu61Zn1.5
Gold alloy 9 carat-red	Au37.5Ag5Cu57.5
Gold alloy 9 carat-deep red	Au37.5Cu62.5

Continuous Casting Alloys

Page 6 of 7

Alloy type Description, ISO	Spec'n Ref
Gold alloy 9 carat	Au37.5Ag47.8Cu5.9
Gold alloy 9 carat	Au37.5Cu44Zn7
Gold alloy 9 carat	Au37.5Cu
Gold alloy 9 carat	Au37.5Ag31Zn20
Gold alloy 9 carat	Au37.5Ag33Zn3.5
Gold alloy 9 carat	Au37.5Ag17Zn15
Palladium alloy gold-palladium	Au60Pd40
Palladium alloy gold-palladium	Au45Pd40Ag5Cu10
Palladium alloy gold-palladium	Au51Pd38Cu
Palladium alloy gold-palladium	Au65Pd35
Palladium alloy gold-palladium	Au75Pd19Cu
Palladium alloy gold-palladium	Au40Pd20Ag20Cu
Palladium alloy gold-palladium	Au75Pd18Ag1CuIn
Palladium alloy gold-palladium	Au40Pd15Cu5InSn
Palladium alloy gold-palladium	Au84Pd10Zn6
Palladium alloy gold-palladium	Au46Ag39Pd6
Palladium alloy gold-palladium	Au56Ag24Cu14
Palladium alloy gold-palladium	Au60Ag25Pd14
Palladium alloy silver-palladium	Ag30Pd35In30
Palladium alloy silver-palladium	Ag58Pd27.5
Palladium alloy silver-palladium	Ag70Pd27Au1.5
Palladium alloy silver-palladium	Ag55Pd27Cu14
Palladium alloy silver-palladium	Ag60Pd25
Palladium alloy silver-palladium	Ag52Pd25In23
Palladium alloy silver-palladium	Ag75Pd25
Palladium alloy silver-palladium	Ag70Pd20Au10
Palladium alloy silver-palladium	Ag60Pd20Au20
Palladium alloy silver-palladium	Ag80Pd20
Palladium alloy silver-palladium	Ag40Pd20Au40
Palladium alloy silver-palladium	Ag40Pd30Au30
Palladium alloy silver-palladium	Ag70Pd30
Silver, fine silver	Ag100
Silver alloy 99.5%Ag	Ag99.5Mg0.4
Silver alloy	Ag99Mg0.4Ni0.15
Silver alloy 94%Ag	Ag94Cu6
Silver alloy 93%Ag	Ag93Cu7
Silver alloy 92.8%Ag	Ag92.8Cu5.3Ge1.7B
Silver alloy 92.6%Ag	Ag92.6Cu7P0.01
Silver alloy 92.6%Ag	Ag92.6Cu5.4Ge1.5B
Silver alloy silver-germanium	Ag92.6Cu5.3Ge1.7B
Silver alloy 92.5%-sterling silver	Ag92.5Cu7.5
Silver alloy 90%Ag	Ag90.Cu10P0.03
Silver alloy silver-cadmium	Ag89.5Cd10.5
Silver alloy 89.5%Ag	Ag89.5Cu10.5
Silver alloy 83%Ag	Ag83Cu17

Continuous Casting Alloys

Page 7 of 7

Alloy type Description, ISO	Spec'n Ref	
Silver alloy 80%Ag	Ag80Cu20	
Silver alloy 75%Ag	Ag75Cu25	
Silver alloy 72%Ag	Ag72Cu28	
Silver alloy silver-indium	Ag61.5Cu24In14.5	
Silver alloy 60%Ag	Ag60Cu2Zn13.5	
Silver alloy 60%Ag	Ag60Cu23Zn17	
Silver alloy 55%Ag	Ag55Cu21Zn22	
Silver alloy 54%Ag	Ag54Cu40Zn5	
Silver alloy 50%Ag	Ag50Cu20Zn30	
Silver alloy 50%Ag	Ag50Cu15.5Zn15.5	
Silver alloy 50%Ag	Ag50Cu50	
Silver alloy 49%Ag	Ag49Cu16Zn13	
Silver alloy 45%Ag	Ag45Cu26Zn23	
Silver alloy 40%Ag	Ag40Cu30Zn28	
Silver alloy 30%Ag	Ag30Cu70	
Silver alloy 20%Ag	Ag20Cu80	
Silver brazing alloy BS 1845	Ag50CuZn16	BAG1
Silver brazing alloy BS 1845	Ag42CuZn16	BAG1
Silver brazing alloy BS 1845	Ag38CuZn22	
Silver brazing alloy BS 1845	Ag34CuZn20	
Silver brazing alloy BS 1845	Ag30CuZn21	BAG2a
Silver brazing alloy BS 1845	Ag55CuZn22	BAG7
Silver brazing alloy BS 1845	Ag40CuZn28	BAG34
Silver brazing alloy BS 1845	Ag30CuZn32	BAG20
Silver brazing alloy BS 1845	Ag43CuZn20	BAG6
Silver brazing alloy BS 1845	Ag72CuCd0.025	BAG8a
Silver brazing alloy BS 1845	Ag50Cu14.5Zn13.5	BAG3
Silver brazing alloy BS 1845	Ag60CuZn14	BAG9
Silver brazing alloy BS 1845	Ag49CuZn23	BAG5
Tin	Sn100	
Tin-antimony alloy tin-antimony	Sn99Sb1	
Tin-antimony alloy tin-antimony	Sn87Sb8Cu4	
Tin-copper alloy tin-copper	Sn95Cu5	
Tin-lead alloy tin-lead	Sn60Pb36Ag4	
Tin-lead alloy tin-lead	Sn60Pb40	
Tin-lead alloy tin-lead	Sn63Pb37	
Tin-lead alloy tin-lead	Sn62Pb32Ag2	
Tin-zinc alloy tin-zinc	Sn70Zn30	
Zinc	Zn100	
Zinc aluminium alloy	Zn99.5Al0.5	
Zinc aluminium alloy ZA12	Zn88Al12	
Zinc aluminium alloy ZA27	Zn73Al27	