



## Platinum alloys - Recommended platinum alloys for good manufacturing practice

Used for Platinum Alloys	Casting	Machining	Die striking	Hand fabrication
Pt950/Ruthenium	✓	✓	✓	✓
Pt950/Cobalt	✓			

**Pt950/Ruthenium (Hardness 130HV)** - Due to high hardness and the working properties, this alloy is preferred as a universal alloy. It can be cast, machined and used for hand fabrication.  
**Pt950/Cobalt (Hardness 135HV)** - Due to its high hardness and the fine grain, this alloy is preferred as a casting alloy. Because of its strength it is also used for fine wire in chain making.

## Fineness of gold (percentage of gold in alloy)

8ct	9ct	10ct	14ct	18ct	20ct	22ct	24ct
33.33%	37.50%	41.66%	58.33%	75.00%	83.33%	91.66%	100%

## Weight conversion between metals

To - metal of item you want to make

From - item in your hand	Wax	Silver	9ct	14ct	18ct	22ct	24ct (fine)	Platinum
Wax	x1.00	x10.49	x11.30	x12.90	x15.10	x17.60	x19.32	x21.45
Silver	x0.10	x1.00	x1.08	x1.23	x1.44	x1.68	x1.84	x2.04
9ct	x0.09	x0.93	x1.00	x1.14	x1.34	x1.56	x1.71	x1.90
14ct	x0.08	x0.81	x0.88	x1.00	x1.17	x1.36	x1.50	x1.66
18ct	x0.07	x0.69	x0.75	x0.85	x1.00	x1.16	x1.28	x1.42
22ct	x0.06	x0.60	x0.64	x0.73	x0.86	x1.00	x1.10	x1.22
24ct (fine)	x0.05	x0.54	x0.58	x0.67	x0.78	x0.91	x1.00	x1.11
Platinum	x0.04	x0.49	x0.53	x0.60	x0.70	x0.82	x0.90	x1.00

Use this table to find the weight of an article in a metal different from that in which it is currently made.

How to use this table:

1. Weigh the item in your hand.
2. Identify the metal of the item in your hand in the left column.
3. Scroll horizontally across the row until you reach the vertical column under the metal you want to use.
4. Multiply the weight of the item you hold, by the number in that box.

Example: You have a 9ct ring weighing 8 grams. What will it weigh in 18ct?

1. Along the horizontal row marked "9ct", and in the vertical column under the heading "18ct" we find the factor 1.34.
2. 8 grams x 1.34 = 10.72 grams in 18ct

## Conversion table

1 carat = 0.20 grams	1 gram = 5 carats	1 carat = 4 grains	1 inch = 2.54 centimetres
1 troy ounce (oz) = 31.1035 grams	1 kilogram (kg) = 32.1507 ounces	1 centimetre = 0.394 inches	

## Metal melting points

Metal	Melting point (°C)	Metal	Melting point (°C)	Metal	Melting point (°C)
Silver - sterling:	893	Gold - 9ct:	800 - 960	Gold - pure:	1063
Silver - pure:	961	Gold - 14ct:	850 - 920	Platinum - pure:	1769
		Gold - 18ct:	990 - 1030		

## Wedding anniversary gifts

Traditional				Modern							
1 <sup>st</sup>	Paper	13 <sup>th</sup>	Lace	1 <sup>st</sup>	Clocks	13 <sup>th</sup>	Textiles, furs	25 <sup>th</sup>	Silver	37 <sup>th</sup>	Alabaster
2 <sup>nd</sup>	Cotton	14 <sup>th</sup>	Ivory	2 <sup>nd</sup>	China	14 <sup>th</sup>	Gold jewellery	26 <sup>th</sup>	Pictures	38 <sup>th</sup>	Beryl, tourmaline
3 <sup>rd</sup>	Leather	15 <sup>th</sup>	Crystal	3 <sup>rd</sup>	Crystal, glass	15 <sup>th</sup>	Watches	27 <sup>th</sup>	Sculpture	39 <sup>th</sup>	Lace
4 <sup>th</sup>	Fruit, flowers, silk	20 <sup>th</sup>	China	4 <sup>th</sup>	Appliances	16 <sup>th</sup>	Silver holloware	28 <sup>th</sup>	Orchids	40 <sup>th</sup>	Ruby
5 <sup>th</sup>	Wood	25 <sup>th</sup>	Silver	5 <sup>th</sup>	Silverware	17 <sup>th</sup>	Furniture	29 <sup>th</sup>	Furniture	45 <sup>th</sup>	Sapphire
6 <sup>th</sup>	Iron, sugar, sweets	30 <sup>th</sup>	Pearl	6 <sup>th</sup>	Sweets, iron, wood	18 <sup>th</sup>	Porcelain	30 <sup>th</sup>	Diamond	50 <sup>th</sup>	Gold jewellery
7 <sup>th</sup>	Wood, copper	35 <sup>th</sup>	Coral, platinum	7 <sup>th</sup>	Desk sets	19 <sup>th</sup>	Bronze	31 <sup>st</sup>	Timepieces	55 <sup>th</sup>	Emerald
8 <sup>th</sup>	Bronze, pottery	40 <sup>th</sup>	Ruby	8 <sup>th</sup>	Bronze, pottery	20 <sup>th</sup>	Platinum	32 <sup>nd</sup>	Vehicle	60 <sup>th</sup>	Diamond
9 <sup>th</sup>	Willow, pottery	45 <sup>th</sup>	Sapphire	9 <sup>th</sup>	Linen, lace	21 <sup>st</sup>	Brass, nickel	33 <sup>rd</sup>	Amethyst		
10 <sup>th</sup>	Tin, aluminium	50 <sup>th</sup>	Gold	10 <sup>th</sup>	Leather	22 <sup>nd</sup>	Copper	34 <sup>th</sup>	Opal		
11 <sup>th</sup>	Steel	55 <sup>th</sup>	Emerald	11 <sup>th</sup>	Jewellery	23 <sup>rd</sup>	Silver plate	35 <sup>th</sup>	Jade		
12 <sup>th</sup>	Silk, linen	60 <sup>th</sup>	Diamond	12 <sup>th</sup>	Pearls, coloured gems	24 <sup>th</sup>	Musical instruments	36 <sup>th</sup>	Bone china		