

Hopper Capacity.

Coinage Crown ND change machines uses the Hopper U with varying size hopper extensions. Payment kiosks use the Hopper U with the X1 extension for change giving. Some other machines use the Universal Mk4 hopper.

	£1	50p	20p	10p	5p	€2	€1	50c	20c	10c
HopperU +X1	745	950	1550	1110	900*	840	940	900	1180	1650
HopperU +X2	910	1160	1895	1360	1100*	1030	1150	1100	1440	2020
HopperU +X3	1490	1900	3110	2230	1800	1690	1880	1800	2360	3320
Mk4 +LargeX	4680	5940	9720	6960	5640	5280	5880	5640	7380	10380
Mk4 +Med X	3120	3960	6480	4640	3760	3520	3920	3760	4920	6920
Mk4 Module	2000*	2400*	3900	2800	2300	Also tested with 1500 £2 coins				

Key: X1 stands for small hopper extension etc. The numbers are the actual number of coins, and do not represent value. *Figures verified by testing.

Calculation.

The capacity of a hopper depends on the volume. This can be calculated in litres and therefore the capacity of each coin can be deduced. It has been determined by testing that the space a coin occupies is equal to approximately 2 times its volume. Using these figures it is possible to obtain a table of capacity for various coins. Whilst every endeavour has been made to avoid errors in these tables, no liability can be taken for inaccuracies contained here in.

Coin	Volume mm ³	Coins/litre		Coin	Volume mm ³	Coins/litre
£2	1584	315				
£1	1272	390		€2	1141	440
50p	1009	495		€1	1015	490
20p	617	810		50c	1058	470
10p	865	580		20c	813	615
2p	1000	470*		10c	579	865

Formulae:

Volume of a coin is $\pi d^2 t / 4$.

Where d = diameter of coin, t = thickness of coin

Capacity in Mk4 hopper is 2.7 lt or 1278 x 2p