

Modern Clock Key Manufacture

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From time to time we get comments from customers on the way Clock Keys are currently manufactured. The comments generally fall into these areas:

Question:

Why does the shaft have a round hole drilled in it, as well as the square section?

Answer:

Years ago, keys were made by drilling a small round hole in the blunt end of a new key blank. Sharp square tools were then driven into the blank by a press, in gradually increasing sizes, cutting away a small amount of material. This process was repeated until a perfect square of the correct size was obtained. In the modern world, manufacturers are constantly forced to find cheaper and less labour-intensive ways to manufacture things. This applies to almost every industry and trade.

Modern keys are made in just two operations. A hole is drilled into the blank. This hole is sufficiently large to allow a sharp square cutter to remove the corners in one single operation. The result is a perfectly functional key - the corners of the square measure exactly what was ordered, however the signs of the round hole are still visible. To all intents and purposes this modern key is perfectly satisfactory. It will fit snugly on a shaft of the correct size, the only difference being the fact that the small arcs in the faces of the key no longer make contact with the clock. Of course, unless the key was a perfect this, this part of the key never made contact anyway.

Question:

Old keys and arbors were tapered. Why are modern keys parallel sided?

Answer:

This goes back further still, to when the keys were truly hand-made. To make a key with a snug fit, both the arbour and key were tapered. It is common practice for a repairer to 'square-off' the winding arbors during an overhaul. By using a tapered key, it would still fit the arbor even after it had been squared off. These keys were often made by an assistant or apprentice, and in those days labour costs were very low.

Question:

If I want a key of the old style, what should I do?

Answer:

If you purchase a key one or two sizes smaller than needed, it is a simple but time-consuming task to file out the inside with a flat needle file until a perfect replacement is obtained.

Question:

Why can't I order keys by number and not by metric size?

Answer:

There are at least two key numbering systems in existence, so you would need to specify the numbering system as well as the number required. As all our keys are manufactured to a metric size (the distance between any two adjacent corners) it makes much more sense to order by size.