Silver Marking

I normally recommend against laser bonding marks on silver. Over the last 15 plus years working with laser bonding materials such as TherMark and CerMark I have found in general that LMM 14 works best on silver.

For some reason in general if the silver is from North, Central or South America marks better. Silver from India and Asia tends to not mark as well. I am not saying that other parts of the world are making lower grades of silver or anything like that. I t might just be something like there is more magnesium or some element in general in silver from certain parts of the world that allow it to mark easier.

Silver conducts heat very fast so you will have to mark with a lot of power and very slow speed normally to get a mark.

LMM 14 has an aggressive ph balance to it especial in liquid form and it may stain or tarnish the silver.

Silver is very soft and if you are able to make a good laser bond on it the mark is basically as strong as what you are marking on. If the mark was for a necklace pendant that just hangs it should be fine but if it is for a ring, bracelet or keychain type item that will see wear I would avoid it. What most people don’t understand is that the silver wears down and if it is just a kind of plain peace you won’t notice it much but if there is a high contrast mark and that wears then it is much more noticeable.

I have not yet tried the new LMM 6060 coating on silver yet. Being water based it probably will not have a possible staining issue but mark durability would be the same as LMM 14.

Silver plating can be even more of a problem because you never know how thick it is or how consistent the thickness is from part to part. There is a potential of the heat from your laser possibly melting through the plating if it is thin.

With all of that said we and a number of our customers over the years have had success in marking wedding cake knife sets like the photo below.

