Novel method for desoldering IC devices

Not long ago, our attention was drawn to a desoldering aid for IC devices using a technique originated by F8CV/F9BL. This consists of a stainless steel hypodermic needle (with point ground down to avoid risk of scratches) forming a thin tube with diameter sufficient to fit over the IC leads.

The procedure recommended is to heat and liquify the solder fastening an individual IC pin, using a soldering iron, and then when the solder is molten, the hollow needle is gently introduced while turning it gently between the fingers, until the IC lead is separated from the solder by the wall of the needle. The soldering iron is removed, and since the solder will not "take" to the stainless steel as it cools, the needle can afterwards be withdrawn so that the lead is left free. The process is repeated and all soldered IC leads and the device can then be removed from the PCB.

At the time it was not made clear what type and size of needle was used. Brian Castle, G4DYF, has recently tried out this technique and can vouch for its effectiveness. He has also found that in order to find a needle with an internal diameter sufficiently large to fit over a typical IC lead, it needs to be the type normally used in medical practice for drawing up the contents of a phial into a syringe before an injection is made using a finer needle. He reports that suitable needles are known as Leni Sabi, size 21G by 1½in, 40mm 8/10.

(From "Radio Communication".)