

The Prostate Implant Seed Handling Tool invented by this author has two components. One is a seed pick-up and transporting tool. It is composed of a small vacuum pump, an air filter, a plastic tube, a probe, a needle and a glass tube. Using the vacuum and the force of gravity, the tool can pick up a seed and drop it in the ion chamber tube and suck it out in a few seconds. The glass tube can hold up to seven seeds and seven spacers and they can be dropped in each needle in an orderly fashion. It takes less than half a minute to complete one needle loading. The glass tube allows the operator to verify the seeds/spacers before dropping them in the needle. This author has used this tool for seed activity verification and needle loading in all cases since June 25, 1997. A needle loading tool was recently developed as the second component of the seed handling tool. It has a self-shielded seed/spacer container with leaded plastic in front as a window, a self-shielded flat needle holder holding 24 needles, a base and a shield in front of the base with leaded plastic on its top. This needle loading tool not only makes the needle loading easier and faster but also significantly reduces the radiation exposure to the hands. The needle holder can be detached easily from the base and put on a readypack film or cassette for autoradiograph.