Automated Point Design and Fabricator for Orthopedic Kirschner Pins

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Automated point design and fabricator for orthopedic Kirschner pins was implemented in the National Children's Hospital's (In Spanish: Hospital Nacional de Niños) Maintenance Area in order to reduce the time and increase the efficiency of the sharpening process for pin tips; which is precise and safe for use. A series of tests were conducted using the tips of 20 leftover pins obtained from the Orthopedics department, which were approved by the individual in charge of the process and by the Pediatrics department, because they complied with the requirements, had been implemented in the operating room and presented no problems there. Later the machine was donated to the Hospital where a use and safety instruction manual, was delivered to the end users with the purpose of avoiding any mishaps; and a brief training was provided for the use thereof. The project has been assessed based on usefulness aspects at the Children's Hospital, by donating and operating it regularly for one year and two months; obtaining tips with three equal sides and three equal angles resulting in better quality of the physician's work and greater efficacy of the sharpening process, thus helping Hospital patients who are the direct beneficiaries.

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