Application: Sterilization Trays

Component: Liquid Silicone Rubber Trays

Design Requirements:
Organizing and storing medical instruments are challenges in healthcare. Trays, storage containers and the surgical instruments they hold require autoclaving. They need to be designed so they protect their high value contents, store and stack easily, and are quickly recognizable while conserving space.

Design Approach:
Minnesota Rubber and Plastics LSR trays make storage and autoclaving simple with easy-to-recognize molded compartments. The trays are custom designed so that specific tools fit tray contours, cushioning and protecting them from the damage often experienced with ordinary trays and drawers.

Related Benefits:
Seamless and glove friendly, these stackable LSR trays can be designed to hold families of different size tools. Individual tool compartments can be designed with risers and drainage holes for drying and to provide extra separation and protection for individual tools that are heavy or have sharp edges. The trays also can be molded in a variety of colors for product differentiation as they fit inside standardized or customized metal sterilization trays.

Molded of medical grade silicone, these trays are rated for 10,000 hours of continuous exposure to autoclave processing. They promote safe, effective sterilization, and are durable yet highly versatile. The LSR material is non-reactive, stable and resistant to extreme environments and temperatures from -55°F to +225°F (-48.3°C to +107.2°C) while maintaining its useful properties.

Minnesota Rubber and Plastics provides assistance with design and materials engineering from a broad range of medical grade material options. In addition to LSR, these include compounds compliant with ISO 10993, USP Class VI, and FDA requirements. The company also operates an ISO 13485:2003 certified quality management system as it manufactures medical sealing devices, medical assemblies and related products in Class 10,000 and Class 100,000 clean rooms.