Gaynor Minden’s and Injury Prevention

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Introduction

Gaynor Mindens are a specialized pointe shoe for dancers with the intent of injury prevention. The shoes unique components are designed to provide support and longevity. This is done with the addition of cellular urethane foam, molded shanks, and an elastomeric box. Changes to the traditional method of making pointe shoes are a recent development in production. Improving upon the traditional method helps to prevent damaging effects to dancers lower limbs, and adds time to the wear ability of the shoe.

Parts of a Traditional Pointe Shoe

Traditional pointe shoes are all handmade. Slight variations in structure are expected between individuals work with in a manufacturer.

Box: Surrounds the toes to support the sides of the foot.

Vamp: The front portion of the box.

Platform: The flat round surface in the tip of the box. This is where a dancer stands while en pointe.

Shank (Inside, Middle, Outer): Provides support and flexibility for the arch of the foot.

Drawstring: Used to provide fine alterations to the width of the shoe.

Pleats: Formed while constructing the box from excess satin.
Outer Wings: An extension of the box that provides support to the sides of the foot.

Side Quarters: Fabric used to make the heel of the shoe.

Binding: Fabric tube that encases the drawstring.

Traditional Method of Making Pointe Shoes

Traditionally pointe shoes are made from glue, burlap, canvas, satin, and paper. Over time these components are broken down by moisture and the shoe becomes un-wearable for dancers. The traditional method for making pointe shoes has been in practice since around the 1830’s and is still used today.

All pointe shoes are handmade using a “turn-shoe” technique, meaning the shoes are made inside out. Before making the box of the shoe a seamstress sews together all the satin and canvas parts of the shoe. The canvas is then tacked on to the middle shank tightly around a mold, and the satin is flipped around to the other side of the shoe. The box is then made alternating layers of burlap and glue. When completed the box is then leveled and hardened before flipping the satin back over and tacking it to the underside of the shoe. To finish off the shoe the outer shank and sock liner are then added. This “turn-shoe” method makes the initial product extremely strong.

To make pointe shoes wearable dancers must break in their shoes before use. Breaking in pointe shoes is to weaken the shoes slightly from their initial state, which is to hard for the dancer. There are many methods used to break in pointe shoes. Commonly used methods are water/alcohol, scraping, bending, and pounding. Water or alcohol can be put on the sides of the shoe in order to soften the box. Scraping adds friction to the leather sole of the shoe. Bending helps to make the shoe more pliable in order to move the foot through its range of motion. Pounding is used to dampen the sound of the shoe hitting the ground while dancing. The goal of breaking in pointe shoes is to obtain the ideal strength and pliability within the shoes. Upon wear moisture begins to break down the resin/“glue” with in the shoe causing the pointe shoe to soften. If the shoes become to soft a new pair must then be broken in to be able to be worn.
Parts of a Gaynor Minden Pointe Shoe

Gaynor Mindens have the same components of a traditional pointe shoe. However, a few areas have been modified for improved performance.

Shank: Provides support and flexibility at the arch of the foot. Uses an elastomeric for longevity.

Box: Made with an elastomeric compound for longevity, and added shock absorbing components.

Platform: Contains cellular urethane foam to absorb impact upon toes.

How Gaynor Mindens are Made

Gaynor Mindens use different materials to form the shank and box of the shoe. Because of this difference Gaynor Mindens are not made using the “turn-shoe” technique. The fabric portion of the shoe is still hand made by a seamstress, but a machine creates the components using an elastomeric compound.

The shank of Gaynor Minden’s come in a range of strengths of the elastomeric compound. There are five different shank strengths from soft (Pianissimo) to hard. With more options for shank strength Gaynor Minden’s provide more specified support for the arch of the foot. The elastomeric compound also helps to prevent shank weakening and breaking for dancers with very strong feet.

The box of Gaynor Minden’s is also made using the same elastomeric compound. The compound slows the breakdown of the shoe, providing support for a longer period of time. The box also contains an anti-shock lining to reduce impact upon the foot while dancing en pointe. Cellular urethane foam is also added within the platform of the box. This foam is used to absorb impact, and help prevent loud noises while wearing the pointe shoes.
The method of breaking in pointe shoes in preparation of use is not needed with Gaynor Minden pointe shoes. Because the shank and box of the shoes is made with a different material the preparation process is not needed to wear the shoes. Gaynor Minden’s are designed to mold specifically to your own feet while being worn.

Function

Gaynor Minden’s are designed to aid the dancer and prevent injury. Often use of traditional point shoes can cause long-term injuries to the feet, ankles, knees, and hips. Injuries of the lower extremities are common in dancers en pointe due to the un-natural placement of weight directly over the toes. Dancing in this position can irritate joints due to shock waves from impacts. This problem is why Gaynor Minden created their own studies to optimize the function of pointe shoes in order to aid dancers.

More Information

Further information on the method to make pointe shoes can be found by watching this video, and at the Gaynor Minden website.

https://www.youtube.com/watch?v=fzB1yY2397E

http://www.dancer.com/index.php