



Circulator Boot™ System

The name **Circulator Boot™** was chosen to indicate a device that benefits the heart function and all of the circulations in the body: arterial, venous and lymphatic. It is noninvasive and its use is contraindicated only by the presence of fresh deep vein thrombi in the legs.

The **Circulator Boot™** is more than a product. Its use in limb salvage has evolved into a method of treatment that supports the core element of wound therapy: increased blood supply. Combined with the use of local antibiotic injections, boot therapy may control the infection in patients with osteomyelitis and necrotizing cellulitis when standard methods of treatment are failing.

The end-diastolic timing of its leg compressions is unique and has been used in large numbers of patients to salvage legs at risk of amputation. It also has other promising uses that deserve study and serious consideration: treatment of patients with angina, congestive heart failure, stroke, kidney failure and septic shock.



In Layman's Terms:

A leg with poor arterial blood flow may be likened to a dirty sponge that is half wet. Squeezing such a sponge disseminates the water throughout the sponge. Soaking and wringing the water repeatedly from the sponge may help clean it. In like fashion, the heart monitor of the **Circulator Boot™** is timed to allow each arterial pulse wave to enter the leg as best it can (to partially wet the leg "sponge"). Boot compressions provide a driving force to disseminate blood around the leg and at the same time press venous blood and excess tissue water from the leg. Patients with a pulse rate of 60 beats per minute might receive 3600 such compressions an hour. Patients with severe arterial leg disease might receive 100 such treatments or close to a half million compressions! Breakdown of clots, rechannelization of blocked vessels and the formation of new small vessels may help restore blood flow.

The Circulator Boot™ is a cardio-synchronous compression system classified as Intermittent Compression Therapy (ICT) which includes the following:

- A rapid action valve assembly capable of both pressurizing and exhausting the boot within a fraction of a second.
- Disposable double-walled plastic bags to enclose the chosen portion of the leg and to contain the compressed air.
- Fluted lower leg legging to extend the Mini-Boot treatment to the thigh.
- Compressed air supply to power the Circulator Boot compression cycles.
- Rigid, adjustable Long Boot to enclose the leg from groin to toes.
- Rigid Mini-Boot to enclose the foot and ankle for patients requiring treatment of the foot only.
- A controller unit to detect the QRS complex of the cardiac rhythm and to appropriately time boot compressions at the end diastolic portion of the heart cycle.