

12 CHAMBER INTERMITTENT PNEUMATIC COMPRESSION SYSTEM

# Hydroven 12





# A legacy you can trust

Arjo has been innovating and developing products that assist in the management and treatment of vascular and lymphatic conditions for over 30 years. Along with our world class hand held Dopplers and vascular assessment systems, Arjo is uniquely positioned to offer clinicians comprehensive solutions for the holistic assessment and treatment of vascular conditions.

# Designed for patient comfort and compliance

# The Problem

Disruption of the lymphatic system has severe and sometimes debilitating lymphedema implications for the patient. Lymphedema has no cure but can be successfully managed when diagnosed and treated.<sup>1</sup>

#### The solution

Hydroven® 12, with its unique LymphAssist™ mode, is an advanced Intermittent Pneumatic Compression (IPC) system which has been designed to offer both clinicians and patients an effective treatment option to manage lymphedema.

Developed in conjunction with Manual Lymphatic Drainage (MLD) therapists, Lymphedema Specialists and Tissue Viability nurses, *Hydroven 12* delivers a gentle and effective treatment for your patients.

In addition to the management of lymphatic conditions, *Hydroven 12* is effective in the treatment of the following conditions, when combined with an individualized monitoring program:

- Acute and chronic wound management
- Chronic venous insufficiency
- Edema management

### Choice of three automatic treatment profiles

The *Hydroven 12* system is comprised of an intelligent pump and a range of multi-chamber arm and leg garments capable of delivering three types of treatment options.

### LymphAssist™ therapy - Exclusive to Hydroven

The unique *LymphAssist* mode replicates the basic principles of Manual Lymph Drainage (MLD). The automatic pressure and multi-chamber sequencing helps to promote efficient fluid transfer through the patient's lymphatic system.

This gentle 'directional', rhythmic massaging stimulates the lymphatic vessels encouraging the transport of proteins and waste products away from affected areas.

#### **Graduated sequential therapy**

The graduated sequential therapy provides a controlled pressure differential between adjacent chambers in each garment. This therapy helps restore the natural hydrostatic balance of the limb being treated.

#### Wave therapy

Wave therapy produces a gentle peristaltic cycle for those patients who may be unable to tolerate graduated sequential compression.

The flexibility of this 'three-in-one' approach provides clinicians with the confidence that the treatment can be tailored to suit the clinical indications and patient's requirements. Each profile allows clinicians to optimize pressure settings and treatment times to deliver the most effective treatment for managing vascular conditions.

#### Flexi-hose

The new flexi-hose allows the patient to be positioned comfortably without compromising access to system controls or indicators. The easy to clean and anti-kink hose assists efficient system set up.

#### **Graphical control panel**

The new graphical control panel incorporates high visibility LED displays that separate the main system controls.

Garment pressure and mode are displayed on the upper display, while the timing and cycle information are displayed on the lower display. This efficient layout keeps both user and clinician informed of the treatment cycle.





New 12 chamber garment insert

New graphical control panel

#### Single or bilateral therapy

Single or bilateral therapy is possible by simply connecting two garments to the *Hydroven 12* system. A simple polarized push fit allows safe and accurate garment connection.

## **Garments and inserts**

The comfortable 12 chamber garments move fluid away from the affected areas, in conjunction with the customized treatment profiles.

Inserts can be used to accommodate larger limbs. The overlapping chambers under the 'zip in' insert provide total circumferential compression, which assists with the effective transport of fluid.

## **Anti-tamper and lock feature**

The pressure, cycle time and treatment options are protected by a lock feature which prevents accidental adjustment of the treatment profile.

# **Specifications**

Intermittent Pneumatic Compression System			
Order code	316003US		
Supply voltage	100VAC to 220VAC		
Supply frequency	50 - 60 Hz		
Power input	38 - 77 VA		
Degree of protection against electric shock	ock Class II, double insulated Type BF		
Degree of protection against liquid ingress	IPXO – no protection		
Mode of operation	Continuous		
Size 11.4" x 9.8" x 5.1"			
Weight	8.4 lbs		
	LymphAssist 15-40 mmHg		
Pressure range	Sequential 15-120 mmHg		
	Wave 15-100 mmHg		
	All modes +/-5%		
	Inflation - 30-95 sec in 5 sec increments		
Cycle times	Deflation - 10-95 sec in 5 sec increments		
	Treatment time - 10-99 minutes or continuous (maximum 2 hrs)		
Treatment modes	LymphAssist, Gradient Sequential and Wave		

Garments			
Order Code	Description	Length (L)	Thigh Circumference
316L76S	Leg Garment Standard Width	30"	28"
316L84S	Standard Leg	33"	28"
316L76W	Leg Garment Large Width	30"	31"
316L84W	Wide Leg	33"	31"
Order Code	Description	Length (L)	Additional Width at Thigh
316LI76	Leg Insert Standard Width	30"	7 1/2"
316LI84	Leg Insert Large Width	33"	7 1/2"
Order Code	Description	Length (L)	Circumference Shoulder (H)
316A68	Arm Garment Standard Width	26"	24"
316A78	Arm Garment Large Width	30"	24"
Order Code	Description	Length (L)	Additional Width at Shoulder
316AI68	Arm Insert Standard Width	26"	6 1/2"
316AI78	Arm Insert Large Width	30"	61/2"

Clinical evidence – Intermittent Pneumatic Compression (IPC) and Manual Lymph Drainage (MLD) provide a synergistic enhancement of the effect of Complex Decongestive Physiotherapy (CDP).

IPC can be used safely and effectively for the treatment of patients with breast carcinoma associated Lymphedema. The ease of application of IPC as a long term therapeutic intervention suggest that it may warrant more widespread use in this patient population. The therapy is well tolerated and remarkably free from complications.<sup>2</sup>

- 1. National Lymphedema Network. Position statement of the National Lymphedema network updated Feb, 2011.
- 2. Szuba A et al (2002). Decongestive lymphatic therapy for patients with breast carcinoma associated Lymphoedema. Cancer; 95 (11): 2260-2266.

At Arjo, we are committed to improving the everyday lives of people affected by reduced mobility and age-related health challenges. With products and solutions that ensure ergonomic patient handling, personal hygiene, disinfection, diagnostics, and the effective prevention of pressure ulcers and venous thromboembolism, we help professionals across care environments to continually raise the standard of safe and dignified care. Everything we do, we do with people in mind. www.arjo.com

