



PAL[®]

Power-Assisted Liposuction



The PAL[®] System

from MicroAire[®] Aesthetics

- ▶ Proven Cell Viability^{2,3,4}
- ▶ Faster Procedure⁷
- ▶ Less Surgeon Fatigue⁷
- ▶ Precision Engineering
- ▶ Patented Technology
- ▶ Made in America





Photo courtesy of Dr. El-Atar



Photo courtesy of Dr. El-Atar



Photo courtesy of Dr. El-Atar



Photo courtesy of David Kaufman, MD

Before & After

PAL® is the most widely used and preferred alternative to manual liposuction.¹

- ▶ Proven Cell Viability^{2,3,4}
- ▶ Less Bruising⁷
- ▶ Less Swelling⁷
- ▶ Less Surgeon Fatigue⁷
- ▶ Faster Procedure⁷

Only PAL® can offer this increased speed and ease-of-use.

“ It’s dramatic how much better patients feel, how much more effectively we can treat them, how much more satisfied they are, and how far superior the results are compared to [traditional liposuction]. ”

- Dr. Gerhard Sattler

The PAL® System from MicroAire® Aesthetics

The PAL®-650 from MicroAire® Aesthetics is a powerful, precision instrument designed for small- or large-volume fat extraction, artistic body contouring, and harvesting fat rich in adipose-derived regenerative cells (ADRC).²

PAL's® smooth reciprocating cannulas glide through tissue, reducing the amount of physical effort required during liposuction and also reducing your O.R. time.⁷

Reciprocation also increases your control, helping you to gently guide the cannula with greater accuracy, even through dense fibrous tissue.

The result is a faster procedure, less fatigue for you and more precise outcomes for your patients.⁷

Adipocytes and ADRCs harvested with PAL® are just as healthy and viable as cells harvested using manual liposuction; and PAL® produces higher yields of loosely adherent stem cells, which may improve graft retention.^{2,3,4}

Try PAL® and see for yourself how much better your body contouring and fat-grafting results can be. You'll wonder how you ever got along without it.

- ▶ PAL® does not use heat, like lasers or ultrasound energy which can damage cells and injure patients.
- ▶ PAL® was shown to provide the greatest preservation of surrounding tissues and septal fibers.⁵
- ▶ The PAL® fluid pathway connects directly from the cannula to the sterile tubing - so tissue stays pure and clean. With knock-off devices, fluids can pass through the handpiece containing bio-contaminants from previous patients even after sterilization.
- ▶ Vibration dampening technology makes PAL® more comfortable than imitations.
- ▶ PAL® is powered by a strong electric console, so it won't bog down like air-powered devices.



Features:

- ▶ Fully autoclavable handpiece and cable
- ▶ Speed control on the handpiece and also on the power console
- ▶ Works with any infiltration and aspiration system
- ▶ 2mm reciprocating stroke at 4,000 cycles per minute
- ▶ Anodized aluminum body
- ▶ Weight: 1.1 lb (0.5 kg)
- ▶ Size: 8" x 1" x 1.5" (20.3 x 2.5 x 3.8 cm)

PAL[®] Cannulas

Small variations in the number of ports, as well as their size and location on the cannula, can have a significant impact on performance and outcome.

MicroAire[®] has developed several port configurations, based on clinical studies and recommendations from our customers.

Extraction

Most popular cannulas for large-volume debulking and body contouring:



Mercedes

All-around top-selling cannula for liposuction



Double Mercedes

High-performing in fibrous tissue such as gluteal



Triport II

Ports only on one side (270°) to prevent dimpling

Harvesting

These are well-suited for producing small, consistent lobules for fat grafting:



Multi-Hole

2mm openings produce lobules optimized for vascularization



Del Vecchio Track-12

Most efficient cannula for harvesting small lobules to be grafted



Triport IV

Good for feathering contours while harvesting small lobules

Specialty

PAL[®] reciprocation provides cannula uses that go beyond liposuction:



Helixed Tri-Port

Ideal for treating gynecomastia and lipoma



Spatula

Releases adhesions to allow for fat grafting beneath scars



Flared Mercedes

Useful for pre-tunneling and breaking up fat prior to harvesting

See the complete listing of PAL Cannulas in the separate Cannula brochure or online at www.microaire.com.

What do the studies say?

PAL® is safe, fast and capable of producing results equal or superior to those achieved through use of traditional lipoplasty.⁶

PAL® is the most widely used and preferred alternative to traditional, manual liposuction.¹

Compared to traditional liposuction, PAL® took 35% less time, resulted in 45% less intraoperative pain, and resulted in 49% less surgeon fatigue. The amount of fat aspirated per minute with PAL® was 31% greater. PAL® led to faster healing and recovery for patients. Due to reduced surgeon fatigue, PAL® offers safer and more precise surgery.⁷

PAL® has similar complication rates, speed of recovery, bleeding (with the tumescent technique), and aesthetic results as those of traditional suction-assisted liposuction, while it is superior in terms of ease of fat removal.⁸

PAL® outperformed traditional, suction-assisted liposuction. PAL® decreased surgeon fatigue and reduced procedural time.⁹

The number of viable ASC and the proliferation rates did not significantly differ between PAL® and manual aspiration. PAL® is a feasible method for harvesting fat tissue containing viable ASC. Quantity and quality of PAL-harvested ASC is similar or even better compared to ASC harvested manually.²

Tissue collected using PAL® is not different from tissue collected by manual aspiration.^{2,3,4,10}

5020 Console

MicroAire® Standard Electric Console

- ▶ Provides power to the PAL®-650 Handpiece
- ▶ Simple touch-screen interface
- ▶ Controls two PAL handpieces at once
- ▶ Weight: 14 lbs (6.35 kg)
- ▶ Height: 6" (15.24 cm)
- ▶ Footprint: 12" x 14" (30.48 cm x 35.56 cm)
- ▶ Electrical: 300 W, 100-240 V, 50/60 Hz



ASP-1021

PAL® LipoTower™ (USA Only)

- ▶ Sturdy and powerful surgical cart used for tumescent liposuction
- ▶ Strong, reliable pumps for both infiltration and aspiration
- ▶ Touchscreen interface and integrated PAL control system
- ▶ The only UL®-listed liposuction cart on the market
- ▶ Vacuum Pump: Dual 1/4-Horsepower, Rotary Vane
- ▶ Vacuum Flow Rate: 3.0 SCFM (0.08 m³/min)
- ▶ Vacuum Pressure: 0–29 in/Hg (0–736 mm/Hg)
- ▶ Infiltration Pump: Peristaltic
- ▶ Infiltration Flow Rate: 50–700 ml/min
- ▶ Weight: 185 lbs (84 kg)
- ▶ Height: 4' (1.2 m) pole down
7' (2.1 m) pole extended
- ▶ Footprint: 2' x 2' (0.6 m x 0.6 m)
- ▶ Electrical: 120 V, 60 Hz (UL-Listed)



PAL-730

PAL® Wand

- ▶ An ergonomic manual handpiece for sensitive areas (such as the neck and back)
- ▶ Compatible with all PAL® cannulas

PAL-500

Sterilization Case

- ▶ Accommodates two handpieces, electric cable and up to ten cannulas
- ▶ Fits in most standard autoclaves



ASP-CAN-2S LipoFilter

LipoFilter® Gravity-Decant Fat Processor

- ▶ Three-liter fat harvesting and separation system
- ▶ Large-volume decanting and washing
- ▶ No centrifuge needed
- ▶ Works with any lipo system
- ▶ Sterile-packed, single-use



To order, call toll free **800-722-0822**

REF Number	Description
PAL® Component Part Numbers	
PAL-650	PAL® Powered Handpiece
5006-PAL	PAL® Cable (For use only with the 5020 Console)
5020	PAL® Electric Console
ASP-1021	LipoTower™ with Aspiration and Infiltration (USA Only)
PAL® Accessories Part Numbers	
CAP-600E	PAL® Washer Disinfecter Cap
PAL-500	PAL® Sterilization Case
PAL-700	PAL® Single-Use Luer Adaptor
PAL-730	PAL® Wand™ Manual Handpiece
PAL-900	PAL® Aspiration Tubing, 2.75m (6PK)
PAL-1200	PAL® Aspiration Tubing, 3.66m (5PK)
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ASP-CAN-2S	LipoFilter®
ASP-ADP-2	Adapter - Toomey-to-Luer Syringe
ASP-ADP-3	Adapter - Toomey-to-Luer Needle

Ordering Information

PAL[®]

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