MicroAire’s PAL® LipoSculptor™ is the only U.S.-patented liposuction instrument using a reciprocating motion (rather than rotating) to facilitate the movement of the cannula within tissue. This innovation reduces the amount of manual force and physical effort required to perform lipoplasty, especially in areas with fibrous tissue. The result is a better experience for both the surgeon and patient, compared to traditional liposuction.

- 2mm reciprocating stroke at 4000 cycles per minute
- Thumb-controlled speed throttle on handpiece
- Powered by a stand-alone electric console
- Special suction pumps are not necessary
- Autoclavable Instrument and electric cable
- High-grade stainless steel cannulas manufactured in the U.S.

Unlike ultrasonic and laser liposuction devices, the PAL® LipoSculptor™ does not use heat, so there are no concerns for the accidental burning that can occur with other systems.

**PAL® LipoSculptor™ Electric Handpiece**

MicroAire’s PAL® LipoSculptor™ is the only U.S.-patented liposuction instrument using a reciprocating motion (rather than rotating) to facilitate the movement of the cannula within tissue. This innovation reduces the amount of manual force and physical effort required to perform lipoplasty, especially in areas with fibrous tissue. The result is a better experience for both the surgeon and patient, compared to traditional liposuction.

- 2mm reciprocating stroke at 4000 cycles per minute
- Thumb-controlled speed throttle on handpiece
- Powered by a stand-alone electric console
- Special suction pumps are not necessary
- Autoclavable Instrument and electric cable
- High-grade stainless steel cannulas manufactured in the U.S.

**An ergonomic manual handpiece for sensitive areas such as the neck and back.
- Compatible with all LipoSculptor™ cannulas.
- Accommodates two handpieces, electric cable and up to ten cannulas
- Components are autoclavable

**LipoSculptor™ and Accessories**

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAL-500</td>
<td>Sterilization Tray</td>
</tr>
<tr>
<td>PAL-650</td>
<td>LipoSculptor™ Handpiece</td>
</tr>
<tr>
<td>PAL-700</td>
<td>Luer Lock Adapter</td>
</tr>
<tr>
<td>PAL-730</td>
<td>LipoSculptor™ Manual Wand</td>
</tr>
<tr>
<td>PAL-900</td>
<td>Aspiration Tubing Set</td>
</tr>
<tr>
<td>1020</td>
<td>Standard Electric Console</td>
</tr>
<tr>
<td>1006-PAL[E]</td>
<td>Electric Cable</td>
</tr>
</tbody>
</table>

**Turbo Cannulas**

- Provides significant increase in aspirant removal rate compared to standard cannulas.
- Special valve in the hub assembly allows ambient air to enter the cannula.
- Luer Lock Adapter
- Makes Luer Lock cannulas compatible with the PAL® LipoSculptor™

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MicroAire’s PAL® LipoSculptor™ is the only U.S.-patented liposuction instrument using a reciprocating motion (rather than rotating) to facilitate the movement of the cannula within tissue. This innovation reduces the amount of manual force and physical effort required to perform lipoplasty, especially in areas with fibrous tissue. The result is a better experience for both the surgeon and patient, compared to traditional liposuction.¹

Unlike ultrasonic and laser lipoplasty devices, the PAL® LipoSculptor™ does not use heat, so there are no concerns for the accidental burning that can occur with other systems.

²mm reciprocating stroke at 4000 cycles per minute
Thumb-controlled speed throttle on handpiece
Powered by a stand-alone electric console
Special suction pumps are not necessary
Autodrivable Instrument and electric cable
High-grade stainless steel cannulas manufactured in the U.S.

Maximum-speed control
Accepts a single 1006-PAL® Electric Cable
Available in 110v or 220v

An ergonomic manual handpiece for sensitive areas such as the neck and back.
Compatible with all LipoSculptor™ cannulas.

Components are autoclavable

Turbo Cannulas
Provides significant increase in aspirant removal rate compared to standard cannulas.
Special valve in the hub assembly allows ambient air to enter the cannula
Makes Luer Lock cannulas compatible with the PAL® LipoSculptor™

1
Dermatology Times, February 2003. “Liposuction Tools,” John Jesitus quoting Dr. Gerhard Sattler: “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].”

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**Mercedes Spatula**

Mercedes has developed multiple cannula varieties, based on recommendations from surgeons.

### Flared Mercedes

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3mm</td>
<td>Great aggressiveness of the flared cannula, providing maximum extraction through a smaller incision. Good for breaking up fat without suction, prior to sculpting and extraction.</td>
</tr>
<tr>
<td>4mm</td>
<td>More aggressive, best used for contouring and sculpting. This is the cannula that received widespread acclaim from surgeons speakers during the recent ASAPS and ASAPS annual meetings.</td>
</tr>
</tbody>
</table>

### Double Mercedes

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>360°</td>
<td>Ideal for fine sculpting and feathering. Excellent for removing emulsified fat from laser or ultrasonic procedures. Well suited for lipolysis of the abdomen and flanks.</td>
</tr>
<tr>
<td>360°</td>
<td>More aggressive, general use cannula. Good for flimsy tissue and large-volume extraction.</td>
</tr>
</tbody>
</table>

### Offset Double Mercedes

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>360°</td>
<td>More aggressive, best overall general-use cannula.</td>
</tr>
<tr>
<td>360°</td>
<td>Good for fibrous tissue and large-volume extraction.</td>
</tr>
</tbody>
</table>

### Mercedes

<table>
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<tr>
<th>Size</th>
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</tr>
</tbody>
</table>

### Multi-Hole

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>360°</td>
<td>Ideal for fine sculpting and feathering. Excellent for removing emulsified fat from laser or ultrasonic procedures. Well suited for lipolysis of the abdomen and flanks.</td>
</tr>
</tbody>
</table>

### Single-Port

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90°</td>
<td>The most aggressive and most gentle cannula, available in varying lengths and diameters. Especially good for fine sculpting, and for lipolysis in sensitive areas such as the neck and back.</td>
</tr>
</tbody>
</table>

### Spatula

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90°</td>
<td>The Spatula is a shorter non-aggressive cannula with a blunt tip that makes it safer to use in small regions such as the neck, and its delicate areas such as the back.</td>
</tr>
</tbody>
</table>

### LipoSculptor™ Extraction Cannulas

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3mm</td>
<td>More aggressive, best overall general-use cannula.</td>
</tr>
<tr>
<td>3mm</td>
<td>Good for flimsy tissue and large-volume extraction.</td>
</tr>
</tbody>
</table>

### LipoSculptor™ Feathering Cannulas

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6mm</td>
<td>More aggressive, best overall general-use cannula.</td>
</tr>
<tr>
<td>4mm</td>
<td>Good for flimsy tissue and large-volume extraction.</td>
</tr>
</tbody>
</table>

---

**Tri-Port LipoSculptor™ Cannulas**

Tri-Port LipoSculptor™ Tri-Port cannulas are designed with all ports on one side of the cannula. Ports can be directed away from the skin to prevent surface irregularities. This also provides better control when shaping and sculpting, yet cannulas are still optimal for large-volume extraction and debulking.

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3mm</td>
<td>Moderate volume.</td>
</tr>
<tr>
<td>3mm</td>
<td>Moderate aggressiveness, general use cannula. Good for majority of cases.</td>
</tr>
<tr>
<td>3mm</td>
<td>More aggressive. Best overall general-use cannula.</td>
</tr>
<tr>
<td>3mm</td>
<td>Good for flimsy tissue and large-volume extraction.</td>
</tr>
</tbody>
</table>

---

**Tri-Port® II**

- **270° of extraction.**
- **High volume.**

**Helixed Tri-Port III**

- **270° of extraction.**
- **Aggressive cannula for high-fibrous areas.**
- **Ideal for gynecomastia cases.**

**Tri-Port IV**

- **270° of extraction.**
- **Ideal for feathering because of minimal volume.**
- **Small hole size.**
- **Similar to Spatula™ high-def cannulas.**

---

**Mirrored Tri-Port II**

- **90° of extraction.**
- **Moderate volume.**

**Tri-Port III**

- **90° of extraction.**
- **Aggressive cannula providing maximum extraction.**
LipoSculptor™ 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.

Mercedes® has developed multiple cannula varieties, based on recommendations from surgeons.

Mercedes
The best overall, general-use LipoSculptor™ cannulas. Ranging from non-aggressive sculpting and extraction to aggressive port sizes that are well-suited for large volume extraction and fibrous areas.

Flared Mercedes
- Aggressive, high-volume cannula, ideal for debulking, separation, dissection and pre-tunneling.
- Good for fibrous tissue and large-volume extraction.

4mm Flared Mercedes
- More aggressive, best used for contouring and sculpting.
- Ideal for gynecomastia cases.

Double Mercedes
- 360° of extraction.
- More aggressive.
- Good overall general-use cannula.
- Good for fibrous tissue and large-volume extraction.

Offset Double Mercedes
- 360° of extraction.
- More aggressive.
- Excellent for fine sculpting and feathering.
- Well suited for lipoplasty in sensitive areas such as the back.

Multi-Hole Mercedes
- 360° of extraction.
- Ideal for fine sculpting and feathering.
- Excellent for removing emulsified fat.
- Well suited for lipoplasty in sensitive areas.
- Good for majority of cases.

Spatula
- Ideal for fine sculpting and feathering.
- The spatula is a shorter non-aggressive cannula with a blunt tip that makes it safer to use in small regions such as the neck, and in delicate areas such as the back.

LipoSculptor™ Extraction Cannulas
- 3mm Multi-Hole
- 3mm Double Mercedes
- 3mm Flared
- 4mm Flared

LipoSculptor™ Feathering Cannulas
- 3mm Tri-Port IV
- 3.6mm Tri-Port IV
- 3.6mm Offset Double Mercedes
- 4mm Offset Double Mercedes

Lipoplasty in sensitive areas such as the back.
- Ideal for gynecomastia.
- Good for majority of cases.
- Multi-Hole Mercedes
- 360° of extraction.
- More aggressive.
- Good overall general-use cannula.
- Good for fibrous tissue and large-volume extraction.

Helixed Tri-Port III
- 270° of extraction.
- Aggressive cannula for high-fibrous areas.
- Ideal for feathering because of minimal volume.
- Small hole size.
- Similar to Vaser® high-def cannulas.

Tri-Port II
- 270° of extraction.
- High volume.
- Maximum volume.
- 90° of extraction.
- Moderate volume.

Mirrored Tri-Port II
- 270° of extraction.
- Maximum volume.

Tri-Port IV
- 270° of extraction.
- Ideal for feathering because of minimal volume.

Tri-Port III
- 360° of extraction.
- Good for majority of cases.

SPATULA
- 3mm Flared Mercedes
- Ideal for fine sculpting and feathering.
- Excellent for removing emulsified fat.
- Well suited for lipoplasty in sensitive areas.

Tri-Port IV
- 270° of extraction.
- Aggressive cannula providing maximum extraction.

Single-Port
- 360° of extraction.
- Ideal for fine sculpting and feathering.
- Excellent for removing emulsified fat.
- Sharp, tapering end.

3mm Tri-Port IV
- 3.6mm Tri-Port IV
- 3.6mm Offset Double Mercedes
- 4mm Offset Double Mercedes

3mm Flared
- Ideal for fine sculpting and feathering.
- Excellent for removing emulsified fat.
- Sharp, tapering end.

3mm Tri-Port III
- 90° of extraction.
- Very aggressive.

3mm Tri-Port IV
- 90° of extraction.
- Good for majority of cases.

3mm Offset Mercedes
- Moderate volume.
- Good for majority of cases.
- Low profile, low profile.

3mm Flared
- Ideal for fine sculpting and feathering.
- Excellent for removing emulsified fat.
- Sharp, tapering end.

3mm Tri-Port I
- 90° of extraction.
- Good for majority of cases.

3mm Tri-Port II
- 90° of extraction.
- Moderate volume.

3mm Tri-Port III
- 90° of extraction.
- Good for majority of cases.

3mm Tri-Port IV
- 90° of extraction.
- Good for majority of cases.

3mm Tri-Port V
- 90° of extraction.
- Good for majority of cases.

3mm Tri-Port VI
- 90° of extraction.
- Good for majority of cases.

3mm Tri-Port VII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port III
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port IV
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port V
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port VI
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port VII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port VIII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port IX
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port X
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XI
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XIII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XIV
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XV
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XVI
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XVII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XVIII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XIX
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XX
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XXI
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XXII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XXIII
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XXIV
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XXV
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XXVI
- 90° of extraction.
- Good for majority of cases.

5mm Tri-Port XXVII
- 90° of extraction.
- Good for majority of cases.
LipoSculpt™ 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 multiple cannula varieties, based on recommendations from surgeons.

Mercedes

The best overall, general-use LipoSculpt™ cannulas. Ranging from non-aggressive sculpting and extraction cannulas, to aggressive port sizes that are well-suited for large volume extraction and fibrous areas.

Tri-Port
LipoSculpt™ Tri-Port cannulas are designed with all ports on one side of the cannula. Ports can be directed away from the skin to prevent surface irregularities. This also provides better control when shaping and sculpting, yet cannulas are still optimal for large-volume extraction and debubbling.

Tri-Port II
270° of extraction. High volume.

Mirror Tri-Port II
270° of extraction. Maximum volume.

Tri-Port III
90° of extraction. Moderate volume.

Helixed Tri-Port III
270° of extraction. Aggressive cannula for high fibrous areas. Ideal for gynecomastia cases.

Tri-Port IV
270° of extraction. Ideal for feathering because of minimal volume. Small hole size. Similar to Vaser® high def cannulas.

Multi-Port
60° of extraction. Ideal for fine sculpting and feathering. Excellent for removing emulsified fat after laser or ultrasonic procedures. Well suited for liposuction of the neck and back.

Single-Port
90° of extraction. The Single-Port is a shorter non-aggressive cannula with a blunt tip that makes it safer to use in small regions such as the neck, and its delicate areas such as the back.

Spatula
90° of extraction. The Spatula is a shorter non-aggressive cannula with a blunt tip that makes it safer to use in small regions such as the neck, and its delicate areas such as the back.

Flared Mercedes
360° of extraction. Aggressive, high volume cannula, ideal for debubbling, separation, dissection and pre-tunneling.

Flared Mercedes
360° of extraction. More aggressive, best used for contouring and sculpting. This is the cannula that received unbiased acclaim from surgeon-speakers during the recent ASPS and ASAPS annual meetings.

3.6mm Flared Mercedes
4mm Flared Mercedes
3mm Multi-Hole
3mm Multi-Hole
3mm Offset Double Mercedes
3mm Flared
4mm Flared
3mm Flared
3mm Offset Double Mercedes
3mm Flared
4mm Offset Double Mercedes

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Length</th>
<th>Part No.</th>
<th>USABLE PORT</th>
<th>SINGLE USE PORT</th>
<th>MULTI-USE PORT</th>
<th>TURBO PORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4mm</td>
<td>15cm</td>
<td>PAL-240LM</td>
<td>-240LM</td>
<td>-240S2</td>
<td>-240LL</td>
<td>-240S1</td>
</tr>
<tr>
<td>3mm</td>
<td>15cm</td>
<td>PAL-300LS</td>
<td>-300LS</td>
<td>-300MLM</td>
<td>-300MLS</td>
<td>-300MLL</td>
</tr>
<tr>
<td>4mm</td>
<td>15cm</td>
<td>PAL-400LM</td>
<td>-400LM</td>
<td>-400S2</td>
<td>-400LL</td>
<td>-400S1</td>
</tr>
<tr>
<td>4mm</td>
<td>22cm</td>
<td>PAL-404LS</td>
<td>-404LS</td>
<td>-404LS</td>
<td>-404LL</td>
<td>-404XL</td>
</tr>
<tr>
<td>5mm</td>
<td>15cm</td>
<td>PAL-500LS</td>
<td>-500LS</td>
<td>-500MLM</td>
<td>-500MLS</td>
<td>-500MLL</td>
</tr>
</tbody>
</table>
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2mm reciprocating stroke at 4000 cycles per minute
- Thumb-controlled speed throttle on handpiece
- Powered by a stand-alone electric console
- Special suction pumps are not necessary
- Autoclavable Instrument and electric cable
- High-grade stainless steel cannulas manufactured in the U.S.

An ergonomic manual handpiece for sensitive areas such as the neck and back. Compatible with all LipoSculptor™ cannulas.

Components are autoclavable

Turbo Cannulas
- Provides significant increase in aspirant removal rate compared to standard cannulas.
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