AtRactor
Coronary Surgery

One Retractor for all Open Heart Operations

- **V-shaped retractor arms** provides improved view of the operating field
- **Suture Holder inserts** enable an organized and simple fixation of the sutures
- Compatible with other devices (e.g. OPCAB stabilizer)
- **Rotating blades** are flexible and conform to the changing dimensions of the ribs during the opening process of the retractor - reduces trauma to the patient through unique atraumatic design

**FC510R**
AtRactor IMA Set Complete

- **Atraumatic IMA Preparation** – Transfer of force from patient’s sternum to OR table reduces the possibility of rib fracture
- **Improved exposure** of the internal mammary artery due to increased angle
Heart Valve Surgery

FC500R
AtRactor Retraction System Basic Set

- Compatible with the Heart XS Accessories (Atrium & Valve Hooks)
- Accessories for heart valve operations can be fixed in any position along the lateral arms
The computer simulation shows the V-shaped opening of the sternum created by the AtRactor causes less stress on the ribs and is therefore less traumatic for the patient than opening the sternum with standard retractors, which opens the sternum in a parallel manner.

The red color indicates the areas in which a pressure of 24 PSi is reached. The grey areas are those in which there is excessive pressure beyond 24 PSi. These are the areas in which a fracture is highly likely to occur. When a standard retractor is used, this pressure predominantly affects the first two ribs. With the AtRactor, used in combination with the flexible blades, no grey area can be seen in the computer simulation.

* Internal data produced by Prof. Dr. Ing. habil. Carsten Könke
The compatible AtRactor retraction system offers an innovative solution for all open heart surgeries from sternotomy to mammary exposure – for every surgeon. Due to the postoperative risks which can occur especially after sternotomy in the upper rib area, the V-shaped exposition, which is less traumatic for the ribs, should be highlighted.

In addition, flexible retractor blades enable a considerable improvement to the view of the operating field. A specific feature is the gentle Mammary-Lift, which is due to the transfer of the pressure from the sternum bone to the OR table - less traumatic for the patient in comparison to conventional Mammary Retractors.

Associate Professor Dr. med. Omer Dzemali
Senior Consultant Cardiac Surgery
Stadtspital Triemli, Zurich

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AtRactor
Basic Set and Accessories

Basic Set Complete

**FC500R**

AtRactor Retraction System Basic Set
Set consisting of:
- 1 x FC501R  AtRactor Retractor Frame
- 4 x FC502R  AtRactor Swiveling Blades, Straight, 30 x 28 mm
- 4 x FC503R  AtRactor Swiveling Blades, Straight, 40 x 28 mm
- 4 x FC504R  AtRactor Swiveling Blades, Curved, 30 x 28 mm
- 4 x FC505R  AtRactor Swiveling Blades, Curved, 40 x 28 mm

Interchangeable Blades (Depth and Width), (sold individually)

**FC502R**
30 x 28 mm  
AtRactor Swiveling Blade, Straight

**FC503R**
40 x 28 mm  
AtRactor Swiveling Blade, Straight

**FC506R**
50 x 28 mm  
AtRactor Swiveling Blade, Straight
AtRactor (Frame)

**FC501R**
AtRactor Retractor Frame Only

<table>
<thead>
<tr>
<th>Ratchet Bar</th>
<th>Arm Length</th>
<th>Max. Opening</th>
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<tbody>
<tr>
<td>7½” (190 mm)</td>
<td>9¾” (245 mm)</td>
<td>7¾” (195 mm)</td>
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**FC504R**
30 x 28 mm
AtRactor Swiveling Blade, Curved

**FC505R**
40 x 28 mm
AtRactor Swiveling Blade, Curved

**FC507R**
50 x 28 mm
AtRactor Swiveling Blade, Curved
AtRactor IMA Set Complete

Set consisting of:
1 x FC500R AtRactor Retraction System Basis Set
1 x FC511R AtRactor Mammary Retraction System
2 x FC512R AtRactor Connection Clamp for FC511R
Sample Configuration

1 x FC501R   AtRactor Retractor Frame Only
4 x FC504R   AtRactor Swiveling Blades, Curved
2 x FC138R   Connecting Clamp for Accessories
1 x FC124R   Deaver Valve Hook
1 x FC126R   COOLEY Atrium Retractor
1 x FC135SU  Single Use Suture Holder Instruments
Optional Accessories

**Heart XS Malleable Valve Hook**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Length</th>
<th>Width</th>
<th>Total length</th>
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<tbody>
<tr>
<td>FC121R</td>
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<td>18 mm</td>
<td>10” (250 mm)</td>
</tr>
<tr>
<td>FC122R</td>
<td>95 mm</td>
<td>18 mm</td>
<td>11” (280 mm)</td>
</tr>
<tr>
<td>FC123R</td>
<td>95 mm</td>
<td>22 mm</td>
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**Heart XS Malleable Deaver Valve Hook**

<table>
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<tr>
<td>FC124R</td>
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**Heart XS COOLEY Atrium Retractor, Shaft: Rigid**

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<tr>
<td>FC126R</td>
<td>60 mm</td>
<td>35 mm</td>
<td>10” (250 mm)</td>
</tr>
<tr>
<td>FC127R</td>
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<td>45 mm</td>
<td>10” (250 mm)</td>
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**Single Use Suture Holder Inserts**

<table>
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<th>Item No.</th>
<th>Length</th>
<th>Width</th>
<th>Total length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC135SU</td>
<td>60 mm</td>
<td>20 mm</td>
<td>10” (250 mm)</td>
</tr>
</tbody>
</table>

1 box FC135SU: 10 Packs of 2, Sterile Units