Hemashield
Collagen coated vascular grafts and patches

HEMASHIELD grafts have been sold over 2 million times worldwide.\(^1\) Constructed from fabric that is knitted or woven from polyethylene terephthalate yarn, the HEMASHIELD grafts and patches are impregnated with a highly purified bovine collagen which minimizes bleeding at implant and eliminates the operative preclotting step.\(^2,3,5\) In addition, the collagen is gradually resorbed by the patient.\(^2,3,5\) Research also demonstrates low immunogenic potential of the bovine collagen used in the HEMASHIELD prostheses, both short and long-term.\(^4,5\) The collagen coating improves the healing properties compared with other sealants. HEMASHIELD grafts show a thinnest inner capsule and tend to show more complete tissue ingrowth at 6 months as compared to competitive gelatin grafts in a porcine model.\(^3\)

The velour design increases the availability of graft surface to promote tissue integration and the crimping on the grafts offer some flexibility in length for easier suturing at the time of implant.\(^7\) The HEMASHIELD products are magnetic resonance safe\(^8\) and offer high patency rates.\(^6\)

The HEMASHIELD Vascular Grafts are indicated for use in the treatment of aneurysmal or occlusive diseases. HEMASHIELD Woven/ Knitted Double Velour Cardiovascular Fabrics / HEMASHIELD PLATINUM FINESSE Ultra-Thin Knitted Cardiovascular Patches are indicated for closure of vessels in the treatment of atherosclerotic diseases including carotid artery stenosis.

*non-exhaustive and non-contractual illustrations*
HEMASHIELD GOLD Knitted Microvel Double Velour Vascular Grafts
Intended for use in the replacement or repair of the abdominal aorta and peripheral arteries, when open surgical operation is required.

The warp knitting technique used for the graft construction resists unraveling.9,10

- Straight
- Bifurcated
- Axillo-bifemoral

HEMASHIELD PLATINUM Woven Double Velour Vascular Grafts
Intended for use in the replacement or repair of the thoracic aorta, abdominal aorta and peripheral arteries, when open surgical operation is required.

- Straight
- Bifurcated
- 1 Branch
- 3 Branch
- 4 Branch - HEMASHIELD PLATINUM Woven with pre-sewn 4 branches designed for total aortic arch replacement allows short period of circulatory arrest of the brain.11
- Angled 4 Branch
- Thoracoabdominal

HEMASHIELD Knitted Double Velour Cardiovascular Fabrics
Intended for vascular patch angioplasty, including carotid endarterectomy, when open surgical operation is required.

HEMASHIELD Woven Double Velour Cardiovascular Fabrics
Intended for vascular patch angioplasty, including carotid endarterectomy, when open surgical operation is required.

HEMASHIELD PLATINUM FINESSE Ultra-Thin Knitted Cardiovascular Patch
Intended for vascular patch angioplasty, including carotid endarterectomy, when open surgical operation is required.

References:
5. The Human Immune Response to Bovine Types I and III Collagen and the effect of formaldehyde crosslinking – Preclinical study
CARDIOROOT
THE INNOVATIVE AORTIC ROOT GRAFT

The innovative one piece-design collagen-coated CARDIOROOT graft delivers a new option for the repair or reconstruction of the ascending aorta. The unique design of CARDIOROOT mimics the anatomy and blood flow dynamics of the natural sinuses of Valsalva.

Expect the same high quality offered by MAQUET - Market leader in Thoracic grafts

- Anatomically correct shape
- Unique uncrimped section that does not stretch:
  - allows easy sewing of valve remnants, or prosthetic valve within the tube, avoiding potential bleeding and shortening the procedure
  - facilitates estimation of the length required for optimal placement of valve remnants or prosthetic valve to ensure optimal clinical outcomes
  - can be precisely trimmed and shaped in case of remodeling technique procedures.
- Outstanding handling and suturability
- 3 References lines acting as a guide for prosthetic valve or valve remnants anastomosis.

**PHYSICAL PROPERTIES**

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<th>Woven</th>
<th>Coated polyester fabric</th>
<th>Cross-linked Type I bovine collagen</th>
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<tbody>
<tr>
<td>Construction</td>
<td>Woven</td>
<td>Water permeability</td>
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**PRODUCT INFORMATION**

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<tr>
<th>Body Diameter</th>
<th>Body Length</th>
<th>Bulb Diameter</th>
<th>Bulb Length</th>
<th>Collar Length</th>
<th>References</th>
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