

Hybrid-Mesh HM CAST

Next Generation Orthopedic Cast



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HM SPLINT



HM CASTING TAPE

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◆ History

- 2001 06 Establishment of New Cast Industry corporation
12 Registered in U.S FDA
- 2003 07 Received US Patent
12 Factory built at Seohari Duseomyun Un-yang up Uljugun Ulsan City
- 2004 10 Obtained CE approval (British FDA)
12 Quality Management System Certification (certified by ISO13485:2000)
- 2014 03 Factory built at Cheoyongsanup 5Gil Cheongryangmyun Unjugun Ulsan
- 2015 10 Applied for skin protector design
12 Awarded Export Tower Reward at 52nd of The day of Trade
- 2016 06 Registration of skin protection design patent
07 Registered as a middle sized company with great export potential
08 Registered as venture company
- 2017 01 Awarded Korea Frontier Management
04 Establish a research institute
04 ISO13485:2003 renewal
10 Australia TGA Registration
- 2018 05 Quality Management System Certification (ISO13485:2016)

◆ Certification



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▶ **Plaster bandage**
It is heavy and stuffy.





▶ **Fiberglass / Polyester Cast**
It is lighter than plaster bandage, but hard to ventilate.




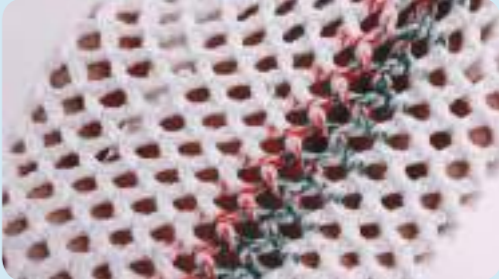
▶ **HM CAST**
It is light, well-ventilated, and allows user to get its cast wet. (except with external wounds)

◆ Comparison of conventional cast vs. HM CAST

Conventional Cast

Cotton bandage used in combination with conventional cast provides poor or no ventilation, causing unsanitary conditions inside the cast like decay, foul odor and itching. When conventional cast is exposed to moisture for extended period, skin irritation or maceration occurs.

HM CAST

HM Cast's skin protector is made of polypropylene material instead of cotton. Polyolefin is waterrepellent and dry-able fabric.

Hybrid-Mesh HM CAST

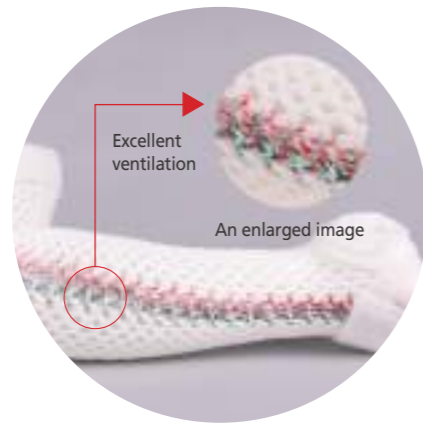
Next Generation Orthopedic Cast



◆ Features and Advantages of HM CAST



HM Cast is a next generation of cast utilizing stocking type application method.



HM Cast is superior in ventilation.



HM Cast is wet-able and shower-able cast.

◆ Specification

Product Code	HS Code	Description (Width x Length)	Piece / Box	Box Size (mm)
HMC225, HMC225(T)	9021.10	2Inch X 25cm	5	355 X 140 X 105
HMC245		2Inch X 45cm	5	550 X 140 X 105
HMC335, HMC335(T)		3Inch X 35cm	5	455 X 140 X 105
HMC350		3Inch X 50cm	5	600 X 160 X 105
HMC370		3Inch X 70cm	5	430 X 160 X 170
HMC435, HMC435(T)		4Inch X 35cm	5	455 X 185 X 120
HMC455		4Inch X 55cm	5	655 X 185 X 130
HMC490		4Inch X 90cm	5	505 X 185 X 205
HMC555		5Inch X 55cm	5	655 X 185 X 120
HMC590		5Inch X 90cm	5	505 X 185 X 220

* (T) is a product with a thumb on the skin protection pad.

Ventilation



HM Cast is made of polyester fabrics and is specially woven so that it creates an air layer, thus minimizing itching and odor significantly. HM Cast's skin protector can easily be dried after shower with good ventilation and body heat.



Ease of Application

HM Cast is easily applied like wearing a sock or stocking. Its elasticity makes it conform to the contour of each patient's body without the risk of pressure point.



X-ray Penetration

HM Cast has good X-ray penetration which enables checking of fine synostosis progress.



Lightness

HM Cast's unique skin protector using a special material create an air layer enabling an easy absorption and excretion of water. Completed HM cast is 30% lighter than other conventional casts.



Customizable

HM Cast can be made in custom color or design.



Eco-friendliness

HM Cast is disposable as it is made of poly cotton fabrics.

◆ HM CAST Application Precautions

1. Wear exam gloves.
2. Do not use hot water above 30°C.
3. Do not immerse in water for too long.
(If dipped in water longer than 10 seconds, HM Cast may get hardened too fast to complete the applications.)
4. After soaking cotton yarn in water do not twist it. (it may cause faster reaction and bubbles.)
5. Polyurethane resin may cause the reaction temperature to reach up to 42°C briefly.
6. If you have symptoms such as a rash or itching, consult your doctor.

◆ Storage Precautions

1. Prevent any damages, i.e. scratches and puncture, on the protective aluminum foil package.
Small hole may trigger the hardening reaction, making HM CAST unusable.
2. Avoid direct sunlight and store in cool, dry place (15°C~30°C)
3. Store HM CAST horizontally on a flat surface. Storing HM CAST sideways or vertically for extended period may cause the resin to migrate.



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◆ HM CAST Procedure

Photos of HM CAST application Short Arm



1 Roll the skin protector like a donut, place it on the fingertips and pull it up.



2 Applied skin protector.
An operator uses latex gloves.



3 Take HM Cast out of packing paper and roll it in donut shape. Cut parts of the cast if fixing the thumb.



4 Dip it in the water for 3 to 5 seconds, and gently shake couple times it out once or twice.
Water moderate temp : (20°C~25°C)



5 Leave about 3cm on the ends of the skin protector (This is for the easy completion of folding the protector on the ends after treatment) on the thumb part, roll the sectioned cast and fold up the protector to fix it.



6 Unroll and raise the cast to the end, and then fold the end of the skin protector for the finish.



7 When doing molding, rub the cast with lightly moistened palms to make the cast fit and hard.



8 **Completed HM CAST.**
(The cast gets solid and able to fix well after 10-15 minutes.)

* Visit www.newcast.co.kr for more information on procedure.

◆ HM CAST Procedure

Photos of HM CAST application Short Leg



1 Roll the skin protector in donut shape, place it on the toes and un-roll it.
An operator uses latex gloves.



2 State of the skin protector applied.
An operator uses latex gloves.



3 Take a cast out of packing paper and roll it into a donut shape.



4 Dip it in the water for 3 to 5 seconds, and gently shake couple times it out once or twice.
Water moderate temp : (20°C~25°C)



5 Leave about 3cm (~1 inch) on the ends of the skin protector (This is for the easy completion of folding the protector on the ends after treatment) and put on the cast over the protector and pull it up.



6 Fold the both ends of the rotector to wrap the cast up and mold it. When doing molding, rub the cast with lightly moistened palms to make the cast fit and hard.



7 **Completed HM CAST.**
(The cast gets solid and able to fix well after 10-15 minutes.)



8 **Sample HM Cast Application**

* Visit www.newcast.co.kr for more information on procedure.

◆ Various procedures cases of the HM CAST

- Introduce product and demonstration (KLFY-TV)



- Cases of American patient procedure (6abc Action News)



- Cases of finger fractures



- Using The HM CAST and Medical Devices



- Cases of spine correction



- Cases of Korean patient procedure (SEN TV)



Hybrid-Mesh HM SPLIT

◆ Features and Advantages of HM SPLIT



Strength

HM SPLIT Uses a special cotton based elastic fabric, allowing perfect fit on curved parts with proper hardness.



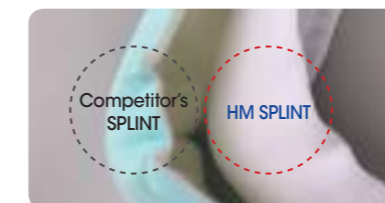
Ease of Application

HM SPLIT has smoother surface than conventional fiberglass splints and is superior in correcting broken bones. HM SPLIT is especially effective when fastening winding parts.



Protection of Injury

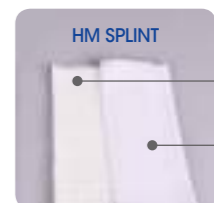
HM SPLIT's elasticity creates a perfect elliptic shape on folded parts, preventing injury from friction. Unlike fiberglass splint with sharp edges which cause cuts on both patients and operators skin, the edges on HM SPLIT are protected on both ends.



HM SPLIT is a product of high degree of elasticity and has a small part folded when having a procedure.



Competitor's SPLIT
External non-woven fabric + Internal non-woven fabric = Low elasticity



HM SPLIT
Internal polyester + External polar fleece = High elasticity

◆ Specification

Product Code	HS Code	Description (Width x Length)	Piece / Box	Box Size (mm)
HMS330	9021.10	3Inch X 30cm	10	410 X 165 X 125
HMS388		3Inch X 88cm	5	510 X 165 X 110
HMS438		4Inch X 38cm	10	490 X 190 X 125
HMS476		4Inch X 76cm	5	450 X 190 X 160
HMS576		5Inch X 76cm	5	450 X 210 X 160
HMS5114		5Inch X 114cm	5	400 X 225 X 220
HMS3450		3Inch X 450cm	1	400 X 175 X 150
HMS4450		4Inch X 450cm	1	400 X 200 X 150
HMS450		5Inch X 450cm	1	400 X 225 X 150



◆ HM SPLINT Procedure

Short Arm Splint



1 Soak the released HM SPLINT in Water for 5-7 Seconds. Water moderate temp. (20°C-25°C)



2 Lightly squeeze the HM SPLINT out of the water 2 to 3 times.



3 Lightly remove the remaining moisture from the HM SPLINT with a dry towel.



4 Put the HM SPLINT pad on an affected area and roll bandage onto it.



5 The HM SPLINT procedure is completed by positioning it to the affected location. (The cast gets solid and able to fix well after 10-15 minutes.)



* Prevent any damages, i.e. scratch and puncture, on the protective aluminum foil package. Small hole may trigger the hardening reaction, making HM SPLINT unusable.

* Avoid direct sunlight and store in cool, dry place (15°C-30°C)

* Store HM SPLINT horizontally on a flat surface. Storing HM SPLINT sideways or vertically for extended period may cause the resin to migrate.

* Wear regular exam gloves before handling HM SPLINT.

* Visit www.newcast.co.kr for more information on procedure.