



NGage[®] Surgical Mesh System

OPERATIVE TECHNIQUE



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The surgical technique shown is for illustrative purposes only. The technique(s) actually employed in each case will always depend upon the medical judgment of the surgeon exercised before and during surgery as to the best mode of treatment for each patient. Please see Instructions for Use for the complete list of indications, warnings, precautions, and other important medical information.

INTRODUCTION

Key Features

- Mesh body made of 1mm thick commercially pure titanium
- End caps and standard rings made of titanium alloy
- Diamond shape cutouts guide the trimming process
- Spiked end caps NGage end plates
- End caps in 0, 2.5 and 5 degree configurations



Surgical Mesh





6-Lobe NGage Surgical Mesh at T8 -T9.



4-Lobe NGage Surgical Mesh Sizing Chart

Size	Mesh Length	Mesh Length	Mesh Length	Mesh Length
	(no end caps)	(two O deg. end caps)	(0 deg.+ 2.5 deg. end caps)	(two 2.5 deg. end caps)
10mm x 10mm	7mm	10mm	10.5mm	11mm
	10mm	13mm	13.5mm	14mm
	15mm	18mm	18.5mm	19mm
	30mm	33mm	33.5mm	34mm
12mm x 12mm	8mm	11mm	11.5mm	12mm
	10mm	13mm	13.5mm	14mm
	12mm	15mm	15.5mm	16mm
	16mm	19mm	19.5mm	20mm
	30mm	33mm	33.5mm	34mm
14mm x 14mm	9mm	12mm	12.5mm	13mm
	13mm	16mm	16.5mm	17mm
	15mm	18mm	18.5mm	19mm
	17mm	20mm	20.5mm	21mm
	30mm	33mm	33.5mm	34mm
	50mm	53mm	53.5mm	54mm
16mm x 16mm	10mm	13mm	13.5mm	14mm
	15mm	18mm	18.5mm	19mm
	50mm	53mm	53.5mm	54mm
	70mm	73mm	73.5mm	74mm

End Caps – 0 degree and 2.5 degree Each 0 degree end cap adds 1.5 mm in length Each 2.5 degree end cap adds in length Mesh wall thickness = 1mm

6-Lobe NGage Surgical Mesh Sizing Chart

Size	Mesh Length	Mesh Length	Mesh Length	Mesh Length
	(no end caps)	(two O deg. end caps)	(0 deg.+ 5 deg. end caps)	(two 5 deg.end caps)
12mm x 15mm	8mm	11mm	12mm	13mm
	12mm	15mm	16mm	17mm
	13mm	16mm	17mm	18mm
	16mm	19mm	20mm	21mm
	17mm	20mm	21mm	22mm
13mm x 17mm	9mm	12mm	31mm	14mm
	10mm	13mm	14mm	15mm
	13mm	16mm	17mm	18mm
	15mm	18mm	19mm	20mm
	20mm	23mm	24mm	25mm
17mm x 22mm	10mm	13mm	14.5mm	16mm
	15mm	18mm	19.5mm	21mm
	70mm	73mm	74.5mm	76mm
	90mm	93mm	94.5mm	96mm
22mm x 28mm	10mm	13mm	15mm	17mm
	15mm	18mm	20mm	22mm
	70mm	73mm	75mm	77mm
	90mm	93mm	95mm	97mm
26mm x 33mm 26 33	10mm 15mm 70mm 90mm	13mm 18mm 73mm 93mm	15.5mm 20.5mm 75.5mm 95.5mm	18mm 23mm 78mm 98mm

End Caps – 0 degree and 5 degree Each 0 degree end cap adds 1.5 mm in length Each 5 degree end cap varies in length. For sizes, see chart Mesh wall thickness = 1mm

1. Site Preparation

Resect the affected vertebral bodies and adjacent disc material. Roughen the end plates using the rasp. With the caliper determine the desired mesh construct length.



2. Mesh Sizing

Trim the mesh body taking into account additional length for each end cap used. The total length of the mesh construct can be determined using the sizing charts on pages 4 and 5.



3. Mesh Assembly

After the mesh body has been cut to the desired length the ends can be further formed using the bending pliers. This will facilitate assembly of the end caps to the mesh body. Pack the mesh body with graft material and assemble the end caps in place using finger pressure or a mallet.



3. 6-Lobe Mesh Assembly

For longer constructs it may be necessary to pre-assemble a standard ring to the inner center of the mesh body. Secure each of the standard ring screws to the body and pack with graft material. Finally, assemble the end caps.



4. Mesh Insertion

The construct is positioned using a mesh holder and is inserted using an impactor. Graft material is implanted aroung the mesh construct to complete the procedure.





NGage Surgical Mesh Implants

4 Lobe		6 Lobe	
Catalog No.	Description	Catalog No.	Description
10mm x 10mm 74-1007 74-1010 74-1015 74-1030 74-5010 74-6010	Surgical Mesh, 4 lobe, 7 mm height Surgical Mesh, 4 lobe, 10 mm height Surgical Mesh, 4 lobe, 15 mm height Surgical Mesh, 4 lobe, 30 mm height End Caps, 0 degree, 10mm End Caps, 2.5 degree, 10 mm	12mm x 15mm 76-1208 76-1212 76-1213 76-1216 76-1217 76-5012 76-6012 76-7012	Surgical Mesh, 6 lobe, 8 mm height Surgical Mesh, 6 lobe, 12 mm height Surgical Mesh, 6 lobe, 13 mm height Surgical Mesh, 6 lobe, 16 mm height Surgical Mesh, 6 lobe, 17 mm height End Caps, 0 degree End Caps, 5 degrees Standard Ring
74-1208 74-1210 74-1212 74-1216 74-1230 74-5012 74-6012	Surgical Mesh, 4 lobe, 8 mm height Surgical Mesh, 4 lobe, 10 mm height Surgical Mesh, 4 lobe, 12 mm height Surgical Mesh, 4 lobe, 16 mm height Surgical Mesh, 4 lobe, 30 mm height End Caps, 0 degree, 12 mm End Caps, 2.5 degree, 12mm	13mm x 17mm 76-1309 76-1310 76-1313 76-1315 76-1320	Surgical Mesh, 6 lobe, 9 mm height Surgical Mesh, 6 lobe, 10 mm height Surgical Mesh, 6 lobe, 13 mm height Surgical Mesh, 6 lobe, 15 mm height Surgical Mesh, 6 lobe, 20, mm height
<mark>14mm x 14mm</mark> 74-1409 74-1413	Surgical Mesh, 4 lobe, 9 mm height Surgical Mesh, 4 lobe, 13 mm height	76-5013 76-6013 76-7013	End Caps, 0 Degree End Caps, 5 Degrees Standard Ring
74-1415 74-1417 74-1430 74-1450 74-5014 74-6014	Surgical Mesh, 4 lobe, 15 mm height Surgical Mesh, 4 lobe, 17 mm height Surgical Mesh, 4 lobe, 30 mm height Surgical Mesh, 4 lobe, 50 mm height End Caps, 0 degree, 14 mm End Caps, 2.5 degree, 14 mm	17mm x 22mm 76-1710 76-1715 76-1770 76-1790 76-5017 76-6017	Surgical Mesh, 6 lobe, 10 mm height Surgical Mesh, 6 lobe, 15 mm height Surgical Mesh, 6 lobe, 70 mm height Surgical Mesh, 6 lobe, 90 mm height End Caps, 0 degree End Caps, 5 degrees
16mm x 16mm 74-1610 74-1615 74-1650 74-1670 74-5016 74-6016	Surgical Mesh, 4 lobe, 10 mm height Surgical Mesh, 4 lobe, 15 mm height Surgical Mesh, 4 lobe, 50 mm height Surgical Mesh, 4 lobe, 70 mm height End Caps, 0 degree, 16 mm End Caps, 2.5 degree, 16 mm	76-7017 22mm x 28mm 76-2210 76-2215 76-2270 76-2290 76-5022 76-6022 76-7022	Standard Ring Surgical Mesh, 6 lobe, 10 mm height Surgical Mesh, 6 lobe, 15 mm height Surgical Mesh, 6 lobe, 70 mm height Surgical Mesh, 6 lobe, 90 mm height End Caps, 0 degree End Caps, 5 degrees Standard Ring
		26mm x 33mm 76-2610 76-2615 76-2670 76-2690 76-5026	Surgical Mesh, 6 lobe, 10mm height Surgical Mesh, 6 lobe, 15mm height Surgical Mesh, 6 lobe, 70mm height Surgical Mesh, 6 lobe, 90mm height End Caps, 0 degree

76-6026

76-7026

76-7001

End Caps, 5 degrees

Standard Ring Standard Ring Screw

NGage Surgical Mesh Instrumentation









Trimmers

Vertebral Body Distractor

Rasp

Holders



Impactors

NGage Surgical Mesh Implants



Middle Tray

Catalog No.	Description
Middle Tray	

/4-0040	Mini Hex Driver
74-0060	Distractor
74-0061	Distractor Jaws, right, 5-63mm
74-0062	Distractor Jaws, left, 5-63mm
74-0063	Distractor Jaws, right, 60-98mm
74-0064	Distractor Jaws, left, 60-98mm
74-0010	Mesh Holder, Straight Small
74-0012	Mesh Holder, Angled Small
74-0014	Mesh Holder, Straight Large
74-0016	Mesh Holder, Angled Large
74-0070	Caliper
74-0055	Rasp

4 Lobe Implant Tray



NGage Surgical Mesh InstrumentS



Bottom Tray

Catalog No. Description Bottom Tray

74-0020	Mesh Trimmer, Straight
74-0022	Mesh Trimmer, 90 Degree Cut
74-0030	Mesh Impactor, Straight
74-0032	Mesh Impactor, Up Angled Mesh
74-0034	Impactor, Side Angled Mesh
74-0036	Impactor, Wave, Straight Mesh
74-0038	Impactor, Wave, Angled Bending
74-0045	Pliers
74-0050	Mallet

6 Lobe Implant Tray



Please visit <u>Orthofix.com/IFU</u> for full information on indications for use, contraindications, warnings, precautions, adverse reactions and sterilization.

Caution: Federal law (USA) restricts this device to sale by or on the order of a physician. Proper surgical procedure is the responsibility of the medical professional. Operative techniques are furnished as an informative guideline. Each surgeon must evaluate the appropriateness of a technique based on his or her personal medical credentials and experience.



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