

(A Government of Kerala Undertaking) Thycaud P.O, Thiruvananthapuram - 14, Kerala. Tel: 0471 - 2945600, 2337353, Fax: 0471 - 2945647 Email :ep.kmscl@kerala.gov.in CIN: U24233KL200TSGC021616, PAN : AADCK4029M, GSTIN : 32AADCK4029M1ZK

	Running Contract Details
Equipment Name	Spinal Endoscopy
Running Contract Valid Till	19-12-2024
Tender Ref No	KMSCL/EP/T473(R)/1368/2022
Tendered Quantity	10
Supplier Name	M/s Lakshmi Neurospine Technologies
GST No	32AAHFL1631P1Z9
Installation & Delivery Period	8 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Su	pplier`s Details	
Address		Contact Details
Door No.235 3rd Floor	Contact Person	Santhosh Mechery
Address	Phone	0484-4863322
	Mobile No	9962541273
	Email	neurospinetech2017@gmail.com,sales@lnst med.com

	Item-v	vise Price Details		
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	1368 & Spinal Endoscopy (Joimax/ Joimax Germany) Model & Make : JOIMAX/ Joimax Germany	O Incl.GST :0%	0	0
2	"Interlaminar Endoscope -Outer diameter of 10 mm Working length of 125 mm including all accessories mentioned in the specifications (Except below items)" - Joimax/ Joimax Germany	851200 Incl.GST :12%	62776	913976
3	"Interlaminar Endoscope-Outer diameter of 7.3mm with working length 150mm including all accessories mentioned in the specifications (Except below items)" - Joimax/ Joimax Germany	884800 Incl.GST :12%	65254	950054

	Item-w	vise Price Details		
4	"Transforaminal Endoscopes - Outer diameter of 6.3 mm , working length (120-260)mm including all accessories mentioned in the specifications (Except below items)" - JoiMax/ Joimax Germany	851200 Incl.GST :12%	62776	913976
5	"Thermocoagulation: Outer diameter 7.5mm including all accessories mentioned in the specifications (Except below items)"	851200 Incl.GST :12%	62776	913976
6	"Camera Control Unit & Camera Head & Light Source as per the specification (Except below items)"	4480000 Incl.GST :12%	330400	4810400
7	"Rercording Device as per the specification (Except below items)"	2195200 Incl.GST :12%	161896	2357096
8	"Multifunctional Drill and Resection System including all accessories mentioned in the specifications (Except below items)"	2240000 Incl.GST :12%	165200	2405200
9	"Radio Frequency system including all accessories mentioned in the specifications (Except below items)"	2464000 Incl.GST :12%	181720	2645720
10	FHD Foraminoscope (3.7 WCh), ocular for Transforaminal approach through Kambin triangle	851200 Incl.GST :12%	62776	913976
11	FHD Laminoscope (6.0 WCh), ocular for Interlaminar Approach	851200 Incl.GST :12%	62776	913976
12	Fibre Optic Cable	50400 Incl.GST :12%	3717	54117
13	Adaptor Light source side	1904 Incl.GST :12%	140.42	2044.42
14	Adaptor Endoscope side	2016 Incl.GST :12%	148.68	2164.68
15	Guiding Rod, blunt, green	16432.5 Incl.GST :5%	1292.69	17725.19
16	Guiding Rod, conical, green	15750 Incl.GST :5%	1239	16989
17	Guiding Rod Forceps	74550 Incl.GST :5%	5864.6	80414.6
18	Guiding Tube, conical, red	16275 Incl.GST :5%	1280.3	17555.3
19	Guiding Tube, conical, yellow	16275 Incl.GST :5%	1280.3	17555.3

	Item-v	vise Price Details		
20	Guiding Tube, conical, green	16275 Incl.GST :5%	1280.3	17555.3
21	Stopper	1575 Incl.GST :5%	123.9	1698.9
22	Silicone Sealing Cap for Luer-Lock, blue	525 Incl.GST :5%	41.3	566.3
23	Scope Working Tube Distance Ring	840 Incl.GST :5%	66.08	906.08
24	Closing Cap for Endoscopes	420 Incl.GST :5%	33.04	453.04
25	Cleaning Wire	420 Incl.GST :5%	33.04	453.04
26	Endo-Flexprobe Handle	89250 Incl.GST :5%	7021	96271
27	Endo-Flexprobe, standard	59850 Incl.GST :5%	4708.2	64558.2
28	Metal Hammer	43470 Incl.GST :5%	3419.64	46889.64
29	Steel Ruler	2887.5 Incl.GST :5%	227.15	3114.65
30	Working Tube with Handle, standard Lip	45150 Incl.GST :5%	3551.8	48701.8
31	Biopsy Forceps, Blakesley	141750 Incl.GST :5%	11151	152901
32	Endo-Kerrison Pistol Handle	141750 Incl.GST :5%	11151	152901
33	Endo-Kerrsion-Shaft use with pistol handle	135450 Incl.GST :5%	10655.4	146105.4
34	Reamer Handle XT, cannulated	90300 Incl.GST :5%	7103.6	97403.6
35	Semi-Flexible Grasper Forceps, curved, up-biting	157500 Incl.GST :5%	12390	169890
36	Biopsy Forceps, Spoon, angled	124950 Incl.GST :5%	9829.4	134779.4
37	Biopsy Forceps, Spoon	124950 Incl.GST :5%	9829.4	134779.4
38	Sterilization Tray Cover	23520 Incl.GST :12%	1734.6	25254.6
39	Sterilization Tray for Instruments	120960 Incl.GST :12%	8920.8	129880.8
40	Sterilization Tray for Instruments Access	120960 Incl.GST :12%	8920.8	129880.8

41 42 43	Norm-Container H 200 mm, blue Disposable Access KIT2,with 3 Reame		96320	)	7103.6	103423.6
	Disposable Access KIT2.with 3 Reame		Incl.GST :12	%	1100.0	100720.0
43		ers	52169. Incl.GST :12		3847.51	56017.11
	Working Tube Shaft, straight 90 $ ilde{A}, \hat{A}^\circ$		1522: Incl.GST :5'		1197.7	16422.7
44	Working Tube Shaft, Standard Lip		1522: Incl.GST :5'		1197.7	16422.7
45	Guiding Tube, conical, yellow		1522: Incl.GST :5'		1197.7	16422.7
46	Dissector		30450 Incl.GST :5'		2395.4	32845.4
47	Palm Handle		90300 Incl.GST :5'		7103.6	97403.6
48	Guiding Tube, conical, violet Guiding Tube, conical, red		36750 Incl.GST :50		2891	39641
49			15750 Incl.GST :5		1239	16989
50	Working Tube, Handle		1417: Incl.GST :5		1115.1	15290.1
51	Working Tube, Adapter		1417: Incl.GST :5		1115.1	15290.1
52	Endo-Kerrison-Shaft		135450 Incl.GST :5'		10655.4	146105.4
53	Spoongrasper Forceps		11917: Incl.GST :5		9375.1	128550.1
54	Hook Punch		13440 Incl.GST :5		10572.8	144972.8
55	Endo Elevator Blund		54127.: Incl.GST :5		4258.03	58385.53
56	Curette WL 200 - 260 MM/ OD 4 - 4.5	MM	36750 Incl.GST :50		2891	39641
57	NiTi Nerve Hook, superelastic		44100 Incl.GST :5		3469.2	47569.2
58	Curette WL 275 - 295 mm OD - 3 - 3.5 MM		36750 Incl.GST :5		2891	39641
			19112872.		1420020.38	20532892.48
		-	e Maintenance Char	-		
Rate	4 <sup>th</sup> Year 5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year

		Annual / C	omprehensive M	aintenance Cha	rges (Exl.Tax)		
AMC	38,000.00	41,800.00	45,980.00	50,578.00	55,635.80	61,199.38	67,319.32
CAMC	91,200.00	1,00,320.00	1,10,352.00	1,21,387.20	1,33,525.92	1,46,878.51	1,61,566.36
"Interlami	inar Endoscope-(		of 7.3mm with we specifications (Ex	~ ~		ll accessories me	ntioned in the
	20 500 00		• · · · · · · · · · · · · · · · · · · ·	-		(2) (15, 15	(0.07(.(7
AMC	39,500.00	43,450.00	47,795.00	52,574.50	57,831.95	63,615.15	69,976.67
CAMC	94,800.00	1,04,280.00	1,14,708.00	1,26,178.80	1,38,796.68	1,52,676.35	1,67,943.99
"Transfora	minal Endoscop		ter of 6.3 mm , w he specifications	0 0 .		iding all accessoi	ries mentioned
AMC	38,000.00	41,800.00	45,980.00	50,578.00	55,635.80	61,199.38	67,319.32
САМС	91,200.00	1,00,320.00	1,10,352.00	1,21,387.20	1,33,525.92	1,46,878.51	1,61,566.36
"Thermoco	"Thermocoagulation: Outer diameter 7.5mm including all accessories mentioned in the specifications (Except below items)"						
AMC	38,000.00	41,800.00	45,980.00	50,578.00	55,635.80	61,199.38	67,319.32
САМС	91,200.00	1,00,320.00	1,10,352.00	1,21,387.20	1,33,525.92	1,46,878.51	1,61,566.36
	"Camera Contro	l Unit & Camera	a Head & Light S	Source as per the	e specification (E	xcept below item	s)''
AMC	2,00,000.00	2,20,000.00	2,42,000.00	2,66,200.00	2,92,820.00	3,22,102.00	3,54,312.20
CAMC	3,60,000.00	3,96,000.00	4,35,600.00	4,79,160.00	5,27,076.00	5,79,783.60	6,37,761.96
		"Rercording D	evice as per the s	pecification (Exc	cept below items)	)''	
AMC	98,000.00	1,07,800.00	1,18,580.00	1,30,438.00	1,43,481.80	1,57,829.98	1,73,612.98
CAMC	1,76,400.00	1,94,040.00	2,13,444.00	2,34,788.40	2,58,267.24	2,84,093.96	3,12,503.36
"Multifuno	ctional Drill and	Resection System	n including all ac	cessories mentio	ned in the specif	ications (Except	below items)''
AMC	1,00,000.00	1,10,000.00	1,21,000.00	1,33,100.00	1,46,410.00	1,61,051.00	1,77,156.10
CAMC	1,80,000.00	1,98,000.00	2,17,800.00	2,39,580.00	2,63,538.00	2,89,891.80	3,18,880.98
	Radio Frequency	y system includin	g all accessories	mentioned in the	e specifications (]	Except below iter	ns)''
AMC	1,10,000.00	1,21,000.00	1,33,100.00	1,46,410.00	1,61,051.00	1,77,156.10	1,94,871.71
CAMC	1,98,000.00	2,17,800.00	2,39,580.00	2,63,538.00	2,89,891.80	3,18,880.98	3,50,769.08
	FHD Forami	noscope (3.7 WC	h), ocular for Tr	ansforaminal ap	proach through	Kambin triangle	
AMC	38,000.00	41,800.00	45,980.00	50,578.00	55,635.80	61,199.38	67,319.32
CAMC	91,200.00	1,00,320.00	1,10,352.00	1,21,387.20	1,33,525.92	1,46,878.51	1,61,566.36
		FHD Laminos	cope (6.0 WCh),	ocular for Interl	aminar Approac	h	
AMC	38,000.00	41,800.00	45,980.00	50,578.00	55,635.80	61,199.38	67,319.32
САМС	91,200.00	1,00,320.00	1,10,352.00	1,21,387.20	1,33,525.92	1,46,878.51	1,61,566.36

# **Other terms & conditions**

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).

2. The supplier shall submit performance security amounting to 5.00% of the value of the supply order.

3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.

4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).

5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

## **Technical Specification**

#### Equipment :1368 & Spinal Endoscopy (Joimax/ Joimax Germany)

## I. <u>Spine Endoscopy</u>

Endoscope: Scopes available for Interlaminar, Transforaminal and Pain Management. Scopes should be in angulation of  $15^{\circ}$  and  $30^{\circ}$  both in Combo mode and Occular mode.

- 1. Endoscope for Interlaminar has Outer diameter of 10 mm Working length of 125 mm or Outer diameter of 7.3mm with working length 150mm. Working channel of 6 mm or 4.7 mm and Irrigation and aspiration channel of 1.5 mm. Working Tubes should have outer diameter of 13.7mm or 8.5mm and inner diameter of 10.2 mm or 7.5mm.
- 2. Transforaminal Endoscopes has Outer diameter of 6.3 mm, Working length 171 mm and 208 mm (XT version) 120 mm (THX version). Working channel 3.7 mm, Irrigation and aspiration channel 1.5 mm. Working Tubes should have outer diameter of 7.5mm and inner diameter of 6.5mm.
- 3. Thermocoagulation: Outer diameter 7.5mm, 3 possible versions simple ou double lips or 45° stainless steel only, Orientation handle integrated to the tube, Working channel 3.7mm, Irrigation and aspiration channel 1.5 mm

SI. No	o. Surgical approach	Outer diameter of working tubes	Inner diameter o working tubes	Endoscope f angulations	Endoscope outer diameter	e Endoscope working channels
Α	Interlaminar	Outer diameter 13.7 mm 4 possible versions 0° plastic and stainless steel, 90° plastic and stainless steel Exists in 2 materials plastic or stainless stee	Inner diameter 10.2 mm	15° in combo or occular version	Outer diameter of 10 mm Working length of 125mm	Working channel of 6 mm Irrigation and aspiration channel of 1.5 mm. Scope to provide access through single incision. Instrument access to be through the scope. Scope to have lateral irrigation channels
В	Interlaminar	Outer diameter 8.5 mm 3 possible angulations 0°,30°, 45° Only in stainless steel	mm	15 degree in 5 combo or ocular version	7.3mm. Working length of 150mm	Working channel of 4.7mm. irrigation and aspiration channel of 1.5mm
Scope chann	1 0	sh single incision. Instrument acces	ss to be throu	gh the scope. Scope	e to have later	ral irrigation

C Transforaminal

Outer diameter7mm- 7.5

Inner  $15^{\circ}$  and  $30^{\circ}$ 

Working

Outer

mm	2	diameter 6.5	5 combo or o	occular	diameter of	channel 3.7
possible versions	0° et	mm	versions	and	6.3 mm	mm. Irrigation
45°	Only stainless	8	45°		Working	and aspiration
steel	Working				length 120-	channel 1.5
Tube with orienta	tion handle				260 mm	mm.
integrated to the						
tube.						

Scope to provide access through single incision. Instrument access to be through the scope. Scope to have lateral irrigation channels

D	Thermocoagulation	Outer diameter 7.5mm 3 possible	e Inner	30° combo or	Outer	Working
		versions simple or double lips or	diameter	6.5occular version	diameter of	channel 3.7m
		45° stainless steel only	mm		6.3 mm	m
		Orientation handle integrated to			Working	
		the tube.Inner diameter 6.5			length 124	Irrigation and
		mm,30° combo or occular			mm	aspiration
		version,Outer diameter of 6.3				channel 1.5
		mm Working length 124 mm				mm
		Working channel 3.7mm				
		Irrigation and aspiration channel				
		1.5 mm				

#### I. Camera Control Unit & Camera Head:

#### A. HD 3 chip High definition Camera System with recording facility (External or Internal

- 1. The system should be truly Digital HDTV endoscopic video camera
- 2. The system should have the minimum Resolution of 1920 x 1080 pixels FHD/3840x2160pUHD, progressive scan and the consistent use of 16:9 format

#### A. HD 3 chip High definition Camera Head

- 1. 3 chip HD Camera Head resolution 1920 x 1080 pixel, 3x1/3" CMOS Progressive Scan 60HZ with 3 freely programmable Camera Head buttons and optical zoom lens of 2x dynamic optical / digital zoom range. Options available for Single Cable technology and split cable technology
- 2. The system should have special features:
- a. Should optimize image quality & Digital Source Sampling thus maximizing hi-fidelity image transmission.
- b. The system should have Optical Zoom/ digital Zoom to enhance the quality of Image size & cross specialty Standardization of the camera system, regardless of the telescope used

#### A. HD 3 chip High definition Camera Control Unit

- 1. AGC: Microprocessor controlled
- 2. The system should have the following features:
- a. Camera system should have at least two camera buttons to control the various functions of the camera from the camera head.
- 1. All the camera head button functions can be also controlled by the keyboard/touch screen from a non sterile field.
- 2. Video Outputs DVI, HD SDI, RGB/ S-Video Converter
- 3. DVI Connecting Cable
- 4. Power supply 220-240 VAC 50/60 HZ
- 5. Should have safety certificate from a competent authority CE issued by a notified body registered in European Commission / FDA(US).

## A. Light Source

Standalone / Integrated LED Light Source (100Watts) with the Camera System. The integrated Light Source should last at least 30,000 hrs. The Light source should be integrated through the touch screen system

## I. Recording Device:

- 1. HD Image capture facility with External/ Inbuilt recording; should supply the necessary storage hardware.
- 2. Internal hard disk / USB drive of at least 250GB capacity- along with. In case of external recording device it should be from the same manufacturer
- 3. Should be able to take video and still images during surgeries.
- 4. The system should support to take still images from recorded video footages
- 5. In case of inbuilt recorder, price can be quoted along with the Camera system and left blank for the slot allotted for quoting the rate of recorder in BOQ
  - I. **Multifunctional Drill and Resection System**: 10,000 rpm with high torque accelaration ramp, clockwise and oscillating modes shaver blades msut include deflector shaver blades to drill in the corner, can be angulated at 12, 24 and 36°. Automatic detection of blades for increased safety.
  - II. **Radio Frequency System:** RF system designed for spine surgery with arc control for increased safety, enable to coagulate blood vessels on the dura without any damage and to shrink tissues . Specific Spine Vap and Spine coag modes, Bipolar and Monopolar neurotomy modes for pain management . Reusable handle
  - III. Instruments: 2 separated trays: Access and dissection tray

Forceps are equipped with the Luer Overload Protection System – LOPS".Kerrison punches must be in two parts and can be assembled in 8 different positions, different angulated punches 40,  $90^{\circ}$  straight and curved for Safe approach to the Kambin triangle. 3 different sets instruments for the interlaminar approach for deherniation/ massive decompression must be available.

Sl. No	Instrument	Description	Qty
1	FHD Foraminoscope (3.7 WCh), ocular for Transforaminal approach through Kambin triangle	Scope to provide access through single incision. Instrument access to be through the scope. Scope to have lateral irrigation channels	1
		WL 170 - 260MM / OD 6.3MM / 30 DEG /WChE 3.7MM	
2	Fibre Optic Cable	L 3.0 M	1
3	Adaptor Light source side		1
4	Adaptor Endoscope side		1
5	FHD Laminoscope (6.0 WCh), ocular for Interlaminar Approach	Scope to provide access through single incision. Instrument access to be through the scope. Scope to have lateral irrigation channels	1
		WL 70-200MM/ OD 10MM/ 15 DEG/WChD 6.0MM	
6	Guiding Rod, blunt, green	L 250 mm / ID 1.0 mm / OD 2.5 mm Instruments and scope preferably from same manufacturer for compatibility	1
7	Guiding Rod, conical, green	Instruments and scope preferably from same manufacturer for compatibility L 220-240mm mm/ ID 1 - 2mm / OD 2.5 - 3.5mm	1
8	Guiding Rod Forceps	WL 143mm / for 2.5/4.0/5.2mm Guiding rod	1
9	Guiding Tube, conical, red	Instruments and scope preferably from same manufacturer for compatibility	1
		L 185 mm / ID 5.3 mm / OD 6.3 mm	
10	Guiding Tube, conical, yellow	L 195 mm / ID 4.2 mm / OD 5.2 mm	1

1	Guiding Tube, conical, green	L 205 mm / ID 2.6 mm / OD 3.9 mm	1
2	Stopper	H 6 mm / OD 14 mm / ID 3.4 mm, inbuilt/	1
		individual. Instruments and scope preferably from	
		same manufacturer for compatibility	-
3	Silicone Sealing Cap for Luer-Lock, blue	Inbuilt/individual. Instruments and scope from	1
4		same manufacturer for compatibility	1
4	Scope Working Tube Distance Ring	Scopes OD 6.3 mm, inbuilt/individual	1
		Instruments and scope preferably from same	
5	Clasing Can for Endessans	manufacturer for compatibility	1
3	Closing Cap for Endoscopes	OD 15 mm / ID 11 mm / Bore 1 mm,	1
		inbuilt/individual.Instruments and scope	
		preferably from same manufacturer for	
6	Cleaning Wire	compatibility L 400 mm / OD 1.0 mm	1
		L 460 mm / OD 3 mm / ID 2.2 mm	1
	Endo-Flexprobe Handle		1
	Endo-Flexprobe, standard	L 320 mm / OD 2.0 mm	1
9	Metal Hammer	L 200-225MM/ 100-200 gm .Instruments and	1
		scope preferably from same manufacturer for	
0		compatibility	1
	Steel Ruler	L200-300mm	1
:1	Working Tube with Handle, standard Lip	L 150-170mm/ ID 6-7mm/ OD 7-8mm.	1
		Instruments and scope preferably from same	
		manufacturer for compatibility	
22	Biopsy Forceps, Blakesley	WL 300-320mm/ OD 3.5-4MM. Leur Overload	1
		protection system enabled for damage	
		reduction.Instruments and scope preferably from	
		same manufacturer for compatibility	
3	Endo-Kerrison Pistol Handle	OD 5.5 mm. Single handle to attach Detachable	1
4	Fude Vernier Sheft are with vistel boudle	shafts WL 300-350mm/OD 3-3.5mm/ 40-45	1
4	Endo-Kerrsion-Shaft use with pistol handle		1
		deg.Instruments and scope preferably from same manufacturer for compatibility	
5	Reamer Handle XT, cannulated	Quick-Lock-System, pull-release	1
		WL 300-320MM /OD 2.5 - 3MM/Helix 2.5mm	1
0	Semi-Flexible Grasper Forceps, curved, up-biting	WL 500-520MM/OD 2.5 - 5MM/Henx 2.5MM	1
		Leur Overload protection system enabled for	
17 1   18 E   19 N   20 S   21 V   22 E   23 E   24 E   25 1   26 S   27 E		damage reduction.Instruments and scope	
		preferably from same manufacturer for	
		compatibility	
7	Biopsy Forceps, Spoon, angled	WL 300-320MM /OD 2.5 - 3.5MM/45°	1
		Leur Overload protection system enabled for	
		damage reduction.Instruments and scope	
		preferably from same manufacturer for	
8	Biopsy Forceps, Spoon	compatibility WL 300-320MM /OD 2.5 - 3.5MM	1
0		W L 500-520191191 /OD 2.5 - 5.5191191	1
		Leur Overload protection system enabled for	
		damage reduction.Instruments and scope	
		preferably from same manufacturer for	
		compatibility	
9	Sterilization Tray Cover	L 530 mm / W 240 mm	1
0	Sterilization Tray for Instruments	Resection Tray / L 530 mm / W 240 mm / H 75	1
		mm	
1	Sterilization Tray for Instruments Access	Access Tray / L 530 mm / W 240 mm / H 75 mm	1
32	Norm-Container H 200 mm, blue	L 580 mm / W 280 mm / H 200 mm	1
3	Disposable Access KIT, with detachable reamers	Content: 2 Needles (20G and 21G), 1x 2 ml / 1x 5	1

		Dishes, 2 Guide Wires, 2 Sealing Caps, 2 Discography / Chromography Needles (18G and 21G), 3 Reamers fine	
34	Working Tube Shaft, straight 90°	L 91 mm / ID 10.2 mm / OD 13.7mm, stainless steel	1
35	Working Tube Shaft, Standard Lip	L 91 mm / ID 10.2 mm / OD 13.7mm, stainless steel	1
36	Guiding Tube, conical, yellow	L 185 mm / ID 4 mm / OD 6.9 mm	1
37	Dissector	WL240MM/OD 3.5MM	1
38	Palm Handle	L 104 mm / ID 25 mm	1
39	Guiding Tube, conical, violet	L 155 mm / ID 10.1 mm / OD 14.9 mm	1
40	Guiding Tube, conical, red	L 170 mm / ID 7 mm / OD 10 mm	1
41	Working Tube, Handle	L 7 mm / ID 14 mm / OD 22 mm	1
42	Working Tube, Adapter	L 31 mm / ID 10.2 mm / OD 22mm	1
43	Endo-Kerrison-Shaft to be used with piston handle/Detachable	WL 240-280mm/OD 5-5.5mm/ 40°	1
		Leur Overload protection system enabled for damage reduction.Instruments and scope preferably from same manufacturer for compatibility	
44	Spoongrasper Forceps	WL 240-280MM /OD 4 - 4.5MM. Leur Overload protection system enabled for damage reduction.Instruments and scopepreferably from same manufacturer for compatibility	11
45	Hook Punch	WL 200-240MM /OD 4 - 4.5MM/JL 8.0mm. Leur Overload protection system enabled for damage reduction.Instruments and scope preferablyfrom same manufacturer for compatibility	1
46	Endo Elevator Blund	WL260MM/OD4.5MM/JL 19MM	1
47	Curette	WL 200-260MM /OD 4 - 4.5MM.Leur Overload protection system enabled for damage reduction.Instruments and scope prefereably from same manufacturer for compatibility	1
48	NiTi Nerve Hook, superelastic	WL 250-270MM/OD 2-2.5MM. Instruments and scope prefereably from same manufacturer for compatibility	1
49	Curette	WL 275-295 mm OD-3 -3.5MM. Instruments and scope prefereably from same manufacturer for compatibility	.1
50	Dissector	WL300-360mm/ OD 3.5- 4.5mm. Instruments and scope prefereably from same manufacturer for compatibility	1