



H& Surgical

www.hnsurgical.com



H&Surgical Co., Ltd provides
trocars, laparoscopic surgical devices as well as
the product line used for surgical operations



www.hnsurgical.com

- ISO 13485:2003
- ISO 9001:2008
- KS Q ISO 9001:2009
- GMP
- CE1023

HANS CLIP



HANS CLIP

Artery & Vein

Patented
Improved



HANS CLIP provides safer and more secure surgical hemostasis without the complications of using metallic materials. The clip is made of permanent and non-absorbable polymer.

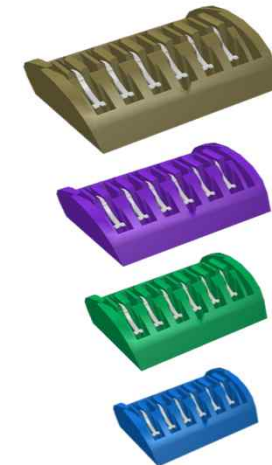
The cross-line shape grooving prohibits sliding from vessel or tissue after compressed.

Patent No. : 10-20**-***** (PCT applied)

제품 리스트

EDI Code : B2121017

MODEL No.	Color code	Clip SIZE	Ligation SIZE
HC-XL	GOLD	XL	7 ~ 16 mm
HC-L	VIOLET	L	5 ~ 13 mm
HC-ML	GREEN	ML	3 ~ 10 mm
HC-M	BLUE	M	2 ~ 7 mm



6 Clips / Cartridge
14 Cartridges / Box



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MADE IN KOREA



H&S CO., LTD.
202, #39, 40St, Gungnae-ro, Bundang-gu, Seongnam-si,
Gyeonggi-do, 463-470, Korea
T:+82-31-713-5116 / F:+82-31-712-5118



TEST REPORT

Report Ref. No.
13-037112-01

Name and address of the applicant
 H&SURGICAL CO., LTD.
 6F #601, Jungang Innotech, 148, Sagimakgol-ro,
 Jungwon-gu, Seongnam-si, Gyeonggi-do, 462-8
 07, Republic of Korea
 TEL:+82-31-713-5116
 FAX:+82-31-712-5118

Standard / Test method
 The standard submitted by the applicant

Test result
 Test articles complies with the above standard.

Tested equipment :
 Clip, surgical, general use

Model/type ref. :
 HC-ML

Manufacturer :
 H&SURGICAL CO., LTD.
 6F #601, Jungang Innotech, 148, Sagim
 akgol-ro, Jungwon-gu, Seongnam-si,
 Gyeonggi-do, 462-807, Republic of Ko
 re

Additional information :
 H320130710

Issue date : 2013-10-30
 Reissue date : 2013-11-08

The test results contained apply only to the test sample(s) supplied by the named applicant, and this test report shall not be reproduced in full or in part without the written approval of the KTL in advance.

Tested and reported by

Yeon-yeop, Bae, Engineer

Reviewed by

Dong-bin, Kim, Director

KOREA TESTING LABORATORY



※ 위 마크는 후후 전자특인중 다조 프로그램에서 원본다조시 사용되는 2D코드입니다.

Korea Testing Laboratory (controlled by KFDA)

- <Requirement Test>
- Color and transparent
- pH
- Heavy metals as Lead
- KMnO4 Consumption
- Non-Volatile Residue
- Ultraviolet Absorption
- Cytotoxicity
- Maximum Sensitization
- Intracutaneous Reactivity
- Rabbit pyrogen test
- Acute systemic toxicity
- Hemolysis
- Appearance
- Dimension
- Clip ligation
- Clip removal
- Sterility
- EO Sterilization

→ **PASS ALL**



Comparative Test

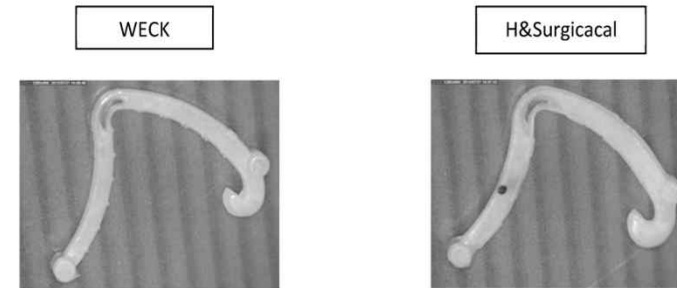
BBy Lab of Vit***Tec, France

- French based global surgical manufacturer
- \$100M global sales
- Selling titan clip and instrument (ligation)

Comparative grip test

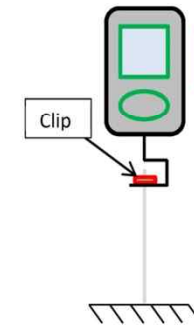
PLASTIC CLIP ML WECK/H&Surgical

Following test focus on the grip performance of the Weck plastic clip and the H&S plastic clip:



Test performed with an electronic tensile meter on a silicon vessel.

Representation of the test:



3 Clips of each brand have been tested

Results:

Clips	Weck	H&Surgical
#1	1,70N	3,30N
#2	1,80N	2,60N
#3	2,8N	2,92N
Average	2,1N	2,95N

Ccl :

H&Surgical plastic clips provide better grip on the vessels. For information there is no specification or acceptance criteria in Vit***Tec for this kind of clip to determinate that this product meet a good level of performance.



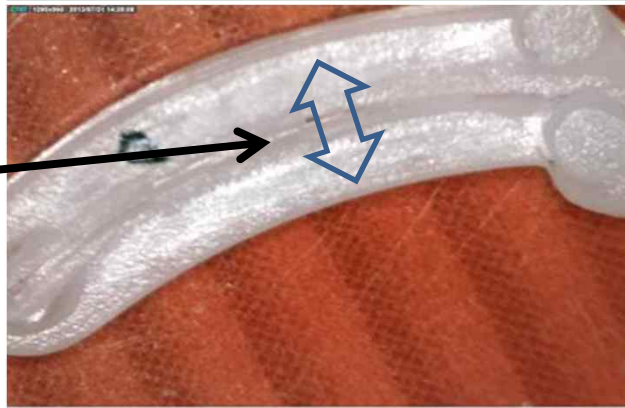
HANS CLIP

HANS CLIP, H&Surgical

Hem-o-lok, WECK



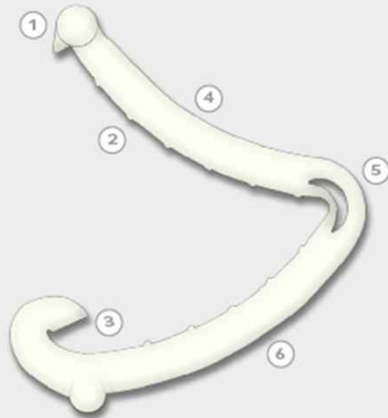
Providing stronger hold
But providing enough flexibility



* Comparison with M-size, Provided by Lab of Vit***Tec



HEM-O-LOK
BEHIND THE CLIP



① Bosses are designed to retain clip in applier jaws

② Patented unique **crossline** interface with the vessel and are designed to prevent slippage

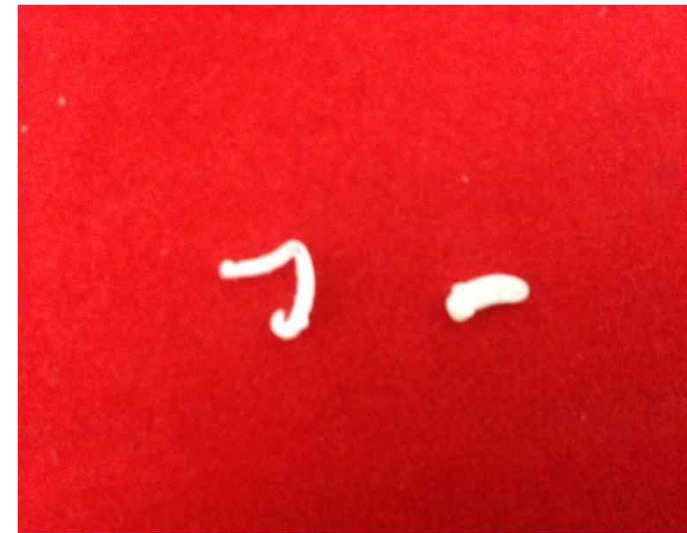
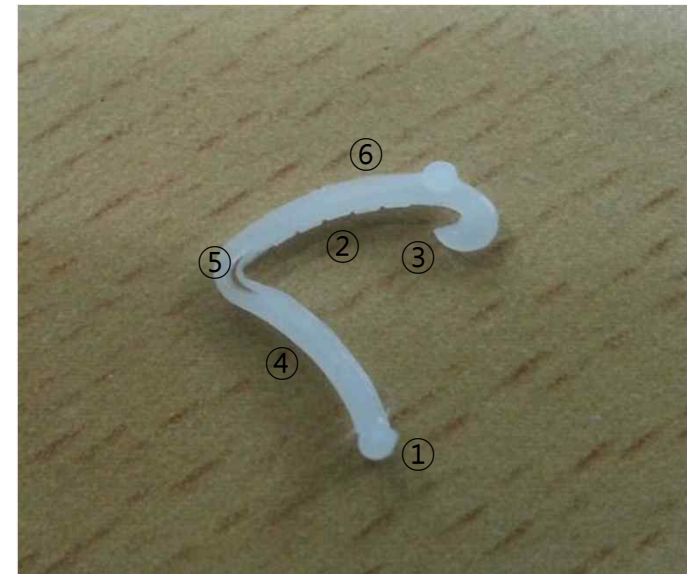
③ Locking mechanism provides tactile feedback and secure closure

④ Bow-shape allows removal with appropriate instrument

⑤ Hinge allows flexibility in clip placement prior to clip locking

⑥ Non-absorbable polymer is inert, not-conductive, radiolucent, and does not interfere with CT, MRI or X-ray diagnostics

HANS CLIP



* M 사이즈 실물



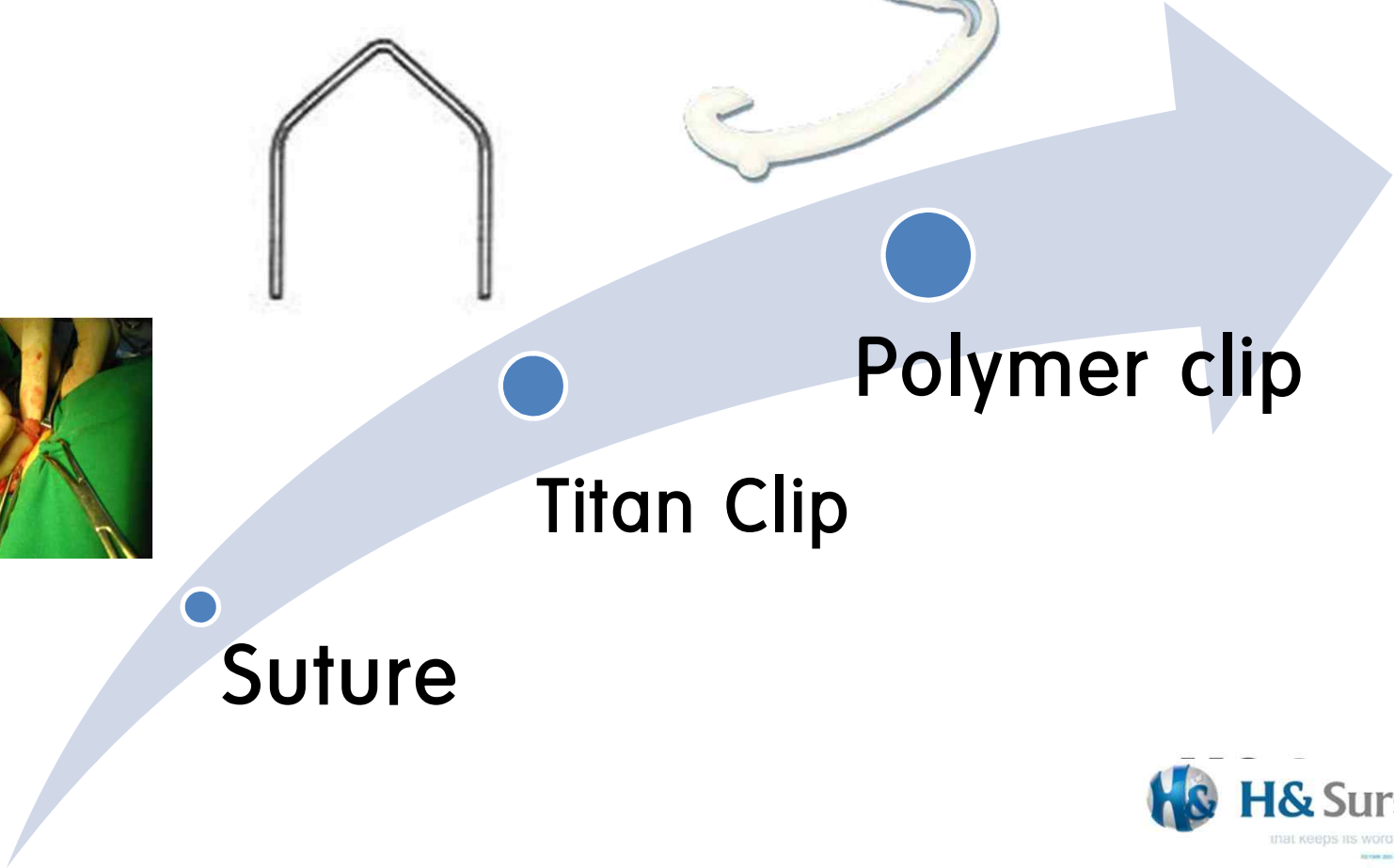
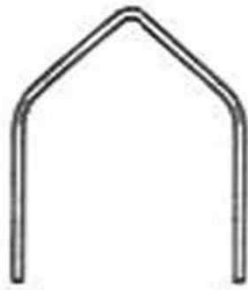
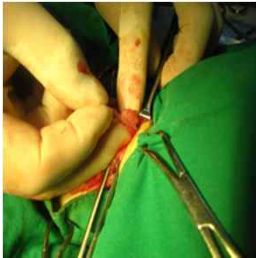
H&Surgical

that keeps its word with the clients

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Generation of Ligation Market



Suture

Titan Clip

Polymer clip



Why Ligate With Polymer Clips

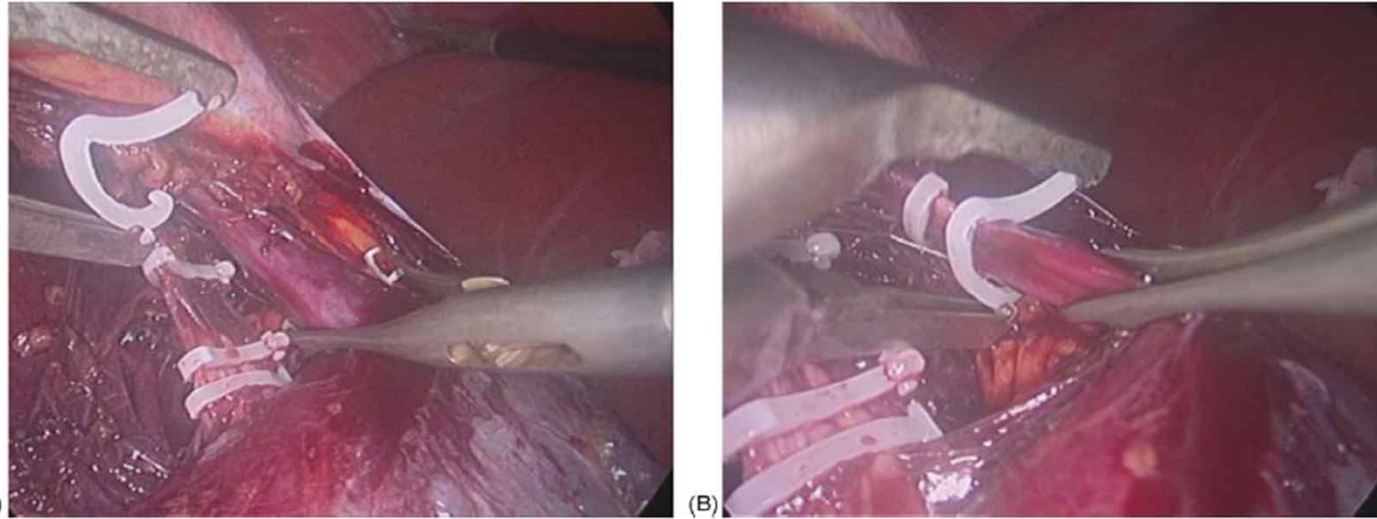


Fig. 2 - (A and B) Photographs show control of the renal vein with a laparoscopic Babcock to reduce the venous diameter and facilitate the positioning of the Hem-o-lok clip.

- Speed
- Ease of application
- Reliability, Safety
- Cost effective
- Ideal for Laparoscopic Surgery
- Can reach into areas of difficult exposure
- Limited number of sizes have widespread applicability