BiClamp® reduces costs in many specialties
BiClamp® product range

With our BiClamp instruments, vessels and tissue bundles can be reliably coagulated and sealed.

Dealing with vessels individually is usually not necessary. All BiClamp models for both open surgery and laparoscopy are reusable.

**THE BENEFITS OF ALL BICLAMP INSTRUMENTS**

- The BiClamp product range offers a wide indication-specific selection for open surgery and laparoscopic interventions1
- The shape and length of the jaws is adapted to the body; target tissue can be reached even with reduced surgical access1
- The ceramic-insulated jaws reduce the risk of thermal damage to adjacent tissue structures2
- The BiClamp device is as appropriate as the LigaSure instrument to successfully ligate 2-7 mm arteries and veins3
- All BiClamp models can be reused, which reduces BiClamp operating costs4,5,6

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1. Product catalog
2. Based on internal measurements / Erfahrungen

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You can find more instruments in our product catalog

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BiClamp 201 T
Angled 18°, smooth, length 200 mm
No. 20195-202

BiClamp 150 C
Angled 23°, smooth, length 150 mm
No. 20195-221

BiClamp LAP Maryland
Semi-deep, length 340 mm
No. 20195-134

BiClamp E LAP forceps
Fenestrated, semi-deep, length 340 mm
No. 20195-248

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*Individual models, based on specialization*
References
2 Leo, V et al: Vaginal hysterectomy and multimodal anesthesia with bipolar vessel sealing (BiClamp forceps) versus conventional suture technique: quality results’ analysis, Archives of Gynecology and Obstetrics, 2013
4 Gloriani, G et al: Minimally invasive vaginal hysterectomy using bipolar vessel sealing: Preliminary experience with 100 cases, J Obbset Gynaecol, 2013
5 Samuels, D et al: Vaginal hysterectomy with bipolar coagulation forceps (BiClamp) as an alternative to the conventional technique, Archives of Gynecology and Obstetrics, 2011
6 Li, L et al: BiClamp forceps was significantly superior to conventional suture ligation in radical abdominal hysterectomy: a retrospective cohort study in 391 cases, Arch Gynecol Obstet, 2012

BiClamp reduces costs – in many specialties

For vessel and tissue sealing, the BiClamp procedure is cheaper than clip/suture closure and competitors’ disposable products. The reasons for this are different for each specialty and vary in importance. The advantages apply to both open surgery and laparoscopic techniques, such as laparoscopic hysterectomy.

"I think the BiClamp has three remarkable features: it is fast, safe and efficient. The current average operation time is an hour and 10 minutes; however using Erbe BiClamp, I shorten the operation time to 50 minutes which is cutting about 30% of the operation time. These 20 minutes of reduced operation time have a significant meaning to me."

Prof. Hang Seok Chang M.D., Ph.D., F.A.C.S.
Gangnam Severance Hospital
Seoul, South Korea (Thyroidectomy)
The calculation is based on an estimated 35,000 total thyroidectomies of around 100,000 thyroid procedures per year in Germany.

Single-use vessel sealing instruments are used in approx. 14,000 total thyroidectomies. According to internal Erbe estimates, approx. 3,500 procedures were performed using the BiClamp 150 C, and 17,500 with the conventional suture or clip (as of 2009).

Compared with the overall costs of both alternatives (single-use instruments or the conventional technique), using BiClamp for surgical interventions results in a potential saving of over 11 million Euros per year.

**Method**

- **Potential saving with BiClamp using total thyroidectomy as an example**

  The calculation is based on an estimated 35,000 total thyroidectomies of around 100,000 thyroid procedures per year in Germany.

  Single-use vessel sealing instruments are used in approx. 14,000 total thyroidectomies. According to internal Erbe estimates, approx. 3,500 procedures were performed using the BiClamp 150 C, and 17,500 with the conventional suture or clip (as of 2009).

  Compared with the overall costs of both alternatives (single-use instruments or the conventional technique), using BiClamp for surgical interventions results in a potential saving of over 11 million Euros per year.

<table>
<thead>
<tr>
<th>Cost-benefit analysis</th>
<th>BiClamp</th>
<th>Single-use vessel sealing instrument</th>
<th>Suture and clip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument equipment costs (incl. reprocessing)</td>
<td>€27.87</td>
<td>€160.00</td>
<td>€0.00</td>
</tr>
<tr>
<td>Suture material</td>
<td>€6.34</td>
<td>€6.34</td>
<td>€19.02</td>
</tr>
<tr>
<td>Cost of drainage incl. fitting</td>
<td>€7.67</td>
<td>€7.67</td>
<td>€14.49</td>
</tr>
<tr>
<td>Equipment costs per intervention</td>
<td>€41.88</td>
<td>€114.01</td>
<td>€33.51</td>
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<tr>
<td>Intervention time in minutes</td>
<td>142 min</td>
<td>170 min</td>
<td>180 min</td>
</tr>
<tr>
<td>Cost of intervention time</td>
<td>€1,269.48</td>
<td>€1,519.80</td>
<td>€1,609.20</td>
</tr>
<tr>
<td>Personnel cost reduction</td>
<td>€250.32</td>
<td>€339.72</td>
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<tr>
<td>Material cost reduction</td>
<td>€132.13</td>
<td>€8.37</td>
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<tr>
<td>Potential saving per intervention</td>
<td>€382.45</td>
<td>€331.35</td>
<td></td>
</tr>
<tr>
<td>Number of interventions p.a. per method</td>
<td>14,000</td>
<td>17,500</td>
<td></td>
</tr>
<tr>
<td>Potential saving p.a. per method (rounded)</td>
<td>€5,354,000</td>
<td>€5,799,000</td>
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</tr>
<tr>
<td>Total potential saving (rounded)</td>
<td>€11,153,000.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*SPECTARIS study: Potential savings of innovative medical technology in healthcare. Thermofusion and total thyroidectomy with BiClamp, 2008.*
Vaginal hysterectomy
BiClamp versus traditional suture closure

"BiClamp allows vaginal hysterectomies to be performed safely in patients with minimal uterine descent. With multimodal anesthesia it is possible to discharge the majority of patients on the same day as the operation."

Sealing uterine structures using BiClamp

LOWER OPERATING COSTS AND OTHER BENEFITS OF BICLAMP

- BiClamp is an easy, fast and safe technique
- Intraoperative blood loss is minimized
- Operating times are shorter with BiClamp
- Postoperative pain is reduced
- In-patient time is reduced through the use of this technique
- Patients have lower morbidity and an improved quality of life

References
3. Samulak, D et al: Vaginal hysterectomy with bipolar coagulation forceps (BiClamp) as an alternative to the conventional technique, Archives of Gynecology and Obstetrics, 2017
4. Lobodasch, K et al Allgemeine Gynäkologie. Vaginale Hysterektomien mit Hilfe der BiClamp, 2005
7. Clavé, H et al: Painless vaginal hysterectomy with thermal hemostasis (results of a series of 152 cases), Gynecological Surgery, 2005
8. Wässerer, S: Vaginale Hysterektomie mit und ohne BiClamp®. Eine prospektive randomisierte, einfachblinde, klinische Multizenterstudie, Tübingen, Univ, Diss, 2009

Sambit Mukhopadhyay
Consultant Gynecologist and Clinical Director, Norfolk and Norwich University Hospital Foundation Trust
Colney Lane, Norwich, UK

BiClamp 201 T
Angled 18°, smooth, length 200 mm
No. 20195-202
Open-surgery adnexa sealing using BiClamp

BiClamp 201 T
Angled 18°, smooth, length 200 mm
No. 20195-202

LOWER OPERATING COSTS AND OTHER BENEFITS OF BICLAMP

☑ BiClamp is a convenient, efficient technique that can be controlled

☑ Intraoperative blood loss is minimized

☑ Operating times are shorter with BiClamp

☑ Postoperative pain is reduced

☑ In-patient time is reduced through the use of these instruments

☑ BiClamp reduces the risk of postoperative complications

References
2. Li, L et al: BiClamp forceps was significantly superior to conventional suture ligation in radical abdominal hysterectomy: a retrospective cohort study of 191 cases, Arch Gynecol Obstet, 2012
Laparoscopic hysterectomy and lymphadenectomy

LOWER OPERATING COSTS AND OTHER BENEFITS OF BICLAMP

☑ With the use of BiClamp, the formation of lymphocele is significantly reduced versus conventional ligation with suturing.

☑ The thermofusion technique considerably reduces the intervention time.

☑ Blood loss is usually lower.

☑ Thermofusion is a safe, useful procedure for breast surgery with removal of the axillary lymph nodes.

"Why do I need LAP BiClamp instruments? BiClamp instruments offer extremely stable sealing. They last a very long time and are excellent value for money. Erbe has proven to be a reliable partner for decades."

PD Dr. med. Dimitri Sarlos
Senior Consultant, Gynecology and Gynecological Oncology
Medical Director, Mittelland Breast Center
Medical Director, KSA Gynecological Tumor Center
Kantonsspital Aarau AG, Switzerland

References
1. Tsuda, N et al: Prevention of lymphocele development in gynecologic cancers by the electrothermal bipolar vessel sealing device, Gynecological Surgery, 2005
The ceramic-insulated jaws reduce the risk of thermal damage to adjacent tissue structures.

“BiClamp allows the vessels in the upper pole of the thyroid to be treated safely. We don’t need clips or sutures.”

Prof. Dr. med. Dr. h.c. Martin K. Walz
Klinikum Essen-Mitte
Surgery and Center for Minimally Invasive Surgery
Essen, Germany

LOWER OPERATING COSTS AND OTHER BENEFITS OF BICLAMP

- BiClamp means procedures can be carried out safely1,2,3,4
- The overall intervention time is significantly shorter vs suture ligation1,3
- The technique significantly reduces the risk of postoperative bleeding1
- Significant potential savings on instrument costs2
- Fewer patients require oral calcium administration4

REFERENCES

The laparoscopic BiClamp is an instrument that allows very precise and effective hemostasis. During liver parenchymal transection it works well with its crushing technique function and it is very useful when associated with water from the ERBEJET. Together they allow a precise dissection and identification of vascular structures inside the liver.

Dr. Marcel Santuza, Dr. Eduardo Vihuela Hapatobiliary Surgery, Sotera del Rio Hospital, Santiago, Chile

| BiClamp 150 C | Angled 23°, smooth, length 150 mm
| BiClamp LAP forceps | Maryland, semi-deep |

<table>
<thead>
<tr>
<th><strong>Liver surgery, lobectomy, tonsillectomy</strong></th>
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<tr>
<td><strong>ABDOMINAL SURGERY</strong></td>
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<tr>
<td><strong>References</strong></td>
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</tbody>
</table>

| **The benefits of BiClamp for these procedures** |
| **Partial hepatectomy using BiClamp:** The technique is effective and free from complications |
| ☑ BiClamp reduces interoperative blood loss |
| ☑ BiClamp can also be used for cirrhotic livers |
| ☑ There are no postoperative complications like bleeding or leakage |
| **Pulmonary lobectomy (BiClamp vs. stapler):** An efficient technique that is easy to carry out |
| ☑ No complications occur |
| ☑ Reduced stapler use means reduced costs |
| **Tonsillectomy using BiClamp:** Safer vessel closure with much less thermal expansion |
| ☑ Significantly reduced intraoperative blood loss |
| ☑ Severe postoperative bleeding is unlikely |
| ☑ Significantly reduced intervention times |
| ☑ Significantly lower rate of complications |
| ☑ Significantly reduced postoperative pain |
| ☑ Out-patient procedures are possible |

| **BiClamp 150 C** | Angled 23°, smooth, length 150 mm |
| **BiClamp LAP forceps** | Maryland, semi-deep |

| **No.** | **20195-221** | **No.** | **20195-134** |
LOWER OPERATING COSTS AND OTHER BENEFITS OF BICLAMP

- The BiClamp technique is a practical alternative to clips and ligation
- Interoperative blood loss is reduced with this technique
- The procedure reduces intervention times
- Easy handling
- Safe, quick and effective sealing of vessels and vascularized tissue
- Precise tissue grasping thanks to instrument geometry

"BiClamp reliably controls intrarenal vessels during off-clamp laparoscopic partial nephrectomy, without the need for subsequent renorrhaphy. Used in conjunction with waterjet dissection, this achieves a truly minimally ischaemic procedure with no secondary haemorrhage."

Mr Andrew Kennedy-Smith
Wellington Hospital
Wellington, New Zealand

References
2 Medical Video: Kennedy-Smith, A: Nephrectomy, partial, laparoscopic, with ERBEJET 2 and BiClamp, 2014
3 Medical Video: Stenzl, A: Radical cystectomy and formation of a neobladder in female patients with BiClamp, 2015