

HARTMANN



Helps. Cares. Protects.

Focused on
effectiveness
and safety.

Smart solutions for
orthopedic procedures

- ✚ Significant time savings
- ✚ Greater process efficiency
- ✚ Strengthen infection prevention



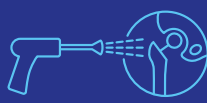
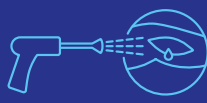

Pulse Lavage

Precision lavage for implant stability and infection control

- Improves fixation strength**
Supports better implant hold – helping reduce the revision rate
- Helps prevent Surgical Site Infections (SSI)¹**
Removes necrotic tissue, bacteria, and particles
- Cleanses and washes wounds**
Improves incision visibility and supports wound healing
- Easy, efficient handling**
Ergonomic handle with long tubes, built-in irrigation and suction



Single-use, high pressure Pulse Lavage with battery pack for:

-  Orthopedic joint replacement and internal fixation
-  Debridement of wounds
-  Intraoperative cleansing and washing
- 1** Ergonomic grip for comfortable handling
- 2** Tip locking system for secure retention
- 3** External battery pack for easy disposal
- 4** Short and long tips for various procedures
- 5** Switch-controlled pressure: high or low speed
- 6** Dual tubes for simultaneous irrigation and suction

1 In combination with other measures as bundle



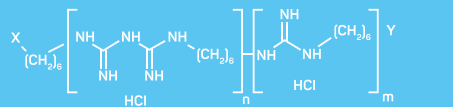
PREVENTIA® Surgical Irrigation

Unique solution to combat Surgical Site Infections, biofilm and antibiotic resistance

- Broad antimicrobial spectrum of effectiveness¹
- Fast activity in just 1 minute²
- Reduces reformation of biofilm compared to HOCl and saline & Ringer's solutions²
- More tissue-friendly than PVP-I³
- Superior to HOCl and saline³
- Promotes wound healing¹
- No secondary rinse out required

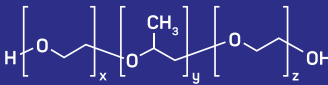


Composition of two active substances:



Polyhexanide (PHMB)

Broad spectrum of antimicrobial activity. Penetrates bacterial cell membranes, removes biofilms and provides defense against harmful microbes.¹



Poloxamer

Surfactant that reduces the tension between two materials – helping PHMB to reach the site of action more effectively.

1. Kramer et al. (2018) Skin Pharmacol Physiol 2018; 31(1):28–58 (Related to PHMB solutions).
2. In-vitro results on planktonic time kill assay according to EN 1276:2019 for quantitative suspension test to evaluate the bactericidal activity of chemical disinfectants and antiseptics. Data on file.
3. In-vitro results on minimum bactericidal concentration (MBC) and relative therapeutic index. Data on file.

HIP One-Drape Solutions

Efficient one-drape solutions for standard & minimally invasive approach



- **One-drape solutions** for full patient covering
- **Specifically designed** also for Direct Anterior Approach (DAA)
- **Less steps = less time** needed for draping¹
- **Easy access to both legs** for intraoperative length control
- **Helps to support infection prevention** due to fewer contact points during draping¹



Application videos on
Hartmann-Surgical-Drapes.com

Up to
40 %
less time
required¹

HIP 1 Hip drape with 1 integrated stockinet

- Draping with 3 persons (2 steril – 1 unsteril)
- With integrated anesthesia cover
- Unilateral cutout with integrated incision film



Up to
30 %
less time
required¹

HIP 2 Hip drape with 2 integrated stockinets

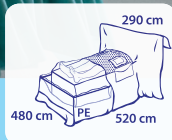
- Draping with 3 persons (2 steril – 1 unsteril)
- With integrated anesthesia cover
- Bilateral cutout with integrated incision film



Up to
50 %
less time
required¹

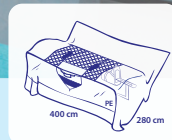
HIP Frame Hip drape for frame

- Draping with 2 persons (2 steril)
- With integrated anesthesia cover
- Bilateral cutout with integrated incision film



Hip Traction

- Draping with 2 persons (2 steril)
- Suitable for lateral and postero-lateral access in the lateral or supine position²
- Good visualization of patient positioning



CombiSet®

Everything you need –
ready to use at your fingertips



Less unpacking.
Faster prep.
More procedures.

Standardized, time-saving processes

- Includes exactly the components you need for a specific procedure in one sterile set
- Speeds up OR prep to enable more interventions
- Cuts down procedure time and costs

Customized configuration

- Configure your sets to fit your unique needs
- Select from over 3000 components
- Custom colour coding and QR codes for optimized storage

Increased safety

- Lower risk of handling errors compared to single-packaged components
- Supports in reducing cross-contamination and healthcare related infections

Sustainability & reliability

- Significantly less packaging waste than single items
- Produced, packed, and sterilized in the EU
- Consistent quality and reliable delivery ensured

¹ Compared to split sheets due to easier process and fewer steps needed for full patient draping
² Additional underlay sheets recommended

Hand Set

High-quality, single-use sets
to optimize hand surgery efficiency



Complete surgery-in-a-box set
for your hand procedure



Save time

Ready-to-use sets save staff time
by reducing reprocessing tasks

Cut costs

No reprocessing costs, from maintenance and sterilization
to administrative overhead and labor

Support safety

Avoid reprocessing related non-conformities and help reduce infection risk

Design your personal set

Choose from a wide range of instruments to match your procedure flow

¹ Time saving using disposable instruments set instead of reusable one (material reprocessing); maximum value from seven hospitals in Europe (average time saving: 30 minutes)

Bone Cement Mixing Solutions

Vacuum system for the safe mixing and
application of high-quality bone cement



- **Minimize the risk of aseptic loosening of hip endoprotheses** (>15,000 cases per year)¹
- **Decrease exposure to toxic fumes (MMA) in the OR** by 50-70% compared to conventional mixing systems²
- **Reduce set-up time in the OR up to 40%**³
- **Reduce the risk of rehospitalization** (avg 5 days)⁴ **and rehabilitation** (avg 4 weeks)⁵ due to revision surgery
- **Decrease the financial burden of a revision range per patient** (from 30,000 EUR to 50,000 EUR)⁶
- **Save 80g of burned plastic per patient** (due to packaging in Combiset)

Each product available as a single
pack or as part of the CombiSet®



**Vacuum Bone
Cement Mixer Bowl**

- Greater durability and fatigue resistance by minimizing material porosity
- Better cement quality via 550 mmHg vacuum system
- Increased safety with carbon filter minimizing methyl methacrylate exposure



**Vacuum Bone Cement
Mixer Syringe**



**Bone Cement
Delivery Gun**

- Efficient, controlled delivery of bone cement during procedures

¹ Malchau H et al. Prognose der totalen Hüftarthroplastik, Institut für Orthopädie, Universität Göteborg, Schweden, 2000.
² Nature Scientific report (2022) 12:11890 by Gregory T. Carroll & David L. Kirschman Methyl Methacrylate Safety Data Sheet, ThermoFisher Scientific, Revision Date: Jan. 26, 2018
³ Basis: Produktivitätssimulation der UNITY Consulting & Innovation AG auf Basis der Daten von 25 OP-Prozessoptimierungsprojekten mit über 100.000 OPs in der DACH-Region.
⁴ Beauftragt von Paul Hartmann AG
⁵ Clin Med Insights Arthritis Musculoskeletal Disord. 2012; 5: 89–94.
⁶ BMC Musculoskeletal Disord. 2023 Feb 3;24(1):91. doi: 10.1186/s12891-023-06196-1.



Hilft. Pflegt. Schützt.

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