Maximize your economy of care.
Safeguard their quality of care.
Out-of-date equipment blocks your pathway to the future!

There are two principles that dictate today’s purchasing decisions:

1. Continual enhancement of the quality of care starts by improving clinical processes.
2. Ever sharper competition is forcing hospitals to mobilize their savings potentials.

Out-of-date equipment cannot help resolve the conflict between cost-cutting and quality enhancement.

Technical island solutions hamper workflows across all departments and disciplines – and burden budgets as well. This puts a drain on innovative power.
Automated Infusion Systems

Design your workplace
Utilize the flexibility of a modular system.

One system for greater diversity
Profit from the flexibility to cover the entire therapy spectrum.

Peace of mind
Simplify your workflows in the ER, OR and on all wards.

Medication safety
Counteract the serious risk of medication errors.

Investment security
Lower your initial investment, operating and process costs.

Infusion competence
Develop personalized solutions to fit your needs and processes.

B. Braun – Sharing Expertise
Partner up with a dependable and innovative expert.

B. Braun Space:
"Focus on quality of care while keeping costs under control"

Building up and reinforcing cross-departmental and interdisciplinary structures is the answer to the complex challenges of tomorrow.

Liberate yourself from the limitations of out-of-date equipment!

Define your requirements for future-proof solutions!

This brochure will help you do just that in a systematic way.
Design your workplace

Poor workplace ergonomics affect workflow quality.

**Complex technology**
It’s hard to keep up with the demands of the present using equipment from the past.

On many of wards, the staff wrestles with old and clumsy pumps – their batteries drained of power over the years. This situation keeps the patients tied to their beds. Early mobilization is extremely difficult.

**Rigid standards on the ICU**
Wherever each infusion pump has to be attached separately to the bed, the innumerable lines and tubes reduce access to the patient.

Bedside docking systems help keep infusion technologies more manageable.

With classical systems, the price paid for this advantage is a need for more space. The maximum number of infusion pumps that can be mounted is limited. A flexible adaptation to the patient’s special needs is almost impossible.

Such rigid structures hamper work at the patients’ bedside.
B. Braun Space lets you break the rigid structures of classical systems.

Uncompromisingly simple
On the ward, Space pumps stand out by virtue of their intuitive operation and identical user interface. Users and hospitals profit from shorter learning curves.

The small, handy pumps with their powerful batteries give your patients their mobility back more swiftly.

In seconds, the Space pole clamp can be detached and re-attached almost everywhere. You can remove from one to three infusion pumps at time.

Configuration scalability
Whether in the ER, OR, recovery room or the radiology suite, B. Braun Space helps you personalize your solutions.

Greater flexibility on the ICU
The docking system is expandable from one to up to 24 infusion/syringe pumps. This gives you the freedom to effectively configure even the most complex infusion systems.

The number of power cords is reduced to a minimum and accessibility to the patient’s bedside is greater than ever.

Sophisticated appearance
B. Braun Space lends a look of sophistication to your hospital rooms and operating theaters.

B. Braun Space heightens staff and patient satisfaction.

- One identical user interface shortens the learning curve
- Handy, lightweight equipment promotes patient mobility
- Space-saving solutions improve workplace ergonomics
- Modular expandability enables personalized configuration
- Customization enables optimal equipment utilization
A lack of matching equipment impedes clinical pathways.

**Ineffective interfacing costs time and money**
Infusion pumps frequently have to be changed when patients are transferred to the OR, MRI, ICU or general wards.

Every interruption not only consumes time, but can also lead to serious complications. This fact applies to situations across all departments and disciplines.

Considerable added costs and administrative outlays are incurred by device-specific disposables and accessories.

**Equipment bottlenecks cost money**
Too many different infusion pumps that do not cover a broad therapeutic spectrum create bottlenecks in availability.

Universally implementable equipment is a prerequisite for hospital-wide standardization and simplification.

Special single-type pumps like PCA or TCI-pumps are expensive. On top of the initial investment costs and often-substantial operating costs comes added administrative outlay for dedicated consumables.
Break bottlenecks with B. Braun Space. Universality means utmost economy.

One system for greater diversity
Whether syringe or volumetric, a B. Braun Space pump can be used to cover all fields of infusion therapy. By attaching a patient control button, every Space pump can be converted into a PCA pump. And the OR can use TCI on every single of its Space pumps.

Universal in use
The syringe pump accepts all syringes in sizes from 2/3 ml to 50/60 ml. In neonatology, for example, this feature enables even very small volumes to be delivered accurately. With Infusomat® Space a comprehensive range of standard and special lines are available for oncology, blood transfusion and enteral and parenteral nutrition, to name a few.

Future-proofing your systems through technology platforms
All components are designed according to a unified platform strategy. Your Space systems of today can be updated with features for your needs of tomorrow.

B. Braun Space slashes the number of models and overhead costs.

- Universally versatile pump systems break equipment bottlenecks
- TCI* for Infusomat® and Perfusor® Space pumps at no added cost
- A patient control button turns every Space pump into PCA
- Future-proof, scalable platforms protect your investments

- Cutting costs in procurement, operations and maintenance
Peace of mind

Future-proof solutions are ones that foster human relations.

Out-of-date technology hampers your staff
As budgets and resources become more restricted, the daily demands on the quality of care do not diminish, but grow. Equipment technology must be adaptable to workflows, and not the other way around.

Nurses and doctors alike need to focus on patients and their treatments. Every inadvertent alarm interrupts the workflow. Mistaken alarms cost time and cause patients and their relatives to worry, too.

Complicated patient transfers
The equipment must accompany the patient along the clinical pathway. Imaging diagnostics and time-critical patient transfers are becoming increasingly relevant denominators. Over-sized, out-of-date equipment and drained batteries pose hassles and are dangerous when moving patients.

More paperwork
Nurses should concentrate on the quality of the care they give. This is difficult for them when they have to keep manual records. Equipment without data communication interfaces to PDMS is not viable for the future.
B. Braun Space helps you simplify your workflows.

Uninterrupted workflows
It is important keep the work on the wards flowing as smoothly as possible, and to avoid interruptions caused by infusion equipment. That is why Space systems were strategically designed to prevent inadvertent alarms. They also announce planned events like syringe changes. Space systems can be connected to the staff-call systems as easily as to the hospital’s intranet.

Saves time when transferring patients
With a flick of the wrist, each pump can be removed from the bedside docking station and stacked onto a sturdy and stable transport unit. Its lightweight and modern battery technology make Space the ideal companion during patient transfers.

Automatic medical record keeping
Space features both cable and wireless interfaces for logging medical data onto the PDMS. Uni- and bi-directional, fully automated medical record keeping is enabled. Up to 24 pumps can be connected to one ICU bed without the nurses having to change any network settings.

B. Braun Space helps you continually improve the economy of your processes.

- The equipment technology can be customized to individual needs
- State-of-the-art alarm management keeps work on the wards running smoothly
- Nurses are relieved of the hassles of paperwork
- Decision-making is more secure thanks to seamless medical record keeping
- Cutting costs by improving workflow efficiencies
You cannot keep pace with rapid progress if you use out-of-date equipment.

By avoiding medication errors, you lower the complication rate, the average hospitalization stay of your patients and ultimately reduce costs.

One fact never changes: The best way to avoid complications is to ensure that the pump delivers a continuous infusion.

In this regard, the requirements placed on infusion equipment have become greater as progress marches on. Syringe pumps with user-dependent syringe fixation are not viable in modern settings, especially where highly potent vasoactive drugs are administered.

Only state-of-the-art equipment can warn about impending medication errors in an instant.

A purchasing decision that will stand the test of time must give due consideration to the aspect of medication safety.
Automated Infusion Systems

B. Braun Space lets you counteract the risk of serious medication errors.

Avoid transcription errors
With the Space IT interface, you can electronically transfer drug prescriptions from the PDMS to the infusion pumps.

Prevent dosing errors
Space DoseGuard® technology provides comprehensive protection against dosing errors. The barcoding function* reliably identifies syringes and infusion bottles to instantly prevent any mix-ups. The pump-resident drug library minimizes the risk of calculation and dosing errors. This feature also runs an automatic plausibility check of all dose rates entered.

High-precision delivery
The Space generation is setting new benchmarks in mechanics and sensor technology. The fully automated syringe piston brake on Perfusor® Space and the line-based clamp automatically safeguard your patients against infusion free-flow. The syringe pump grasps and fastens the syringe automatically to ensure excellent pump behavior. The Perfusor® Space allows fully automatic, overlapping syringe change*. This can particularly prevent complications caused by blood pressure fluctuations in patients receiving vasoactive drugs. It also takes a big load off the nursing staff.

B. Braun Space helps you minimize medication errors and complication risks.

- Highly accurate drug delivery even at minute volumes
- Prevents inadvertent bolus delivery when changing syringes
- Uninterrupted syringe changes* take a load off nursing staff and lower complication rates
- Pump-resident drug library prevents dosing mistakes

- Cut costs by preventing medication errors
Out-of-date infrastructures create higher overheads and promote inefficiency.

Cost drivers
Out-of-date technical equipment and all kinds of different models and generations drive up costs for the technical services department.

These costs add up over the equipment’s lifecycle and put a drain on budgets year after year.

Maintenance costs
Out-of-date equipment prevents you from maximizing cost-cutting synergies.

This situation also puts a burden on any technical services departments responsible for maintenance management.

The constant need to replace rechargeable batteries is a prime example of how out-of-date equipment can drive up overhead costs.
B. Braun Space lowers initial investment, operating and process costs.

Cut investment costs, enhance cost efficiency
With B. Braun Space, you are no longer forced to choose between standard and PCA/TCI/MRI pumps, bedside systems or mobile infusion pumps.

Restricting the number of models relieves your budget of extraneous expenditures. You thereby achieve optimal utilization rates and cost efficiencies.

Modern maintenance management lowers costs
Equipment nowadays can be handy, low-weight and robust and still uncompromisingly meet all practical needs.

The software-supported battery monitoring ensures the necessary reliability, long-life and the associated profitability. IT and intranet-driven service tools support technicians in effective troubleshooting. Your technical services department also benefits from the next generation of technical equipment.

Future-proofing and investment security
B. Braun Space is the embodiment of state-of-the-art in infusion technology. Its hardware and software architecture protect your IT integration investments. This is exactly what you demand of future-proof solutions.

With B. Braun Space, your overhead always stays within budget.

- Restricting the number of models helps cut costs
- Universal pump applicability maximizes cost efficiency
- IT-supported troubleshooting lowers maintenance costs
- Modern rechargeable batteries ensure long-term operation
- The perfect blend of cost-cutting and quality of care enhancement
Complete fluid management
B. Braun offers a wide range of standard infusion solutions for all areas of application and a full range of colloids. The solutions are offered in various infusion containers. The portfolio includes the leading collapsible Ecoflac® plus container and the Ecobag® infusion bag.

Clinical nutrition
Convenience, cost-effectiveness and safety – your best choice for an "all-in-one" nutritional mixture. 3-Chamber bags supply different formulations with amino acids, carbohydrates and fat with or without electrolytes. The NuTriflex® System is a "ready-to-use" multi-chamber bag system. Various single bottle systems with lipid emulsions, omega-3 fatty acids, amino acids, glucose and trace elements are also available.

Infusion sets, syringes, stopcocks / valves, infusion filters
A variety of standard IV administration sets for gravity or pump infusion as well as dedicated pump administration sets are available for B. Braun infusion pumps. Special IV administration sets for pediatrics, the preparation and application of cytostatics in oncology, etc. complete the product portfolio.

In addition, a broad range of accessories as stopcocks and manifolds, infusion filters and needle-free injection valves are available for infusion therapy.
At B. Braun, we have been driving innovation for centuries.

Our experience along with our expansive range of products allows us to develop the perfect solution.

Together with our customers, we are able to capitalize on shared potentials for improvement and cost savings.

Injectable drugs
The B. Braun injectable drugs portfolio includes innovative products as well as long-established injectable drugs for anesthesia, intensive care, emergency and general medicine. Lipuro® technology, an MCT/LCT lipid emulsion drug delivery system, reduces pain on injection.

Peripheral venipuncture
B. Braun shielded IV catheters combine optimum protection against needlestick injuries and related infections with well-established handling properties. The self-activating clip technology of the new Introcan Safety® and Vasofix® Safety is designed to prevent accidental needlesticks by automatically covering the needle tip when the needle is removed from the catheter.

Central venous catheters
A broad product range for challenging therapies in anesthesiology and intensive care medicine. Including the standard catheter Certofix® (1 to 5 lumens), the high-flow and catheters for pediatric applications along with Certofix® protect catheters ensure long-term protection against catheter infection.

Regional anesthesia/analgesia
B. Braun offers a wide range of products for all areas of regional anesthesia. It consists of products for nerve-blocking procedures performed close to the spine (spinal- and epidural anesthesia) (Perifix®) as well as nerve stimulators (Stimuplex® & Contiplex®), single-use needles and sets for peripheral nerve blocks.
B. Braun is a global supplier on the corporate healthcare market with a workforce of more than 32,000 employees in over 50 countries.

"Sharing Expertise" best expresses the spirit of B. Braun’s corporate culture: It is the promise to share medical knowledge and expertise with customers and colleagues alike.

B. Braun is committed to its close partnerships with physicians, nurses, hospital managers and researchers. The aim is to benefit the health of everybody, to use the knowledge gained effectively, to expand it logically, consistently and with determination – always in dialogue with its partners.

As one of the leading system providers, B. Braun develops services and pipeline products that provide optimum therapeutic benefits for patients in both clinical and outpatient settings.

The expertise of B. Braun rests on three supporting pillars: innovation, efficiency and sustainability. These corporate values help B. Braun deliver on its promise of “Sharing Expertise”.

B. Braun Headquarters, Melsungen, Germany
Architects: Sir James Stirling and Michael Wilford
Innovation

B. Braun has a long tradition of developing innovative products and services to simplify doctors’ and nurses’ work routines and to improve therapies for patients – a key factor in our success. The ongoing dialog with our customers combined with the creative drive of our human resources feed the constant flow of new ideas systematically incorporated into every product and new advancement.

Efficiency

Today’s healthcare systems increasingly demand that the relationship between cost and benefit be a sensible one. It is in everybody’s self-interest to keep the social security systems functioning by raising the level of efficiency at corporations, hospitals and in outpatient sector. Almost two centuries of experience enable B. Braun to provide smart strategies, products, and services for more efficient operational processes.

Sustainability

As a corporate citizen in a global society, B. Braun feels responsible for its employees and for the geographical regions in which it is active. This responsibility obviously encompasses environmental protection, but also the commitment to create perspectives for future generations by promoting cultural and sporting events. In these times of constant change, sustainability means offering dependability and consistency not only to customers, but also to world’s other less fortunate.
Space is at the beginning of its lifecycle

In 1951...

...B. Braun, the pioneer of infusion therapy, introduced the first infusion pump on the market. The original Perfusor® based on Dr. Hess’s design allowed highly accurate drug delivery.

Today...

...more than 50 years of experience later, B. Braun launched Space, the next pump generation – a modular system that yet again raises the bar in automated infusion technology. Discover how B. Braun Space helps you maximize economy of care in your hospital and safeguard the quality of care of your patients.

To find out more about the * starred features in this brochure, ask your contact at B. Braun or visit www.space.bbraun.com.
Automated Infusion Systems

Optimize the quality of your care – effectively and
Check out your requirements

Taking Stock

1. Design your workplace
   - In what departments will the pumps be used?
   - How many infusion and syringe pumps are required per bed?
   - Lightweight, handy pumps offer greater mobility
   - Easy to use for volumetric and syringe pump
   - The bedside docking station systems take up little space
   - Can be expanded by more than seven syringe pumps/four infusion pumps per ICU bed
   - Pump equipment can be standardized

2. Requested therapy profile
   - Total Intravenous Anesthesia (TIVA)
   - Target Controlled Infusion (TCI) for IV Anesthesia
   - Patient Controlled Analgesia (PCA)
   - Enteral nutrition
   - Cytostatic drug delivery

3. Supports workflows
   - Adaptable pre-alarm times and volumes
   - Central alarm monitoring
   - Easy patient transferring
   - MRI-compatible pumps
   - PDMS integration via network

4. Medication safety
   - Prevents bolus delivery when changing syringes and IV administration sets
   - Drug library minimizes impending dosing errors
   - Overlapping syringes changes, e.g. with catecholamines
   - Even delivery even at low rates

5. Investment security
   - Universal in use
   - Reduces operating costs
   - Low service and maintenance
   - Future-proof and flexible
   - State-of-the-art technology
The basic differences

- **Can the docking station be extended to more than 6 and 10 syringe pumps for intensive care patients?**
  
  Space Systems give you great flexibility (from 1 up to 24 pumps) but take up a minimum of bedside space.

- **Are the pumps universal in use (PCA, TCI, MRI), meaning, we do not required any added special single-type pumps?**
  
  By attaching a patient control button, every Perfusor® or Infusomat® Space can be converted into a PCA pump.

- **Are the pumps handy enough to support early patient mobilization?**
  
  The small, handy pumps with their powerful batteries give your patients their mobility back more swiftly.

- **Is inadvertent bolus delivery prevented when changing syringes, for example when injecting catecholamines?**
  
  The fully automated syringe piston brake on Perfusor® Space and the automatic syringe fastener are just two examples of Space's benchmarking safety concept.

- **Can the pumps be adapted to future requirements?**
  
  By purchasing B. Braun Space, you are investing in cutting-edge technology and will profit from the continual further development of the modular system.

- **Does the supplier have the know-how to cover the entire infusion therapy spectrum?**
  
  B. Braun has the expertise to develop customized solutions for your needs and work processes.