

allianz

Inaugural Issue | The Magazine for Partners of B. Braun's OEM Division



SHARING EXPERTISE WITH
CEO CAROLL NEUBAUER

ANTIQUE MEDICAL DEVICES OFFER
UNIQUE GLIMPSE INTO FUTURE

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B | BRAUN SHARING EXPERTISE

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CHECK OUT OUR MEDICAL CROSSWORD PUZZLE ON PAGE 35!



Tom Black

EDITOR'S NOTE

On behalf of all of us here at B. Braun Medical Inc., welcome to our inaugural edition of *allianz* Magazine.

By definition, an alliance is "a partnership or union of two parties to become essentially one." The first objective of the OEM Division of B. Braun Medical is to form true partnerships with companies in the healthcare market. That goal and our company philosophy, "Sharing Expertise," form the cornerstones of our strong relationships in the medical industry as well as with the governing agencies that regulate our products and processes.

This magazine will allow us to share our product knowledge,

industry acumen and expertise with you, our most important colleague. Our "Ask the Expert" column is geared to provide leaders like you with a variety of interesting facts and practices from disciplines within a medical manufacturer. As you will read in this edition, the medical principle of "first, do no harm" is echoed by Mr. Caroll Neubauer, CEO of B. Braun Medical, on a daily basis. His work to make B. Braun an industry leader, along with his tenacity to help eliminate the medical device tax, has positioned Mr. Neubauer as one of our industry's most passionate supporters.

We hope that *allianz* is more than just another industry journal that comes across your desk. We want

it to be a magazine that is fun, creative and insightful – the one periodical that you can't wait to see sitting next to your laptop or coffee mug twice a year. Our industry is made up of a great mix of young and "experienced" talent with a common goal: improving patient outcomes. Thank you for your dedication!

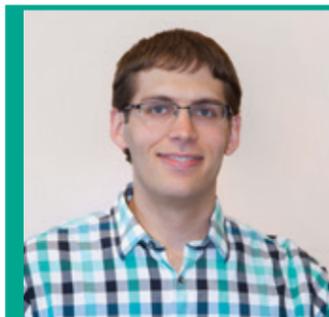
If you have any ideas to improve or make our publication more useful (or fun!), please respond to our info@bbraun.com site. From industry highlights and hot topics to restaurant reviews and entertaining pieces, *allianz* Magazine will be an escape from your daily e-mail grind. I hope you enjoy reading it as much as we have enjoyed creating it for you!

From a small apothecary in Melsungen, Germany, to becoming one of the top medical companies in the world, B. Braun Medical has been a loyal, devoted partner to patients, physicians, healthcare practitioners, and medical and drug companies for many decades.





ASK THE EXPERT: DANIEL DIETRICH



Daniel Dietrich is the Staff Engineer for Extrusion at B. Braun OEM Division.

Q: What are some basic tubing specifications?

There are three basic elements incorporated in extrusion: inside diameter (ID), outside diameter (OD) and tube length. Of course, there are many other factors involved in constructing a custom tube, but these are the first three (and most important) factors to consider. Other specifications to consider include color, material, grade of material, striping and number of lumens.

Q: What do customers need to communicate to their extruder?

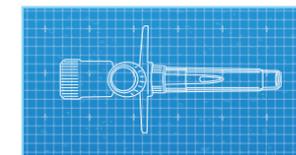
Our customers often have specification requirements related to material, color and diameters, but are sometimes unaware of many other complex features we can incorporate. We can tailor the tube to meet specific needs. Customers should also be active members of the proofing process before full-scale production. Communicating and affirming the device's intended application help ensure that the tubing is representative of what the customer wants before the final version is created.

Q: What are some recent tubing trends?

There is a rise in popularity of thermoplastic elastomers (TPEs). This plastic is considered a hybrid or alloy, where two dissimilar plastics are chemically joined and create a matrix with properties of both materials. This process is often expensive and challenging, but it is capable of providing unique tubing characteristics to help improve patient care that cannot be achieved with traditional materials.



Do you need a supplier that makes managing complicated projects look simple and speeds you to market?



How about one with world-class design chops and quality systems for ensuring excellence?



Or one that saves time and money with sterilization, packaging and regulatory capabilities all under one large roof?

If your answer is yes, then B. Braun OEM is the only supplier you'll need. Beyond a full roster of capabilities, we offer a vast array of products. You'll find parenteral pharmaceutical solutions in a variety of bags, a thick catalog of standard and custom valves, all the admixture accessories you'll ever need, and the products and capabilities to build a custom kit for your device or drug. It all adds up to a single-source supplier that goes far beyond being a vendor to becoming a true partner. Visit BBraunOEM.com.

B. Braun Medical | OEM Division | USA

B | BRAUN
SHARING EXPERTISE

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B. BRAUN AND BETHLEHEM, PA.: SHARING AN IMPRESSIVE INDUSTRIAL HERITAGE



A rich legacy of innovation intertwines B. Braun's OEM Division and Bethlehem, Pa., the eastern Pennsylvania city that the company has called home for more than 35 years.

B. Braun came to Bethlehem in 1979 when it purchased Burrton Medical Products, a leading medical manufacturer. In 1992, the company became known as B. Braun Medical Inc. The Burrton name was used in conjunction with the OEM Division until 2002. Our headquarters remains in Bethlehem; and our primary production facility is only four miles away in the neighboring city of Allentown.

Similar to B. Braun, which traces its German heritage back to 1839, the city of Bethlehem and the surrounding Lehigh Valley region have a profound and lasting legacy of manufacturing and innovation. Rich in natural resources, the region was the birthplace of the U.S. Industrial Revolution and paced the emergence of the nation's coal, iron, steel and cement industries.

At one point in time, city namesake Bethlehem Steel was one of the largest and most powerful companies in the United States. Its steel helped build the Golden Gate Bridge, Empire State Building and Panama Canal. During this manufacturing and economic boom, the city's

work ethic and entrepreneurial spirit rose to new heights.

Bethlehem and the Lehigh Valley rebounded from the downfall of the steel industry 20 years ago and is now one of the fastest growing regions in the mid-Atlantic. The city itself has been listed as one of the top places in the country for both business growth and lifestyle appeal.

The Lehigh Valley is home to some of the most innovative and advanced companies in the world, including medical device manufacturer Olympus America; Lutron, a world leader in lighting controls; and Fortune 500® Air Products in addition to B. Braun. One of the nation's top engineering schools, Lehigh University, also calls Bethlehem home.

In addition to its industrial growth, Bethlehem is experiencing a cultural renaissance as evidenced by the variety of festivals, concerts and community events hosted throughout the year. Musikfest, the second largest free music festival in the United States, draws more than a million people during the event's 10 days each August. Musikfest and many other events take place at the remarkable SteelStacks campus located on former Bethlehem Steel property, much of which has been repurposed for arts and entertainment.

Time and time again, Bethlehem has demonstrated the capacity to take on new challenges. The work ethic and ingenuity in the Lehigh Valley will help B. Braun's OEM Division to continue meeting the growing demands of the contract manufacturing marketplace.

NEW LOW PRESSURE CHECK VALVES DESIGNED TO PREVENT BACKFLOW OF FLUIDS IN MEDICAL DEVICES

B. Braun's OEM Division has expanded its selection of low pressure check valves to include both normally open and normally closed large-bore low pressure check valves designed to prevent the backflow of fluids into the primary IV container during piggyback hookup or bolus injection.



The normally closed valves open automatically when pressure is applied and are designed for the intermittent injection of fluids while preventing backflow. They feature a crack pressure of 22 inches of water maximum and a back pressure of 30 PSI. A male luer lock option also is available.

The normally open low pressure check valve operates with gravity/flow pressure for optimal shut-off performance. It has a low back pressure of 6.75 inches of water maximum to reseal and a high back pressure of 30 PSI of water.

The valves are not made with natural rubber latex. They can be purchased as a bulk non-sterile product or for integration into a custom fluid administration set.

We provide one of the industry's most extensive valve selections. Available in both standard and custom options, configurations include needle-free, dual check, aspiration, low pressure, trumpet, normally closed, and in-line. With an array of flow rates, materials and sizes, our valves are designed to meet any of the toughest application challenges.

The valves feature a crack pressure of 22 inches of water maximum and a back pressure of 30 PSI. A male luer lock option also is available.

CREATING A WORLDWIDE CENTER OF EXCELLENCE FOR NEEDLE-FREE VALVES



The Allentown plant produces more than 200 million valves a year in over 40 different configurations.

From the breakthrough introduction of SAFSITE® in 1988 through today's more recent developments, B. Braun has stayed at the forefront of needle-free valve innovation. The pioneering spirit and advanced thinking are concentrated in our Center of Excellence for Needle-Free Valves in Allentown, Pa.

B. Braun "Centers of Excellence" are global concepts that dedicate individual facilities to engineering and manufacturing specific product lines, then supplying that product worldwide through its operations in 60 countries. The Allentown plant produces more than 200 million valves a year in over 40 different configurations. That's a lot of experience to build upon.

"We look to the team in Bethlehem for the next needle-free innovation and how to integrate needle-free applications into medical devices," said David Schleder, Director of OEM & International Operations

at B. Braun's OEM Division. "This facility is B. Braun's only supplier of needle-free valves. We have a responsibility to keep our company and the industry on the cutting edge."

The Center of Excellence helps reinforce B. Braun's commitment to "Sharing Expertise." B. Braun's training department regularly goes into the field and teaches healthcare providers how to effectively use B. Braun devices. When they do that, they gain valuable feedback about how caregivers interact with devices and components, including valves. The information from the field filters back to product development teams that find ways to refine and improve the products.

"This allows us to go beyond the contract manufacturing model by giving us a reliable assessment of how these devices are used and responded to in the field," said Schleder. The valuable two-way communication creates an effective reporting system, allowing B. Braun to consistently innovate needed technology.

And innovation isn't confined to improved product function or capabilities. B. Braun has deployed advanced automation techniques at its Center of Excellence to bolster production capacity, improve product quality and predictability, and mitigate cost increases. "We're always looking for ways to meet the global demands for users and buyers of our components," said Schleder. "Even small improvements can make a big difference when we're working with quantities in the hundreds of millions."

EVOLUTION OF NEEDLE-FREE VALVES

The first generation of B. Braun needle-free valves hit the market in the late 1980s in response to federal needle-free legislation. Since then, B. Braun has engineered two additional designs that make needle-free valves easy and safe to use.



SAFSITE® (1988) – SAFSITE is the first generation of needle-free valves, which positioned B. Braun as a category leader. The device featured a capped safety connector for infusion systems. Very versatile valve, suitable for different applications.



ULTRASITE® (1994) – The second generation of needle-free valves, ULTRASITE used spring-loaded technology that allowed the valve to be hermetically sealed without using a cap. Eliminating the cap from the valve – without compromising sterility or performance – remedied the hassle of removing and replacing caps.

CARESITE® (2006) – B. Braun's current needle-free valve, CARESITE, has a streamlined design. This allows for more efficient manufacturing and more benefits for the customer, while still retaining the valve's function. Input from clinicians provided the basis for the design. The result: a device designed to help improve outcomes and efficiency. The CARESITE needleless connector with an innovative positive displacement feature is designed to help reduce catheter occlusions while preventing healthcare workers from accidental needlestick injuries.



To learn more about the evolution of B. Braun needle-free valves, visit us.bbraunoem.com.



WANT TO REDUCE COST IN YOUR SUPPLY CHAIN? REQUEST OUR COMPLIMENTARY WHITE PAPER

Medical devices are comprised of many components that must work together for the final device to function properly and reliably. It is essential that you manage your supply chain efficiently by establishing best practices for selecting and qualifying suppliers.

This white paper demonstrates how medical device manufacturers can apply time-tested quality systems principles to the supply chain process, especially as they relate to (1) selecting and qualifying suppliers, (2) segmenting them into categories based on potential risk, and (3) monitoring them over the short and long terms to drive continuous improvement.

Quality devices start with quality components, and quality components start with quality suppliers. Applying quality systems principles to the purchasing process can help ensure you have an objective, rational process in place to evaluate supplier suitability and long-term performance.

You can read more about the quality systems approach and other industry topics at our Resource Center (bbraunoem.com/resources).

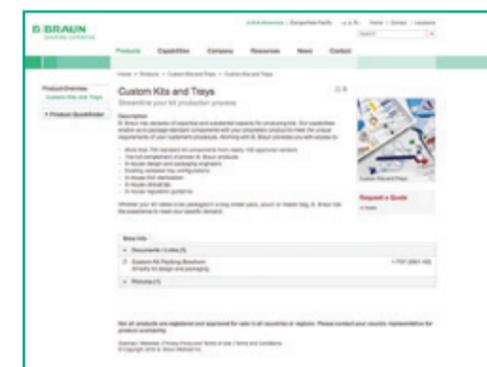
CAN'T SEE OUR FACILITIES IN PERSON? DO IT VIRTUALLY!

Our new video virtual tour will give you a behind-the-scenes look at B. Braun OEM Division's extensive manufacturing facilities in Allentown, Pa., Irvine, Calif., and the Dominican Republic – without the travel.

It's the next best thing to setting foot on our manufacturing floors. You'll be able to see the people, equipment and facilities that make our contract manufacturing services among the most extensive and dependable in the business.

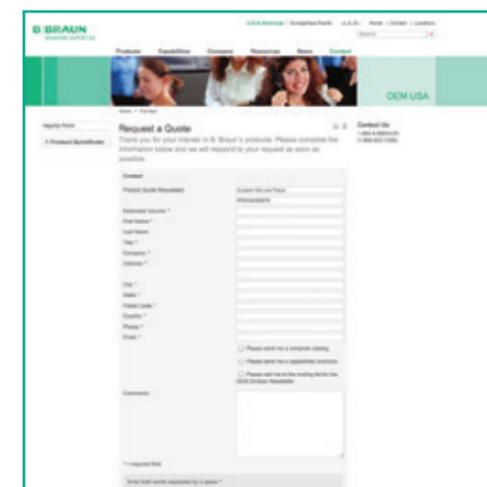
Your sales representative will be your guide, leading you through a tablet-based tour from the comfort of your office or conference room.

While we are unable to reward you with frequent flyer miles for this virtual visit, we're certain you'll find the experience informative and worthwhile. Ask your sales representative for a tour the next time he or she visits you.



LIKE WHAT YOU SEE? GET A QUOTE!

The next time you're perusing the B. Braun OEM Division website and see a product that piques your interest, you don't have to go to the "contact us" page to get pricing information.



We've made it easy. Simply click on the "Request a Quote" link under the product photo. A page will pop up that is automatically populated with the product name and part number. All you need to do is fill in your contact information, hit send, and your request will be sent immediately to the representative covering your territory.

You can expect a return e-mail or phone call within one business day. Click "Request a Quote" on as many products as you'd like. You'll get a quick response with the information you need.

Interview with
Caroll Neubauer,
Chairman and
CEO, B. Braun
of America Inc.



Caroll Heinz Neubauer is a member of the global Management Board of the B. Braun Melsungen Group of Companies. Mr. Neubauer oversees the North America operations from Bethlehem, Pa., where he serves as the Chairman and Chief Executive Officer of B. Braun of America Inc. and B. Braun Medical Inc. Mr. Neubauer has served B. Braun for more than 28 years.

Mr. Neubauer is, among other things, currently the Chairman of the German American Chamber of Commerce New York, and a member of the Board of Directors of AdvaMed (the industrial association of medical device manufacturers in the U.S.). He also serves as a member of the Board of the Medical Device Innovation Consortium (MDIC) and a member of the President's Advisory Group of the U.S. Chamber of Commerce.

Fluent in English and German, Mr. Neubauer was born in New Jersey and completed his schooling in both the United States and Germany. He earned a German law degree from the Albert Ludwigs University, Freiburg, Germany, in 1983 and a Master of Laws (LL.M.) from Georgetown University in 1987.

SHARING EXPERTISE: CONTRACT MANUFACTURING THE B. BRAUN WAY



What role does the OEM Division play at B. Braun?

Contract manufacturing has been an important part of our operations long before the term "contract manufacturing" was commonplace. While our OEM business started primarily with components, we have expanded our capabilities over the years to include full-service assembly, kitting and packaging, along with all of the professional support services that move a product from concept to market. Our OEM Division has allowed us to leverage our capabilities and provide advanced solutions to a category that is constantly evolving.

What makes the OEM Division a preferred option for customers?

We have a long history of contract manufacturing. We've produced an amazing array of devices and components for a variety of markets. We're able to bring decades of experience to every project at every stage of the product lifecycle. We also have a well-earned reputation for thoroughness, especially with documentation for FDA requirements. We consistently bring this level of detail to our contract manufacturing engagements, which gives our OEM Division customers peace of mind.

Is there an advantage to customers for B. Braun offering contract manufacturing services?

Our experience designing and marketing medical devices for use in an assortment of healthcare settings gives us unparalleled insight into what is happening in the field. We have B. Braun associates who train and interact with nurses, doctors and clinicians. Most contract manufacturers are a full step removed from the field, whereas our contract manufacturing customers benefit from that expertise.

What is the future for contract manufacturing in the U.S. and abroad?

The contract manufacturing market is projected to continue its 4-6% growth rate into the next several years. We intend to build our business faster than that rate as more companies look for complete outsourcing services that can speed time to market and reduce the risk and complexity associated with using several different suppliers.

What are the most significant changes you've seen in the contract manufacturing market in the past 10 years?

Our customers have asked us to take on more responsibility over the years. We've embraced it. As a result, we're working more closely with customers earlier in the development lifecycle. The end product becomes stronger, and the manufacturing process becomes more streamlined the earlier we get involved. Of course, we've also seen a desire for safer medical devices — for example, those offering needlestick prevention and DEHP-free materials. We have been, and will continue to be, at the forefront of these and many other patient-safety movements.

What changes do you anticipate seeing in the contract manufacturing market in the next 5 to 10 years?

We see even more stringent regulatory requirements ahead, so we're structuring our documentation and compliance processes to be ready for those increased demands. We always want to be one step ahead, not reactive.

How does B. Braun's "sharing expertise" mentality apply to the OEM Division?

It's a perfect fit. B. Braun's OEM Division customers benefit from the 175-plus years of medical device experience and knowledge throughout our worldwide organization. Exceptional contract manufacturing isn't about the equipment and components. It's about the people, knowledge and passion that we offer every hour of every day.

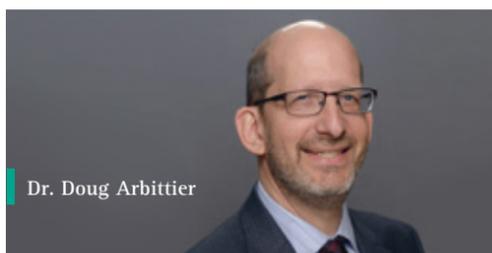


PERSPECTIVE ON THE MDET SUSPENSION

We were pleased that the U.S. House of Representatives and Senate passed a two-year suspension of the Medical Device Excise Tax (MDET) as part of the so-called "tax extenders" legislative package. While there is more work to be done, this legislation passage represents a critical first step towards our collective goal of seeing that the MDET is fully repealed.

I want to express my sincere gratitude to all of our partners and employees who proactively raised their voices by participating in our grassroots efforts and also by encouraging our elected officials to repeal the MDET.

ANTIQUATE MEDICAL DEVICES OFFER UNIQUE GLIMPSE INTO FUTURE



Dr. Doug Arbittier

To know where you are and where you're going, they say, it's important to know where you've been. When contemplating medical device innovation, looking at the future demands a careful exploration of the past.

Dr. Doug Arbittier, a practicing anesthesiologist, has dedicated 35 years to exploring the medical past. He has a rare passion for antique medical devices – a reverence almost as rare as the instruments themselves. Many of his unique devices were featured in a beautiful 2016 B. Braun OEM Division calendar, which showcases the tools, technology and techniques used by some of the greatest and most innovative pre-20th century physicians.

"The past gives us historical guidance on how to continue to innovate today," Dr. Arbittier believes. "Medical history unveils how far we've come as a society."

Dr. Arbittier owns and curates more than 2,500 historical medical devices gathered from around the world. The artifacts are displayed at the

Arbittier Museum of Medical History in York, Pa., a private museum predominately visited by well-known doctors and collectors who share his passion for antique medical devices.

The museum's collection spans from the 1700s to the 1800s, an era predating sterilization. The pieces were not only created to be functional, but also as works of art. While modern instruments are typically made of sleek stainless steel, Dr. Arbittier's collection largely features more aesthetic materials, including handles made of ivory and ebony.

Although Dr. Arbittier's medical artifacts are centuries old, many of them were located and researched on the Internet. Information related to the devices – ranging from medical societies, individual physicians who used them and sales catalogues – has been digitized and preserved.

Dr. Arbittier's passion for medical antiquities emerged when his mother bought him an old metal examining chair for \$10 at a local flea market. After the chair collected dust in the corner of his childhood room for several years, he began to wonder where the chair had come from and who had previously owned it. Dr. Arbittier researched the chair at the library (the Internet was not yet available) and discovered the manufacturing company and an original 1920s medical catalog. From that point forward, his interest for the medical past flourished.

Continued on pg. 26



"The past gives us historical guidance on how to continue to innovate today." –Dr. Doug Arbittier



Assorted medical xylography blocks. These wooden blocks were carved by hand and used to print detailed pictures for 16th- and 17th-century medical books.



Dr. Arbittier's favorite piece in the collection is a handwritten letter by Benjamin Rush, signer of the Declaration of Independence and famous Philadelphia physician of the late 18th century. The letter details the practice of bloodletting to heal tuberculosis.

Although modern medical knowledge has proven timeworn procedures such as bloodletting ineffective, there is still a high degree of respect for the innovation and creativity used to conceive the idea. During the 1700s and 1800s, doctors investigated new methods to treat diseases and ailments. Today's doctors do the same, but benefit from over 200 years of medical knowledge that assist their research.

"Current technology is only as relevant as its ancestors. Looking at past medical devices gives us a perspective of the development of current medical technology," says Dr. Arbittier. "Doctors are always looking for new advancements to improve treatments, therapies and interventions. Studying how previous doctors accomplished new innovations can help shift our thinking outside of the box."

In the early 1800s, Bernhard Heine, a German physician, invented the first mechanical chain saw. The saw is comprised of a flexible chain attached to an animal horn handle.



It allowed physicians to cut a finer line of bone and tendons located in tighter spaces. Dr. Heine's invention made medical procedures safer, limiting blood loss for patients. One of the few surviving models resides in Dr. Arbittier's collection, and is still in working condition.

Today, doctors use robotic instruments during surgeries. Robotic tools allow surgeons to cut with more precision, drastically reducing recovery periods. At the time, Dr. Heine's saw was a tremendous innovation, as robotics are today. Both radically changed surgical morbidity.

The retrospection enabled by Dr. Arbittier's collection is well-appreciated by B. Braun, whose own origins date back to 1839.

"B. Braun has a heritage spanning over 175 years," says Tom Black, Vice President, OEM and International Divisions Sales and Marketing, B. Braun OEM Division. "Our extensive history in the industry has given our people a wealth of expertise, which we are eager to share, accompanied by a deep appreciation for how far the medical field has come."

That's one of the reasons why celebrating the legacy of medical device innovation was a perfect fit for the OEM Division's calendar, according to Black.



Dr. Arbittier concurs: "I've collected over 2,500 items in order to preserve them for future generations. Many of the items would have been thrown away or destroyed if I hadn't created my museum. It is my mission to make sure these past innovations don't die out, and B. Braun's calendar helps preserve and share their legacy."



MPO RANKINGS: B. BRAUN IS 14TH

The July/August 2016 issue of *Medical Product Outsourcing* magazine listed B. Braun as the 14th largest medical device company in the world based on its previous year revenues of \$6.7 billion.

Certainly, we're proud to be recognized on the list as one of the only family-owned companies and one that certainly has one of the longest histories of continuous operation.

What does it mean to our customers? With 56,000 associates operating in more than 60 different countries, we have an incredibly broad range of experience and expertise on which to draw for contract manufacturing efforts.

- Our size has given us the ability to establish quality practices and systems that are among the most respected in the world.
- We're well-versed in regulatory requirements and practitioner preference from country to country.
- We have numerous Centers of Excellence in manufacturing and product development, allowing us to concentrate our knowledge and capabilities to drive innovation and continuous improvement.
- We have the manufacturing resources needed to scale to, from initial prototypes to worldwide distribution.

In the end, our rank is more than a number. It reflects our ability to provide OEM Division customers with the expertise, versatility, and resources needed to meet nearly any demand.

THE LIST

1. Johnson & Johnson
2. Medtronic
3. GE Healthcare
4. Siemens Healthcare
5. Philips Healthcare
6. Cardinal Health
7. Danaher Corp.
8. Becton Dickinson
9. Baxter International
10. Stryker Corp.
11. Abbott Laboratories
12. Boston Scientific
13. Essilor
- 14. B. Braun**
15. Alcon (Novartis)
16. Zimmer Biomet
17. Fresenius
18. St. Jude Medical
19. 3M Healthcare
20. Olympus Medical

MEET B. BRAUN'S "CONTRACT THINKERS"



The term "contract manufacturing" is a somewhat limiting term at B. Braun's OEM Division. After all, before "contract manufacturing" can occur, "contract thinking" needs to happen. That's the domain of Dawn Kentner and her engineering team.

Kentner, OEM Product Development Manager and a 10-year B. Braun veteran, heads a dedicated crew of professionals focused on improving the function, manufacturability and quality of components and devices produced by the OEM Division. By supplying vital engineering support, the team provides a solid foundation for success throughout a product lifecycle.

Yet, unlike most engineering departments within a company, Kentner's team views itself as a customer-oriented service organization.

"We work with our customers to find innovative, practical ways to improve speed to market while maintaining a high level of quality," she said. "We find creative, smarter manufacturing methods that will not compromise performance."

One of the primary qualities of an OEM Division engineer is adaptability. "We need to bring a flexible mindset to the table. The inputs are not always clear," she said. "Sometimes we need to dig down and dive

into customers' needs to truly learn the requirements for the patient and the doctor or nurse."

Such versatility demands engineers with resourcefulness – a new breed with diverse technical abilities. "They often break the stereotype of the engineer with the white, button-down shirt and pocket protector," she said. "The breadth and depth of products is wide. In the morning we may be working on a neurologic kit, and in the afternoon a women's health product."

Collaborative problem-solving is an essential element of the team's success, she added. "Our team is built

on a collective experience and knowledge base. We know what works and what doesn't work. We have a wealth of knowledge across the B. Braun organization – people we can go to for answers to tough challenges."

The collective knowledge is poised to expand even further. The group's newest engineer, Mike Chacko, was once an intern at B. Braun. "He's returning with the information and skills he learned here with us," Kentner said, obviously proud of the team's home-grown talent. "The more they learn here, the more they will be able to help our customers succeed."

"What I've Learned"

"There is no such thing as a 'no brainer'. Everything requires some level of thought."

- Kimberly Paris, Corporate Vice President, Quality

"The simpler, the better. There is an elegance and perceived command for subjects when perspectives are stated crisply and concisely. This applies to product design, quality systems, direct communication, dealing with customers, or the authorities."

- John Grimm, Corporate Vice President, Research & Development

"Every company has issues.... it is how each company responds to those issues that is most important."

- Dave Schleder, Director, OEM/International Operations

"I'D KEEP PLAYING. I DON'T THINK THE HEAVY STUFF'S GOING TO COME DOWN FOR A WHILE."

- Carl Spackler, Groundskeeper

"Solving the challenge of how to build a better mousetrap is the fun part of this job!"

- Dave Williams, Director, International Sales & Marketing

"Nothing about this industry is easy... but the reward of knowing that you help patients, every day, makes it all worthwhile."

- Rick Williamson, Vice President of Marketing, Pharmaceutical and Drug Delivery

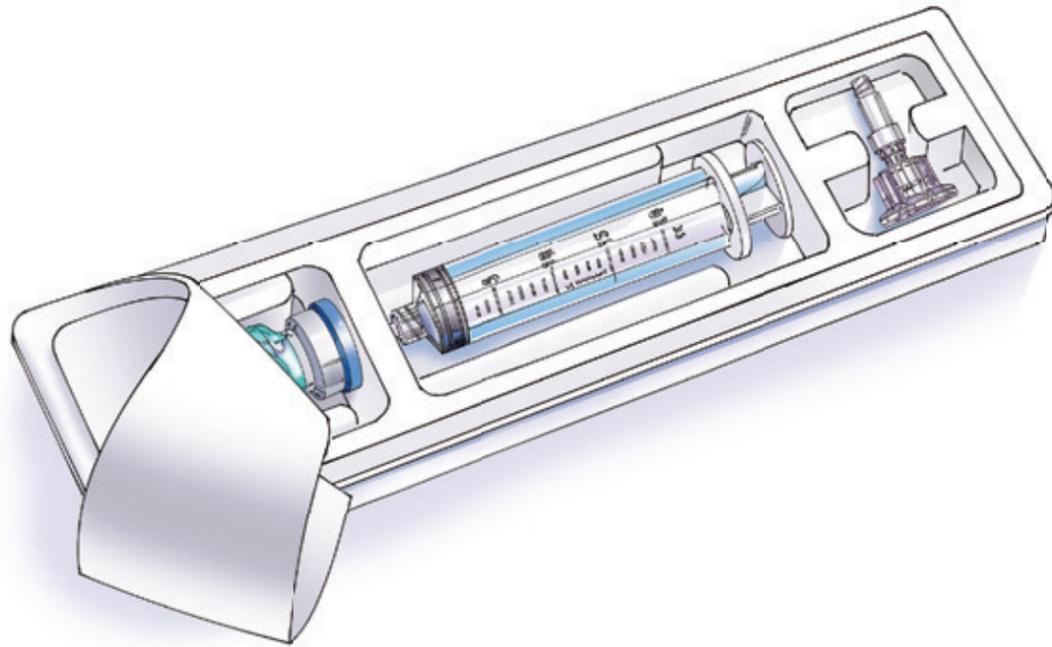
"IT IS BETTER TO AVOID SPILLING THE MILK, THAN TAKING THE CREDIT FOR CLEANING IT UP."

- Paul Polaha, Corporate VP, Sales Systems & E-Commerce

"Everyone has a contribution, especially the quiet ones. It is my responsibility to find the right method to draw out each individual's thoughts and ideas."

- Donna Luckenbach, Associate Director, OEM & International Sales Service

Your drug has a lot of benefits.
Now you can add convenience.

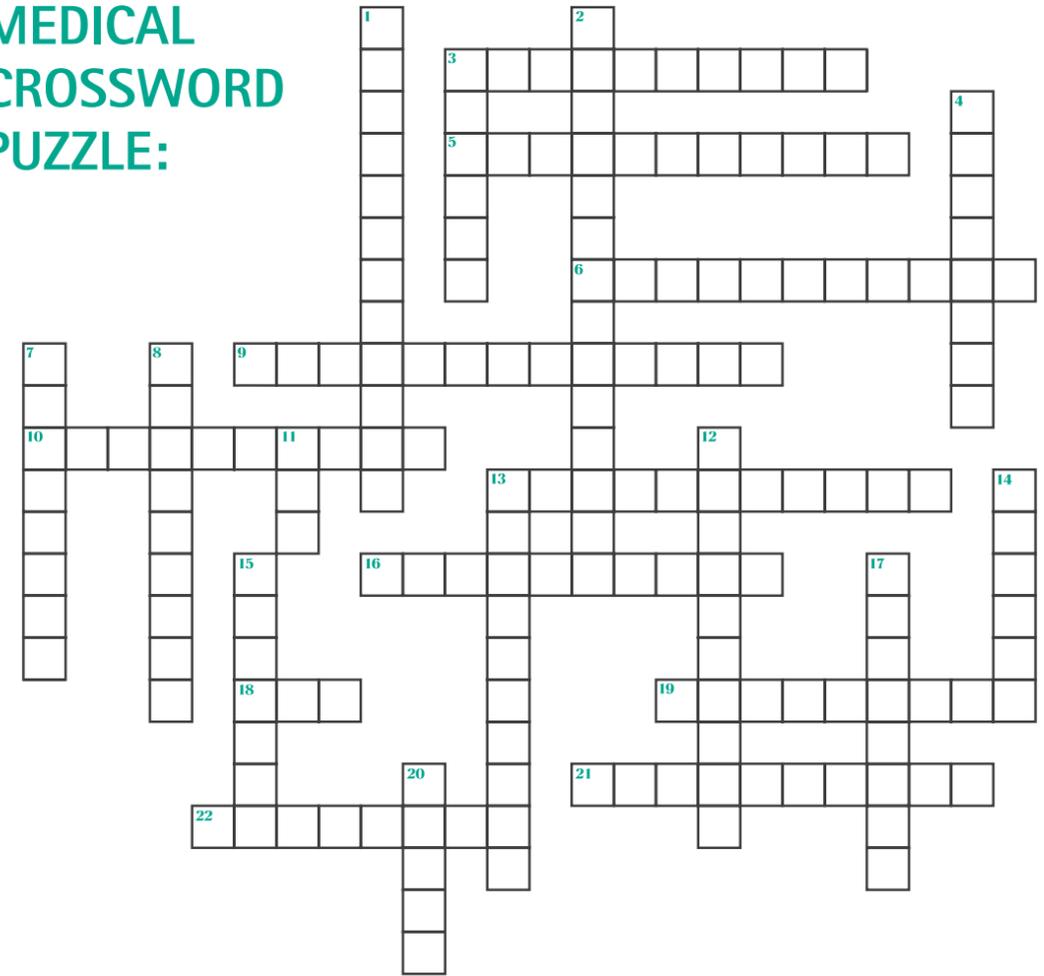


Bundle your drug with devices to make administration easy.

Caregivers have demanding jobs. What if you could help them work smarter by making your drug quick and easy to administer? B. Braun's OEM Division can create a customized bundle of all the devices needed to administer your drug. It'll make your drug convenient for caregivers and separate you from competitors. We offer an extensive selection of proven devices, plus design, regulatory, lab services, packaging and sterilization expertise. It's a full suite of capabilities designed for convenience.

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MEDICAL CROSSWORD PUZZLE:



ACROSS:

3. Nerve bundle that connects all parts of the body with the brain.
5. Imaging technique used to view the internal structure of the human body.
6. Surgery to repair nerve tissue.
9. Medicine that helps to prevent blood clots.
10. Paralysis affecting the lower body.
13. Procedure to remove a portion of the skull in order to relieve pressure on the brain.
16. Difficult articulation of speech.
18. Brain and spinal cord, part of the nervous system (abbreviated).
19. Intense nerve pain in head or face.
21. Inflammation of the protective membranes covering the brain and spinal cord.
22. Large part of the brain containing the cerebral cortex.

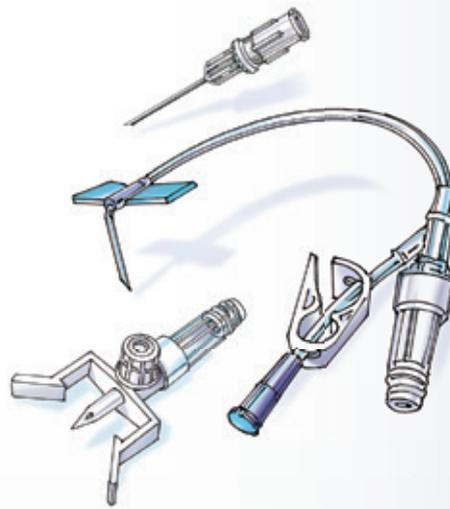
DOWN:

1. Inflammation of the brain.
2. Drugs used in the treatment of epileptic seizures.
3. Caused by a blocked blood vessel or bleeding in the brain.
4. Drugs to relax the central nervous system.
7. Drugs that induce sleep.
8. Drugs that relieve pain.
11. Monitoring method to record electrical activity of the brain.
12. Weakness or paralysis of the entire left or right side of the body.
13. Surgical incision into the skull.
14. Meaning paralysis or a stroke.
15. Temporary loss of consciousness, described as "fainting."
17. Inflammation of the spinal cord.
20. The organ that serves as the center of the nervous system; it's located in the head and is protected by the skull.

These things make life convenient.



These things make your drug convenient.



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