



PERCURO
WHEREVER YOU GO

PERCURO

brought to you by



7 WHO ARE WE?

9

WHAT IS IT?

13 WHO IS IT FOR?



WHY DO WE NEED IT?

57

WHAT IS THE MARKET?

45

WHAT ABOUT NATURE?

41

HOW DOES IT WORK?

27

WHAT DOES IT LOOK LIKE?

15

CONTENTS

A close-up, low-angle shot of a person's legs and feet as they run on a muddy trail in a forest. The person is wearing black leggings with a white feather-like graphic on the lower leg and black running shoes with yellow accents. The ground is wet and muddy, with a small puddle reflecting light. The background is a blurred forest with green foliage and tree trunks.

WHO

ARE WE?



+



Matt Storey

Brittany Justus

Charlene Fan

Shelby Sandler

Industrial Design

Engineering

Business and Marketing

Visual Communication Design



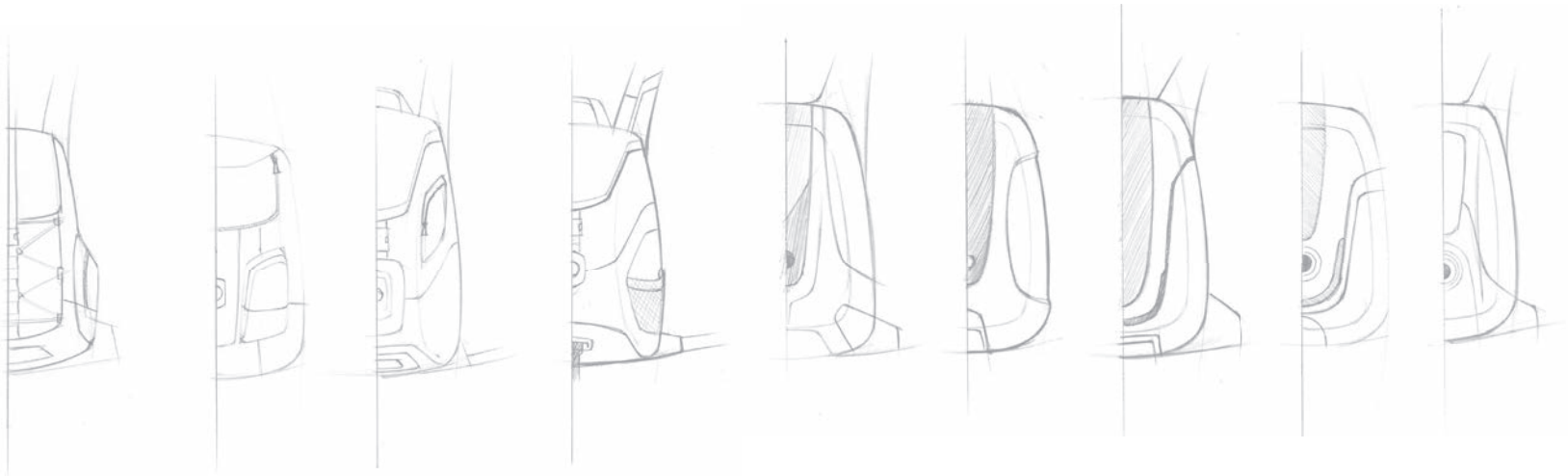
WHAT

IS IT?

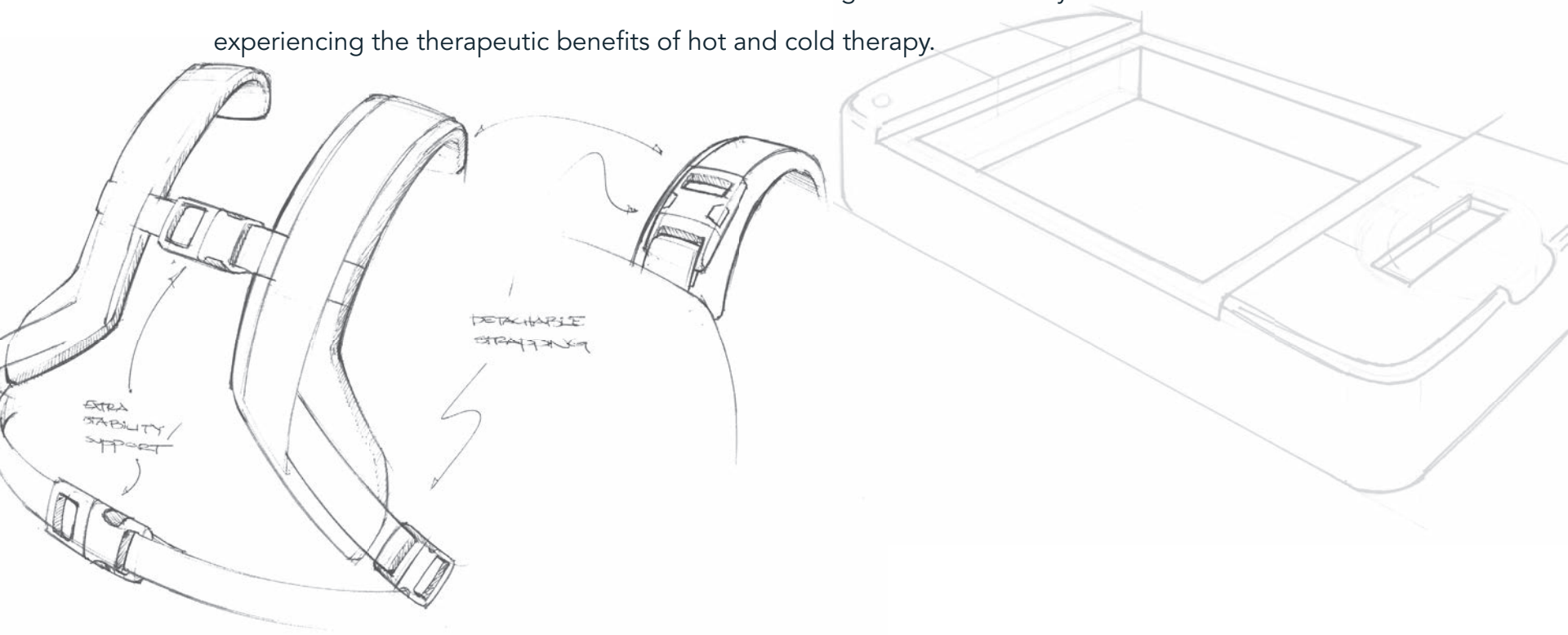
PERCURO

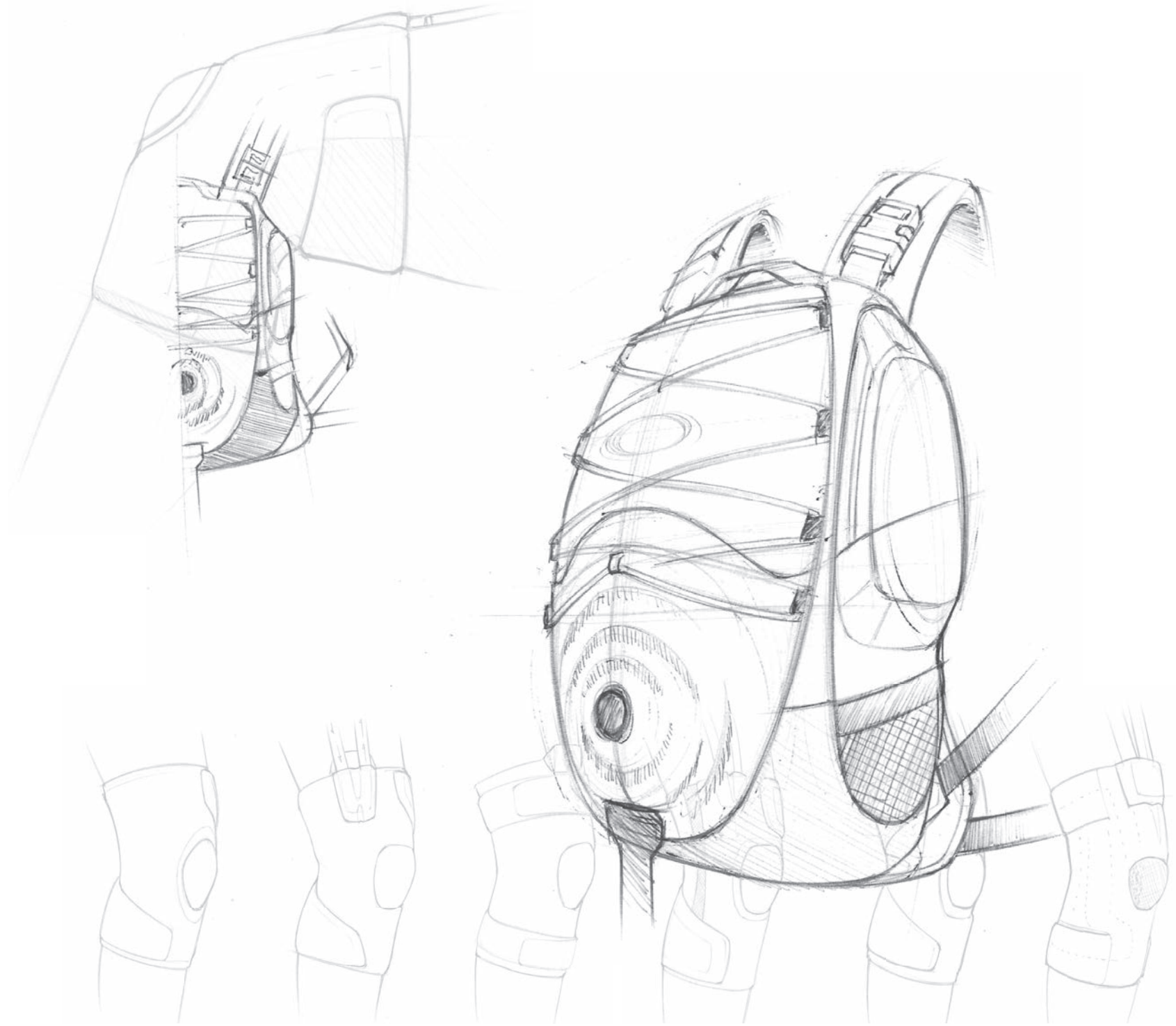
STRIVING TO MAINTAIN AN ACTIVE LIFESTYLE

Percuro is a therapy device designed to help those who benefit from hot and cold therapy. This type of therapy has been known to be beneficial for many types of ailments, including arthritis, diabetes, and general muscle soreness. Hot and cold therapy products currently on the market require the user to remain in one place, sometimes submerged in tubs of water. Percuro, on the other hand, is designed for those who want relief without sacrificing their daily activities. Percuro's unique backpack style attaches to a variety of braces, allowing the wearer to set a hot and cold program which will run while they go about their daily activities.



Percuro is a portable, backpack-style device that delivers hot and cold therapy to a variety of muscle groups and joints. A unique, easy-attach valve system allows the user to purchase one backpack unit and a variety of sleeves to deliver therapy across the body. The mobility of the unit is ideal for those who want the freedom to go about their daily activities while still experiencing the therapeutic benefits of hot and cold therapy.







WHO

IS IT FOR?



POST-OPERATIONAL

- hot/cold therapy
- reduce swelling
- increase blood flow
- pain relief
- relax muscles
- stimulate internal body activity
- increased immune system flow
- increase endorphin levels



GENERAL ACHES & PAINS

- hot/cold therapy
- reduce swelling
- increase blood flow
- pain relief
- relax muscles
- shorten recovery
- increase endorphin levels



SPORTS MEDICINE

- hot/cold therapy
- reduce swelling
- increase blood flow
- pain relief
- relax muscles
- faster recovery
- increase endorphin levels



DIABETES

- hot/cold therapy
- reduce swelling
- increase blood flow
- pain relief
- proper hand/foot care
- reduce coldness
- reduce numbness
- reduce chance of infection/ulcers
- increase endorphin levels

A close-up photograph of a swimmer's head and shoulders as they break the surface of a pool. The swimmer is wearing a bright red swim cap and goggles. A large, dynamic splash of water is captured mid-air, surrounding the swimmer's head. The background is a blurred green, suggesting an outdoor pool setting. The overall scene conveys a sense of motion and energy.

WHAT

DOES IT

LOOK LIKE?

The consumer marketplace is full of a countless array of products in all shapes, sizes, and colors. Many times it can be difficult to choose a product when the competition all touts the same features and functions. We're taught from an early age not to judge a book by its cover, but in actuality that may be the best judgement we can make. With so many products claiming shelf space, a product brand or appearance may be the one thing that sets it apart from its competitors. A recognizable brand combined with a stylish appearance may be the difference between a product that sells and one that doesn't.

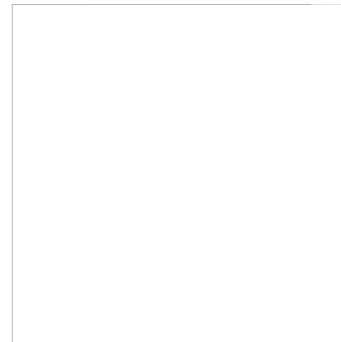
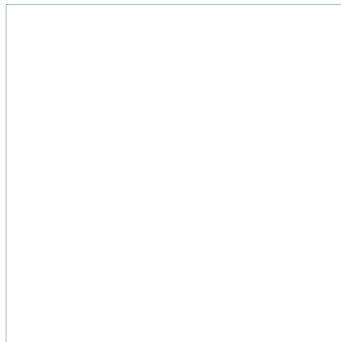
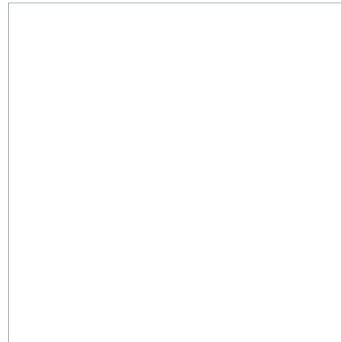
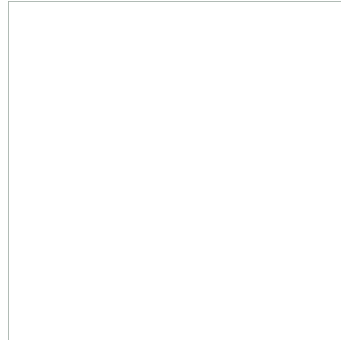
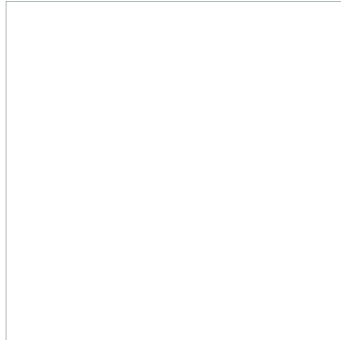
WHO IS PERCURO?

Percuro is striving to maintain active lifestyles for everyone who encounters the company. The Percuro brand encourages people that despite injuries and ailments, they can continue to live a healthy and active life. Percuro aims to lead by example by creating a healthy workplace for employees and only producing products they would encourage anyone and everyone to use.

Contributing to the image of a health-conscious, active lifestyle brand is the image mark of a penguin, which conjures ideas of adventure and wildlife. This mark is accompanied by a logotype and the tagline, 'wherever you go', stressing the fact that Percuro wants to make the things you love to do possible, while still providing relief from any ailments. The Percuro brand is eco-minded, and strives to minimize waste by producing products made with recyclable and renewable materials, as well as packaging our products minimally and transporting them efficiently.

SOPHISTICATED OUTDOORSMAN

Characterized by a strong sense of purpose and use that appeals to outdoorsmen and athletes. There's a focus on multi-functionality due to the addition of storage compartments within the therapy system. An earthy color palette is combined with natural and man-made materials, such as leather, canvas, and plexiglass, to create a natural, modern feel to the system.



CAMELBAK®



PRODUCT



PERSONALITY

fun, sporty, outdoors

cutting-edge, athletic

flexible, elegant

ADS



FORM

narrow, stacked, backpack

ergonomic, functional

asymmetrical, ergonomic

MATERIALS

nylon, polypropylene

ABS

polyester, gel, polypropylene

COLOR

vibrant, earthy

black

grey, purple, transparent

DETAILS

storage, concealed zippers

formed

opposite side straps

COLDONE®



dependable, traditional



ergonomic

polyester, neoprene, cotton

black

simple

VITALWEAR



aquatic



cylindrical

ABS, PVC, neoprene

transparent, black, blue

color breaks

am
arcticmedical



boring, medical



boxy

ABS, polypropylene, PVC

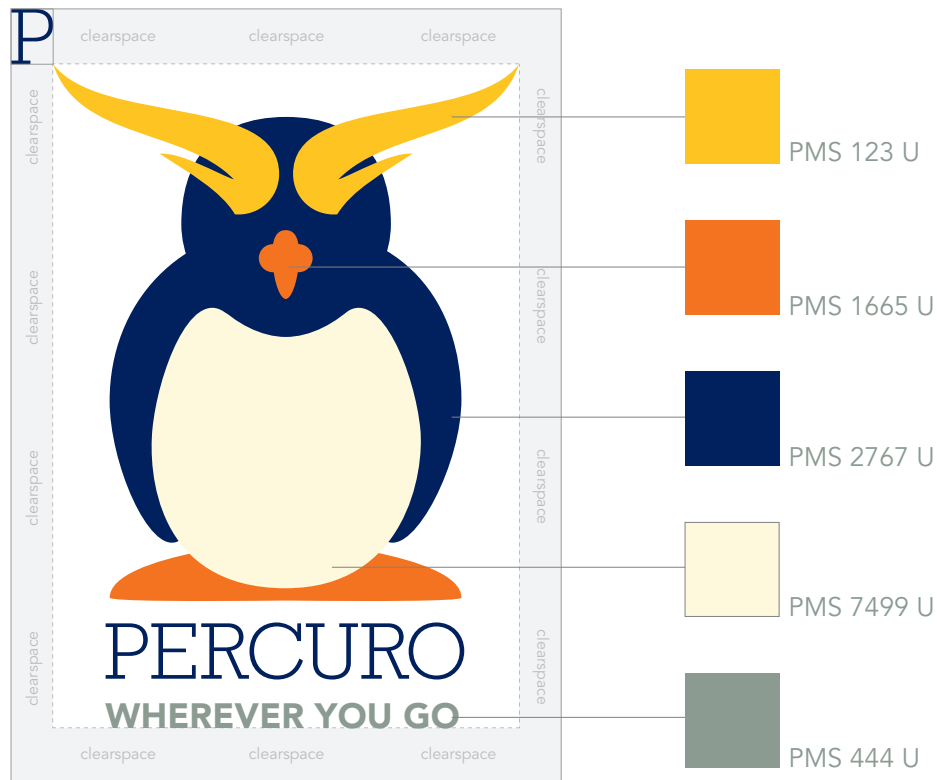
blue white

heavy texture, planar

VERBAL BRAND

The combination of the penguin symbol and Percuro logotype alert customers that this product is not your standard medical device. The use of colors and the penguin symbol give the product an outdoorsy and environmental feel, while the no-nonsense typeface lets customers know that Percuro is dependable.

CLEAR SPACE AND COLORS



MINIMUM SIZES



TYPOGRAPHY

Avenir 45 Book

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz1234567890&!?

Avenir 95 Black

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz1234567890&!?

Rockwell Std Light

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz1234567890&!?

COLORS



PMS 123 U



PMS 1665 U



PMS 2767 U



PMS 7499 U



PMS 444 U

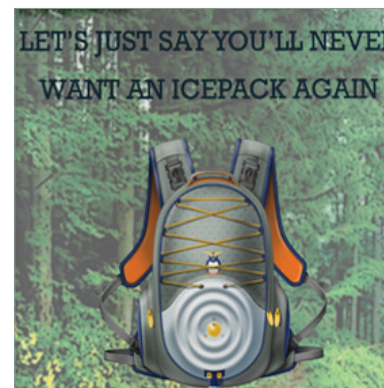
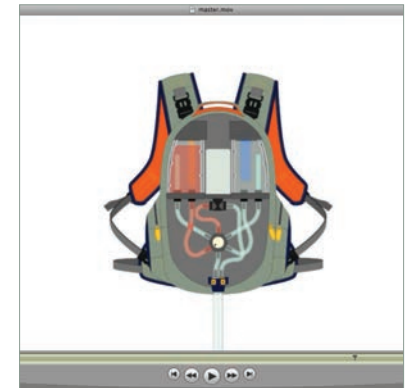
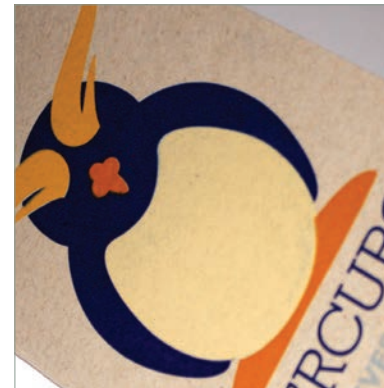
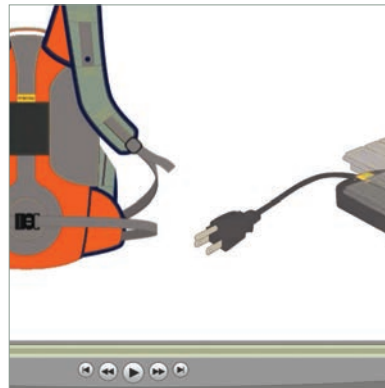
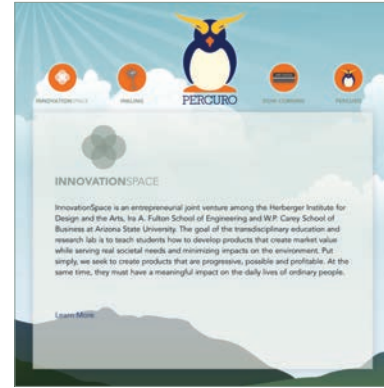


PMS 7547 U

FORMULA GUIDE

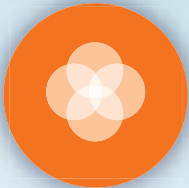
PMS	CMYK	RGB	WEB HEX
123 U	0c 24m 94y 0k	255r 196g 37g	#FFC425
1665 U	0c 68m 100y 0k	243r 115g 33g	#F37321
2767 U	100c 78m 0y 54k	0r 36g 93g	#00245D
7499 U	0c 2m 15y 0k	255r 246g 220g	#FFF6DC
444 U	15c 0m 15y 42k	139r 159g 146g	#8B9B92
7547 U	35c 4m 0y 94k	23r 41g 52g	#172934

Percuro is aims to reach three main groups of customers. These are medical device distributors, therapists, and sports enthusiasts. The medical device distributors and therapists will be best reached through catalogs, tradeshow, and magazines. The sports enthusiasts will be best notified about our product through magazines, event booths, and the Internet. Its important to differentiate the product for medical professionals, stressing the fact that this device will save them time and money and really work. Sports enthusiasts will be interested in the fact that this device relieves their pain while still allowing them to do what they love.





PERCURO
WHEREVER YOU GO



INNOVATIONSPACE



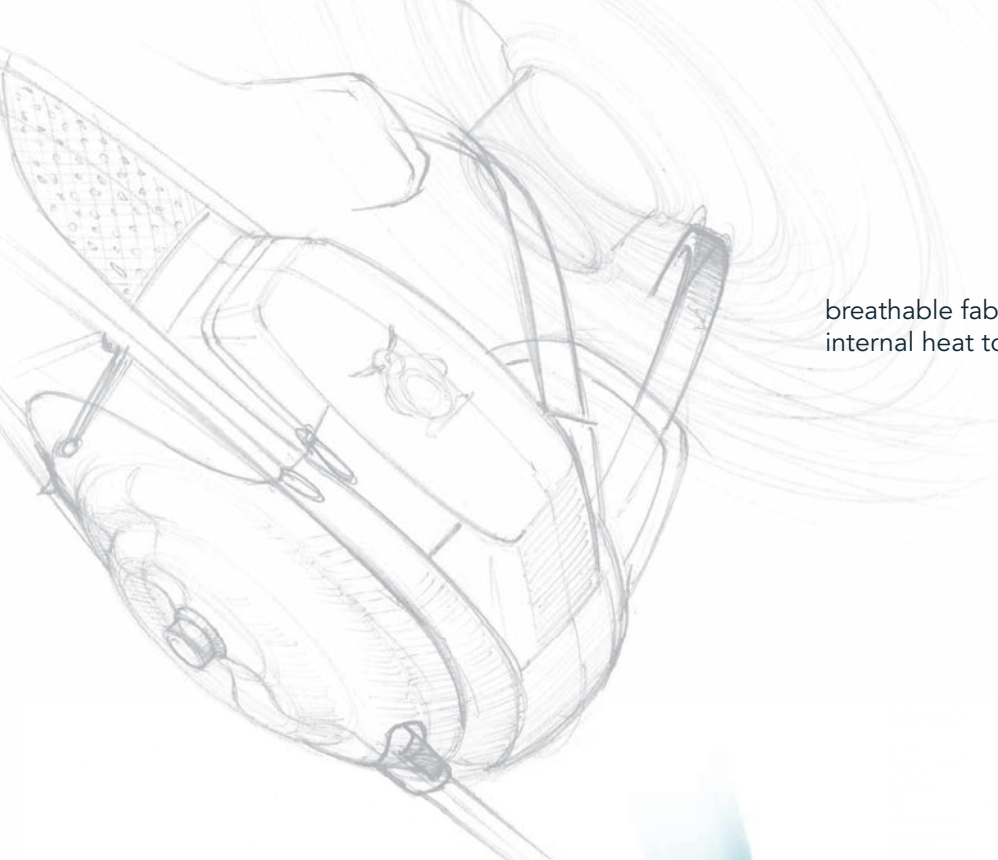
INKLING



DOW CORNING



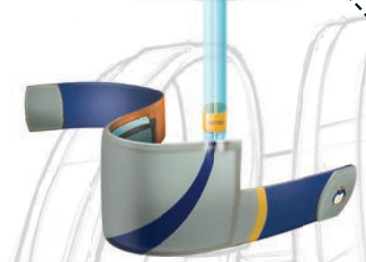
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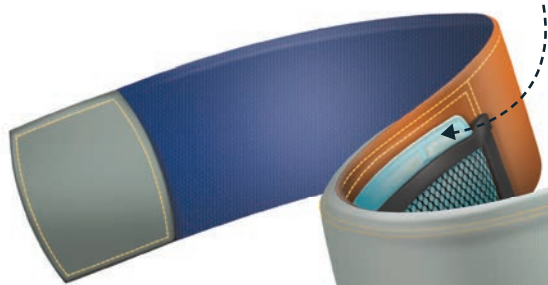
breathable fabric allows internal heat to escape



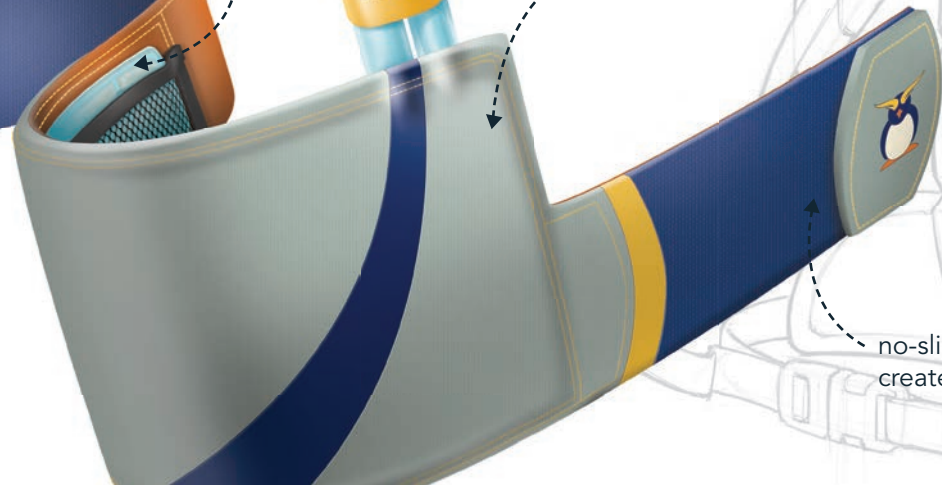
quick connect couplings



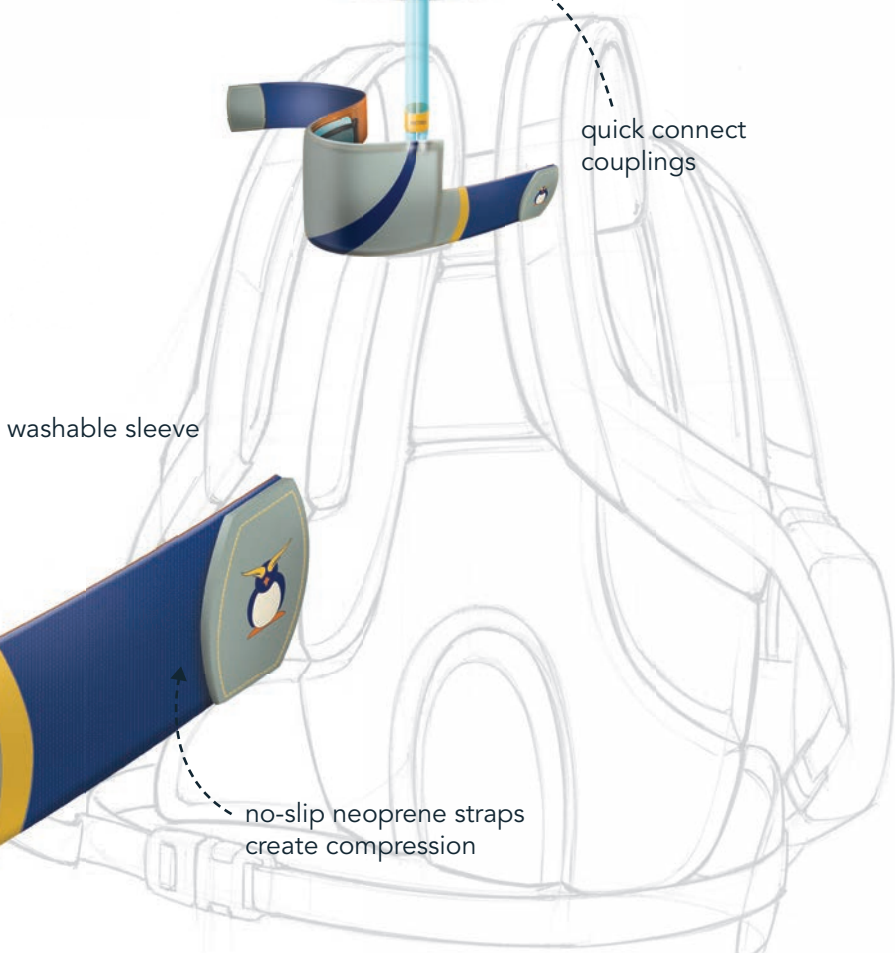
bladder delivers therapy



washable sleeve



no-slip neoprene straps create compression





LOGOTYPE

TOP HANDLE

detachable/adaptable straps for easy on off

padded straps for comfort during use

zipper pockets for cooling stick & small item storage

waist strap to transfer weight off shoulders

VALVE SYSTEM ASSEMBLY

A photograph showing the silhouettes of two cyclists on a hill at sunset. The sun is low on the horizon, creating a bright glow behind the cyclists. The sky is a mix of blue and orange. The cyclists are wearing helmets and backpacks. The text 'HOW DOES IT WORK?' is overlaid in large white letters.

HOW
DOES

IT WORK?

When you're in pain the last thing you want to do is struggle to put together a product or read through complicated instructions. Products to ease pain should be intuitive and not require long procedures. In order to best serve customers, products should also be easy to maintain and repair and adjust to fit a variety of users.

Percuro is designed with the user in mind. By color-coding the product the use becomes intuitive and simple. The product is decoded as follows:

YELLOW - human interaction points

ORANGE - passive contact points

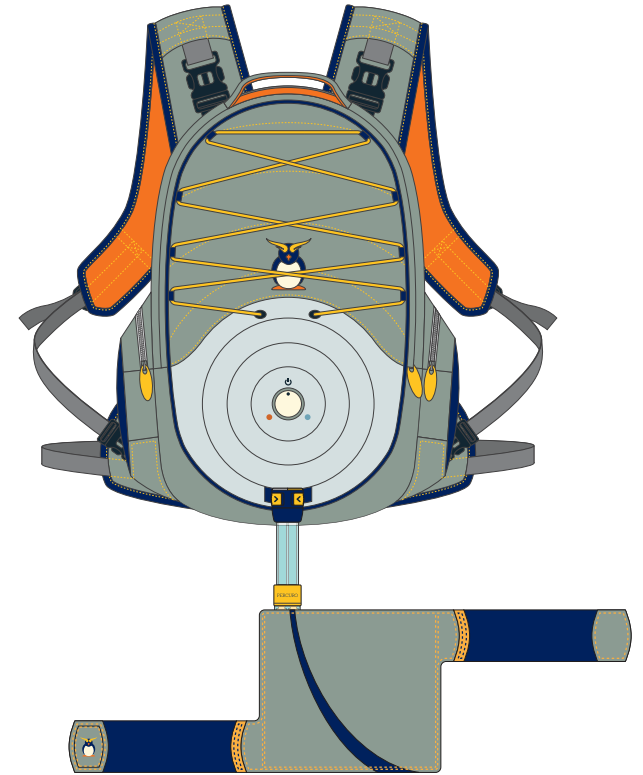
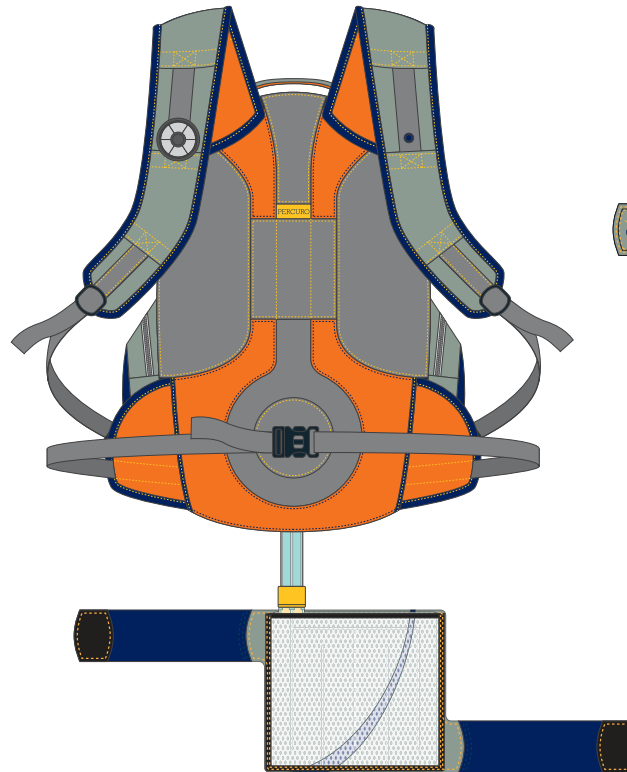
BLUE - accents

GRAY - main body

LIGHT BLUE - references cold therapy

RED-ORANGE - references heat therapy

RIPPLES - communicate 'push'





BEND
A11

silicone tubing



FLOW
E98

one way valves



CUSHY
G86

strap padding



ODOR CONTROL
G72

sleeves

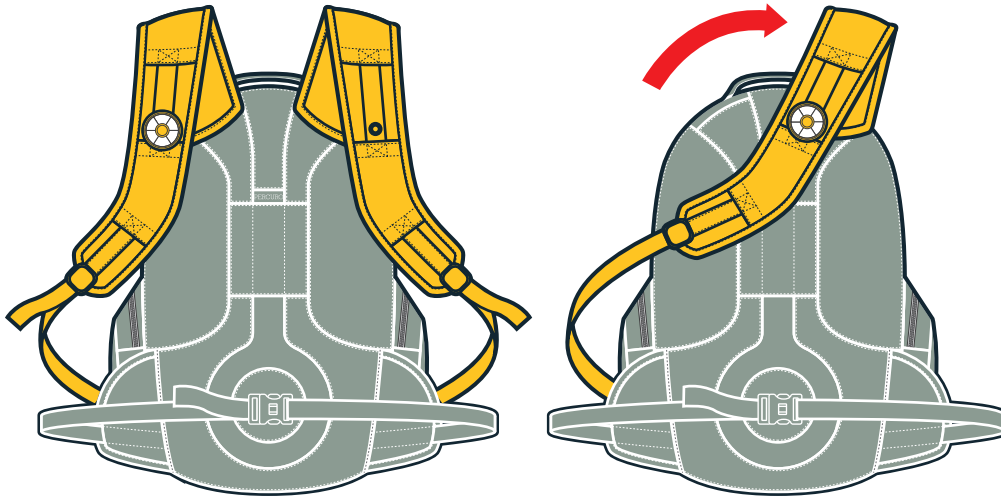


BREATHE
H39

fabric

Dow Corning offers a wide variety of silicone products that will be used in the manufacturing of Percuro. Their silicone tubing flexes without losing its integrity and has insulating properties, making it the perfect choice for the tubing running between the sleeve and backpack. Their silicone valves have long life-spans, are flexible and heat resistant. Dow Corning's silicone foam cushions like other foam but produces no harmful by-

products and is cost-effective, perfect for padding the backpack straps. Their antimicrobial silicone coatings bond permanently to treated fabrics and destroy bacteria, depleting odor buildup on the sleeves where there is constant skin contact. Lastly, their weather resistant textiles are water repellent, and UV and abrasion resistant, so Percuro will last as long as you do.

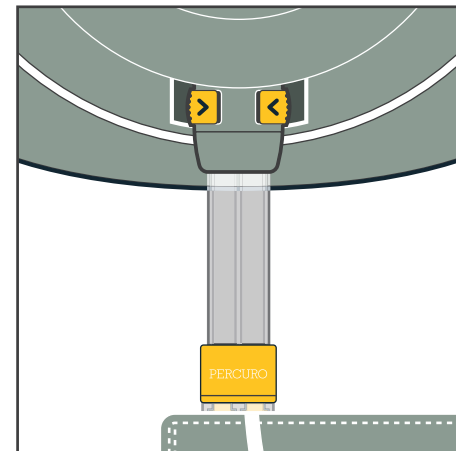
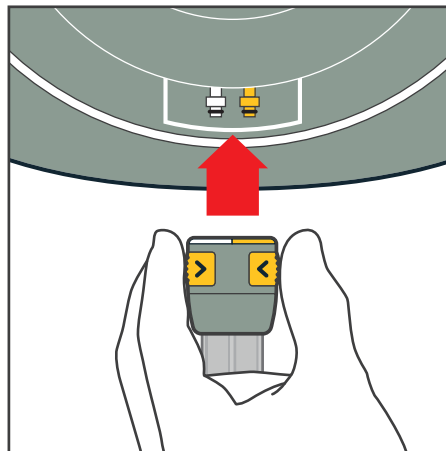
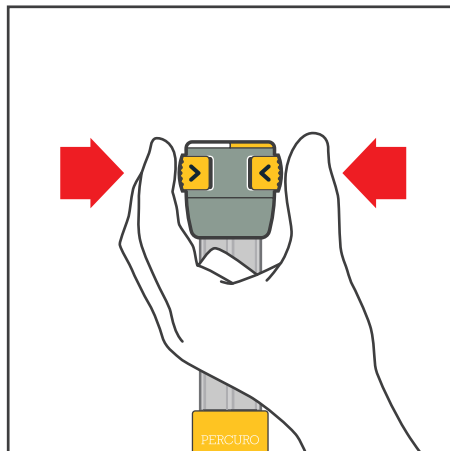


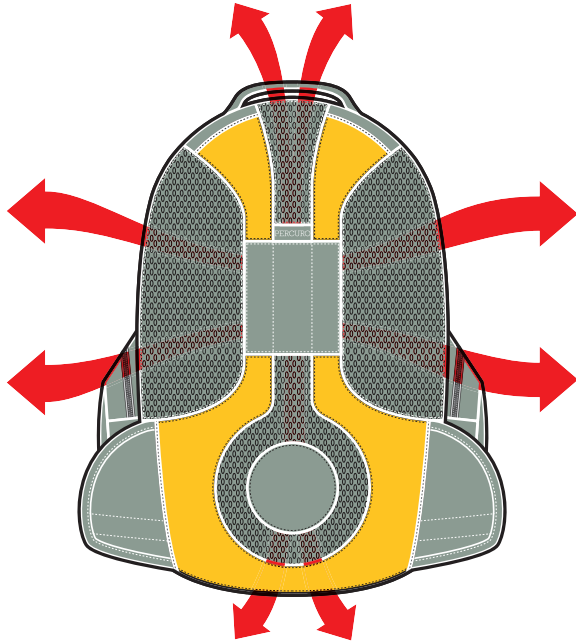
Ultimate Accessibility

Straps detach at four points to make wearable for users with limited flexibility

Easy Assembly

Sleeves easily attach to the backpack with a leak-proof quick-attach coupling system.



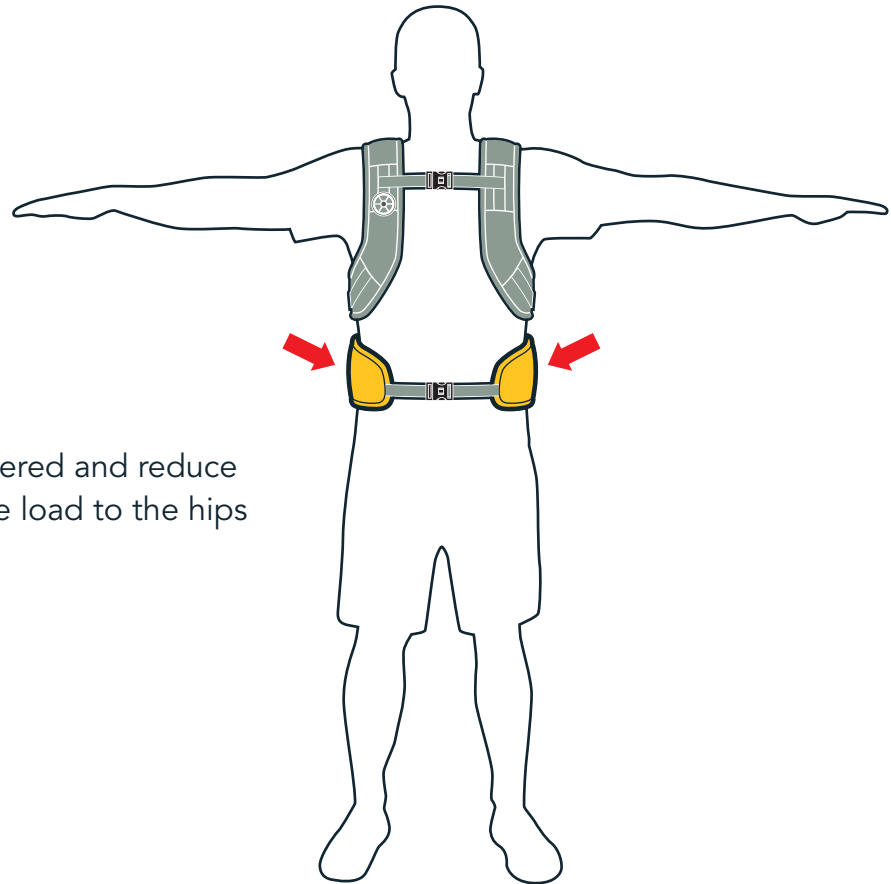


Superior Breathability

Mesh overlays and breathable fabric wick moisture away from the body. Curved back panel moves away from the body, while still supporting the back to improve airflow.

Maximum Stability

Waist and top straps keep weight centered and reduce strain on the shoulders, transferring the load to the hips

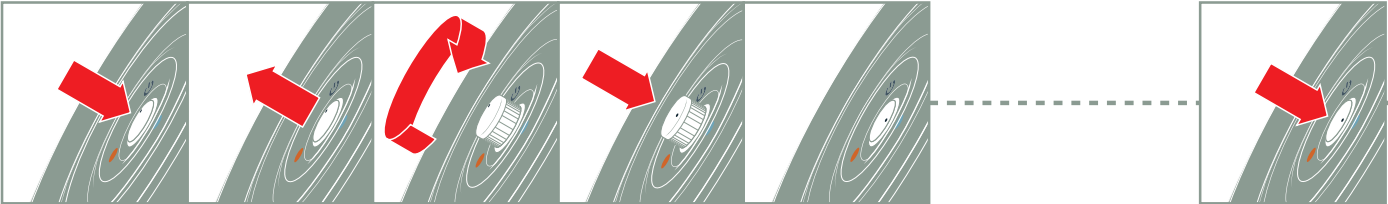




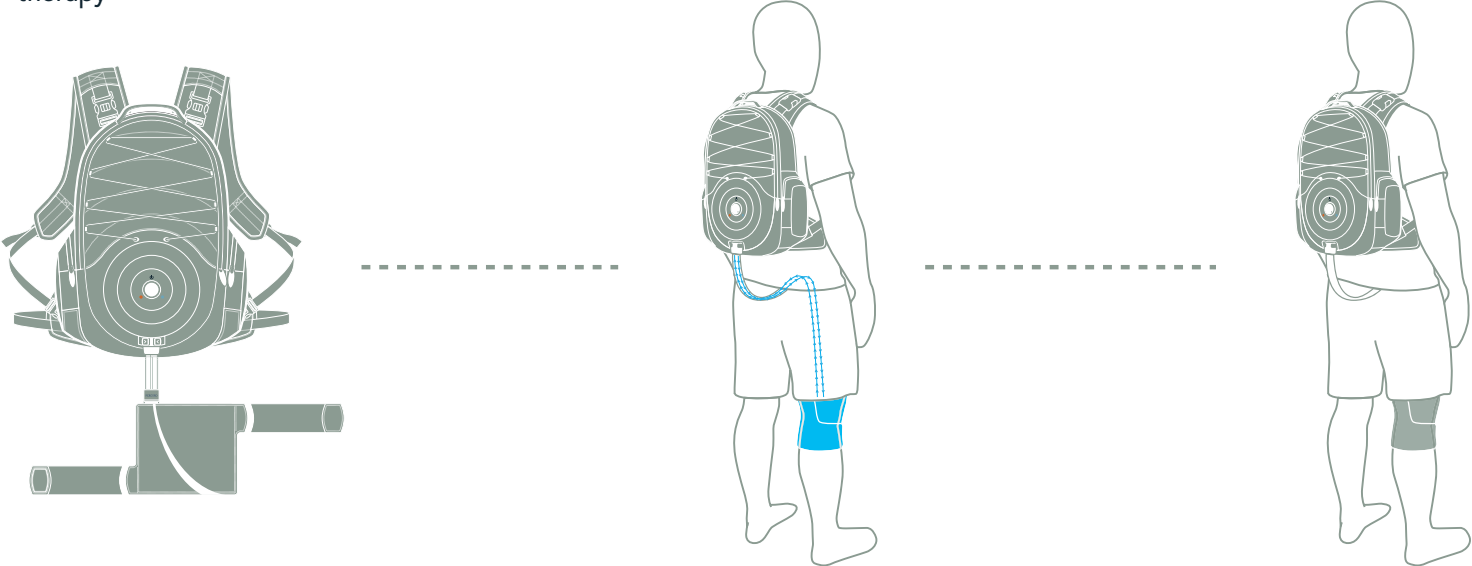
timer

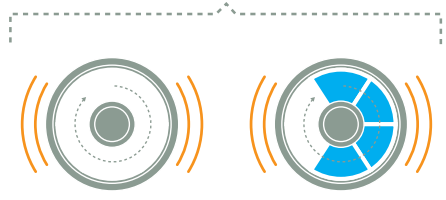
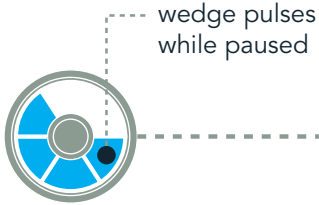


interface



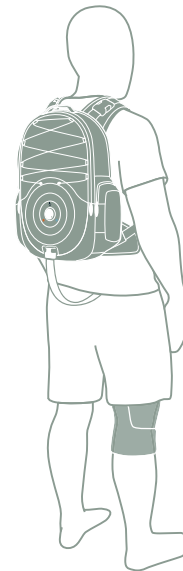
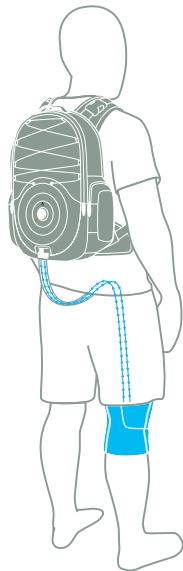
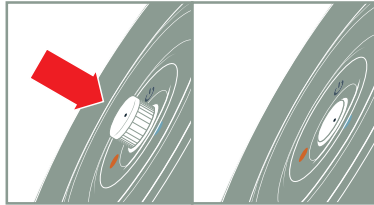
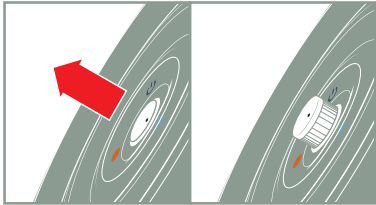
therapy





alarm sounds (1min)

rotating pattern (repeat for 1min)



THERAPY CYCLE

switch to warm therapy

30min

25min

20min

15min

10min

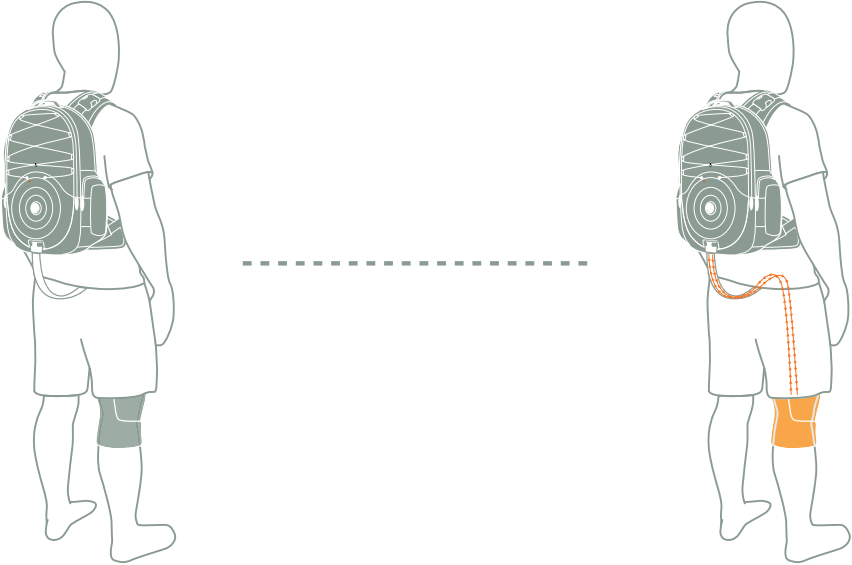
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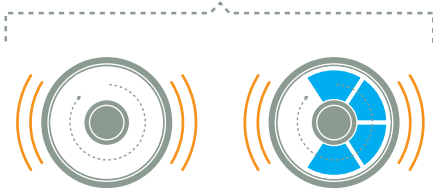


interface



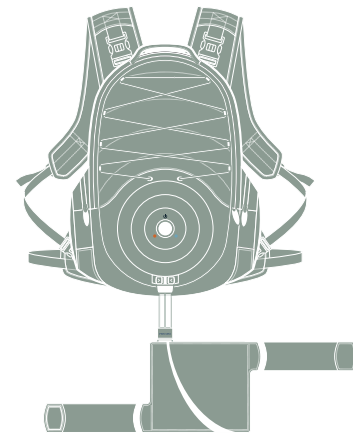
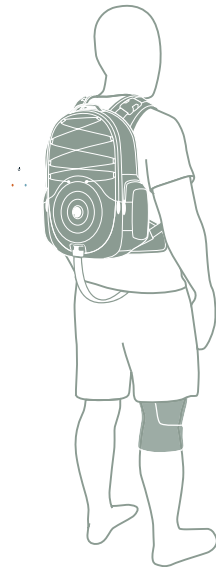
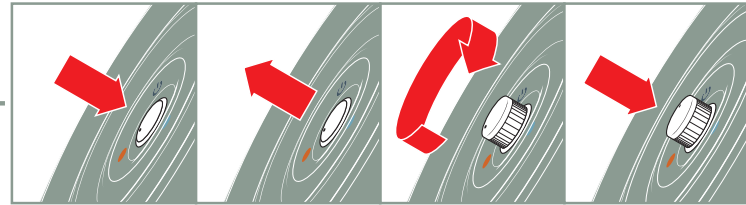
therapy

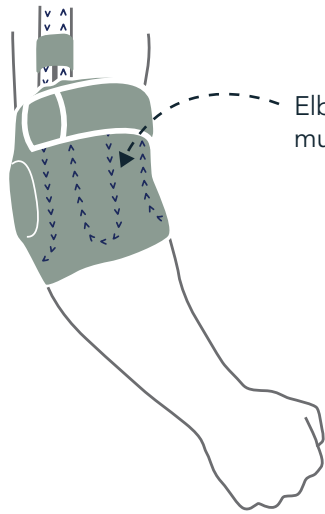




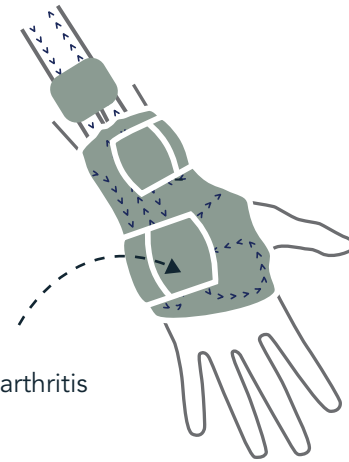
alarm sounds
(1min)

rotating pattern
(repeat for 1min)

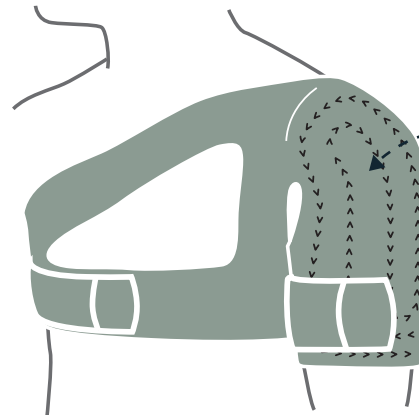




Elbows are a common area for muscle soreness and joint pain



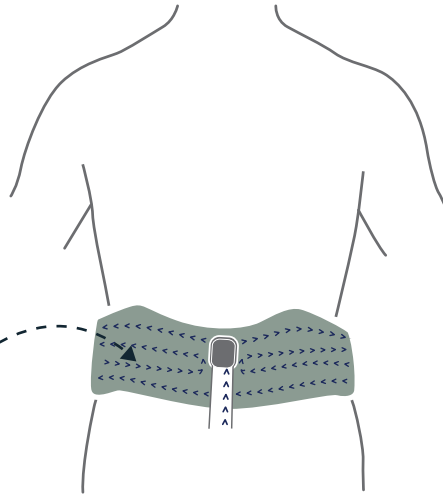
Wrists and hands are the most problematic areas for sufferers of arthritis



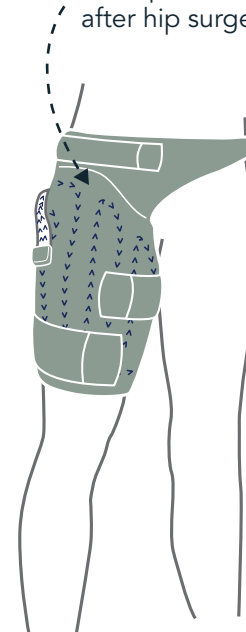
Many sports and athletic endeavors result in shoulder soreness

Percuro is designed to work for a majority of aches, pains, and ailments. Our quick-attach coupling system allows for consumers to purchase one backpack unit and an array of sleeves to suit their needs. This allows consumers to customize Percuro to maximize their benefits.

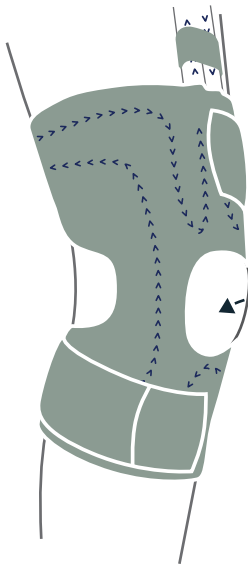
Back tightness and pain is the top complaint of people across all ages



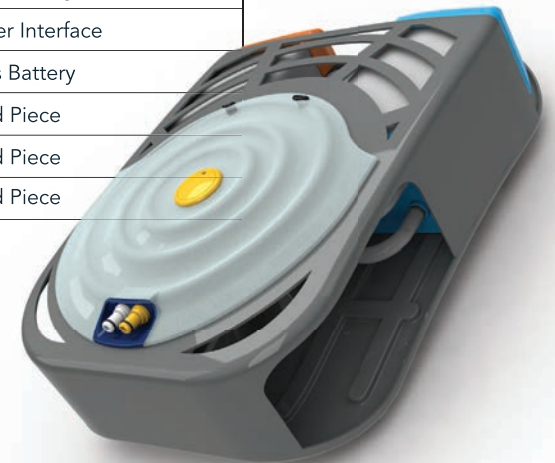
Therapeutic relief is necessary after hip surgery and replacement



Injuries to the knee are the most common for athletes and require intensive therapy after surgery



MATERIAL	AMOUNT	FINISH	PROCESS	JUSTIFICATION
Water Pump - VDC powered	1	Stainless Steel	Purchase	Primary Function
Medical Grade Tubing (3/8")	~ 4 ft	Silicone	Outsource	Flexible, Durable Material
3-way luer fitting valves (3/8")	2	PVC	Injection Molding	Custom made pieces
1/2" npt coupling adapter	2	PVC	Purchase Component	Standard Piece
Barb fitting 1/2" npt x 3/8"	6	PVC	Purchase Component	Standard Piece
Copper Wiring	~20 in	Copper	Purchase Component	Standard Piece
Battery Holder	1	ABS	Injection Molded	Custom Piece
Lithium Ion Battery	1	Standard	Purchase Component	Standard Piece
Electric Wiring	~20 in	Copper/Polyplastic	Purchase Component	Standard Piece
Gel Pad Inserts	2' x 2' material	Nylon	Outsource	Dow Corning material
Polycarbonate Reservoirs (700mL)	2	Polycarbonate	Injection Molded	Light Material
LED Display	1	Standard	Purchase Component	Standard Piece
Timer/Circuit Board	1	Standard	Purchase Component	Standard Piece
Waterproof Silicone Adhesive	1	Silicone	Purchase Material	Standard Material
Epoxy	1	Plastic Fusion Epoxy	Purchase Material	Standard Piece
Ripstop Nylon	2 yd	Weather Resistant	Purchase Material	Standard Piece, Durable
3/4" Ladderlocks	4	ABS	Purchase Component	Standard Piece, Easy to use
Spool 100% Polyester Thread	120 yd	Polyester	Purchase Material	Standard Piece
3/4" Medium weight Nylon Webbing	2 yd	Nylon	Purchase Material	Standard Piece
Main Housing Top	1	Polyethelene	Injection Molding	Primary Housing
Main Housing Bottom	1	Polyethelene	Injection Molding	Primary Housing
Button/Knob	1	ABS	Injection Molding	Main User Interface
Battery Housing	1	ABS	Injection Molding	Contains Battery
RFID Transmitter	1	Standard	Purchase Component	Standard Piece
RFID Tag	1	Standard	Purchase Component	Standard Piece
Main Circuit Board	1	Standard	Purchase Component	Standard Piece

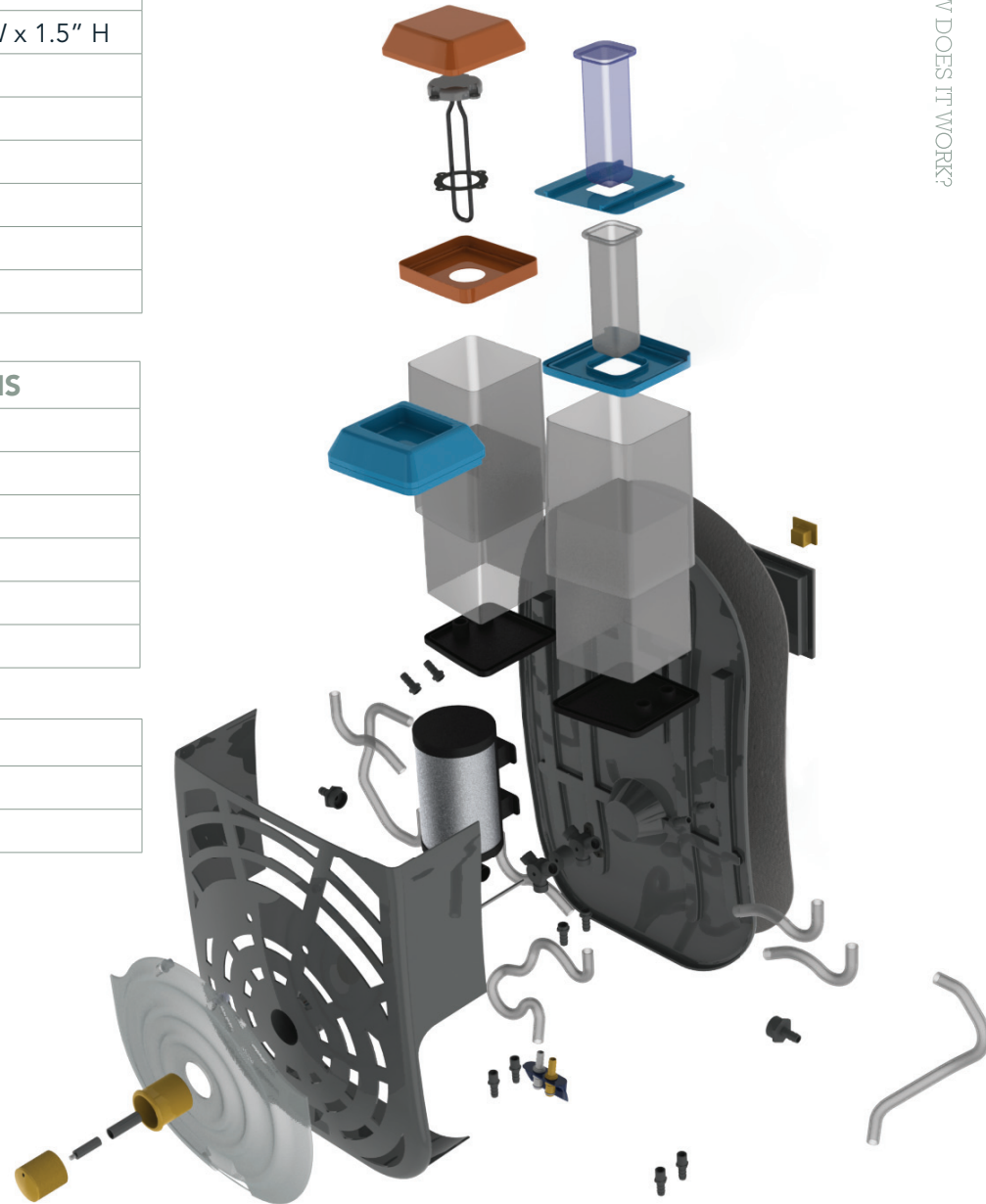


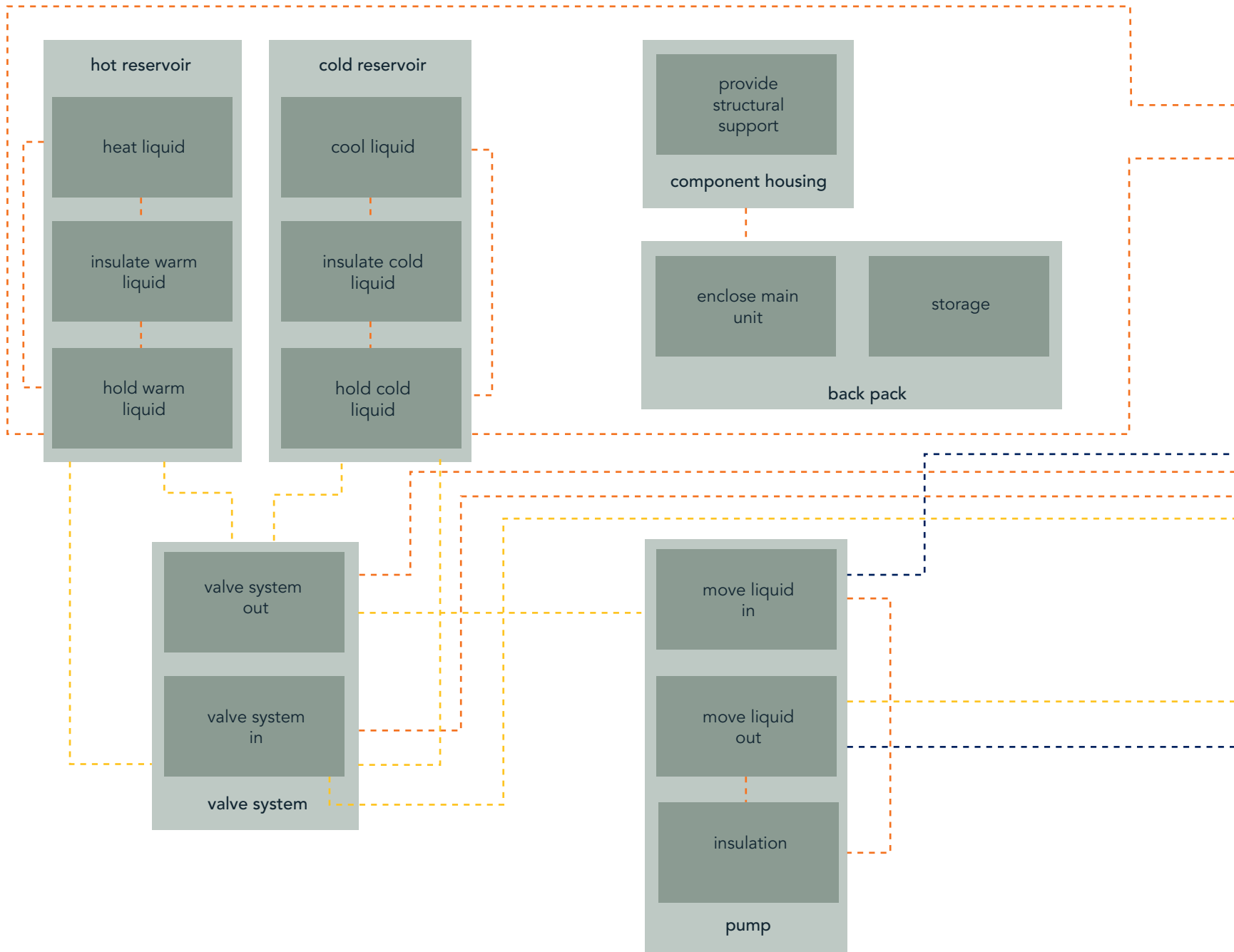
BILL OF MATERIALS

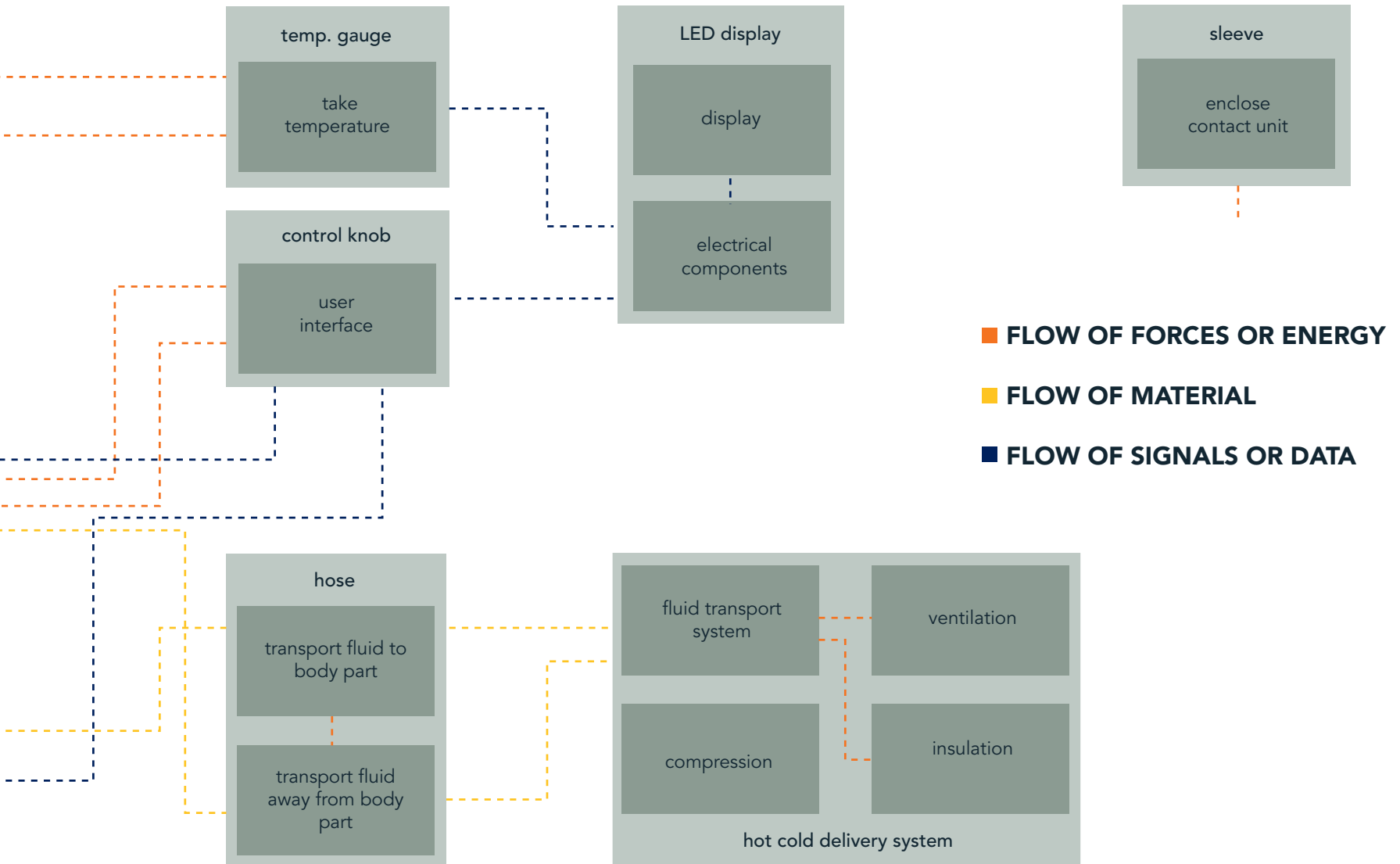
FINAL TARGET SPECIFICATIONS	
Total Mass	<10 lbs
Dimensions of Main Unit	13.5" L x 8.5" W x 1.5" H
Portable Energy Life	≥ 4 hours
Thickness of Wraps	25-35 mm
Cooling Set Point Range (fluid)	40-50°F
Cooling Set Point Range (patient)	50-60°F
Heating Set Point Range (fluid)	100-110°F
Heating Set Point Range (patient)	90-100°F

CIRCULATING SYSTEM SPECIFICATIONS	
Heating/Cooling Rate	3-5°F/min
Fluid Flow Rate	10-13 gph
Reservoir Capacity	700 mL
Reservoir Fluid	Distilled Water
Maximum Pressure	3-6 psi
Pump	Internal Valve System

ELECTRICAL SYSTEM	
Voltage	12 VDC
Current	5A









**WHAT
ABOUT
NATURE?**

Becoming green and eco-friendly has been the latest design trend, but humans are far from living sustainably. Nonetheless, sustainability needs to become more than a trend and turn into a way of life if people want to keep inhabiting the planet as we know it. Recently, the idea of biomimicry has become an exciting design possibility. Biomimicry is a method of observing and imitating lifeforms on our planet and then adapting the methods to suit our design needs. The species alive on our planet today have gone through millions of years of evolution, already determining which designs work and eliminating those that don't.

PACKAGING

- How does nature contain objects for transport?
- Multifunctional design
- Create reusable packaging

In order to be less wasteful the Percuro sleeves will be packaged in reusable cotton bags. These cotton bags will be printed with the attachment instructions in non-toxic inks, and also serve as storage when the sleeves are not in use.

FIT DIFFERENT PEOPLE

- How can a variety of organisms utilize one resource?
- Fits form to function
- Adjustable straps

The adjustable straps provide Percuro with the versatility to accommodate a large variety of different body types. Addressing the question "How do the user needs of Percuro differ from the traditional healthy back pack user?" Utilizing clips at key points on the straps allows Percuro to be converted from a two strap system to one strap worn across the chest. This accommodates people with shoulder or other upper body injuries. The clips can also be released to make removing the device easier and less awkward.

ADVERTISING

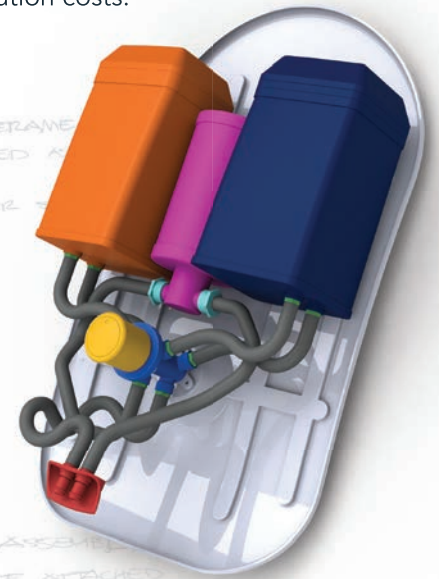
- How does nature get materials where they need to be?
- Simple common building blocks
- Purchase product online

To reduce transportation costs the majority of Percuro's sales will be done online. This will reduce costs as they can be stored near the manufacturing location and shipped only as needed. By not having to ship large quantities of products to retail locations we reduce the packaging and transportation costs.

EASY TO ASSEMBLE

- How does nature attach things?
- Cellular and nested
- System within a system

Each module is fastened to the main chassis in order to allow for easier repairs and extend the life of the product. Each module can be removed without having to disassemble other modules. Parts such as the barb hose fittings are standardized to simplify ordering new parts and reduce tooling costs.



CHANGE TEMPERATURE

- Are there any organisms that change their temperature?
- Three-chambered Frog heart reduces mixing of blood
- Multiple Chambers for Fluid

In order to deliver the hot and cold water in closely timed intervals, multiple chambers for cold and hot water would allow for quicker transition time. Instead of using the original idea of one water reservoir, we have decided to use two different chambers instead that will house the hot water and the cold water. This will allow for a quicker transition time because the water will not have to heat back up after it has been cooled down.

COST

- How do organisms distribute/share goods?
- Fosters cooperative relationships
- Have the product be rentable

Percuro can ideally be rentable from physical therapists, hospitals, chiropractors, and other such medical facilities. These clinics can purchase quantities of the product, and then rent them individually out to patients. Although the facility ultimately owns the device, there may be opportunities to receive a discount by purchasing Percuro in bulk quantities, thus saving the clinics money. By allowing these devices to be rented, it provides assistance for those that only require Percuro for short-term treatment. This may also assist with lowering the overall price for those that wish to purchase the device, as insurance companies are relieved of some of the strain.

MODERATE TEMPERATURE

- How does nature moderate temperature?
- Insects have tubes that help cool flight muscles
- Cooling systems using tubing

In order to deliver hot and cold therapy to the specified muscle or joint, our device will use a tubing system in order to bring the hot or cold fluid to the therapeutic pad.

REDUCE WASTE

- How does nature manage waste?
- Leverages interdependence
- Choose responsible materials

Looking at the beginning of the cycle, we are able to be more environmentally friendly by using silicone-based products for many of Percuro's components. Silicone is not only able to reduce waste by extending the lives of other materials, but the material also enables us conserve energy and other resources. We will need to collaborate with other companies that are able to use our waste as components for their own products. Possibilities include recycling the backpacks and using its materials in creating regular backpacks, or it may be possible for another company to take apart the silicon tubing/valves and use it in a different manner or medium in another product. Through forming partnerships and alliances, we may be able to cheaply provide these other companies with their raw materials, which are actually recycled parts of Percuro.



**WHAT
IS THE
MARKET?**

Trying to break into the market with a new product is a difficult endeavor, but trying to enter a market without first understanding your competitors and the current state of that market is nearly impossible. In order to carve the most lucrative niche for your product and organization it's necessary to have an expansive knowledge of the realm in which you're doing business.

NEED RECOGNITION

- Hospitals and physical therapists need high-quality medical devices to provide therapy to injuries
- Consumers need portability and efficiency to maintain their current lifestyle and minimize the affect of injuries

SEARCH

- Hospitals and physical therapists can find Percuro listed in medical catalogs, trade shows, and magazines
- Consumers can hear about products from advertisements, online, and word-of-mouth

PRE-PURCHASE EVALUATION

- Price
- Brand Reputation
- Perceived value of Percuro compared to other products

PURCHASE

- Hospitals and physical therapists must determine that Percuro is a high-quality product at a competitive price
- Can be purchased through medical equipment catalogs
- Consumers must find that Percuro's delivered value is worth the price and satisfies the need
- Can be purchased from hospitals, physical therapists, clinics, directly online, or retail stores

POST-PURCHASE EVALUATION

- Customer satisfaction and retention
- Feedback from consumers
- Service Support for maintenance
- Education for the consumers on how to use the product

“Percuro is the only product in the market that offers both hot and cold therapy in one system, along with portability and comfort.”

Barriers for entry into the healthcare industry are moderate, since there is little differentiation between products for the end users. The products are mostly distinguished by cost and quality. Low differentiation between products allows many small companies to enter the industry. However, to have a large presence in the market it takes large sums of money spent on research and development to create quality products along with enough economies of scale to keep the cost of the products

low. Percuro is nicely positioned to enter the healthcare design markets since it has deep pockets, Dow Corning’s silicone manufacturing abilities, and has connections with downstream distribution customers. The lack of brand loyalty from the end users means that Percuro needs to stay on the cutting edge of consumer medical devices to keep its customers and end users buying this product.

“...for the first time the number of substantially less than the

POLITICAL ENVIRONMENT

One of the biggest topics in the political environment is health-care reform policy and, more precisely, insurance coverage. On March 23, 2010, President Obama signed the landmark bill to overhaul the America's healthcare system and guarantee access to medical insurance for an estimated 30 million people. This legislation will require most Americans to have health insurance coverage, would enroll roughly 16 million individuals in Medicaid, and would provide subsidized private coverage for low and middle-income people.

Studies conducted prior to passage of the legislation estimates that approximately forty-six million Americans are uninsured, and this number continues to grow. Because medical devices can become quite expensive, the number of consumers that can afford the costs will determine Percuro's sales and use. We will need to rely on private insurance companies to help consumers subsidize the cost of utilizing our device along with federal programs like Medicare and Medicaid to provide coverage for those individuals enrolled.

HOME HEALTHCARE & MEDICAL DEVICES

Healthcare is an important issue in today's society, especially since for the first time the number of humans under the age of 50 will be substantially less than the number over the age of 55. The medical device industry accounts for a hefty part of the healthcare industry, second only to the pharmaceuticals sector. Annual sales are estimated to be over \$250 billion.

One of the greatest trends in healthcare is a shift in the patient's focus from hospitals to home care. The global home care and self-care market is the combined market for home healthcare equipment and home healthcare services. The home healthcare industry generates total annual revenue of \$55 billion. Medical devices and technologies are revolutionizing the home-health systems, creating a consumer-driven model for healthcare. Percuro is an automatic hot & cold therapy system that can provide pain and ache relief without needing to physically go to a hospital or clinic.

humans under the age of 50 will be number over the age of 55.”

GROWTH OF MANUFACTURING SECTOR

The manufacturing sector experiences positive gains in the second half of 2009 and the expectation is for this to continue in 2010. Manufacturing will likely remain at the head of the U.S. economic recovery that is expected to continue through the year as companies begin investing in new equipment. Increased demand globally is at the root of these gains in production as companies strive to rebuild their inventories. However, increased employment and hiring is necessary for true economic growth out of the recession.

CONSUMER SPENDING & DISPOSABLE INCOME

The level of disposable income heavily influences the purchase of “non-critical” goods. Percuro falls within this category because it is not a market displacing technology. Rather, it is simply a better and more efficient way of fulfilling a need. There is a large market of other products that fulfill the same need, though not necessarily as proficient or effective.

Real consumer spending, which is adjusted for inflation, escalated to a seasonally adjusted 0.1% in December 2009 after a 0.4% growth in November. This was the lowest since September’s 0.7% decline. For the fourth quarter, real spending grew at a 2% annual rate. Real spending is down 0.5% compared to December 2007, when the recession began. In the meantime, real after-tax incomes rose a seasonally adjusted 0.3% in December. Real wages were flat and real disposable incomes have increased 2.5% since December 2007

“Dow Corning provides performance-enhancing solutions to serve the diverse needs of more than 25,000 customers worldwide.”

HISTORY AND MISSION

Dow Corning, an equally owned joint venture between The Dow Chemical Company and Corning, Incorporated, “provides performance-enhancing solutions to serve the diverse needs of more than 25,000 customers worldwide.” Formed in 1943, Dow Corning has become a global leader in silicones, silicone-based technology, and innovative solutions using silicone. The company provides over 7,000 silicone-based products, including adhesives, insulating materials, lubricants, etc.

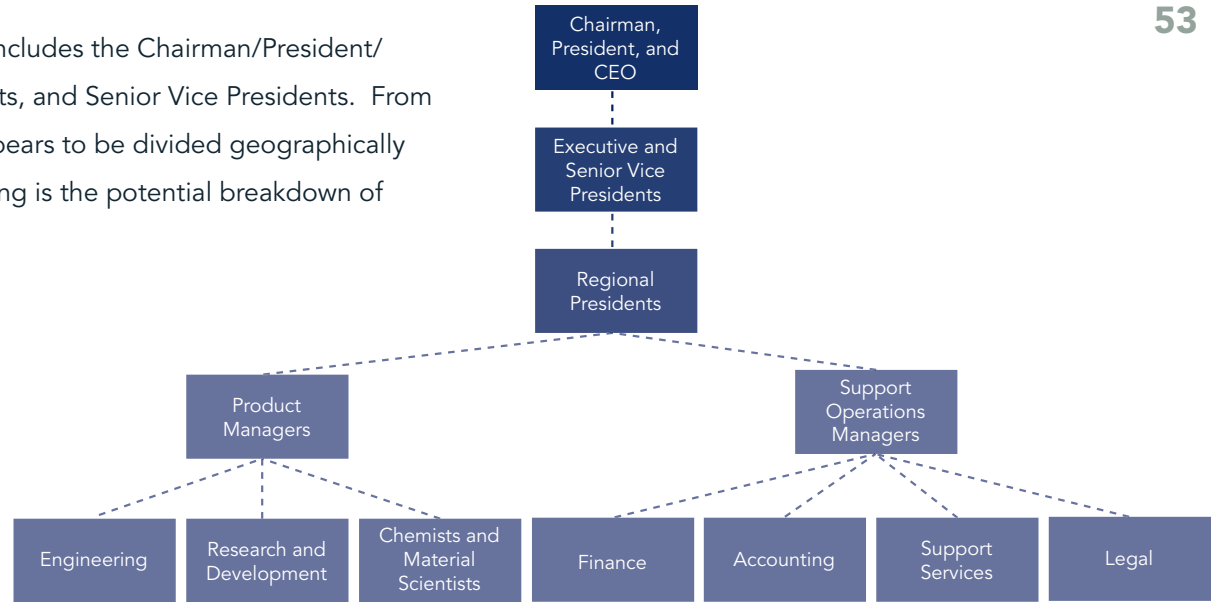
FINANCIAL CONDITION

Dow Corning reported a consolidated net income of \$270.5 million for the fourth quarter of 2009, which is an increase of 57 percent from net income of \$172.6 million reported in the fourth quarter of 2008. However, despite the comparative greater profits in the fourth quarter of 2009, the net income for all of 2009 was \$579.6 million, which is a 22 percent decline from 2008’s reported \$738.7 million. This may be attributed to the poor economic conditions of the past year. Growing levels of sales through 2009 do show steady growth and recovery.

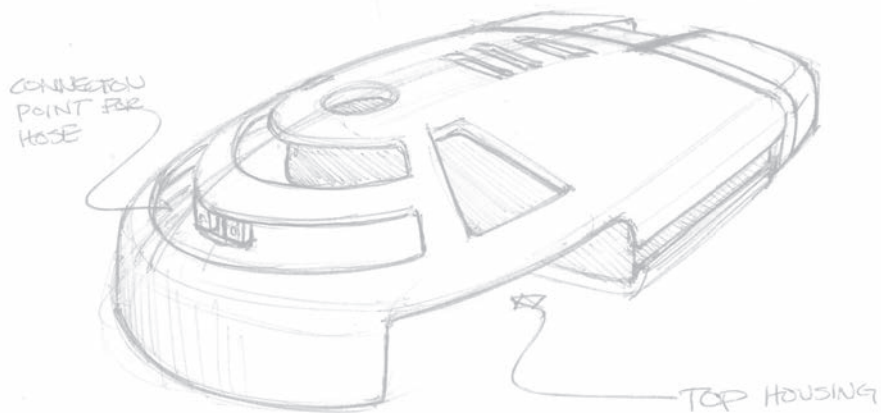
TECHNICAL ANALYSIS

Dow Corning is already an innovative supplier of silicone components for producers of consumable products. Thus, the technical concerns for acquiring the silicone tubing, plastics, and other materials needed for Percuro are relatively limited. The main concern lies in procuring or manufacturing an ultra-portable and light-weight pump for the central system of Percuro to circulate the liquid for the therapy system. This is something that the professional engineers from Dow Corning will need to provide assistance with. If this pump is not something we can purchase from another supplier, Dow Corning may need to look at either developing a unique pump that meets the specific needs of Percuro or to contract a third-party developer. If we do decide to outsource the pump, we can then simply assemble all the separate components at the Dow Corning site. All of this will need to be determined once we are ready to enter the production stages.

Dow Corning’s executive leadership includes the Chairman/President/CEO, various Executive Vice Presidents, and Senior Vice Presidents. From there, the next level of leadership appears to be divided geographically with Regional Presidents. The following is the potential breakdown of roles following executive leadership.



We are targeting three main channels of distribution. End-consumers may purchase the products directly from ordering online through the product website or from general retail stores. They may also go through physical therapists and chiropractors, where they may receive assistance with the cost through insurance if it is prescribed. Physical therapists, chiropractors, and hospitals may choose to purchase these devices from medical device catalogues for themselves so that the central system can be rented for use by patients needing temporary care



PRODUCT

Inkling has created a mobility device that provides convenient rehabilitation care for a variety of pains and aches. Competitors have similar products, however, Inkling is offering a unique product that provides for greater efficiency and portability.

Percuro is a highly convenient hot & cold therapy system that attaches easily into sleeves to provide transportable therapeutic relief. The product also offers time control and temperature changes for greater ease and therapy for the users. The sleeve extensions are for specific body part areas, thus isolating the treatment to the precise problem area. The fluid inside the tubing of the system can reach the temperature of 120°F and then quickly change to 40°F. Percuro also comes with a programming system that automatically shuts off the product for the safety of the user.

PROMOTION

Inkling will be selling Percuro to the big technology healthcare

firms. To promote its product, Inkling will need to pitch the idea and prove that Percuro is a product that will sell. The target audience will be individuals needing a portable therapy system so that they can maintain an active lifestyle despite the injury. Promotional materials will potentially take place online for the targeted audience along with flyers, brochures, and pamphlets for doctor's offices and medical facilities. For Percuro, Inkling will need to gather customers by advertising in magazines that are targeted towards AARP members. Inkling will also focus on listing Percuro in physical therapy and doctors' ordering catalogs and magazines.

PLACE

The item will be sold directly to the technology healthcare companies, who will then sell it to the end users. The exact retail and physical place the products will be sold will be determined after a partnership has been made. Inkling ideally is looking at three main ways of distribution for Percuro. Percuro can be purchased directly online, through a chiropractor or physical therapist, or from generic retail stores. If long-term use of this product is not needed, some physical therapist clinics may choose to rent the central equipment out. With these different methods of distribution, there are many points of contact available for the end-consumer, each differentiated by ease of acquisition and price.

PRICE

The pricing for Inkling needs to equal the sum of the cost of materials, the cost of manufacturing, the cost of labor, and an additional markup for profit. Products similar to Percuro, hot & cold brace therapy, run from \$6.00 for an ice or hot pack to \$119.95 for a therapy system targeting a specific body part. Percuro will be more expensive than the latter, because Percuro is the only product in the market that offers both hot and cold therapy in one system, along with portability and comfort. With a doctor's prescription, consumers may also take advantage of insurance subsidies for Percuro, which will greatly assist with the cost.

PEOPLE

Inkling is dedicated to building a brand around its employees and customers to create the best experience for those experiencing challenges to everyday mobility. Inkling is a team within Dow Corning, and as such, embodies the culture of the Dow Corning. As Percuro progresses further into development, research, and production, the team working on Percuro will expand beyond Inkling. However, all employees and management are striving to achieve excellence in this innovative solution. Customer services will be the number one priority for the people working on Percuro, followed by producing a high quality product that meets the expectations of the end users. Employees will be empowered to meet the needs of customers and satisfy the end-users' expectations.



PROCESS

Inkling wants its end-users to view us as a company that maintains and improves their lifestyle. Inkling, as a team within Dow Corning, is working to provide an innovative solution to the consumer's needs in maintaining an active lifestyle. Inkling (and Dow Corning) wants its customers to think of us for all of their healthcare needs.

PHYSICAL ENVIRONMENT

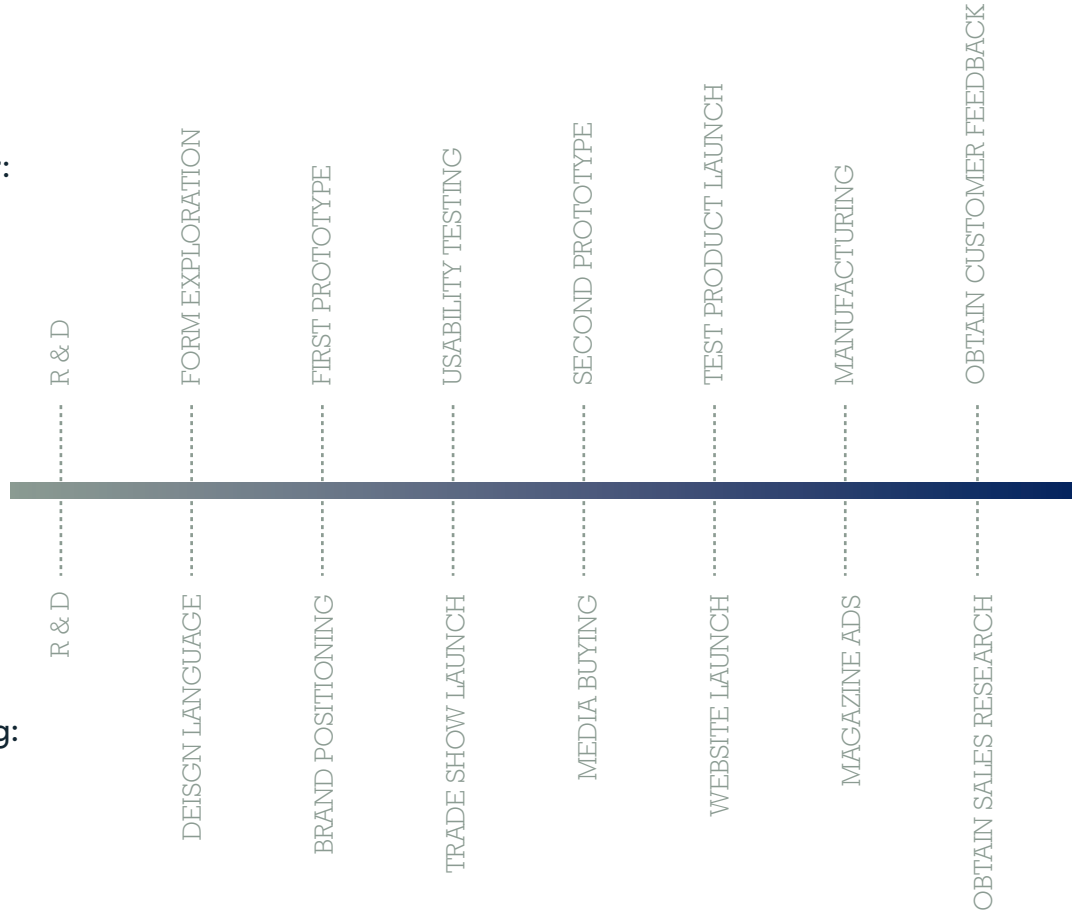
Given Dow Corning's superior and innovative silicon technology, Inkling is able to use many of Dow Corning's component products in the design of Percuro. Percuro is extremely portable, comfortable, and efficient. The packaging for Inkling's products will be a multi-functional bag with instructions printed on the bag itself to create a more sustainable and environmentally friendly package.

YEAR	UNIT PRICE	SALES CHANNEL	AMOUNT	SALES	
1	\$375.00	To Hospitals and Therapists	230	\$86,250.00	
	\$450.00	Direct to Consumers	70	\$31,500.00	
	\$592.00	Indirect from Therapists	75	\$44,400.00	
					Industry Benchmark Markup 48%
2	\$386.25	To Hospitals and Therapists	340	\$131,325.00	
	\$463.50	Direct to Consumers	100	\$46,350.00	
	\$609.76	Indirect from Therapists	132	\$80,488.32	
					Industry Benchmark Markup 48%
3	\$397.84	To Hospitals and Therapists	320	\$127,308.00	
	\$477.41	Direct to Consumers	157	\$74,952.59	
	\$628.05	Indirect from Therapists	191	\$119,958.08	
					Industry Benchmark Markup 48%
					Yearly Price Increase 3%

technology / user:



brand / marketing:



IMPLEMENTATION TIMELINE

A person wearing a red jacket and a headlamp stands on a rocky mountain peak at dusk. The headlamp is illuminated, casting a bright light. The background shows a sunset or sunrise over a range of mountains, with a soft glow on the horizon. The sky is a mix of blue and orange. The person is looking towards the left side of the frame.

**WHY
DO WE
NEED IT?**

Percuro is a product unlike any other on the market. Its holistic design process brings forth a product that's designed with the user in mind, conscious of the world we inhabit, branded to create consumer loyalty, and marketed for a best fit in the retail world. The combination of such a thoughtful design process and the support of Dow Corning's products and knowledge result in a product that would better the lives of anyone

STRIVING TO MAINTAIN AN ACTIVE LIFESTYLE

