



CLIMATE PROTECTION SYSTEMS

CLOTHING SYSTEMS ENGINEERED ACCORDING TO PEOPLE'S
INNATE CHARACTERISTICS AND CLIMATIC FACTORS

OUR JOB IS MAKING SURE YOU CAN DO YOURS

When Taiga was founded in 1982, the company's ambition was to make the best possible work clothing for people who are required to work outdoors regardless of the weather, environment or other risk factors. Since then, we have been a pioneer in developing clothing systems for demanding work environments.

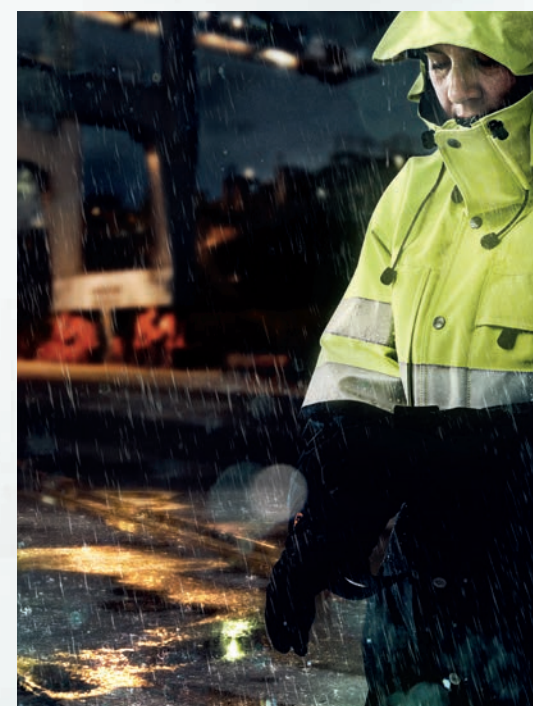
Today, we develop our clothing in collaboration with various test laboratories, polar researchers, work environment experts and – of course – users of Taiga clothing. This is a whole science in the literal sense of the word, and involves much more than just materials and functions.

For example, the thermal base layer you wear determines what type of jacket works best. Your job determines what protection you need and how warm your clothes should be. Various factors determine the correct choice of clothing. For this reason, you should not regard your work clothes as a collection of individual garments, but as a complete integrated system. We summarise this concept as Taiga Climate Protection Systems™. Our aim is to make sure you can do your job – whatever it is.



Ann Rydholm managing director Taiga AB

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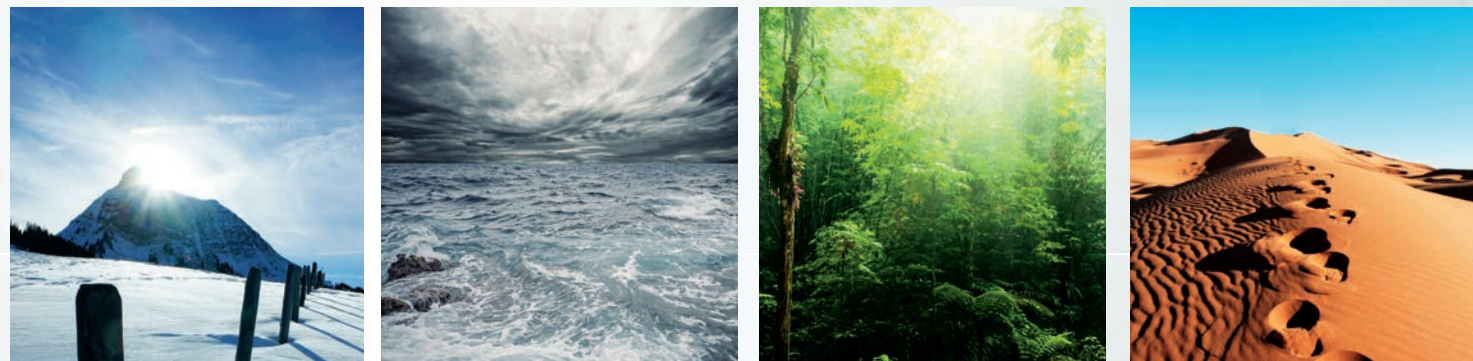
CLIMATE PROTECTION SYSTEMS™

HUMANS ARE BORN NAKED AND ARE MOST COMFORTABLE AT +28 °C IN SHADY WIND-FREE CONDITIONS. WHEN WERE YOU LAST COMFORTABLE?

Very few of the earth's inhabitants live in perfect weather conditions. In Europe, we have many cold months when temperatures frequently drop far below zero, but we also have steady heat in summer. This is why we developed Taiga's Climate Protection Systems™. The system is based on the layer-by-layer principle, and each layer is produced from carefully selected and tested ma-

terials. We also test the clothes' clo value, a measurement unit indicating a garment's insulation ability. This enables us to offer work clothes with outstanding ease of movement and an excellent heat balance even in conditions where an extremely high clo value is required. Besides the tough climates our clothing is exposed to – for example at sea or in the mountains – we

must also consider other risk factors that many of our users are subjected to daily. For this reason, we offer special ranges of clothing developed and approved to provide high visibility and protection against hazardous chemicals, electrostatic discharge, fire or liquid-borne contagion. This is the purpose of Taiga Climate Protection Systems™.



Regardless of whether our customers operate in an urban environment or in tough natural surroundings, they need clothing systems that are optimised for quick-changing jobs, weather and environments. Taiga's experience and know-how regarding protection against extreme cold and heat, wind and rain provide our customers with safety and security.

CHOOSE THE RIGHT CLOTHING WITH THE TAIGA CLOTHING TOOL

The Taiga Clothing Tool is an online tool that helps you choose the right clothing system according to weather and activity. We developed it in collaboration with Ingvar Holmér, professor of climate physiology. To use the tool, you answer questions about the climate you will be operating in, your protection needs (cold, wet, chemicals, electricity etc.), your physical activity and your physical characteristics (height, weight and gender). Based on this information, the tool calculates the clothing system that suits your best.



DRY

The first layer limits convection immediately next to the skin, eliminates moisture and keeps you dry.



CLO ST. 0.6



WARM

The second layer has an insulating effect. It is this layer in the clothing system that provides the warmth your body needs.



CLO ST. 1.7



SECURE

The third layer protects you against the weather, and in certain cases against liquidborne contagion, chemicals, flames etc.



CLO ST. 3.31

DRY, WARM, SECURE – OUR SOLUTION TO OPTIMISE YOUR PERFORMANCE

Good work clothes should keep you dry, warm and secure without restricting your movement. Through research and intensive testing, we have developed clothes that provide optimal mobility and heat balance even in situations that call for very high clo-values.

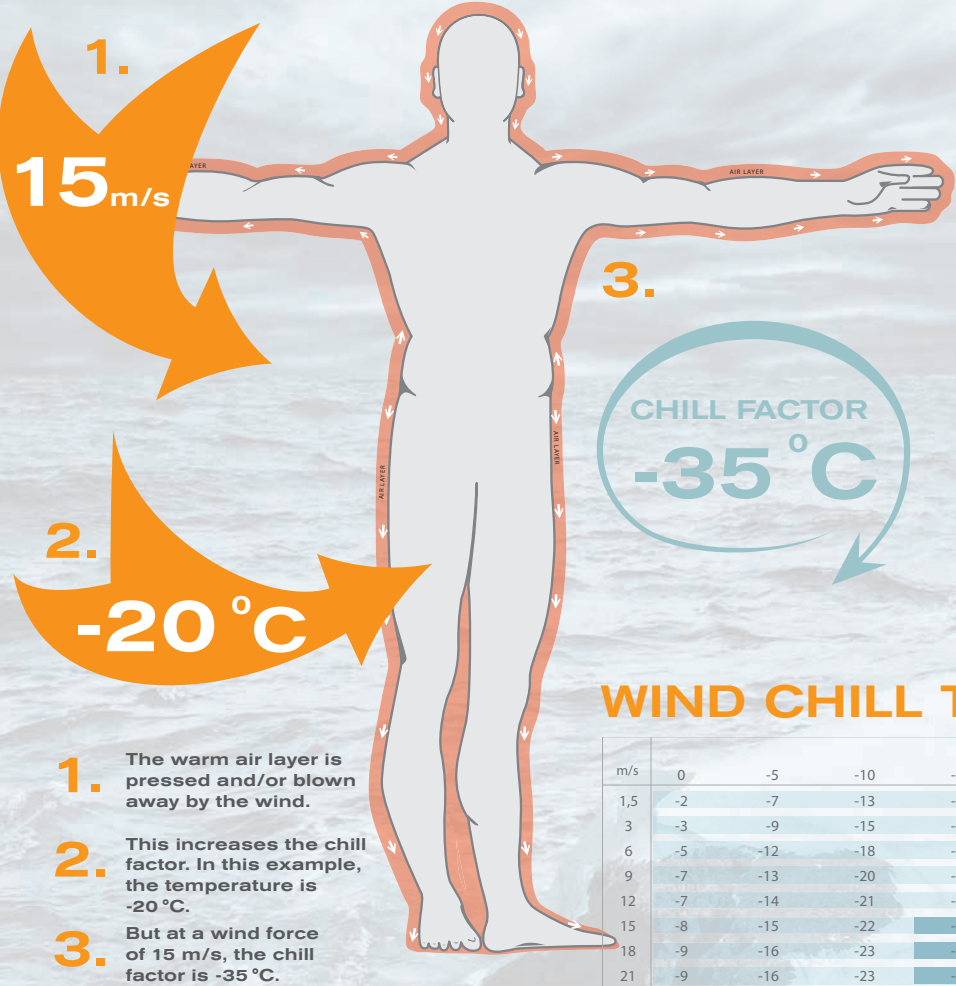
Taiga's clothing systems are based on the layer-on-layer principle: Dry, Warm and Secure. The first layer limits convection immediately next to the skin, eliminates moisture and keeps you dry. After this comes the Warm layer, which insulates heat and wicks away moisture.

This layer can be supplemented if necessary. The outermost layer, the Secure layer, protects you against external factors ranging from rain and wind to electric arcs and hazardous chemicals.

THE KNOWLEDGE THAT MAKES TAIGA UNIQUE

Materials, zips, the position of pockets or the type of seams are carefully chosen on the basis of our knowledge about people, clothing and weather conditions. We have gained this knowledge through tests and experience, and above all by collaborating with a wide range of

experts, including climate physiology experts at Lund University, polar researchers and survival experts. Furthermore, our customers' needs provide a constant source of new knowledge. Below, we share some of our knowledge to help you choose the right clothing system.



WIND CHILL TABLE

m/s	0	-5	-10	-15	-20	-25	-30	-35	-40
1,5	-2	-7	-13	-19	-24	-30	-36	-41	-47
3	-3	-9	-15	-21	-27	-33	-39	-45	-51
6	-5	-12	-18	-24	-31	-37	-43	-49	-56
9	-7	-13	-20	-26	-33	-39	-46	-52	-59
12	-7	-14	-21	-27	-34	-41	-48	-54	-61
15	-8	-15	-22	-29	-35	-42	-49	-56	-63
18	-9	-16	-23	-30	-37	-43	-50	-57	-64
21	-9	-16	-23	-30	-37	-44	-51	-59	-66
24	-10	-17	-24	-31	-38	-45	-52	-60	-67

The main purpose of a wind chill table is to assess local chilling, for instance of the face.

AIR HUMIDITY: HOW IT AFFECTS YOU

People start feeling the effects of high air humidity at temperatures of about 0°C and higher. In the province of Skåne in southern Sweden, for example, the moist climate feels “raw” in the winter. By comparison, the colder climate further north in Sweden may feel more comfort-

able. This is because the air in Scania has higher humidity. The reason is simple: the warmer the air, the more moisture it can hold. Functional clothing materials eliminate the moisture from the clothing system. By contrast, clothes in other materials such as cotton absorb

the moisture, which remains in the clothing. This greatly reduces the clothes’ insulation capacity and robs heat from the body to dry the clothes. As a result, you get wet and cold.

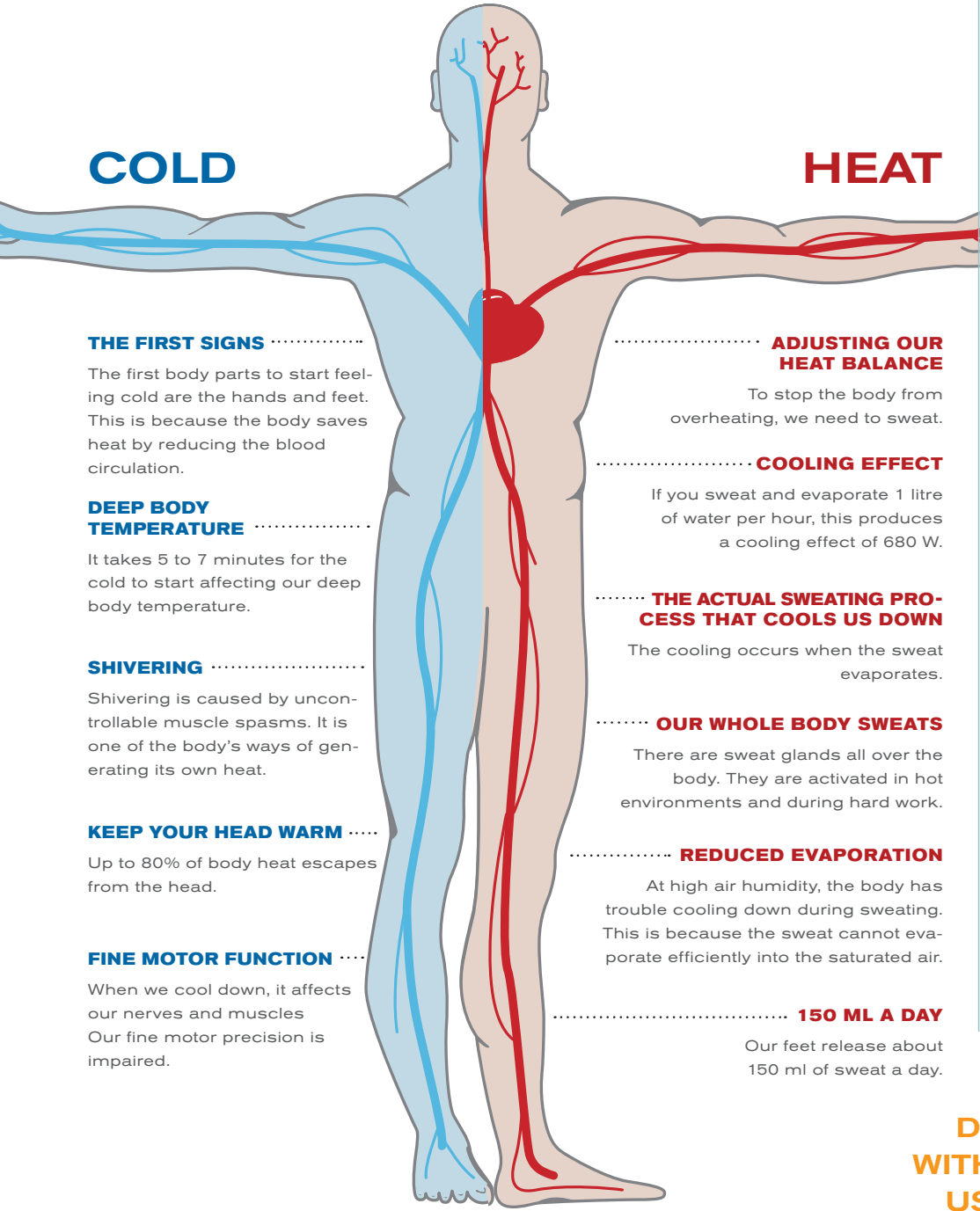
COLD: WHY DOES THE WIND COOL US DOWN?

The human body produces heat. As a result, our body is surrounded by a layer of heated air. When the air flow increases around a warm body, the layer of warm air blows away. As a result, the body cools down. This phenomenon is known as convection, and accounts for 40–80% of the wind’s cooling effect on the body. An extremely strong wind can even press the warm air out of the clothing system. However, note that the temperature does not change just because it’s windy. The temperature always remains the same; it’s the chill factor that varies. So choose your clothes according to both the thermometer and the wind meter.

THE HUMAN BODY: COLD AND HEAT AFFECT US MORE THAN WE THINK

Our body temperature has a strong effect on us. Cold stress and heat stress affect both our performance and our behaviour. They reduce our sense of comfort, decrease our

stamina and influence our mental state. Functions such as memory, spatial orientation and learning ability are negatively affected.



“THE BODY CAN’T ADAPT TO THE COLD”

The Department of Climate Physiology at Lund University in Sweden has been collaborating with Taiga for almost 30 years. The climate physiologists there are experts on how climate and weather affect the human body’s comfort, work performance and health.

Our collaboration with the Department of Climate Physiology has primarily focused on the body’s ability to cope with heat and cold. Together, we have developed clothing systems that function in all weather conditions. The Department has also played a key role in developing the Taiga Clothing Tool. According to the climate physiologists, the most common mistakes made by city dwellers dressing for the cold, are not wearing enough clothing and distributing the clothing unevenly on the body. Their advice on dressing for the cold is easy to follow if you have the right clothing: “Dress in layers with a thermal base layer nearest the skin, a heat-retaining middle layer and outer garments that allow flexibility. However, all functional clothing is not universally suitable for all climates and activities. It’s important to choose the right products for your needs.” It is commonly believed that the body can adapt to the cold. But the climate experts say this is not true: the only solution in cold weather is to dress right. On the other hand, you can train your body to withstand hot conditions by exercising extensively in the heat. This improves the body’s sweating and cooling function.

DRESS RIGHT WITH THE TAIGA USER’S GUIDE

Read more about the body, climate and clothing. Order the Taiga User’s guide on www.taiga.se



TOUGH TESTING IN THE TAIGA CLIMATE LAB

THE TAIGA CLIMATE LAB has a rain chamber and a cold chamber. In the rain chamber, icy rain is emitted from 16 nozzles at a rate of 260 litres per minute. The 600 watt cooling unit in the cold chamber forces the temperature down to -30 °C, and with the fans running, we can achieve a wind shield effect in the wind of -55 °C. Here we test the performance of our garments and clothing systems.

SIMULATED COLD WITH CHILL FACTOR OF -55 °C	MATERIAL PROPERTIES UNDER EXTREME STRESS
MONSOON RAIN WITH AN INTENSITY OF 260 LITRES PER MINUTE	PEOPLE'S INNATE CHARACTERISTICS

Some of our customers operate in extreme and exceptional physical and psychological conditions around the world.

We create customised collections for these and many other customers. These users work in environments where the weather can suddenly fluctuate, and must be prepared for rapid changes. Consequently, our clothes' functions must be tested in all sorts of weather. We also have our own laboratory.

At the Taiga Climate Lab, we subject our garments and ourselves to meticulously documented tests under exceptional conditions. This process shows how our clothes and the human body react under extreme circumstances. We also use the Taiga Climate Lab in the Taiga Test Camp, our training camp for buy-

ers and end users. At the camp, participants learn about dressing to work in the cold, rain and wind. Through theory, practical laboratory exercises and real-life outdoor experience, you discover first-hand how the weather affects your thoughts and actions.



GOOD BUSINESS

Everybody wants to do good business, and everybody wants good customer relations. For Taiga, these aspects are especially important. This is because all the knowledge we gain about our customers' everyday work experiences helps us improve and develop our clothing systems. For this reason, we are especially keen to do good business.



ANALYSIS	SUGGESTIONS	ORDER	DELIVERY	FOLLOW-UP
You might find exactly what you want in our range with-out assistance. If you can't, we'll be happy to sit down and review your needs – your working methods, the jobs you perform and your future requirements – both at individual and operational level.	After we have thoroughly analysed your situation together, Taiga will develop and suggest a clothing system adapted to your needs and preferences in terms of colour, design, material and function. We will present our suggestion along with clothing samples or material and colour swatches.	After presenting the suggestions and making any necessary modifications, we agree on an order. After the order is placed, we keep you updated about the delivery status so you know the delivery dates and can plan your activities accordingly.	Before delivery, we always perform a final quality check to ensure that the delivered clothing system meets your requirements. If you have ordered a particularly large or complex clothing system, we will be happy to visit you and explain all the benefits of the system to your employees.	After you've been using your clothing system for a while, we will contact you to follow up on how things are going. You may have questions about certain functions or which jobs certain clothes are most suitable for. During the follow-up, we also review possible future needs.

YOU WILL FIND THE PRODUCTS AT TAIGA.S



WHETHER YOU WORK AT SEA, IN FORESTS, ON ROADS OR IN EXTREME RISK ENVIRONMENTS, WE ALWAYS PROMISE:

KNOWLEDGE

Knowledge is crucial. Taiga has plenty of it. We know everything about materials and production, protection requirements and the human body's reactions to wind and weather. So far so good. But it's equally important for us to always understand individual customer needs. We combine product knowledge with customer understanding.

COMMITMENT

Everything Taiga does is based on specific expertise. We have a close-knit team of employees who are all experts in their fields. We are passionate about our work, and about Taiga's position. This commitment is a guarantee we offer our customers.

SAFETY

This is how one customer defined what Taiga means to her: "People on a skiing holiday use good technical clothes. The people who work on the ski slopes in all weather conditions choose Taiga." This is the level of quality, security and knowledge that goes into our concept of safety.

TAIGA AB/HEAD OFFICE
Annebergsvägen 3, SE-432 95 Varberg
Box 20, SE-432 21 Varberg, Sweden
www.taiga.se

Phone +46 340 66 69 00
Fax +46 340 66 69 22
Email info@taiga.se



AMBULANCE
& RESCUE



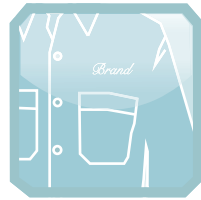
SEA
& NATURE



POWER
& INDUSTRY



INFRASTRUCTURE



BUSINESS
& PROFILE



MILITARY &
LAW ENFORCEMENT

Taiga develops work clothing systems for challenging environments and extreme weather conditions where optimal function and safety are crucial to user comfort. Our products are developed in close collaboration with customers, leading climate physiology experts, suppliers, and in our Climate Lab equipped with a rain chamber, cold chamber and hot chamber.



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