

# HOW TO CHOOSE THE RIGHT UNDERSUIT



# How to choose the right undersuit ?

Are you planning to buy your first or new undersuit and wondering which one to choose? The following tips might be very useful when making the purchase.

The purpose of the undersuit is primarily to provide thermal comfort during the dive. There is however no single, universal undersuit at any water temperature. It is also important to choose the undersuit to the planned length of the dive. When choosing, you need to pay attention to several important questions.

# 1. Thermal protection tailored to individual needs

The undersuits main purpose is to provide thermal protection during the dive, i.e. simply to guarantee diver thermal comfort under water. Each of us has their own individual thermal comfort - some feel better in slightly cooler conditions, others prefer a higher level of heat. Thermal comfort can be controlled by choosing one or several layers of clothing under a dry suit. Properly composed layers of underwear, an undersuit and an additional insulating vest will allow you to properly match your clothing to the type and location of the dive.

# 2. Moisture

A very important feature of a good undersuit is the moisture transfer outside, i.e. breathing material which it is made of. This is especially important during decompression, when we sometimes stay in water for quite a long time without making any movement. A good quality undersuit is one that directs moisture outside the insulation and allow us to feel dry and comfortable. It is also worth remembering that the undersuit should be worn, for example, on thermal underwear. It should be made of thermoactive material, e.g. merino or other breathable and moisture-permeable materials so that the undersuit can fulfill its task.

# 3. Windproofness

Windproofing is another important issue, often overlooked by diving clothing manufacturers. When diving, the sun does not always shine; wind often blows and it rains. After removing the dry suit, we often stay in the undersuit for some time. When the wind blows outside, we often run the risk of catching a cold. So let's put on a material that protects against wind and moisture in the air.

## 4. Dive time and temperature of the water

The comfort of diving will depend on the temperature of the water at which you plan to dive as well as the duration of being underwater. Water takes heat from the body 25 times faster than air, which means that under water, even the warmest, without adequate protection, our body cools down much faster and feels cold. The longer the time spent underwater and the lower the water temperature, the higher the need for a thicker undersuit. If you plan a short dive (up to an hour), even in cool water, a lower weight undersuit is enough, while if you plan a longer dive, at a greater depth or you know that decompression is imminent for you, then even if the water temperature is higher, it is worth putting on the warmest undersuit, or even heating system. Appropriate thermal protection will allow you to enjoy diving longer, without any discomfort associated with cooling down.

## 5. Size of the undersuit (properly chosen size ensures comfort of the movements)

Under water you must have full freedom of movement, so the undersuit should be well-fitted to your figure. When buying, please note that you will often put it on thermal underwear or additional insulation such as a vest. When measuring a new undersuit you should take this into account. You also need to know that if the undersuit is too big, it will not only wrinkle under the suit, restricting freedom of movement, but will also require additional ballast.

## 6. Material

The material from which the undersuit is sewn is very important. Good diving undersuits usually consist of three layers: inner, middle and outer.

- The inner layer is usually a thin material, e.g. fleece, which is designed to comfortably adhere to the body.
- The middle layer is the main proper insulation. Its quality, thickness and technology affect comfort, level of thermal insulation, proper balance under water and the length of the dive.
- The outer layer should make it easier to put on a dry suit and direct moisture away from the body outside, as well as protect from the wind.



flex190

flex190

**Which SANTI  
undersuit choose?**

# Which SANTI undersuit choose?

Santi's offer includes 4 undersuit types, men and women, for dry suits. The line includes undersuits for diving in the waters from the warmest to the extremely low temperatures.

The table below provides an overview of which undersuit to choose at particular water temperature. Remember, however, if you value high thermal comfort, regardless of the water temperature and dive time, you may want to bet on a thicker undersuit.

UNDERSUIT TYPE	WATER TEMPERATURE																					
	0°C	1°C	2°C	3°C	4°C	5°C	6°C	7°C	8°C	9°C	10°C	11°C	12°C	13°C	14°C	15°C	16°C	17°C	18°C	19°C	20°C	
<b>FLEX 80</b>																						
<b>FLEX 190</b>																						
<b>FLEX 360</b>																						
<b>BZ 400X</b>																						



# OUR UNDERSUITS

# FLEX 80

Undersuit designed for diving in warm waters, for summer or as a supplement to a thicker undersuit in transition periods.

The light and flexible Flex 80 men's undersuit was made from the unique Foundation series of the PrimaLoft fabric family.

The material was created to work in base layers and it specialises in moisture management in the layer adjacent to the skin. It efficiently directs moisture away from the skin, dries quickly, breathes, and is resistant to peeling and pilling, which allows you to achieve comfort in a wide range of activity.

# SUMMER LADIES FIRST

Undersuit designed for diving in warm waters, for summer or as a supplement to a thicker undersuit in transition periods. Lightweight, flexible and ergonomic summer undersuit is a convenient product for women diving in warm waters. Made in the upper part of the black PrimaLoft® knitwear and contrasting fleece fabric with graphite reinforcements, which were used on the back and bottom at the front of legs, as well as on the sleeves.

The neck cut has been finished with a stand-up collar, the sleeves are hemmed with a cuff with an additional rubber band, which used in the wider version also at the bottom of the legs prevents them from being pulled up when the suit is being dressed. In addition, in the undersuit you will find two cut pockets at the front and a double-sided zipper. Part of the seams were finished with a contrasting thread, which attracts the details of the cut and emphasizes feminine shapes.





## **FLEX 190**

## **FLEX 190 LADIES FIRST**

Dedicated to diving in waters from 7°C to 14°C, or higher temperature for longer dives. Lightweight, takes up less space than standard undersuits. It does not cause any restrictions on movement under a dry suit.

Made of patented Climashield Contur® fabric, 180 g/m<sup>2</sup> – modern, breathable fabric that provides great elasticity and stretch in all directions. Inside and outside covered with delicate insulating layers of polyester. The top layer has windproof properties.



## **FLEX 360**

## **FLEX 360 LADIES FIRST**

SANTI offers the most innovative 2-piece diving wetsuit consisting of a sleeveless wetsuit and a zip jacket. This set is designed for diving in cool waters from 2°C to about 14°C, or higher for longer dives. Perfect for long, deep and decompression dives.

This innovative, two-part wetsuit made of efficient material PrimaLoft® Gold Insulation has the highest parameters among the available synthetic materials providing thermal insulation - it retains 98% of heat even when wet. PrimaLoft® Gold Insulation has the best ratio of heat protection to material weight together with unique packaging and softness that imitates goose feathers.

Known for waterproofness and trouble-free packaging, PrimaLoft® provides excellent protection against wet weather.



## **BZ 400X**

## **BZ 400X LADIES FIRST**

Dedicated to diving in water from 0°C. Ideal for long and deep dives requiring decompression, even in warmer waters.

Made of Thinsulate™ BZ400 insulation, recommended by 3M company as by far the most optimal for thicker diving wetsuits. Thanks to the factory compression, it takes up less space under the suit. It also has a pressed layer of fine mesh that strengthens the entire structure and makes the insulation very strong.

The insulation layer, even after flooding, maintains temperature and protects against hypothermia. The structure is designed to avoid the so-called “Coldspots” or places through which generated heat can escape.

# TM SANTI

Description:

TM **SANTI** |  | **Diving Equipment**

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