

# **Engineered Fit**

OPEN BACK
Anatomically Fully Bonded



#### **AQUARAPID ENGINEERED FIT**

Anatomically fully bonded. The strategic position of the ultrasonically bonded seams and tapes, provides a powerful frame-structure and shapes the swimmer's contour with the right support and well calibrated pressure keeping viscous drag at minimum.

#### HYDRODYNAMIC PANELS

construction provides an excellent high flexible fit and body contour, optimizing body position, reducing muscle's oscillation and skin vibration for maximum efficiency.

#### SIDE FORM FITTING PANELS

create an ultimate fit promoting an excellent swim position in the water.

#### STRAPS AREA

very tight fit but flexible and sleek for an optimal range of motion generating unrestricted comfort.

#### LAYERED CONSTRUCTION

to enhance a specific medium compression in the breast, abdominal area, hips and in gluteal muscles's zone to stabilize the core and ensure a streamlined and sleek profile decreasing drag and increasing sensory awareness.

#### FLEXOR AREA AND GLUTEAL ZONE

high flexible construction with strategic bonded tape placement.



K-TECH

Lasting
Life Span

performance,
optimized up to

Excellent
breathability
99% of initial
fabric
breathability
is maintained

50 washing and

drying cycles

Limited
Water Pick Up
below 20%
after one hour
in the water

## Water Glide

Minimized water friction on fabric; remarkably low surface tension

Totally human health and environmentally friendly

Ultra-

Water molecules that come into contact with fabric remain on surface, thereby allowing swimmers to effectively glide through water

hydrophobicity
minimum
water drag,
improved
gliding

#### ULTRAHYDROPHOBICITY

 Contact angle of water drops with fabric exceeds 150°, so that they can remain on surface.

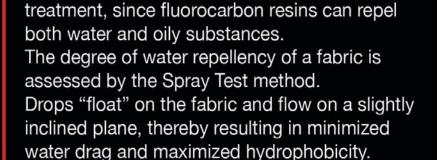
MINIMIZED WATER DRAG, MAXIMIZED GLIDING



## **Engineered Fabric**

4 "AQ K-TECH"

- COMPRESSION
- LIGHTNESS
- HYDROPHOBICITY
- DENSITY



Fluorocarbon resin finishing has developed into

the most important water (and oil) repellent





#### COMPRESSION

The **Compression** is reached thanks to the combination of the woven structure and the elastic yarns: the weave is created by yarns with a straight placement which allows the transfer of all the modulus without dispersion. The type and the size of the elastic portion of the yarn is 2 times more stretchable than those in a traditional elastic fabric, featuring an exceptional compression / weight ratio.

The advantages are:

- 1. less muscle vibration to enhance the glide in water
- 2. a smoother body surface in order to reduce turbulence and consequently the volume drag

### LIGHTNESS

The *Lightness* and *the limited Thickness* of *AQ K-TECH* are two important elements for the efficiency in water. Such a thin fabric, less than 0.5 mm, with low weight, has a cross section which enables a much less water retention, creating less drag in water. The fabric acts like a second skin and assures a feeling of total interaction between the skin and the water. The proprioceptive feedback such as the water feedback are consequently enhanced.

#### HYDROPHOBICITY

The Hydrophobicity is reached with a special technology that is prepared and applied in the different phases of the production process. The treatment is not only on the surface of the fabric but it is done also on the single yarn filaments in the inner part of the fabric structure. For this reason, water pick up is very limited even after hours of intense use. Another unique feature, compared to a standard DWR treatment, is that this is specifically studied to make the water travel faster on the surface of the fabric thanks to a very limited friction between the fabric surface and water.

#### DENSITY

A Density of more than 200 yarn crossings per square cm is the distinctive feature of **AQ K-TECH**. This is very important to guarantee less water penetration through the surface and thus a better glide. Also the smooth surface helps to lower the surface drag and contributes to the exceptional performances in water.

# Engineered Fabric 4 MAIN FEATURES THAT MAKE IT A UNIQUE FABRIC 4 "AQ K-TECH"



The water glides on the surface, the fabric remains dry, the compression enhances the penetration in the water: the recipe for an exceptional performance!

