

PROFESSIONAL GEAR

bio



Disaster and rescue glove <bio> series

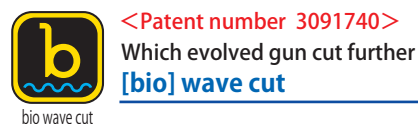
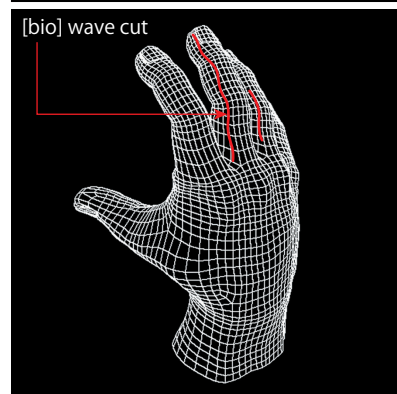
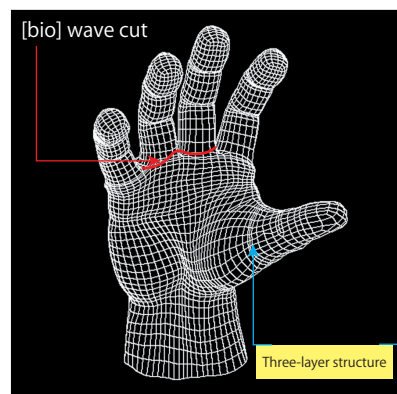
GLOVE CATALOGUE

A&T GLOVE STUDIO

「Power」to support rescue activities with「creativity」,「design power」and「technical power」 That is the evolving bio <bio> gloves.

Processing / cutting and sewing technology that smoothes the movement of fingers and hands.
With new ideas and cultivated know-how.

From products that assume hard work under harsh conditions to products with limited purposes
We always provide professional products that pursue safety and security.



The fingers can be bent and stretched smoothly,
and the grip is excellent.

■The case with conventional gun cut...

Even if an elastic material is used, the sewing thread
sewn in a straight line interferes with the characteristics
of the material, and there is a feeling of tightness and
dullness, which may hinder movement.

■bio Wave Cut,

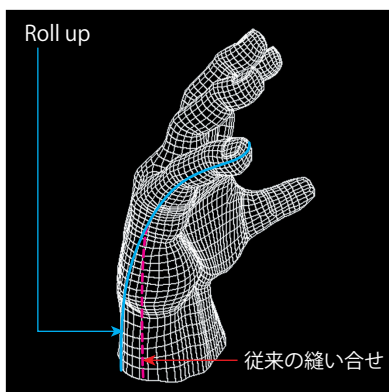
●The base of the fingers and the seams of the
palm are cut in a wavy shape. This cutting prevents
a feeling of tightness and swelling when the fingers
are bent, and keeps the hand in a natural state. The
fit of the product is unmatched by conventional
products.

●Side part of the finger to the movement of the
joint, Wave-shaped cutting.

■Advantages of the “bio” wave cut

By reducing wrinkles, flabbiness and tightness,
By improving the fit of the...

1. smooth movement and ease of activity
2. less likely to tire
3. economical and less prone to tearing and
thread breakage.



Roll up

When stitching the little finger side of the
palm, conventionally, all manufacturers
simply sew along the side.

[bio] glove is stitched from the base of the
little finger to the wrist, moving the stitching
position towards the back of the hand.

This stitching is <Roll-up>. This reduces the
risk of pain when the stitching touches the
side of the little finger, which is often hit by
objects when working, and also reduces
thread breakages, making the glove safe to
use for a longer period of time.

Assist gloves for rescue personnel

SAR

Search and Rescue



In rescue operations, a variety of adverse conditions need to be assumed. Personal equipment, especially gloves, is important and rapidly becomes worn, and if the wrong equipment is selected, it will immediately cause an injury or break and need to be replaced as soon as possible. Originally, cowhide gloves have hard fibers when they get wet, and they lose their original texture, and the fibers may shrink and become untouchable. We have created cowhide gloves that are stress-free against getting wet, and magic gloves that become softer and fit better as you use them. Developed as a rope rescue and descent glove that can lead to serious injuries if you make a mistake.

The aramid knit inside the leather makes it resistant to frictional heat and is suitable for induction ropes and leveling descent.

SAR-531-CBS

Rescue personnel Descending gloves

■ Colour / Black.

■ Size. /

XS	7.0 inch
	(h)200mm×(w)175~185mm
S	7.7 inch
	(h)210mm×(w)190~200mm
M	8.5 inch
	(h)220mm×(w)210~220mm
L	9.0 inch
	(h)230mm×(w)225~235mm
XL	9.6 inch
	(h)240mm×(w)240~250mm
XXL	10.2 inch
	(h)250mm×(w)255~265mm

■ Material. /

Body : Silicon-tanned cowhide
0.70~0.80mm

Wrist: moisture-absorbing quick-drying
pile rubber 35 mm wide.

Heat- and cut-resistant material: aramid knit.



Keeps the original texture even if it gets wet

3-layer structure resistant to frictional heat

Design stuck to the functional

Thin but excellent durable

Safe and secure with aramid knit

■ Features

Silicon-tanned leather with cowhide
& reinforced cowhide +.
Aramid knit inside

Two-part reinforced cow skin leather for easy bending

Easy to bend
V-cut



Inner aramid knit.



Designed to follow the shape of a wristwatch.
Magic band with air force specifications.

Roll up



Attention to detail.
Wrist elastic with sweat-absorbent,
quick-drying material specification.

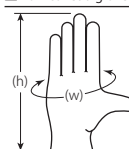
Special processing
New arrival

「Cowhide」gets even more powerful!



「SAR-531-CBS」Rescuers' descent gloves are made of silicon-tanned cowhide leather, which, when wet, returns to its original texture and softness after being squeezed hard and dried in the shade. General cowhide gloves are characterised by the fibres becoming stiff and hard when wet, with a stiff and stodgy feel and loss of texture.

■ How to read glove sizes



Leather gloves are manufactured to shrink vertically (length) and stretch slightly horizontally (width) during use. When purchasing, we recommend choosing a glove that is slightly longer and narrower

Slight differences may occur between the sizes shown in the catalogue and the actual dimensions of the products and the colours of the products.

[bio] wavy cut < patented process >
Smooth finger bending and extension.
Less discomfort in the joints.

RESCUE GLOVE

PU leather assist gloves for rescue workers

SAR

Search and Rescue



Demonstrates its power during rescue activities at natural disasters and rescue sites. The body is made of durable PU leather with a diamond pattern, and non-slip construction for improved work efficiency. Fluorescent yellow is used on the back of the hand, making it ideal for signaling and guidance from a distance.



SAR-571

Rescuer's Glove

■ color / black+fluorescent yellow

■ size /

M 8.5 inch (h)224mm×(w)210~220mm

L 9.0 inch (h)230mm×(w)225~235mm

XL 9.6 inch (h)236mm×(w)240~250mm

XXL 10.1 inch (h)242mm×(w)255~265mm

■ materials /

body: palm Smartphone compatible PU leather

back Fluorescent yellow color knit + PU leather

wristband: 38mm

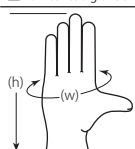
■ feature [bio]web cut<Patented manufacturing method>
Less discomfort at joints.
Smooth bending and stretching of fingers.

Double construction of fluorescent yellow knit and PU leather protects knuckles.
Fluorescent knit with excellent visibility.



Reinforcing patches on the first joints of the palm and fingers protect the seams, the weak point of the gun cut.

How to read glove sizes



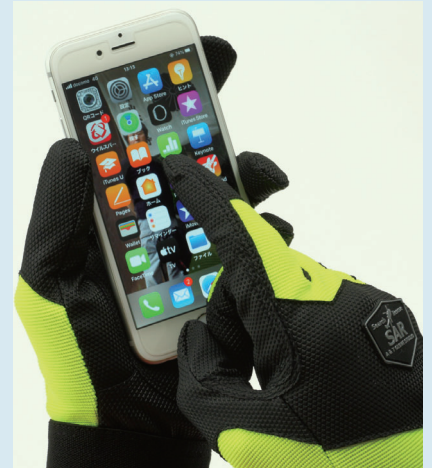
Leather gloves are manufactured to shrink vertically (length) and stretch somewhat horizontally (width) during use. When purchasing, we recommend that are slightly longer and narrower (feel thinner).

There may be slight differences between the sizes shown in the catalog and the actual product dimensions and coloration of the product.



Wristband with hole for carabiner is specially shaped and does not get in the way when flexing

smart touch (Smartphone support)



Immediate response even in emergency situations. Smartphone operation can be performed while wearing gloves.

RESCUE GLOVE

「Aramid」rescue gloves



SAR

Search and Rescue



「Toray・DuPont™ Kevlar®
DuPont™ NOMEX®」

High-performance fiber Kevlar specification

Ultra lightweight! Eliminate as many parts as possible, keep it simple!
The result is stress-free and light movement!

[High-performance fibres and kevlar
Nomex double knit.]



SAR-632-NS

Alami dress cue glove (short type)

■Colour / Navy + yellow + black (NS)

■Material /

Instep side : Kevlar + Nomex double knit.

Palm side : Kevlar + cotton double knit.

Reinforced microfibre + silicon dots

V-cut design at the joints reduces stress when wearing the gloves. The combination of microfibre and silicone is outstanding and the grip is unbeatable! The safety required for a rescue glove is still there!

SAR-632-NS & SAR-632-GS

Aramid Rescue Glove (short type) Common

■Size. /

S 8.0 inch (h)218mm × (w)195~205mm

M 8.5 inch (h)224mm × (w)210~220mm

L 9.0 inch (h)230mm × (w)225~235mm

LL 9.5 inch (h)236mm × (w)240~250mm

XL 10 inch (h)242mm × (w)255~265mm



■Features

Microfibre +.
Silicon dots for excellent grip.



V-cut cut-outs at joints for smooth finger movement.

[High-performance fibres Kevlar and
Kevlar double knit.]



SAR-632-GS

Alami dress cue glove (short type)

■Colour / Moss green + yellow + black (GS).

■Material /

Instep side : Kevlar + Kevlar double knit = higher cut strength.

Palm side : Kevlar + cotton double knit.

Reinforced microfibre + silicon dots

The hole for the carabiner is placed in the wristband section so that it does not get in the way. Reduces the risk of snagging on protrusions in the field, It also reduces the risk of losing it when it is removed, and is convenient for storage and washing.



「Aramid」rescue glove RESCUE GLOVE

「TORAY・DuPont™ Kevlar®
DuPont™ NOMEX®」
「TEIJIN/twaron®」

High-performance fibre aramid fibre specification

Kevlar, Nomex & Twaron, high-performance aramid fibres with excellent cut and abrasion resistance.

Guarded with naturally reinforced leather from the palm side to the fingertips, where contact with hazardous materials is likely.

Supports faster work from hard sites.



bio-615 Aramid disaster field gloves (long type)

■ Colour / Navy + Brown (NB)

■ Size. / XS	7.0 inch	(h)235mm × (w)175~185mm
S	7.7 inch	(h)245mm × (w)190~200mm
M	8.5 inch	(h)255mm × (w)210~220mm
L	9.0 inch	(h)265mm × (w)225~235mm
XL	9.6 inch	(h)275mm × (w)240~250mm
XXL	10.2 inch	(h)285mm × (w)255~265mm

■ Material /

Palm and instep side : para-aramid fibres + para-aramid fibres W-knit (navy)
reinforced leather : cowhide 0.7~0.8mm (brown) +
Knuckle guard (aramid felt)

High-performance aramid fibres
Kevlar (surface material) and
Nomex (backing material)
=Double knit



bio-631

Aramid rescue gloves (short type)

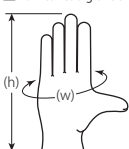
■ Colour / Orange + yellow (OY), moss green + black.(GB)

■ Size. / S	7.7 inch	(h)224mm × (w)195~205mm
M	8.5 inch	(h)230mm × (w)210~220mm
L	9.0 inch	(h)236mm × (w)225~235mm
XL	9.6 inch	(h)242mm × (w)240~250mm

■ Material /

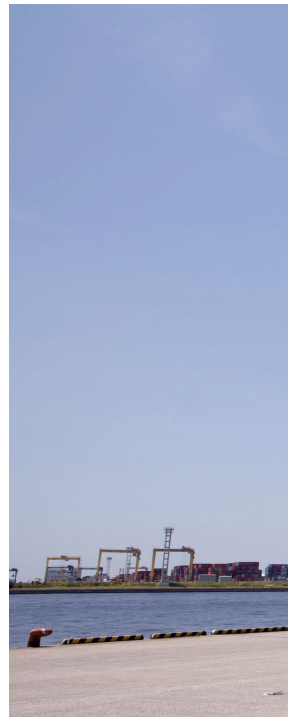
Palm side : para-aramid fibres + para-aramid fibres W-knit (yellow or moss green)+
Protector (polyurethane) + reinforced cowhide 0.7-0.8 mm (yellow or black)
Instep side : para-aramid fibre + para-aramid fibre W-knit (orange or moss green),
Back cotton bonding + reinforced cowhide 0.7-0.8 mm (yellow or black)
Wrist : pile elastic (orange or black)

■ How to read glove sizes



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High-performance aramid fibres
Kevlar (surface material) and
Kevlar (backing material)
=Double knit



[bio] wavy cut <patented process>

At the joints on the instep side, which are prone to contact with hazardous materials, With impact-resistant urethane padding. Protector.

bio-605

Aramid disaster field gloves (long type)

■ Colour / Orange + yellow (OY), black + black (BB).

■ Size. / M 8.5 inch (h)240mm × (w)210~220mm
L 9.0 inch (h)255mm × (w)225~235mm
XL 9.6 inch (h)270mm × (w)240~250mm

■ Material / Palm side : para-aramid fibre knit (yellow or black), lining cotton bonding+.

Reinforced deer back leather 0.7-0.8 mm (yellow or black)

Instep side : para-aramid fibre knit (orange or black), lining cotton bonding+.

Reinforced deer back leather 0.7-0.8 mm (yellow or black) + knuckle guard (polyurethane)

Long type with double wristband design.

Resistant to shifting. Safe, as hazardous materials are unlikely to enter the gloves.



bioウェブカット

High-performance aramid fibres

Twaron (surface material) and Twaron (backing material) = Double knit

Ultra-high performance para-aramid fibres 「twaron®」

twaron®

The Power of Aramid

Enhanced safety with excellent fibre properties.

Hazardous materials such as glass and metal are always present at the scene of accidents and disasters.

Firefighting activities also involve constant contact with fire and heat. The ultra-high performance para-aramid fibre 「twaron®」 is Protects the hand from these situations.

The base material is double-knit from para-aramid fibre 20 count yarn, with a higher density para-aramid fibre weight of 280 g - 290 g to achieve higher heat resistance and cut resistance.

The gloves are constructed from three layers of para-aramid fibre 「twaron®」 + 100% cotton backing fabric + natural leather for hard work.

Demonstrates power through ideas, thorough design and manufacturing methods

The bio-wave cut, which facilitates finger movement, and the reinforced leather that wraps around to the base of the thumb, have been designed with the user's workability in mind, on top of the substantial materials of para-aramid fibres and natural leather, to enhance safety and ease of movement.

Twaron, a strong, functional para-aramid fibre +.

Natural reinforced leather.

Our unique patented manufacturing process

ensures smooth movement.

Outstanding use.

Para-aramid gloves (military gloves), cut and abrasion resistant

cut resistance

sample	Cutting strength (times)
100% Twaron para-aramid.	14
100% cotton	3
100% nylon	3

● Cutting with a safety razor blade requires four times more force than cotton.
● 7G military gloves are used for the sample.

※ How to apply universal type abrasion testers.

(Measured at the Japan Spinners' Inspection Association).

abrasion resistance

sample	burst strength (kg/cm ²)	Abrasion strength (count)
Twaron para aramid	6.2	Over 5,000
Acrylic/cotton blend	6.6	161
100% AC	5.6	216
100% cotton	-	161

Abrasion strength: JIS L1018 Uniform method.

● Approximately 20 times more abrasion-resistant than cotton and acrylic products, It is economical as it can withstand prolonged use.
(Measured at the Japan Spinners' Inspection Association.)

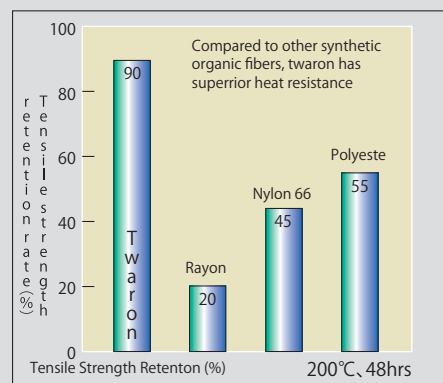
Thermal properties of para-aramid fibres (Twaron).

physical properties	Numerical values (units)
combustibility	29 (LOI % (oxygen index))
decomposition temperature	500 (°C)
Heat resistance (200°C, 48 hours)	90 (%)
specific heat	1420 (J/kgK)
thermal conductivity	0.05 (W/mk)
Heat shrinkage (190°C, 15 min warm air)	0 (%)

● It does not burn easily, does not melt and starts carbonising at 427°C-488°C. Even at temperatures of 400°C, very little CO, CO₂ or HCN is produced.

● Heat resistant up to 600°C for short periods of time, even in high heat work.

Heat resistance of para-aramid fibres (Twaron).



● Twaron exhibits superior heat resistance compared to other organic synthetic fibres.

HOIST OPERATOR GLOVE

Dedicated hoist operator gloves

During helicopter hovering of hoist operator operations,
Responds to the different characteristics of the helicopter's structure
The best item in the <bio-Alpha> series.



Cables flowing outside during hoist operator operation
The type that you can firmly pull with your palm and fingers.

bio-916-Alpha [Full Finger Type]

Dedicated hoist operator gloves
(Full Finger)

■ Colour / Yellow + black

■ size / M 9.4 inch (h)220mm × (w)240mm
L 9.8 inch (h)235mm × (w)250mm
XL 10.4 inch (h)250mm × (w)265mm
XXL 11.0 inch (h)265mm × (w)280mm

■ Material / Body: microfibre 0.8 mm (black)+.

Two-wenit (grey)+

Extra-thick specially tanned cow leather 2.3-2.5 mm (yellow)+.

Fingertip: cowhide 0.8-0.9 mm (yellow)+

Filling material: Para-aramid knit +

Wrist: pile rubber (black)

Extra-thick, specially tanned cowhide leather

When pulling in the wire
Guard your palms from danger
Super thick natural leather.

microfibre

The main body is Even if unit gets wet
from rain or water drops, Material
specifications that do not easily change quality.

para-aramid fibre

Cut and abrasion resistant material inside.
Excellent cut and abrasion resistance.



helicopter types /

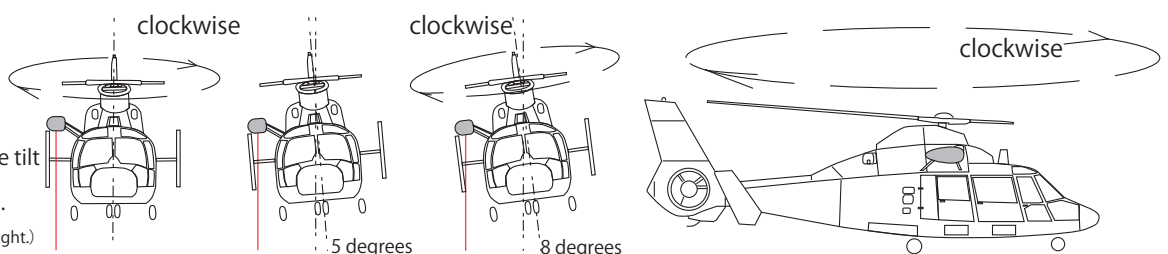
AS365N3

During helicopter hovering

Due to the characteristics of the tilt

The hoist cable flows outwards.

(Refer to the inclination diagram on the right.)





Supports hoist crews, keeping them safe from hazardous operations. Significantly reduces frictional heat burns and increases durability. Patented hoist operator-specific gloves.

Disaster scenes are a race against time. Supporting hoist team safety from one-second hazards. The best materials, including microfibre two-way knit and extra-thick specially tanned leather, provide a large, three-dimensional guard for the palm. More power with a new concept [S-fit] structure tailored to your needs.

What is a dedicated hoist operator's glove?

- 1 : High-strength glove developed exclusively for helicopter hoists.
- 2 : Remarkably durable, long-lasting and economical.
- 3 : Less adhesion of leather scraps due to abrasion, reducing the burden on the cable.
- 4 : Powerful only in adverse conditions, for violently rampant cables.
- 5 : Constantly evolving with new designs to ensure the personal safety of the user.
- 6 : Military, disaster sites, rescue teams, security and other related matters.



Extra-thick specially tanned leather / [S-fit] Design.
The extra-thick, specially tanned leather provides a large, secure guard from the palm to the instep side. Three-dimensional construction with unobstructed palm movement.

Patent number: 4938570.

Hoist operator glove
Technical, secure basic design and features.

bio-916-Alpha
For [Full Finger Type]

Multi-layer construction for peace of mind
Multi-layer reinforcement of lines where cables pass through the most. Safer and more durable.

thin-cased cowhide
Fingertips are 0.7-0.8 mm cowhide specification. Designed to facilitate smooth operation of tasks other than cable operation.

Ordering notes

- ※ Choose between right- or left-hand type of hand used.
- ※ The size indications for this product are intended to be worn over leather gloves, so please select the same size as leather gloves. In addition, if the product is worn over para-aramid gloves, please select one size larger.

Slight differences may occur between the sizes shown in the catalogue and the actual dimensions of the products and the colours of the products.

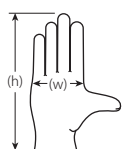
para-aramid knit
Cut- and abrasion-resistant materials are used for the interior.

microfiber

Extra-thick special tanned leather
Almost the entire palm is guarded. Protects hands from hazards when retracting wires.

Sewing thread Bonding process
Adhesive treatment of sewn parts to prevent fraying for increased durability.

How to read glove sizes



Super thick and strong glove with a structural finish that is surprisingly bendable and wrinkle-free.

Here it is. Technique!

two-way knit
Stretchable two-way knit for a good fit.

wristband
Fits the entire hand and prevents shifting. Pile-knitted elastic and Velcro wristband.

Field Implementation Testing
(Elevation training / after about 130 uses)



microfibre

The main body is made of microfibre, the quality of which does not change easily when wet with rain or water drops.

HOIST OPERATOR GLOVE

Hoist operator dedicated gloves



Type where the cable is pushed firmly outwards with the palm during hoist operator operation.

bio-915-Alpha [Open Finger Type]

Over glove for hoist operators only.
(half-finger five-toed)

■ Colour / Yellow + black

■ size / M 9.4 inch (h)220mm × (w)240mm
L 9.8 inch (h)235mm × (w)250mm
XL 10.4 inch (h)250mm × (w)265mm
XXL 11.0 inch (h)265mm × (w)280mm

■ Material /

Body: microfibre 0.8 mm (black)+
Two-wenit (grey)+

Extra-thick specially tanned cow leather 2.3-2.5 mm (yellow)+
Filling material: Para-aramid knit

Extra-thick, specially tanned cowhide leather
Ultra-thick natural leather that protects your palms from danger when wires are pulled in.

microfibre

The main body is Even if unit gets wet from rain or water drops, Material specifications that do not easily change quality.

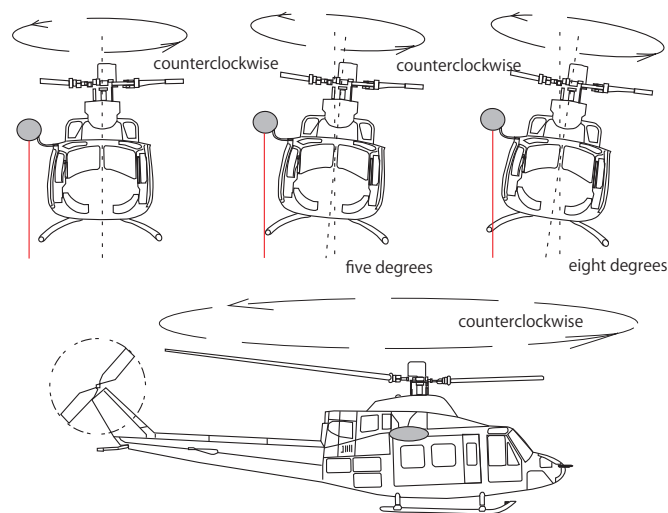
para-aramid fibre

Cut and abrasion resistant material inside.
Excellent cut and abrasion resistance.



helicopter types / Bell 412EP

The tilt characteristics of the helicopter hovering will cause the hoist cable to move closer to the skid. (Inclination diagram below.)

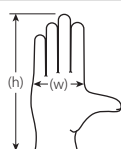


※Ordering notes

- ※ Choose between right- or left-hand type of hand used.
- ※ The size indications for this product are intended to be worn over leather gloves, so please select the same size as leather gloves. In addition, if the product is worn over para-aramid gloves, please select one size larger.

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■ How to read glove sizes



Winter cold region
specifications
Compatible with
thick gloves

Developed for unprecedented cold regions and winter, Rescue requests also occur in cold climates.

The Hoist Glove mittens type open finger type that can be worn over gloves suitable for the climate (made of neoprene, for skiing, etc.) can be operated even if worn over thick gloves.

The wristband has a picking function and can be attached and detached even if you are wearing thick gloves.

Cable when operating the hoist operator

Overglove that supports both "pull" and "push" with the palm.



bio-812

Hoist operator dedicated gloves Cold region specifications

Over Glove (mittens type)

■color/Black + Red

■size/ L 10 inch ~11 inch (h)200mm×(w)260mm~280mm

XL 11 inch ~12 inch (h)210mm×(w)280mm~300mm

※This glove is elastic.

■Material/Body (palm side): Micro fiber (black)

Body (back side): Two-way knit (red)

Cable contact surface: Ultra-thick special tanned cowhide 2.3-2.5 mm (black)

Wristband: Free magic wristband (hook / loop integrated type) specifications

With picking function

■Feature

Patent: 4938570 Super thick cowhide
Surprisingly easy to bend and wrinkle-free structure



Super thick tanned cowhide 2.3~2.5mm



High-strength Kevlar sewing thread and anti-fray processing

Smooth movement with V-shaped notch

Thick cold protection outer glove specifications

Two-way knit for a comfortable fit without feeling oppressive

Micro fiber

Even with thick gloves on
Easy with Picking function
Adjustable freely using free magic.



Thick cold weather gloves for outdoor use
on the market
Combination usage example



(Left) Diving gloves

(Right) Ski gloves

HOIST OPERATOR GLOVE

Hoist operator dedicated gloves



Economical, dedicated hoist operator's glove with greatly increased durability.
An early model with attention to detail using our unique patented manufacturing process.



Three-finger hoist operator-specific overglove with palm to push hoist cable out.



bio-913S

Hoist operator dedicated gloves
(Short type 3 fingers)

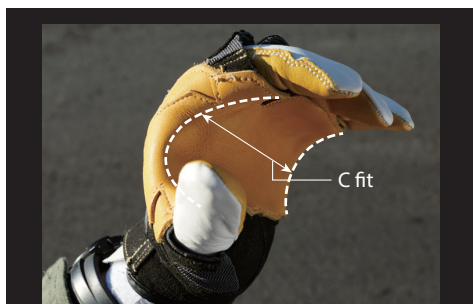
- Colour / Black + grey + yellow
- Size / M 9.2 inch (h)140mm × (w)235mm
L 9.8 inch (h)145mm × (w)250mm
XL 10.4 inch (h)150mm × (w)265mm
XXL 11.0 inch (h)155mm × (w)280mm
- Material /
Body: microfibre 0.8 mm (black)+
Two-wenit (grey)+
Extra-thick specially tanned cow leather 2.3-2.5 mm (yellow)+
Filling material: Para-aramid knit



bio-913L

Hoist operator dedicated gloves
(Long type 3 fingers)

- Colour / Black + grey + yellow
- Size / M 9.2 inch (h)140mm × (w)235mm
L 9.8 inch (h)145mm × (w)250mm
XL 10.4 inch (h)150mm × (w)265mm
XXL 11.0 inch (h)155mm × (w)280mm
- Material /
Body: microfibre 0.8 mm (black)+
Two-wenit (grey)+
Extra-thick specially tanned cow leather 2.3-2.5 mm (yellow)+
Filling material: Para-aramid knit



<bio-913><bio-914>
[C fit] Extra-thick, specially tanned
cowhide leather

Initial open-finger type with excellent manoeuvrability.
Compact design with no wrinkles or slack.

Five-finger hoist operator-specific overglove with palm to push hoist cable out.



bio-914S

Hoist operator dedicated gloves
(Short type 5 fingers)

- Colour / Black + grey + yellow
- Size / M 9.2 inch (h)140mm × (w)235mm
L 9.8 inch (h)145mm × (w)250mm
XL 10.4 inch (h)150mm × (w)265mm
XXL 11.0 inch (h)155mm × (w)280mm
- Material /
Body: microfibre 0.8 mm (black)+
Two-wenit (grey)+
Extra-thick specially tanned cow leather 2.3-2.5 mm (yellow)+
Filling material: Para-aramid knit



bio-914L

Hoist operator dedicated gloves
(Long type 5 fingers)

- Colour / Black + grey + yellow
- Size / M 9.2 inch (h)140mm × (w)235mm
L 9.8 inch (h)145mm × (w)250mm
XL 10.4 inch (h)150mm × (w)265mm
XXL 11.0 inch (h)155mm × (w)280mm
- Material /
Body: microfibre 0.8 mm (black)+
Two-wenit (grey)+
Extra-thick specially tanned cow leather 2.3-2.5 mm (yellow)+
Filling material: Para-aramid knit





9000/9001 PETZL AVAO Harnesses Protector for waist

- Colour / Yellow, black
- Size / 248mm × 99mm
- Material / cowhide 2.3mm~2.5mm



5900/5901 PETZL AVAO Harnesses Protector for legs

- Colour / Yellow, black
- Size / 210mm × 72mm
- Material / cowhide 2.3mm~2.5mm



8900/8901 PETZL NAVAHO Harnesses Protector for waist

- Colour / Yellow, black
- Size / 214mm × 104mm
- Material / cowhide 2.3mm~2.5mm



7900/7901 PETZL NAVAHO Harnesses Protector for waist

- Colour / Yellow, black
- Size / 172mm × 95mm
- Material / cowhide 2.3mm~2.5mm



Carabiner 123 for Super 12 carabiner holder

- Colour / Yellow
- Size / 143mm × 85mm × 23mm
- Material / cowhide 2.3mm~2.5mm



Carabiner Holder Features
Metal hooks & inner hooks
to prevent falling out



Helicopter Hoisting Weight Bag Rescue anchor (made by PIAR, USA)

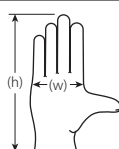
- Colour / Blue + fluorescent yellow.
- Size /
 - 5 lb (≈ 2.268kg)
 - 300mm × 95mm
 - 10 lb (≈ 4.536kg)
 - 330mm × 115mm
- Material / Nylon lead beads

※Ordering notes

- ※ Choose between right- or left-hand type of hand used.
- ※ The size indications for this product are intended to be worn over leather gloves, so please select the same size as leather gloves. In addition, if the product is worn over para-aramid gloves, please select one size larger.

Slight differences may occur between the sizes shown in the catalogue and the actual dimensions of the products and the colours of the products.

■How to read glove sizes



「PETZL harness protectors & accessories

Harnesses are an important piece of equipment that protects the lives of personnel. These protectors prevent deterioration due to friction and other factors, and are designed to be safer and more secure.



bio-531-CWY Rescuers' descent gloves



- Colour / White + yellow
- Size / M 8.5 inch (h)224mm × (w)210~220mm
L 9.0 inch (h)230mm × (w)225~235mm
LL 9.6 inch (h)236mm × (w)240~250mm
- Material / Body : Chrome-free cowhide (white) 0.6-0.7mm+
Reinforced cowhide (yellow) 0.7-0.8mm+
Wrist : moisture-absorbing
quick-drying pile rubber (white)



Designed for rope descent during advanced rescue operations.
They are also ideal for disaster and rescue sites as inner gloves
for dedicated hoist operator gloves.

Assist gloves for rescue personnel.

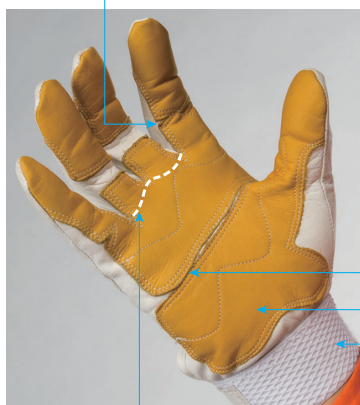
RESCUE GLOVE

■ <bio-531-CWY> Features

Easy-to-bend V-cut

The Velcro band is designed to follow the
shape of the wristwatch and is air force-specific.

Chrome-free cowhide 0.6-0.7 mm



Easy-to-bend reinforced cowhide
divided into 2 parts

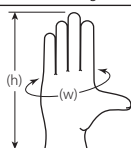
Chrome-reinforced cowhide 0.7-0.8 mm
Wrist elastic with sweat-absorbent,
quick-drying material specification
with attention to detail

roll up

[bio]wavy cut <patented process>
Smooth finger bending and extension
Improved fit with less discomfort at
the joints



■ How to read glove sizes



Leather gloves are manufactured to
shrink vertically (length) and stretch
slightly horizontally (width) during use.
When purchasing, we recommend
choosing a glove that is slightly longer
and narrower

Slight differences may occur between the sizes shown in
the catalogue and the actual dimensions of the products
and the colours of the products.

A fusion item of two types of soft natural leather and idea design

■ <bio-531-CWY>Excellent features of descent gloves

Two types of natural leather and unique cutting

■ Body:

Non-chrome cowhide 0.6-0.7 mm
Water-repellent specification.
Soft, stretchable and excellent fit.

■ Reinforced leather:

Chrome cowhide 0.7-0.8 mm
Excellent friction and
abrasion resistance.

Increased durability and safety. Excellent feel!

<bio531-CWY>Can be used as an inner glove.

Simple auxiliary glove for securing a rope for guidance during rescue operations.

bio Air Rescue R-2

Protector for induction ropes
(Slip-on over type)

■ Colour / White + yellow

■ Size / F (h)110mm × (w)230~270mm

■ Material /

Surface of the body:
Cowhide 1.3-1.5 mm (yellow)
Reverse side of the unit:
Split leather 1.2-1.4mm (gray)
Instep side : pile rubber (orange)



※With hole for carabiner

※Choose between right- or left-hand type of hand used.

Sheepskin

The ultimate fit of a master craftsman
who knows the material inside out.



Gloves for firefighting technical competitions

Glove

Natural leather 「sheepskin」 gloves

Stretchable and excellent fit

Ultra-fine fibre structured sheepskin

Moist texture for improved grip.

Light and comfortable to wear

bio wave cut for better fit

Small wristband designed for easy movement.

Thumb grips, 「don cut」 with no seam contact



Ultra-thin leather specification for a fit that reveals the unevenness of the nails.



[bio]wavy cut <patented process>
Smooth finger bending and extension.
Feeling of use with little discomfort in joints

roll up



Reinforced leather on the palm side that wraps around to the instep side.

bio-541

For fire fighting technology competitions

sheepskin glove (With reinforced leather)

■ Colour / White

■ Size /

S 7.7 inch (h)210mm×(w)195~205mm
M 8.5 inch (h)220mm×(w)210~220mm
L 9.0 inch (h)230mm×(w)225~235mm
XL 9.6 inch (h)240mm×(w)240~250mm

■ Material /

Body : Sheepskin 0.45~0.55mm

Wrist : pile elastic 40 mm wide

※ Small wristband with hole for carabiner



bio-540

For fire fighting technology competitions

sheepskin glove

■ Colour / White

■ Size /

S 7.7 inch (h)210mm×(w)195~205mm
M 8.5 inch (h)220mm×(w)210~220mm
L 9.0 inch (h)230mm×(w)225~235mm
XL 9.6 inch (h)240mm×(w)240~250mm

■ Material /

Body : Sheepskin 0.45~0.55mm

Wrist : pile elastic 40 mm wide

※ Small wristband with hole for carabiner



TEIJIN[®] NANOFRONT[®]

Teijin Nanofront significantly improves grip.
Fit and outstanding durability as good as chamois leather,
These new items are high-function gloves that are
slip-resistant even when wet.

The best fitting fit for helicopter instrument operation and
less tiring even after long periods of use.
Furthermore, a slit cut is adopted on the outside of the fingers to
increase ease of movement and ventilation.

HELICOPTER PILOT GLOVE



The fit is ideal for operating helicopter instruments and is less tiring even after long periods of use.
Furthermore, the thumb is sewn on the outside with a slit design for ease of movement and ventilation.



bio-560

Gloves specially designed for
helicopter pilots.
(Neoprene type with slit)

- Colour / Ice white + white
- size / M 9.4 inch (h)175mm×(w)240mm
L 9.8 inch (h)187mm×(w)250mm
LL 10.4 Inch (h)200mm×(w)265mm
- Material /
Body: Nano front + PU (Ice white)
Finger instep side: PU leather with slit.
Wrist: neoprene
※ Flat side: ventilation holes
Small wristband with carabiner attachment hole

TEIJIN[®] NANOFRONT[®]

Teijin Nano Front Specification Glove Features

The nano-sized irregularities on the surface of
the ultra-fine polyester fibers make it difficult
to slip and create a strong grip.
Moreover, they are non-slip when wet and
washable.
Excellent breathability and resistance to
swelling.
The unique cutting provides an excellent fit
and beautifully expresses the norm (salute).

Special features to aid helicopter operation.



Wristwatches and other instruments
mounted inside neoprene

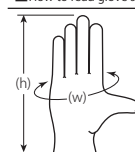


Wristwatches and other instruments mounted on
the upper side of the neoprene



Thumbs, which are prone to damage, are
stitched externally in a two-layer construction

How to read glove sizes



Leather gloves are manufactured to shrink
vertically (length) and stretch slightly
horizontally (width) during use. When
purchasing, we recommend choosing a glove
that is slightly longer and narrower (feels
thinner).

Slight differences may occur between the sizes shown in the
catalogue and the actual dimensions of the products and the
colours of the products.

TEIJIN®
NANOFRONT®

Rescuers' and firefighters' competition gloves

「For rescue technique competition practice」
「For pump manipulation competitions」gloves

Teijin Nanofront, a material with excellent features such as grip, fit, durability and resistance to slipping even when wet. It provides the best performance during practice and competitions, such as rope action and pump operation in technical competitions.



Natural silhouette that is wrinkle-resistant when worn (salute).

bio-550

Teijin Nanofront + PU competition gloves

■ Colour / White + Ice white

■ Size /

M 8.5 inch (h)225mm × (w)210~220mm

L 9.0 inch (h)233mm × (w)225~235mm

XL 9.6 inch (h)241mm × (w)240~250mm



ventilation hole



Thumb don cut



Small band with hole for carabiner

■ Material /

Body palm side: Nanofront (polyester) Body instep side: PU (2-way knit)

Wrist: sweat-absorbing, quick-drying diamond-patterned small wristband (with hole for carabiner).

※ Finger gussets: ventilation holes

Natural leather gloves for competition and training

Natural texture and soft feel that cannot be experienced with artificial leather.

Absolute feel because it is natural leather.

Natural leather gloves become infinitely more comfortable in the hand as they are used.

These white-based cowhide gloves have the unique texture of natural leather and look brilliant during training and competition.

bio-505

Cowhide gloves with reinforced leather for competition and training

■ Colour / White

■ Size /

S 7.8 inch (h)230mm × (w)195~205mm

M 8.5 inch (h)236mm × (w)210~220mm

L 9.1 inch (h)242mm × (w)225~235mm

XL 10.0 inch (h)248mm × (w)240~250mm

■ materials /

Body : cowhide (0.6~0.7mm)

Wrist : pile elastic



roll up



Reinforcing leather specification at the base of the thumb on the palm.



The joints at the base of the fingers are cut in an S shape and the seams are slightly displaced from the joints. This reduces discomfort such as discomfort and stiffness as the stitches do not touch the joints when bending and stretching the fingers. The product is also less bulky, providing a smooth feel and an appropriate fit.



bio-501

Cowhide competition and training gloves

■ Colour / White

■ Size /

S 7.8 inch (h)230mm × (w)195~205mm

M 8.5 inch (h)236mm × (w)210~220mm

L 9.1 inch (h)242mm × (w)225~235mm

XL 10.0 inch (h)248mm × (w)240~250mm

■ materials / Body : cowhide (0.6~0.7mm)

Wrist : pile elastic

613 Athlete leg shackles



613 Athlete leg shackles



Fire brigade pump operation Competition canvas gaiters

613 Athletes. gaiters for pump manoeuvring (Magic band Shoe type)

- Colour / White and black
- Size / L,LL (See below)
- Material /
Body : cotton canvas+.
Cowhide leather band +
metal tailstock

Ultra lightweight! Without bottom band! Developed specifically for pump manoeuvring competitions.
Faster! More beautiful! Supports movement and silhouette.
Fire brigade competition goods in support of hot teams aiming for the national championships.

Two types of shoes to choose from depending on the shoes used.



603 Athletes. gaiters for pump manoeuvring (Strap shoes type)

- Colour / White and black
- Size / L,LL (See below)
- Material /
Body : cotton canvas+.
Cowhide leather band +
metal tailstock

613 Athlete gaiters



■ Magic-band shoes, leather loops

A leather loop is sewn onto the inside of the main body, which can be slipped through the shoe's Velcro band to prevent shifting.

613 /603 Features of Athletes gaiters



■ 2-way knit

Supports smooth ankle movement and is ideal for preventing hot-weather dampness.

■ Anti-Slip Tape

Anti-shifting tape on the inside. Reduces trouser slippage and prevents dishevelled clothing, which is a factor in the scoring of norms.

603 Athlete gaiters



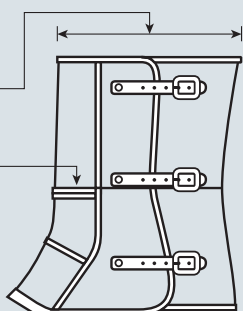
■ General lacing shoes, hooked tip stop

A metal hook is attached to the inside of the main body, so it can be hooked onto shoelaces to prevent shifting.

Sizes/How to choose

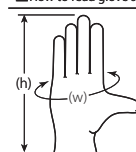
L : 140~170(w)mm
LL: 160~190(w)mm

L : 220(h)mm
LL: 220(h)mm



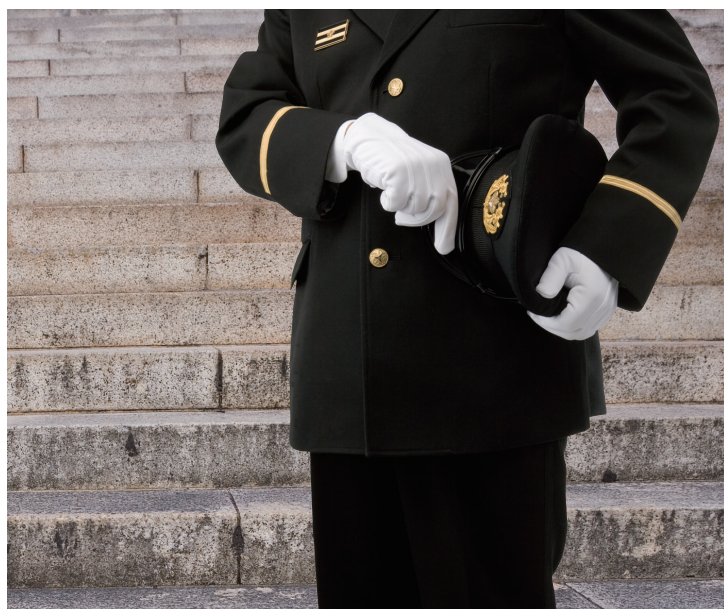
calf (of leg):
From the floor 230~240mm
(Measure without shoes.)
calf (of leg)
220mm

■ How to read glove sizes



Leather gloves are manufactured to shrink vertically (length) and stretch slightly horizontally (width) during use. When purchasing, we recommend choosing a glove that is slightly longer and narrower (feels thinner).

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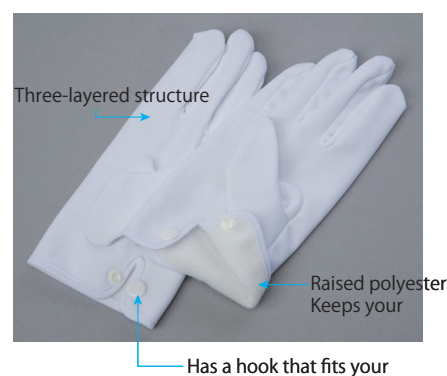
Formal Warm Gloves for Ceremonies and the Hospitality Business

<Nylon+PU film+Raised Polyester> Warm and clean
Indispensable item for ceremonies the hospitality business. Innovative formal gloves with many protective functions against cold.



■ Box/12 pairs

■ Plastic bag/1 pair



Three-layered structure

Raised polyester
Keeps your

Has a hook that fits your

NWP-901

Warm gloves for ceremonial, hospitality and formal wear

- Colour / White
- Size / SS, S, M, L, LL (See table on the right)
- Material / Body: nylon + PU film + Inside: brushed polyester

non-slip

Anti-slip finish, difficult to achieve with nylon materials, made possible by our own technology to fix in place.

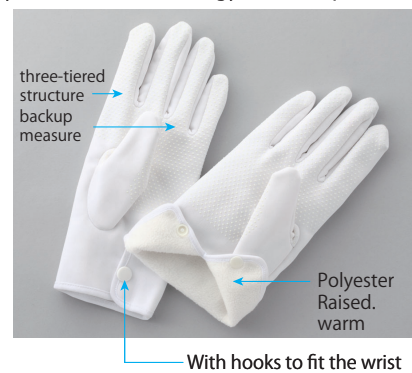
■ Size

Size	L(mm)	W(mm)	Case size(mm)
SS	198	190~195	260×210×100
S	206	200~205	
M	220	220~225	
L	229	230~235	
LL	238	240~245	



■ Boxed / 10 pairs

■ Bagged / 1 twin pack



three-tiered
structure
backup
measure

Polyester
Raised,
warm

With hooks to fit the wrist

FWG-9000 plus S

Warm gloves for ceremonial, hospitality and formal wear

- Colour / White
- Size / SS, S, M, L, LL (See table on the right)
- Material / Body: nylon + PU film + Inside: brushed polyester
Non-slip palm : urethane resin, acrylic resin.

■ Size

Size	L(mm)	W(mm)	Case size(mm)
S	231	200~205	260×305×80
M	245	220~225	
L	254	230~235	
LL	263	240~245	
3L	269	250~255	



Excellent cold protection

Block out the cold with PU film!
Ensure warmth with brushed polyester!

+



Three-layer integrated construction and this thinness

By making it a three-layer integrated structure, Achieves a thin and comfortable fit!

+



Nylon outer material

The outer fabric is made of nylon, so there are no unpleasant cotton scraps on the formal wear!

Features of NWP-901 & FWG-9000 plus S

★It supports freezing hands at events and festivals, and its behavior and appearance are perfect!★

Uses / Winter ceremonies, festivals, formal wear and hospitality, as well as conductors, doormen and security guards.



PROFESSIONAL GEAR
bio
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A&T GLOVE STUDIO CO., LTD.

A & T GLOVE STUDIO

7-4-14-12, Umamikita, Koryo-cho, Kitakatsuragi-gun, Nara, 635-0318 Japan

TEL +81-745-54-3433 / FAX +81-745-54-3457

URL [http : // www. at-glove.com](http://www.at-glove.com)

e-mail address [bio@at-glove.com](mailto:bio@at-glove.com)

\* Since it may change without a preliminary announcement for an improvement, please understand specification, a design, etc. of a product.

\* Some colors of a product may differ on the relation of printing.