



# DJO MOTORSPORTS CATALOGUE

**DONJOY®**

**Compex®**

## YOU MAY NOT KNOW US, BUT THE PROFESSIONALS DO

**DONJOY®**



For almost 30 years, professional athletes needing injury-prevention and post-op recovery assistance have worn DonJoy braces. Our braces are used by the best champions in over 44 countries around the globe. This specially selected MX range features knee and wrist braces in versatile, off-the-shelf models. DonJoy's MX braces help prevent the knee from making unnatural

movements to protect the ACL, PCL, medial and lateral ligaments. They also offer extra support and stability to injured knees.

World Champion Antonio Cairoli, Rui Goncalves, Jose Antonio Butron, Brett Metcalfe and many more World class riders are fitted with DonJoy braces. With the help of his DonJoy Defiance III knee braces, Cairoli won the world title last year and continues to wear them to help protect him against injury.

**Compex®**

MX riders around the world use electrostimulation as an effective and efficient method to improve their training. Originally, electrostimulation was mostly used by physiotherapists to develop specific groups of muscles during rehabilitation. Rapidly, athletes started using that same technique on healthy muscles to complement and enhance their overall training performance.



The operating principle of electrostimulation is very simple and faithfully reproduces the processes involved in muscle contraction controlled by the brain. Electrostimulation is also often used to reinforce muscle, speed up and improve muscle recovery after intensive training or competition and has been successfully used for 'Arm Pump' Phenomenon, a condition commonly suffered by MX riders.

## A PRODUCT FOR EVERY JOINT AND INJURY

Statistics on Motocross injuries show that not only the knee, but also the shoulder, wrist, elbow and ankle joints are frequently injured. There is no need to tell you how quickly a great start to the season can turn into a nightmare in just a few seconds...a bad fall makes the line between success and failure very thin! DonJoy and Compex are aware of this and over the years have developed a full range of premium quality products in answer to the high demands of athletes; products that help you reach your goals. This motorsport catalogue features a selection of our top quality functional products, these products have been tried and tested by athletes and their medical professionals and are designed to help prevent and treat injury. Your safety and health is our concern! We want you to trust your body, trust your instinct and trust our gear... so go for the protection DonJoy and Compex are offering you!

**ANTONIO CAIROLI**  
MX1 GP WORLD CHAMPION

*Antoni*  
#222



**ANTONIO CAIROLI**  
**MX1 AND MX2 WORLD CHAMPION**

**"RIDING WITH OTHER BRACES IS NO LONGER AN OPTION FOR ME, I'VE EXPERIENCED THE DIFFERENCE AND THIS IS A VERY CLEAR CHOICE.**

**I'M NOT GETTING ON THE BIKE AGAIN WITHOUT MY DONJOY DEFIANCES - THEY GIVE ME SUPPORT AT A LEVEL THAT NO OTHER BRACE CAN, I FEEL SAFE WEARING THEM AND IN A SPORT WHERE CONFIDENCE IS KEY, THAT'S A VERY IMPORTANT FEELING."**



## 3 KNEE BRACING

### 4-POINTS-OF-LEVERAGE™

Since 1984, DonJoy's goal has been to revolutionise orthopaedic bracing. Through the 4-Points-of-Leverage™ rigid cuff and strap configuration, a posterior force is applied to the tibia preventing anterior movement.

The 4-Points-of-Leverage™ design is used on the Defiance®, Defiance III®, Armor, 4Titute®, FullForce™ and Legend™ braces.

### UNIQUE INTEGRATION SYSTEM

The centre of the hinge is just posterior to the midline and just superior to the joint line. This allows points 1 and 3 to compress soft tissue, isolating the femur and bringing it forward. Points 2 and 4 draw the tibia posterior, generating a net differential force, or constant load, directly over the tibia, preventing it from moving forward.

#### POINT 3

A strap across the back of the lower thigh pushes the femur anteriorly.

#### POINT 2

The tibia is anchored by a cuff placed at the bottom of the posterior calf.

#### POINT 1

The femur is anchored by a cuff placed at the top of the anterior thigh.



#### POINT 4

A strap placed on the anterior tibia applies an active constant load, to prevent anterior tibial translation.



## What is an ACL injury to the knee?

The anterior cruciate ligament (ACL) is the most commonly injured knee ligament. The ACL controls how far forward the tibia moves in relation to the femur (see diagram) and if the tibia moves too far, the ACL can tear. The ACL is also the first ligament that becomes tight when the knee is straight so if the knee is forced past this point, or hyperextended, the ACL can also be torn.

The ACL is often injured during high action sports activities such as motocross when the athlete suffers a direct blow, a twisting motion or hyperextension. For example, the hyperextension and twisting mechanisms can occur when a motocross rider catches his/her foot in a corner. The tearing of the ligament results in a loud popping sound and the feeling of instability in the knee. Often the medial collateral ligament (MCL) and the ACL are injured at the same time.

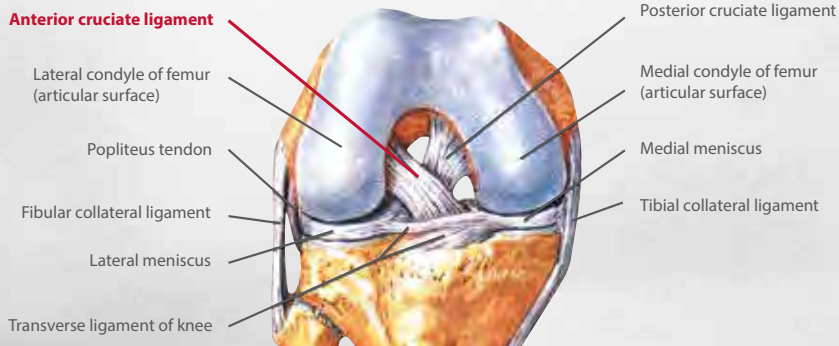


## Why do I need my Anterior Cruciate Ligament?

The ACL stabilises the knee and the instability caused by the torn ligament leads to a feeling of insecurity or "giving way" of your knee, especially when trying to change direction. People with a torn ACL will feel instability when walking down hills or stairs, cutting/pivoting, starting and stopping quickly and when their knee is in full extension. The knee may also feel like it can bend too far backwards.

The symptoms following a tear of the ACL are not always exactly the same in severity for all people. Typically, you will experience swelling of the knee within a short time following the injury. This swelling is due to bleeding into the knee joint from torn blood vessels in the damaged ligament. The pain and swelling from the initial injury will usually go away after a few weeks, but the instability remains. This physical instability and the inability of the patient to control the knee require treatment. Many people have the instability treated by orthopaedic surgery to reconstruct the ligament to increase the stability of the knee and prevent damage to the joint.

Right knee in flexion: anterior view



# DONJOY® **DEFIANCE III®**

The Defiance III features a low-profile design with a very strong but feather light carbon frame. This custom made brace is available in standard and short lengths (for boot clearance), which makes it the ideal brace for high impact motorcycle sports. The Defiance III is our premium brace and is worn by some of the best riders in the world.



## FEATURES AND BENEFITS

- Custom-made to the individual patient
- Patented 4-point dynamic leverage system to protect the knee joint
- Guaranteed anti-migration, Supra-Condyle Pad
- Weight: 510 grams
- ACL, PCL and CI version
- Low profile design: fits comfortably under clothing and sports gear
- Flexion-extension control
- Short & standard length
- 16 colour options, 16 graphic patterns and 18 graduation options
- Normal delivery time: 7-10 days (in urgent circumstances may be accelerated)
- Limited lifetime warranty on frame and hinge

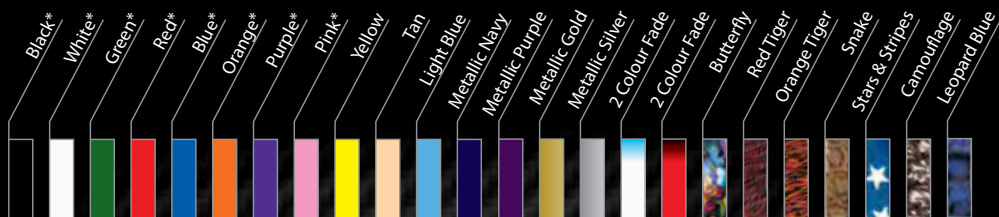
## INDICATION

- Mild to severe ACL and/or PCL, MCL, LCL instabilities for active patients participating in high collision sports
- Conservative treatment of ACL/PCL or CI patients



SourcePoint™ hinge incorporates a spring leaf dampening mechanism that reduces extension shock

## DEFIANCE® COLOUR OPTIONS



\*Metallic versions available

ACCESSORIES	DESCRIPTION	SIZE
11-1006-X-06000	Impact guard	XS-XXL
11-0016-X-06000	Sports cover	S-XXL
11-0103-X-06000	Sports cover (short)	S-XXL
11-0075-X-00000	Lycra® undergarment	S-XL
11-0122-X	Neoprene undergarment	XS-XXL

SIZE	THIGH	CALF
Minimum	12 1/2" (31.8CM)	10 1/4" (26CM)
Maximum	30 5/8" (77.8CM)	20 3/4" (52.7CM)

Measurements taken with a CCM measuring device or casted in weight bearing

**Defiance III with Impact Guard**





## DONJOY<sup>®</sup> ARMOR

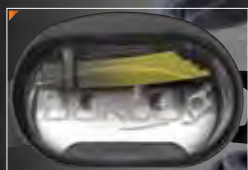
The DonJoy Armor knee brace is our strongest off-the-shelf brace. Lightweight and low profile, we took the best features from our existing line of braces to create a brace that is perfect for motocross. It has a swooping frame design, which means there is no interference with the motorcycle frame or fuel tank. The Armor knee brace has just the right calf cuff length to ensure maximum leverage and boot fit.

### INDICATION

- Mild to severe ACL and/or PCL, MCL, LCL instabilities for active patients participating in extreme sports

### FEATURES AND BENEFITS

- Optional FourcePoint™ hinge
- Medial swooping frame
- Anti-migration Supra Condyle Pad
- Short calf for boot clearance
- Patented 4-point dynamic leverage system
- Stronger 6061 T6 aircraft aluminium frame
- ACL, PCL and CI version
- Moldable frame for custom fit
- Flexion-extension control
- Swiveling strap tabs
- 1-year warranty on frame and hinge



FourcePoint™ hinge incorporates a spring leaf dampening mechanism that reduces extension shock

PART NUMBER	DESCRIPTION	SIZE	COLOUR
11-1004-X-26000	ACL (Standard hinge) Right	XS-XXXL	Silver Vein
11-1005-X-26000	ACL (Standard hinge) Left	XS-XXXL	Silver Vein
11-1440-X	ACL (FourcePoint™ hinge) Right	XS-XXXL	Silver Vein
11-1441-X	ACL (FourcePoint™ hinge) Left	XS-XXXL	Silver Vein
11-0075-X-00000	Black Lycra® undergarment	S-XXL	Black
11-0122-X	Black neoprene undergarment	XS-XXL	Black
11-1006-X-06000	Impact guard	S-XXL	Black
11-1095-9-06000	Calf pinch guard	Universal	Black



Armor with Impact Guard





## **Compex® ELECTROSTIMULATION**

Athletes and MX riders all over the world use Electrical Muscle Stimulation (EMS) as an effective and efficient method to help prevent arm pump, to build muscle mass, for muscle rehabilitation or as pain relief without side effects.

It is a natural technique that can help you enhance your overall training performance. The Compex stimulators will enable you to increase the length of your training sessions, enhance training quality and improve recovery. Compex stimulators are used by many of the world's best riders.



### **IS ELECTROSTIMULATION USEFUL FOR MX?**

Electrostimulation is a natural technique that can help you enhance overall training performance. The Compex stimulator will enable you to increase the length of your training sessions, enhance training quality and improve recovery. However, it is important to continue your usual training programme including cardio-vascular development in order to reach your targets.

#### **Which programmes are best for MX riders?**

If you are preparing for your MX season, relevant programmes include:

- Developing strength in your quadriceps, this programme might also be used on your gluteus muscles, as well as the flexor in the wrist and fingers
- Performing active recovery after intense training and racing

#### **Why do you need to recover after a competition?**

Physical effort creates muscle fatigue. While a good balance between training sessions and recovery can improve performance, overtraining could do the reverse.

#### **What are the benefits of the active recovery programme?**

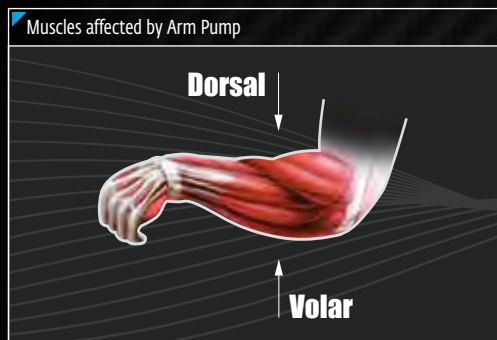
Firstly, it produces an increase in blood flow which accelerates the elimination of lactic acid (waste from muscular contraction). Secondly, the programme helps increase endorphin production which helps relieve muscular pain (= analgesic effect). Finally, the programme has a relaxing effect which helps decrease muscular tension.

You can also use the TENS programme on the Compex in order to relieve muscular pain when required.

## ARM PUMP

It may not be an injury known to everyone, but Motocross riders around the world are very familiar with what has become known as "ARM PUMP".

Arm Pump is a compartment syndrome overuse type injury. As the majority of Motocross injuries are traumatic in nature, it appears that little attention has been paid to this distressing and often very painful condition.

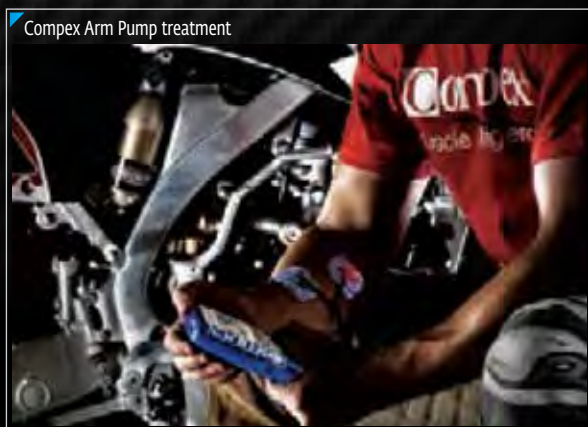


Arm Pump results from the complex hand and wrist co-ordination required to control a high powered motorcycle. When you grip something in your hand there is multiple contraction between the muscle groups on the back (dorsal) and front (volar) of the forearm. To generate a stronger grip, the wrist is pulled into extension. This co-contraction results in an increase in compartment pressure i.e. it is harder for the blood to flow through this region. Also the drainage of the waste products, such as lactate, becomes increasingly inefficient. Therefore, to simply grip a

handlebar increases pressure. To grip the handlebar of a rapidly accelerating or decelerating motorcycle necessitates stronger grip levels. If you then add the throttle action, which uses the dorsal wrist extensors more than the volar wrist flexors, then add the clutch and brake levers, which use the volar finger flexors, the complex nature of this injury becomes apparent.

Not only does "Arm Pump" occur in Motocross, but it is becoming increasingly common at the higher levels of kite surfing, water and jet skiing where inevitably European and World Championships require greater levels of repeated practice and competition.

The Compex device helps reduce the muscle swelling and compression by using specific stimulation programmes that help relax the muscles and stimulate the blood supply to almost four to seven times its normal flow. This stimulated blood supply allows a better drainage and supply of oxygen. This is a painless treatment of 20 to 30 minutes directly after exercise or competition. The device also has specific programmes to encourage endorphin production to help relieve pain.



### THE ULTIMATE IN PRECISION QUALITY: MI TECHNOLOGY

Developed in our research laboratories, Compex's revolutionary and exclusive Muscle Intelligence™ technology automatically adjusts and tailors stimulation parameters to each patient's physical characteristics. This automatic personalisation makes the treatment more efficient and more comfortable for the patient.

#### THE **mi**-SENSOR

The **mi**-SENSOR forms an interactive link between the muscle and the stimulator. It measures certain physiological characteristics of the muscle to be stimulated, analyses them and adjusts the stimulation parameters to suit each patient. It can be used on the 4 channels and requires no further set-up work since it operates in the same way as a conventional stimulation cable.

#### THE 4 **mi** FUNCTIONS:

##### **mi**-SCAN : A personal touch

Since minimising the electrical energy makes treatments more comfortable and efficient, this function uses the sensor to determine and tailor the optimal stimulation parameters to each patient and for each session.

##### **mi**-ACTION : Involving the rider

Since combined active exercise allows you to better incorporate electrotherapy in your treatment protocols, minimal muscular activity in the worked area allows the rider to voluntarily trigger stimulation.

##### **mi**-TENS : Self-regulating pain therapy

Since managing the Gate control dosage involves maintaining energy at the level required to obtain intense tingling sensations, the sensor continuously controls and adjusts the stimulation energy to eliminate unwanted contractions.

##### **mi**-RANGE : Controlling energy

Since there is an optimal therapeutic benefit energy level with low-frequency programmes (endorphin, contracture type), **mi**-RANGE indicates the minimum and maximum energy levels to the user.





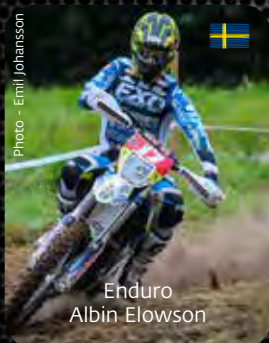




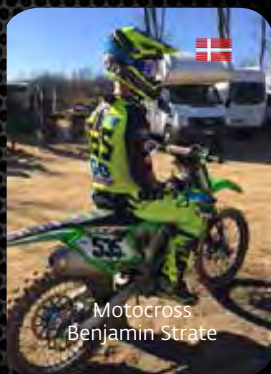
# NORDIC WALL OF FAME



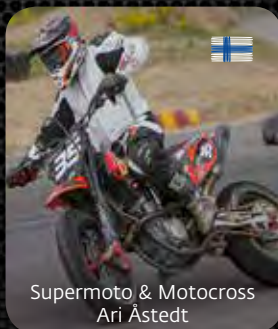
Photo - Emil Johansson



Enduro  
Albin Elowson

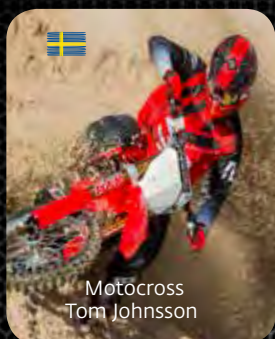


Motocross  
Benjamin Strate



Supermoto & Motocross  
Ari Åstedt





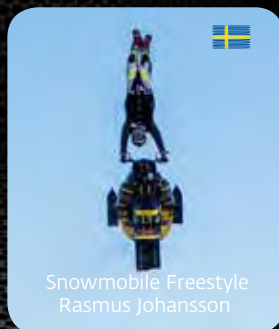
Motocross  
Tom Johnsson



Motocross  
Victor F Henriksen



Motocross  
Amanda Bergkvist



Snowmobile Freestyle  
Rasmus Johansson

The DONJOY logo features the brand name in a bold, italicized, sans-serif typeface. A white swoosh underline is positioned beneath the letters 'O', 'N', and 'J'.

**DONJOY®**

The Compex logo consists of a white square icon containing a stylized 'C' shape, followed by the brand name in a serif font.

**Compex®**

## **CONTACT**

DJO NORDIC AB  
MURMANSGATAN 126  
212 25 MALMÖ  
SWEDEN

SE 040 39 40 00  
DK 89 88 48 57  
NO 23 96 09 27  
FIN +46 40 39 40 00

[www.DJOglobal.eu](http://www.DJOglobal.eu)