

Indoor shoes
workbook
1112



Our mission is to help the athlete achieve peak performance

Salming Sports is a Swedish brand dedicated to indoor sports. In our mission, we strive to push the limits for athletic equipment. We develop innovative and multi-functional gear that helps athletes improve their performances – unbounded.

The X-Factor indoor shoe project involved professionals in the athletic as well as the clinic field. The project was once formed by the high demands of our most demanding athletes and the expertise of the orthopaedic specialists at Team Ortopedteknik in Jönköping, Sweden. The result is a groundbreaking line of lightweight indoor shoes that provide support and functionality for peak performance.

We have been in the floorball and handball business for over ten years. All the time with one clear purpose: design innovative products that help athletes enhance their game. This is the bottom line of our philosophy and it fuels every aspect of our indoor shoe development.



index

BIOMECHANICS, ORTHOPAEDIC COLLABORATION	4-5
X-FACTOR TECHNOLOGIES	6-7
X-FACTOR MALE	8-9
X-FACTOR FEMALE	10-11
X-FACTOR JUNIOR, SPEED ELITE 2.0, SPEED GOALIE	12-13
APPAREL - 365 PRO TRAINING	14-15

Biomechanics - adapting to the movement of the human body

THE GAIT CYCLE

Just as in jogging, the gait cycle is a part of the leg and foot movement in indoor sports. The gait cycle begins when one foot contacts the ground and ends when that foot contacts the ground again. In addition to the gait cycle, indoor sports are characterized by fast, irregular lateral movements, which put tremendous stress on the ligaments, tendons and joints. The trick is to provide a shoe that addresses both, but let us start with the gait cycle.



Cushioning phase, making contact with the ground...

Heel strike the cushioning phase of the gait cycle lasts about 1/4 of the total time the foot is in contact with the ground. The foot pronates and rolls in. The cushioning phase ends when the forefoot makes contact.



Midstance, stability is key

Foot flat the entire body weight is put on one foot. The body weight passes over the foot and leg that provide a stable platform while the other foot is swinging forward. This instable phase makes the majority of the cycle. Arch assist to support the body's own elements that resist excessive flattening, is vital.



Propulsion, taking off...

Propulsion begins when the heel lifts. The windlass mechanism tenses the plantar aponeurosis enabling the foot to become an efficient lever.



The windlass mechanism puts tension on the plantar fascia and raises the arch passively.

LATERAL MOVEMENTS

Fast and irregular lateral movements are typical to indoor sports such as handball, floorball and squash. The knees and joints are subject to strong forces. Extreme pressure on the forefoot requires a shoe that distributes the weight as evenly as possible all over the foot.



ORTHOPAEDICS

TEAM ORTOPEDTEKNIK - biomechanic and orthopedic technology expertise
Orthopaedic technology combines technical and medical know-how, creating a unique expertise which, coupled with a holistic view, enables us to design specially adapted aids. Our goal is to satisfy all needs within our sector through high motivation and professionalism in orthopaedic technology. Our work is both preventive and rehabilitative. The results of our analysis and products shall work to support a functioning life and enable individuals to use their innate capacities as far as is possible. Our foremost goal is to contribute to the quality and security of life.



By using the latest technology we can monitor the different pressure points and the actual pressure while the athlete is exercising. Red colour marks heavy pressure.

Salming X-Factor - innovative technology

The eye-catching X-Factor exterior design encapsulates the product development idea that the shoe should be an

extension of the foot, an exo skeleton that wraps around the foot and creates stability and comfort, enabling the athlete to

focus 100% on the game. The presentation below shows how the athlete achieve that focus with the X-Factor technologies.

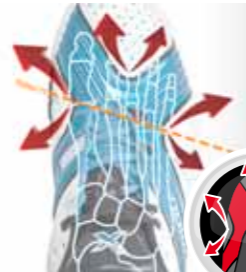


X UPPER



ErgoHeelCup™

To stabilize and fixate the heel, which is key to providing a great fit and comfort, we have developed a new anatomical Ergo Heel Cup that is slightly longer than the average heel cup.



X-Design™

The unique asymmetrical X-factor design stabilizes the foot for lateral movements and reduces pressure at the MTP joints (Metatarsophalangeal joints). It is important to keep the foot stable medio-lateral, avoiding friction and side forces in the soft parts of the foot sole, especially underneath the forefoot. In order to fixate the forefoot without getting pressure at the MTPs we have developed a horseshoe shaped "Front foot lacing stabilizer" within the asymmetrical X-Factor design.



Off Centre Lacing

Asymmetrical lacing designed for added comfort and improved fit.



X MID SOLE



T.G.S.62/75™ Torsion Guide System

The distance from heel to the ball of the foot (62% of the shoe) has been designed with extra stability, which ends in the so-called "ballet" line, a 75° angle. In front of the 75° line, we have equipped the X-Factor with greater flexibility to stimulate the foot's natural movements. TGS 62/75 takes all of the gait cycle criteria into consideration. At the same time, it softens the strains caused by friction during lateral movements. The shoe bends in exactly the right places, stimulating the foot's natural lateral and forward movements



LMS™

Lateral Movement Stabilizer - an especially designed light weight integrated dual torsion unit that supports the foot during fast and irregular lateral movements.



Rebound Foam

Forefoot rebound energy foam - RE35. 80% better rebound energy than a regular EVA midsole compound.



Cushioning Foam

Heel cushioning foam - C35, positioned at the heel centre, gives you 70% better shock absorption than a regular EVA midsole compound.



SpeedLite™

The SpeedLite™ midsole is a lightweight performance EVA compound with long lasting cushioning qualities.



X OUTER SOLE



RollBar™

Increased radius on the inner side of the outer sole, facilitates rolling the foot inwards and toe push off. Reaching for that stop ball in squash or covering a shot in floorball is made easier with the RollBar™ technology.



LMS+

Fast lateral stops expose the foot to the risk to roll over outwards, causing injuries. LMS+ (Lateral Movement Stabilizer Plus) is a unique design with a positive angle of 5° that prevents the foot from rolling over outwards.



SpinZone™

The design of the outer sole meets the lateral movements, twists and turns that are typical for indoor sports. The SpinZone design - applied in the forefoot area - makes it easier for the forefoot to twist and turn under pressure, avoiding stress on knees and joints.



R62

A unique lightweight durable rubber compound with the best possible grip on all indoor surfaces.





Technologies



X-Factor senior male model

Salmings state of the art indoor shoe model.

Features all of the X-Factor innovative technologies such as the Torsion Guide System (T.G.S.62/75), RollBar™ and LMS Plus etc. Please read pages 6-7 for a thorough study and breakdown of the different unique technologies.

Size: Euro. 40,5 - 48
 US. 7,5 - 13,0
 UK. 6,5 - 12,0
 Cm. 25,5 - 30,5

Colours: FluoYellow / Red / Black
 White / AquaPetrol / Black





Technologies



X-Factor senior female model

Salmings state of the art indoor shoe model.

Features all of the X-Factor innovative technologies such as the Torsion Guide System (T.G.S.62/75), RollBar™ and LMS Plus etc. Please read pages 6-7 for a thorough study and breakdown of the different unique technologies.

Size: Euro. 36 - 42

Colours: White / Red / Black

US. 5,0 - 9,5

UK. 3,0 - 7,5

Cm. 22,5 - 26,5





Technologies



X-Factor junior model

A state of the art junior indoor shoe.

Features some of the X-Factor innovative technologies such as the Torsion Guide System (T.G.S.62/75), RollBar™ and LMS Plus etc. Please read pages 6-7 for a thorough study and breakdown of the different unique technologies.

Size: Euro. 36 - 39
 US. 4,0 - 6,5
 UK. 3,0 - 5,5
 Cm. 22,5 - 25,0

Colours: White / FluoYellow / Red / Black



SPEED

Speed Elite 2.0

Shoe upper made in high quality matte white PU leather. The heel part of the EVA mid sole has been updated to enhance stability and cushioning. Features Bionic in the mid sole heel area for cushioning and Bionic plus in the fore foot area for greater rebound property. Outer sole is made in a light weight raw rubber compound with excellent grip properties

Size: Euro. 40,5 - 47
 UK. 6,5 - 11,5

Colours: White / Grey / Blue

SPEED

Speed Goalie

The world's first floorball goalie shoe! A light weight shoe with excellent sliding characteristics and maximized flexibility. The sliding area is padded and powered with the very durable DuPont Cordura nylon which provides excellent sliding properties no matter the quality of the floor surface. Divided outer sole for maximized flexibility. Asymmetrical lacing

Size: Euro. 37 - 47

Colours: Black / Yellow / Orange



CORDURA

365 Pro Training - keeps you dry and comfortable during high performance activities

365 PRO TRAINING

Tee short sleeve

A training tee that provides a superior cooling effect during high performance activities. Powered with Salming CoolFeel™.

Size: XS-XL
 Colour: Black / CyanBlue
 GreyMelange
 White



365 PRO TRAINING

Gym Tee

A muscle fit training tee made in a comfortable stretch fabric.

Size: XS-XL
 Colour: Black, White



365 PRO TRAINING

Shorts

Training shorts that provides a superior cooling effect during high performance activities. Powered with Salming CoolFeel™.

Size: XS-XL
 Colour: Black / CyanBlue
 GreyMelange



365 PRO TRAINING

Gym tank

A muscle fit training tank made in a comfortable stretch fabric.

Size: XS-XL
 Colour: Black, White



365 PRO TRAINING

Running Jkt

A shaped and slim fit with windprotective shell and breathable fabric powered with CoolFeel™. Reflex print. Chest pocket.

Size: XS-XL
 Colour: Black / CyanBlue.

365 PRO TRAINING

Half zip jkt

A half zip training jacket that provides a superior cooling effect during high performance activities. Powered with Salming CoolFeel™.

Size: XS-XL
 Colour: Black / CyanBlue



365 PRO TRAINING

Semi long pants

Semi long training pants that provides a superior cooling effect during high performance activities. Powered with Salming CoolFeel™.

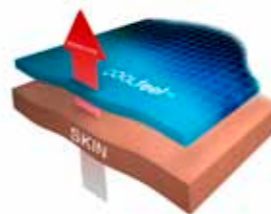
Size: XS-XL
 Colour: Black / CyanBlue.



TECHNOLOGY

CoolFeel™

A functional concept designed fully for transporting moisture from your skin to the fabrics surface where it will evaporate rapidly. Keeps you comfortable during high performance activities.



365 PRO TRAINING

Advanced indoor functional socks

Anatomically knitted for excellent fit. Powered with Salming CoolFeel™.

Size: 35-38, 39-42, 43,45
 Colour: Black, White



365 PRO TRAINING

Running pants

A slim fit with a windprotective shell and a breathable fabric powered with CoolFeel™. Reflex print.

Size: XS-XL
 Colour: Black / CyanBlue.





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