

Fit & Sizing of Shoes/Skates

The Last



The last is kind of a copy of a foot. The last can have very different shapes depending on the purpose (for example running shoe or speed boot) and target group. The last is important for the fit and performance of the shoe and can make a huge difference.

The last for a race shoe must be moulded very accurately around the ankles, in the achilles area or around the fore foot to make sure the shoe has a snug fit and the power of each stroke can be transferred without a loss of energy. There is no need to spend such effort on the last for fitness skates, because this target group wants a very comfortable skate and the padding inside the shoe construction can balance an inaccurate last.

You must be aware that the last is always a copy of a standard foot and it is impossible to find THE perfect last that fits ALL skaters' feet! Knowing this fact and our aim to be able to serve a wide range of skaters led into the decision to offer 4 different lasts under the Powerslide umbrella (including Core Racing). We are sure that we can offer a performance race shoe for almost every foot! None of our competitors has this kind of variety!

Last	Model
Speed	Powerslide: R2, R4, R2 Kids
Power	Powerslide: Double X, Vision, Infinity, C8, PH9 Core Racing: Vi-Pro, Icon, Triple X ²
Kids/Women	Powerslide: Double X Pure, Vision Pure, Vision Junior Core Racing: Triple X ² Pure

Which model to choose for wider feet?

Powerslide and Core Racing shoes are well known for their great fit. But even the different lasts we used in the past haven't been perfect. We spend about 1 year of time to improve our various lasts that are used in our shoe collection in order to be able to serve different target groups of skaters.

- **“Speed” Last**

Skaters coming from fitness and recreational skating are used to a soft padded, comfortable high cut skate. The last for this group is slightly wider but still has a nice snug fit to transfer the power of each stroke without big loss of energy. Also skaters with a wider foot will love the fit of these boots. There are top skaters that participated at world championships using boots where this last has been used.

The list above explains which models of the collection are built with the “speed last.” We created the “power last” for athletes that need tight fitting shoes and who do not want to make any compromise for their performance.



- **“Power” Last**

The „Power Last“ has been developed in close cooperation with Sergio Mc Cargo, one of the best custom boot shoe maker in the world. We optimized the heel lock, the ankle area and the toe box of the shoes. Speedskater who practice on a regular base and who join competitions prefer a more narrow fit. The last for this kind of skaters is more performance driven. Also skaters with more narrow feet will find their favourite model in this category. This last is used for almost all our racing shoes now.

The list above explains which models of the collection are built with the “Power Last.”

Important Note!

The new improved heat mouldability of our carbonfiber racing shoes helps to improve the fit of our standard boots to adapt it to the anatomically shaped foot.

The diversification and assignment of lasts to specific target groups mentioned above is just a rough information. We recommend to test the fit of various skate models in your favourite skating shop before purchasing a racing shoe.

Does Powerslide have a last fitting especially kids and women feet?

Powerslide and Core Racing will also offer racing shoes featuring a special kids/women last starting by middle of 2012. Women feet are significantly different compared to men feet. They are more slim, have a higher arch and higher instep. Kids usually also have rather small and narrow feet.

This new last is used for either the “Pure” models as well as the kids models of Powerslide and Core Racing starting by middle of 2012.

Which Size do I need?

Our carbon shoes have the same fit as a regular sports shoe. We have made the experience that all our Powerslide and Core Racing shoes fit the regular shoe size in most cases. All our lasts seem to fit a lot of skaters from our experience. We call it the “race ready fit”, which means the time to get used to the fit of our racing shoes is extremely short.

We recommend to test the size/fit of a racing shoe first – no matter which brand it is – before you purchase the shoe to make sure to have the correct size and fit right from the beginning.



Does Powerslide offer full size boots only?

We only offer full size boots and skates. The list below converts European size standard into US standard and Mondo Point. Our production is based on the list.

Europe	USA	Mondo Point (cm)
32	14,5	20,5
33	2	21,0
34	3	21,5
35	4	22,0
36	4,5	22,5
37	5,5	23,5
38	6	24,0
39	7	25,0
40	7,5	25,5
41	8	26,5
42	9	27,0
43	10	28,0
44	10,5	28,5
45	11,5	29,5
46	12,5	30,5
47	13	31,0
48	14	32,0
49	15	33,0
50	15,5	33,5

I have oversized feet. Where can I get shoes?

Powerslide now offers the Double X boot up to size **50 (EU) / 15,5 (US)**! Please note that we charge a little higher price for the oversized boots. Please check the price with your local distributor or shop.

I have small feet. Which sizes of shoes offer the 195mm mounting distance?

Starting from size 37 EU / 5,5 US Powerslide and Core Racing offer the 195mm mounting distance.

Does Powerslide offer boots especially for kids?

Powerslide offers 3 different models. Kids feet grow very fast. Speedskates are quite expensive and the financial part is an important factor if kids can practice their beloved sport on a professional level or not. Powerslide listened to the clubs and parents and was the first manufacturer worldwide who offered size adjustable kids speedskates. We offer the following models:

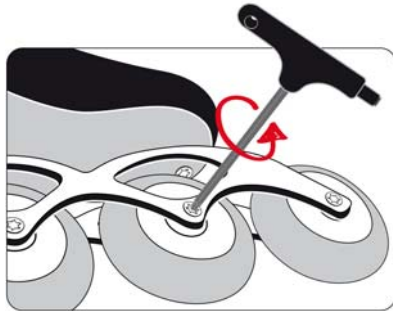
Phuzion 5 Kids

For this entry level skate we combined a fitness boot with a speed frame. The hybrid boot with its fiberglass reinforced composite shell and the soft boot gives the kids good support to help them to learn the basic techniques of skating. The upper construction is made out of one piece. No overlapping parts can put pressure on the kids feet or can cause blisters. The boot can be very easy adjusted in size and grows in 4 sizes from size 33 til size 36 EU.

R2 Kids

This successful model has been introduced in 2003 It's the first size adjustable speedboot for kids. We use glasfiber reinforced composite material for the shell and toe cap in order to have a better power transfer. The upper construction is made out of one piece. No overlapping parts can put pressure on the kids feet or can cause blisters. The boot can be adjusted in 4 sizes from size 33 til size 36 EU. You simply follow the below steps.

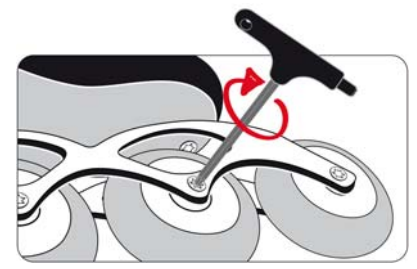
1.



2.



3.



Vision Junior

The Vision Junior is based on a different concept of "size growing shoes". This high performance kids speedskate has been optimized in terms of power transfer. The boot features a carbon/fiberglass/basalt fiber shell. The boot itself has been constructed like an adult skate. WE just offer this kids boot in double sizes – means in sizes 32-33, 34-35, 36-37 and 38-39.

The shell is always based on the bigger sizes of the above given shoe sizes. The extra neoprene liner that comes with the boot fills the gap if the boot is too big for the kids feet. You simply take out the liner if the feet get bigger.

This simple „trick“ helps to use the boots for a longer time.

Advantages of the extra neoprene liner:

- you can take the liner out to let it dry after training or competition
- you can wash the liner
- the liner is also available as extra piece in the aftermarket



Which Model to choose?

You can spend a tremendous amount of money for speed skates. It's the same situation you will find in the bike business. There are cruiser to high-tech racing bikes. Speed skates are high-tech sports equipment used to reach maximum speeds, whether it is in competition or for a personal best. Manufacturers try hard to produce the lightest weight boots/skates in order to gain better results in the competitions, and it is no wonder that this kind of equipment has its price.

Take your time and try different models of speed skates before buying a pair - it is worth it. Most distributors offer consignment to their dealers for two pairs of skates in order to find the right sizes for their customer. Each brand has a different last/fit; there is nothing worse than buying a speed skate that does not fit.

Entry level speed skater or ambitious fitness skater

Speedskating beginner usually look for a low budget skate and a skate with a higher cuff to have more support during skating.

Powerslide is the first company to offer a high performance speed boot made of synthetic materials such as fiberglass reinforced nylon or other composites. The material will be injected into a mould which guarantees 100% accurate production of each pair of boots. The stiffness of the boot depends on the percentage of fibreglass used in the material mix. There are synthetic material combination that belongs to the polyamides, which means that this material is also heat mouldable. The temperature for certain material mixes in the oven is slightly higher than carbon and it takes a bit more time to get the material flexible. The performance of a synthetic boot compared with a carbonfiber boot can reach the same level

The past years have proven that Powerslide composite racing shoes are a serious competitor no matter which kind of level they have been used. The prejudices against synthetic materials have been refuted during the years through the success of the skates.

Skaters who are used to fitness skates with a high cuff, soft and comfortable padded boots should try a skate with a high cuff first which fully covers the ankle and about 2-3cm above the ankle and gives the skater a secure feeling. Models with a higher cuff are for example the R4, C8, PH9 and Vi-SL. Almost all companies who offer speed skates carry at least one model of this category in their line.

There are also low cut speed skates with a slightly higher cuff. Sometimes it's not really obvious, but one centimetre of difference in height can give a lot more support to the skater's ankle and helps the muscles adjust to the new skating technique. One example of this kind of boot is the Powerslide Double X.

A fitness skater should be aware that the muscular system has to get used to flat skates first. Usually that this CAN take a couple 100 km's or a couple of weeks depending on the intensity of skating.

The **fit of speed skates** is a critical topic. The foot should fit tightly in the boot in order to avoid losing energy on every stroke, along with preventing blisters or similar injuries of the foot. However, a really narrow boot can cause serious problems with painful bone spurs. That example should make clear how important it is to try the boot before you buy it. Painful pressure or even



numb toes after a few minutes of wearing speed boots are signs of not properly fitted boots. It's not easy to find a 100% perfect fitting speed boot. Ask your local dealer to help you to thermo fit the boots in order to improve the individual fit for more skating pleasure. Later on you will find more detailed information about the heat molding of racing shoes. Another option is a custom boot. Information to this topic can be found later.

Ambitious- or top-skater

This group prefers a low-cut boot. The low construction gives the skater freedom of movement in the ankle region and allows the skater to skate with the optimal skating technique (known as double push).

Usually the shells of speed skates are made of **carbonfiber**. Carbonfiber is lightweight and stiff, but not easy to produce. Added fibreglass or extra layers of carbonfiber will reinforce the shell construction in exposed areas and will result in higher stiffness of the boot. The upper material of speed boots is made of real leather, synthetic leather or microfiber materials. The liner is made of leather, microfibre or neoprene material.

Which racing shoe is the best for my purpose?

It's impossible to give a general advise which boot to purchase. There are too many different influences like the last for example. Once again we would like to repeat that we recommend to test several racing shoes in the shop or at skating events. The following table does list the boots for certain purposes. You will find some models in more than one category.

Target Group	Model
Kids	Powerslide: R2 Kids (adjustable), Vision Junior (double sizes), Vi-RS Junior (double sizes), PH5 Kids
Clubs	all models of Powerslide and Core Racing
Low Budget	Powerslide: Vi-RS, Vi-RS Junior, Vi-SL R2, R2 Kids, Vision, Vision Junior, Infinity
Entry Level	Powerslide: Vi-RS, Vi-SL, R2, R4, Double X, Vision, Infinity, C8, PH9
Marathon	All models of Powerslide and Core Racing
Top Skater	Powerslide: Double X Core Racing: Vi-Pro, Icon, Triple X ²
Women	Powerslide: Vision Pure, Double X Pure Core Racing: Triple X ² Pure
Inline Alpin	Powerslide: R4, C8