



# POWERSLIDE WHEEL GUIDE

# WHEELS GUIDE



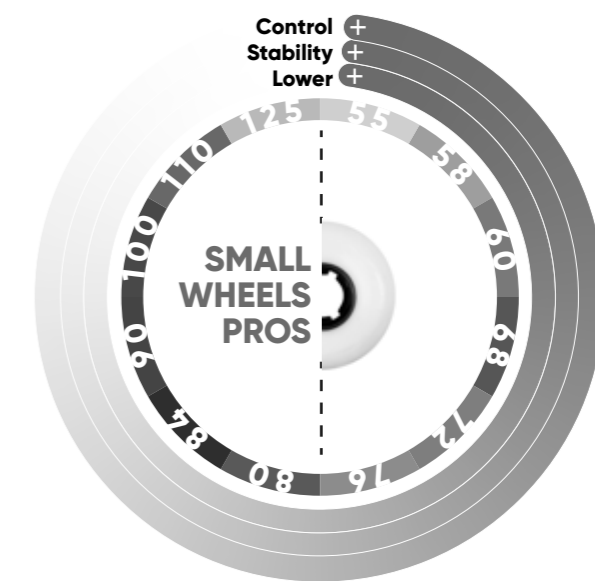
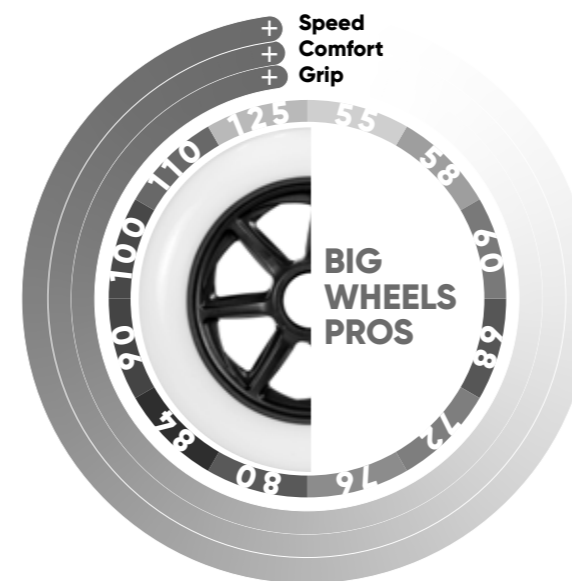
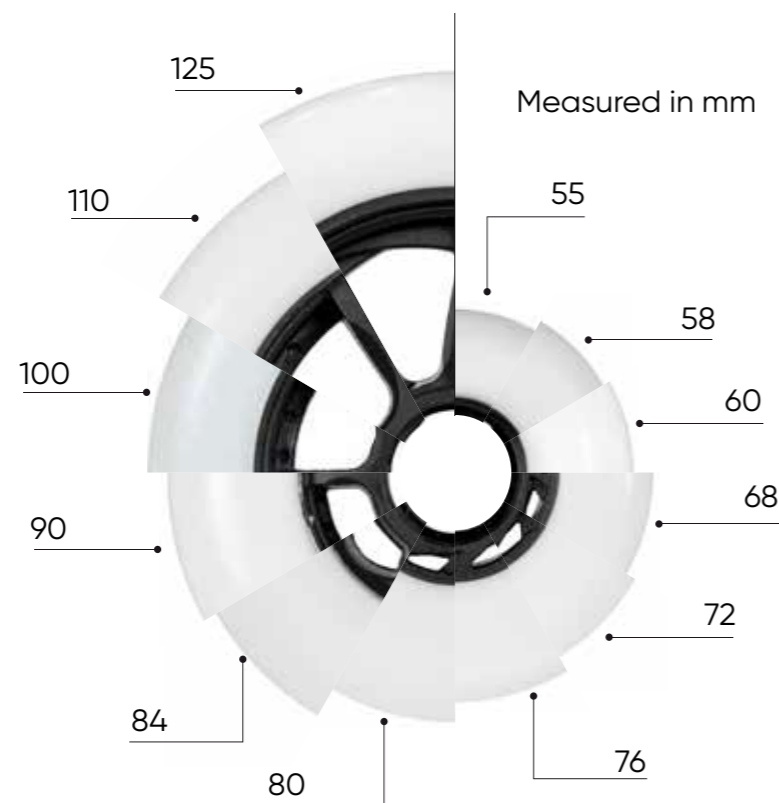
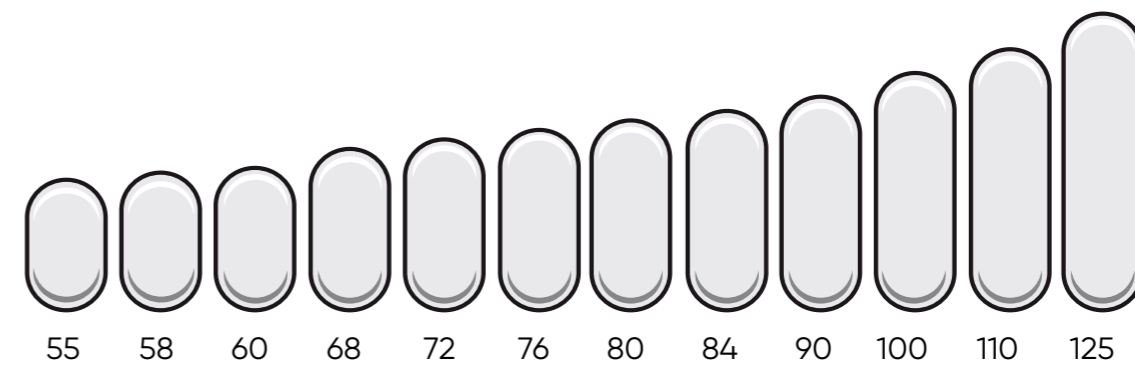
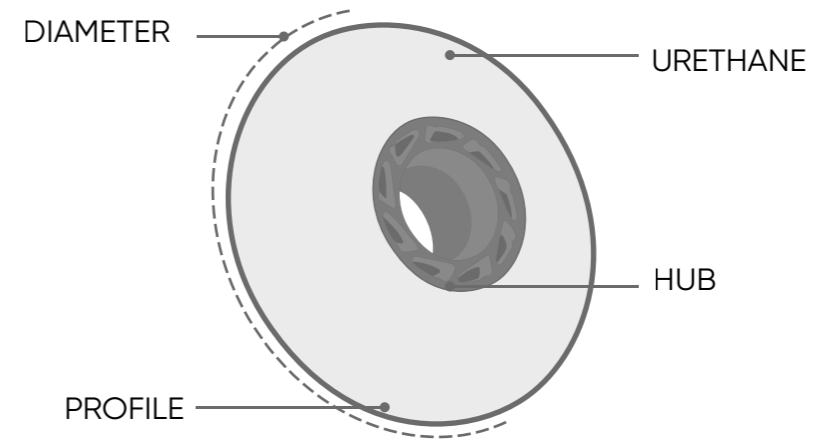
**Wheels**

Inline Skate

## DIAMETER

Wheel sizes on the market range from 55mm to 125mm.

When selecting the size be sure that the diameter of your wheels is compatible with your frame set up.



# URETHANE

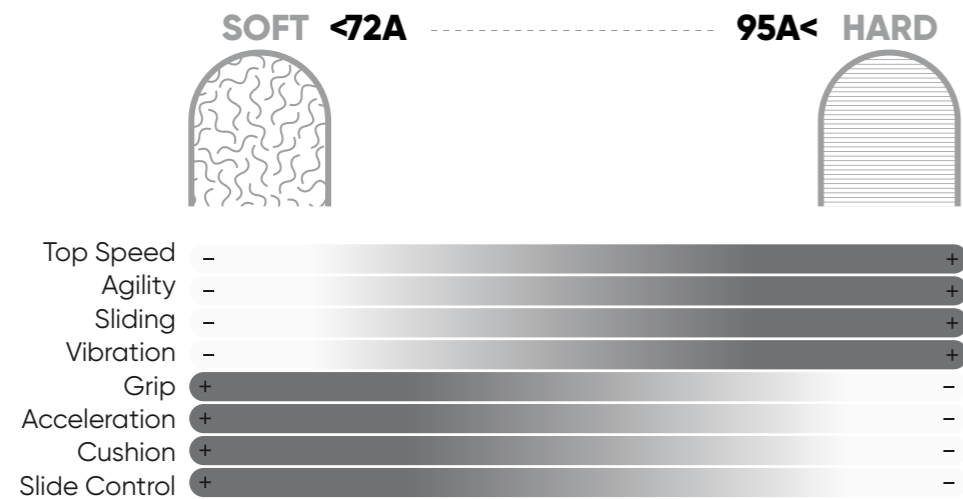


Your wheels can be soft or hard to give you more comfort or a faster roll. Generally, the softest wheels are around 75a (HOCKEY) and the hardest ones are between 100A – 110A (AGGRESSIVE grind wheels).

A wheels hardness is measured in shore and most of the time you will see the letter "A" after the number to describe the value. 84A means that the wheel has a hardness of 84. A lower number indicates that the wheel is soft and when the number is high it's hard.

The maximum hardness possible is 110A but no inline wheels will reach this value because then the wheels will be too hard and will get almost zero rebound.

## WHEEL HARDNESS



## URETHANE QUALITY



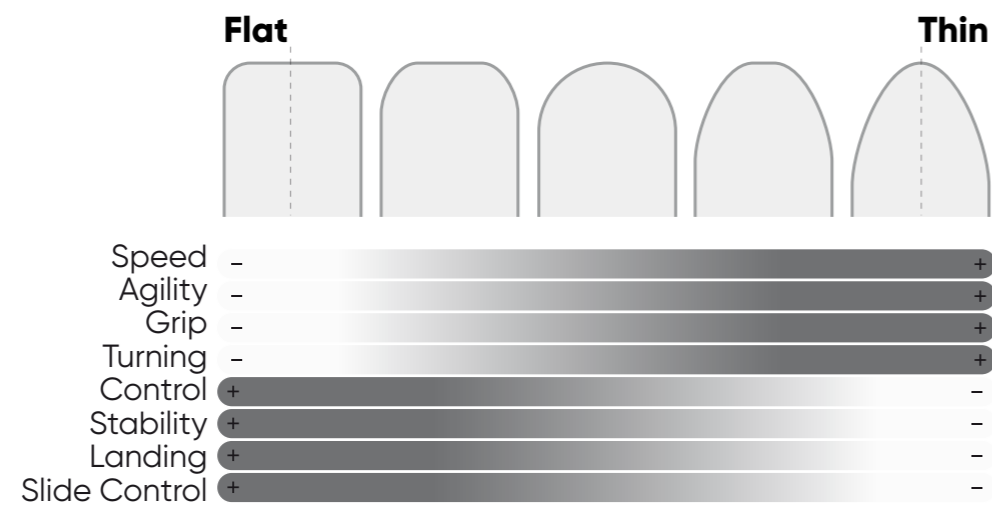
Similar to racing cars tires, the compound will really change the rolling experience. As soon as you make progress with your stability, we suggest investing in wheels with an upgraded compound to feel the best rolling experience possible. A lot of the pleasure from skating come from the quality of your wheels.

# PROFILE



There are a range of shapes of wheel profiles that help serve a variety of functions, for example helping you to either get more stability, more control or a faster roll.

## WHEEL PROFILES



## POWERSLIDE PROFILES



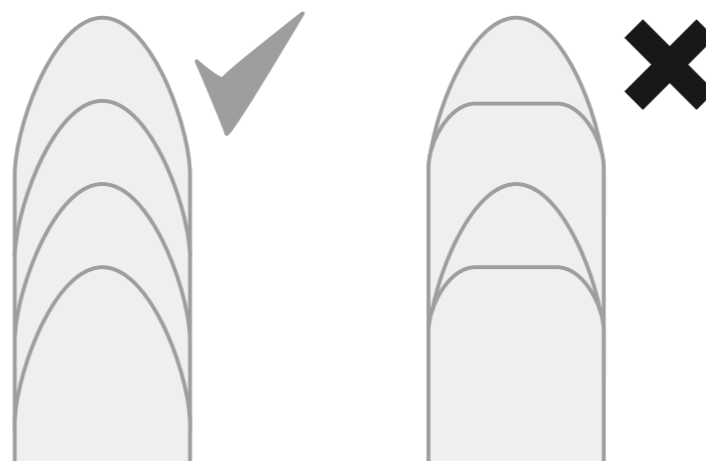
### FULL RADIUS

More stable.  
More consistent roll.  
Less friction on wheel slides.  
Better landing for gaps.

### BULLET

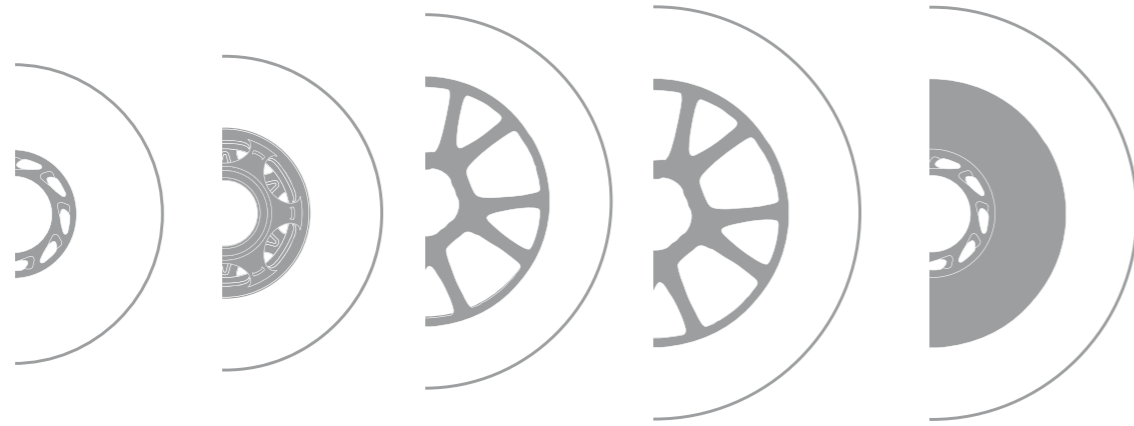
More maneuverability.  
More speed.  
Bigger base for slides.  
Less wheel bite on grind tricks.

**Do not mix different profiles on one skate, It will disturb a lot the way the skate reacts and make them hard to balance on and roll straight.**



## HUBS

The hub is also an element that will impact the wheel. For wheels with the same diameter, a smaller hub will make the wheel feel more comfortable and will provide more grip, but it will also be slower and heavier.



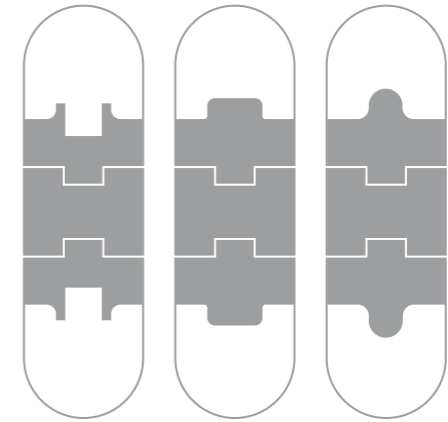
The design of the hub also impacts the wheels performance. If the hub is full like a disc or with lots of spokes it will provide lots of support for the load. The wheel will probably be more reactive and more stable at high speed, but it will also take more vibration.



## WHEEL INTERLOCK

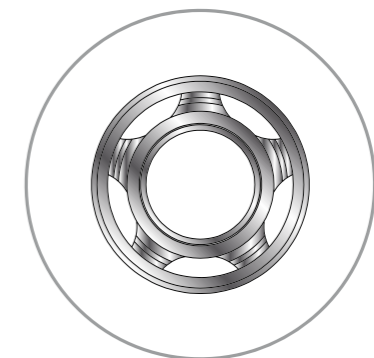


The interlock system of the wheel also makes a difference. The interlock is the link created between the hub and the urethane (compound). Single density wheels use a mechanical interlock that make the wheels stiffer and very stable and Dual Density (DD) wheels can use a mechanical or a chemical lock system. With a chemical lock the wheels get more flex and absorb more vibrations.



## ALU HUBS

Hubs made of aluminum are very stiff offer great power transfer and a very fast rolling experience but they are more expensive, heavier and do not absorb vibration in the same way as plastic hubs, making rolling less comfortable in some situations.

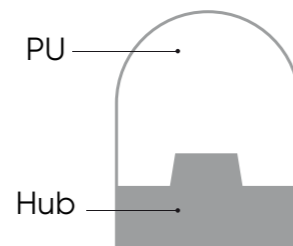


## DD WHEELS

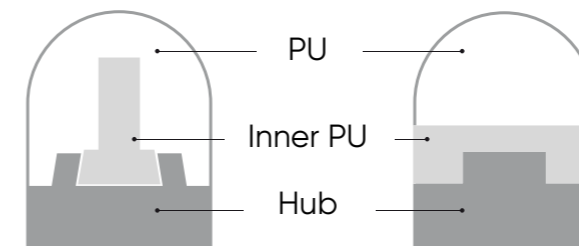


Dual Density is a technology for wheels that use 2 different urethane compounds: A soft one inside and a harder one outside. The first layer against the core is a softer PU and the outer layer is a harder one. The soft inner urethane absorbs vibration for a very smooth ride, acting like suspension to take away the harsh impact from jumps. The harder PU on the outside allows for a fast roll. It really pushes the performance to another level. With DD all specs of the wheels get better: GRIP, COMFORT, ROLL. If you've never tried DD wheels then you really should, it is an essential experience.

### SINGLE DENSITY

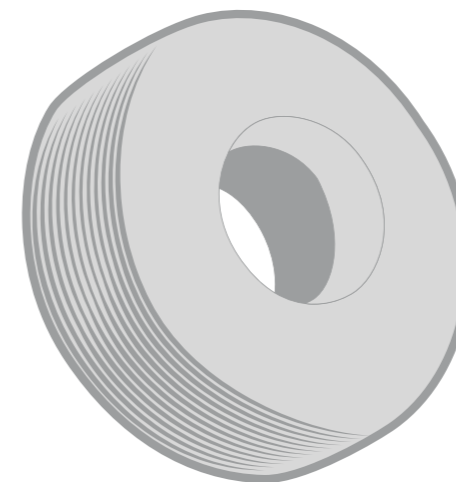


### DUAL DENSITY



## ANTIROCKER WHEELS

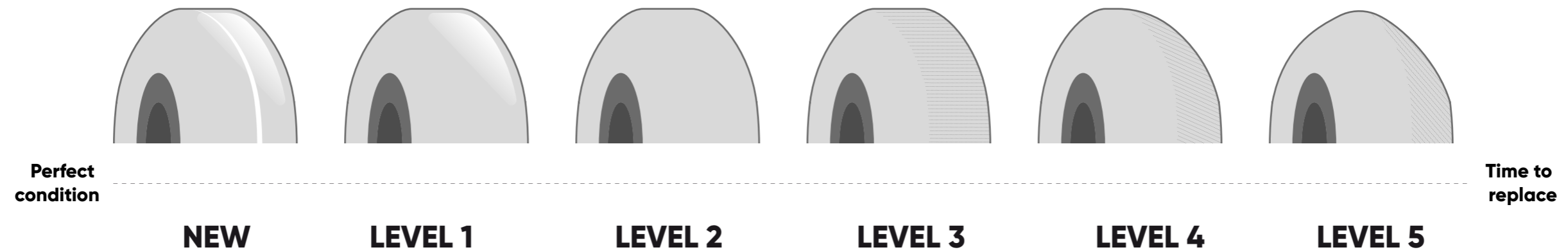
The wheels that are smaller than 50mm and harder than 95A are known as antirockers. These wheels are very hard and slippery and are not suited for rolling, they are only designed for freestyle skating to perform slides and grinds.



# DURABILITY



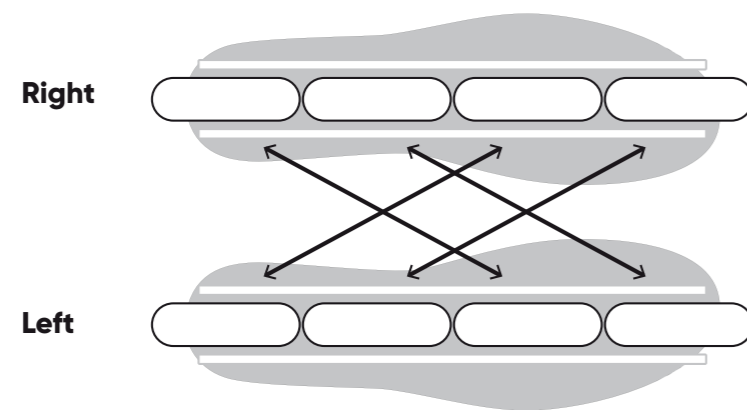
Depending on the use you've made, you can evaluate with these tips the level of "wear" of your wheels.



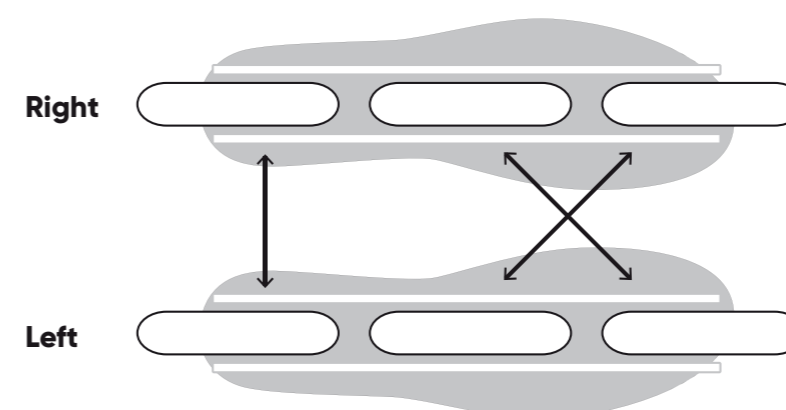
# MAINTENANCE

Noisy or out-of-round wheels are caused by uneven wear. The inside edge of the wheels wears off faster than the outside. Regular rotation of wheels helps to maintain the life and to stabilize the wheel during skating.

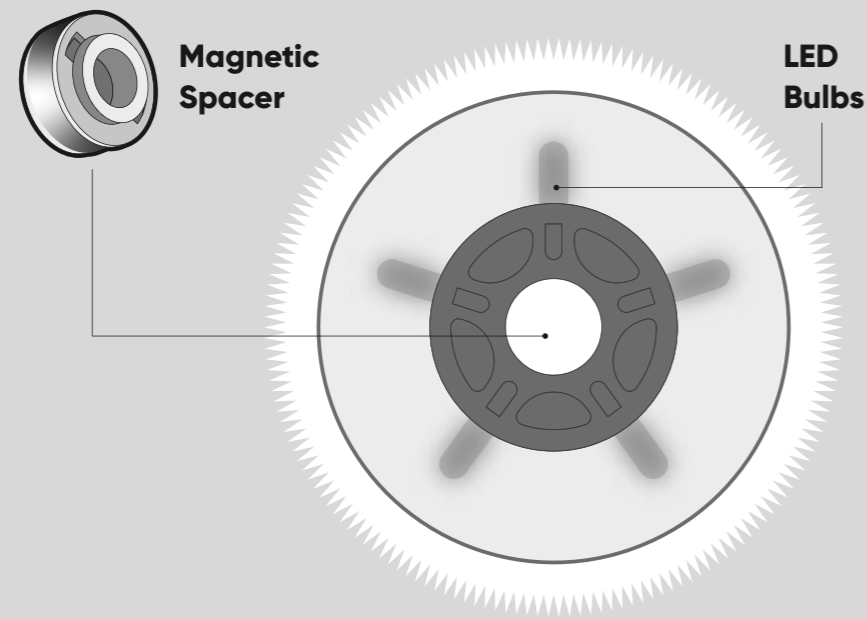
## 4 WHEELS ROTATION



## 3 WHEELS ROTATION

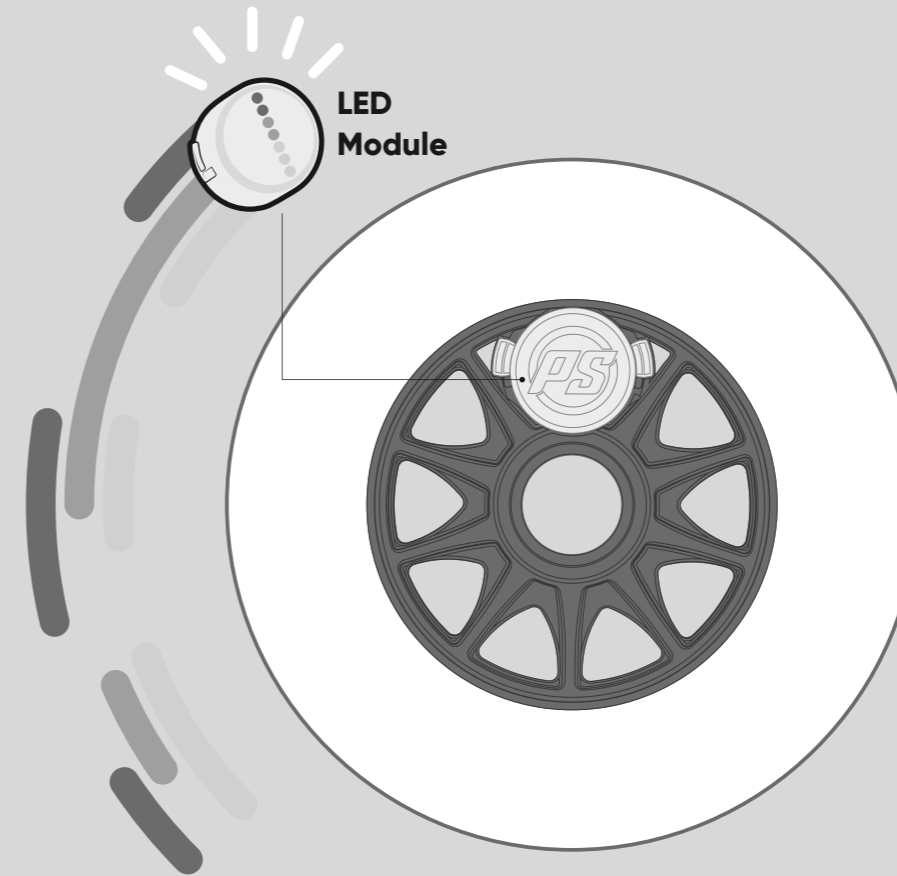


# LIGHTING WHEELS



## LED WHEELS

The LED wheels have small led bulbs inside the PU that are powered by a magnetic spacer and do not need recharging. As long as the spacer is inside the wheel, it will light up when it spins. If you remove the spacer it will behave as a regular wheel (but you need to replace with a regular spacer). These wheels are available in many sizes and colors and urethane quality.



## GRAPHIX WHEELS

GRAPHIX wheels are regular wheels with a special LED module that clicks-in the core. The module has LED lights that creates special lighting patterns and text elements when the wheel spins. The model can be turned on and off by tapping a button and it is removable. It is rechargeable via MICRO-USB. The GRAPHIX wheels are available only in sizes 100, 110 and 125mm and they use high quality SHR urethane with very good performance.



## **What are the most important specs of a wheel?**

The wheels are one of the most important components of your inline skates, they can drastically change your skating experience. These are the main points you need to look for:

- The diameter: Wheel sizes on the market range from 42mm to 125mm. When selecting the size be sure that the diameter of your wheels is compatible with your frame set up.
- The profile: There are a range of shapes of wheel profiles that help serve a variety of functions, for example helping you to either get more stability, more control or a faster roll.
- The hardness: Your wheels can be soft or hard to give you more comfort or a faster roll. Generally, the softest wheels are around 75a (HOCKEY) and the hardest ones are between 100a – 110a (AGGRESSIVE Grind wheels).

## **What diameter/size should I go for?**

You can find many different diameters on the market, but the most common sizes are 60mm, 80mm, 84mm, 90mm, 100mm, 110mm and 125mm. The size of a wheel is always measured in millimeters.

- 55mm to 72mm: We use these wheels for AGGRESSIVE skating such as STREET or SKATEPARK skating. You can also find wheels starting at 45mm for anti-rocker, please refer to our aggressive wheel FAQ for more information on those.
- 76mm to 90mm: This size range are mainly use with either KID skates or 4 wheels skates for URBAN skating when you like to do lot of tricks such as jumps or slides. They're also used for FITNESS skates
- 100mm to 125mm: These are the largest wheels available and are predominately used as Triskates across almost all segments such as URBAN, FITNESS and SPEED

# FAQ WHEELS



## **The diameter of a wheels drastically influences the skating.**

For example:

- The bigger the wheels the easier you will maintain your speed.
- The bigger the wheels the more comfortable your skating will be. A big wheel like 125mm will absorbing a lot of the vibration from the road.
- The smaller the wheels the more agility you will get, (if you compare using the same length frame.) It is easier to make smaller / sharper turns on smaller wheels.

If you want to change the wheels size on your skate, make sure you check the max wheels size your frame can accept.

## **What hardness should I use?**

A wheels hardness is measured in shore and most of the time you will see the letter "A" after the number to describe the value. 84A means that the wheel has a hardness of 84. A lower number indicates that the wheel is soft and when the number is high it's hard. The maximum hardness possible is 110A but no inline wheels will reach this value because then the wheels will be too hard and will get almost zero rebound. Anti-rocker wheels are the only wheels that come above 100a as these are not designed specifically to roll on. It is more common to see wheel hardness's between 82a - 90a.

## **So what is the main impacts of the hardness on my skating?**

A softer wheel will give you more comfort whereas a harder wheel will offer a faster roll.

A softer wheel will wear a bit faster than a hard wheel.

A softer wheel will give you more grip. So if you like to do slides it's better to select a harder wheel.

# FAQ WHEELS



## **How do I check if my wheels are getting used?**

Depending on the use you've made, you can evaluate with these tips the level of "wear" of your Matter wheels:

When the shiny effect of the surface of the wheels is gone you'll probably start to lose a bit of grip in the turn, especially on track. This is level 1.

When the center line of the wheels starts to disappear, you reach level 2. You'll still get the full potential of these wheels on road.

The wheels surface is not smooth anymore. This is level 3 of use and you will start to lose some efficiency in the push, but the roll will still perform the same. You can check the surface by passing your finger over it to evaluate the level of abrasion. When the wheel surface is not smooth anymore the roll is not affected but the grip in the corner is reduced.

The wheel profile starts to be offset but it is still "round". This will start to affect a bit more your push and your balance. You need to regularly rotate your wheels from this point to maintain durability. We call it level 4.

The wheels profile is burnt and one side or both sides looks more like a triangle. The wheels are totally used. It is really time to change them otherwise it will affect a lot your technical progress. It is level 5.

## **Why some wheels are much more expensive?**

You probably notice a wide range of prices for wheels. The quality of each urethane (compound) has a huge influence on the prices. It is always good to look at the compound you get for the prices. Most of the time the best wheels are MADE IN USA like MATTER or UNDERCOVER. It is a sign of high quality bringing you a perfect experience on your skate.

Please note also that wheels with more technology like DUAL DENSITY will cost more. Generally, on those DD wheels we use only the best compound possible both inside and outside.

## FAQ WHEELS



### **My wheels are not spinning properly on my frame, what can I do?**

First, it's important to check the spacers you use. There might be a tiny tolerance at production so it's always good to have some extra spacers with you to make sure you can calibrate perfectly the system. Generally, a longer spacer will fix it instantly.

If it still doesn't work, then try to use a different set of bearings and/or check that the bearings are clean and spinning well. Perhaps try adding a bit of oil to lubricate them.

Finally, if your wheels are still not spinning good also check the bearings don't touch the inside of the frame near the axle part.

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# WE LOVE TO SKATE.



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