Plates?

Sooner or later everyone will ask the question, which plate is right for me? Which plate is better? Which plate is lighter? Why does this plate cost more? To accurately answer this question is impossible because many factors need to be addressed first. Sure you can argue that this plate or that plate was designed with this or that in mind, but is there really a difference? The following is designed to be a guide with useful information for you to hopefully determine which plate is right for you. We have over 70 years of experience in the manufacturing of roller skating plates, over the years we have tried many things and worked directly with skaters with great success. With over 70 years of experience why trust anyone else.

In the world of skating there are two basic types of skating plates, 10 degree and 45 degree, each has its advantages and disadvantages. Most companies derive this number by what angle the kingpin is drilled on, in many cases this kingpin is not drilled on this angles but the standard still stands at 10 degree and 45 degree. Although there are many manufactures that have developed plates in the past; these two simple designs still represent the industry standard. Aside from 10 degree and 45 degree, we have toe stop or no toe stop, light and heavy plates, adjustable pivots and nonadjustable pivots, rubber or urethane cushions, special mounting, and exotic lightweight materials such as titanium or magnesium.

A 10 degree skating plate is designed to place the skater over the kingpin and cushions, creating a more stable skating feel. This type of plate has also been called a Free-Skating plate as it was one of the original designs and allows a skater to be confident and under control in any skating situation. The truck design on a 10 degree plate is typically a more vertical approach which will help keep a skater more upright, typically a less aggressive setup. Looking back in history we can see many uses of this simple design, probably why it has remained the industry standard in skate design.

The 45 degree skating plate is designed to place the skater over the pivot pin creating a more aggressive stance and feel. For many years this plate has been referred to as a figure plate as it got its humble beginnings on the skating floor doing figure loops. The truck design on the 45 degree skate is designed with a horizontal approach in relation to the skating floor, typically more sensitive to the skaters movement allowing him or her to change direction faster but still under control.

Toe stop or no toe stop? Typically a toe stop was used for jumps in figure skating and or starts in speed skating. An essential part of skating whether you're a beginner or an advanced skater is the toe stop. Typically skaters that wanted to skate figure loops would not use a toe stop because it would interfere with their crossovers. Speed skaters used no toe stop plates as well, usually because they were lighter in weight.

Light weight vs. heavy plates. The weight issue has always been a long debate whether speed skating or figure skating and now derby skating. For the longest time traditional skating plates were heavy but very strong, some skaters used this to their advantage in the forum of momentum. Using the weight a skater could propel himself or herself higher in the air and or faster around the track by simply using momentum. Lighter plates were first introduced and

marketed toward kids because the traditional plates were too heavy for them to even skate let alone do tricks. The light plate soon gained the interest of adults because fatigue would set in during a performance or speed skating tournament. The introduction of nylon based material also showed the world an even lighter plate; however recently some were more successful than others. Currently we use a DuPont nylon in our skating plates and have had huge success with them, so much in fact that we use them on our rental skates. In the present day, light plates seem to be more popular than ever but the heavy plate will still be a staple in some people minds as being a traditional skating plate.

Short mount vs. regular mount. Usually only done with a 45 degree plate but can be done to a regular 10 degree plate. The idea here is that 45 degree plates usually have a longer wheel base then traditional 10 degree plates when compared to the same plate size. With that said using a smaller size plate will give you the same wheel base as a longer 10 degree plate. This will also shave considerable weight off the plate, in some cases a skater will go down 2 plate sizes to get the desired wheel base. This set up can also go more extreme and the skater can use an even shorter plate. The idea here is simple, the shorter the plate the shorter the turning radius. The short forward mount idea has been around since the 1980's and is still in use today, originally for short track speed skating but we are seeing a lot of roller derby skaters using this same kind of plate.

Adjustable and nonadjustable pivots. Most entry level plates use nonadjustable pivots and a rubber or nylon pivot cup. The theory here is that beginner skaters were not at a level in which a precision pivot would benefit them. The adjustable pivot will allow a skater to change the geometry of the skate without compromising control. Too much adjustment and you risk breaking a kingpin and or pivot pin, care should be used when adjusting or consult a roller skate technician. The adjustable pivot gives the skater a precision feel with more feedback when skating. It will also not wear out as fast as a rubber or nylon pivot cup.

Cushion development has improved over the years where rubber was the standard years ago and now urethane today. Rubber typically gives a better feel but wears out much faster than some skaters might like. Urethane is a petrochemical and will eventually wear out but generally has a higher rebound rate than rubber. Urethane on average cost less and is easier to produce than rubber making it a solid choice for skating. Most companies offer cushions in many different forums, from hardness ratings to colors to special sizes and shapes. Its important to note that each cushion was designed to work with a particular product, you cannot just put any cushion on any plate. Hardness ratings are popular today but doesn't tell the whole story about how it will perform, this mainly comes down to personal preference, what works for one skater might now work for another. We like to urge the skater to experiment and see what they like best.

Exotic materials are also being used now from magnesium to titanium to different steels and aluminums; all serve a purpose and were designed for a specific reason. All metals come in different forums and contain different elements. With over 70 years of experience we have seen them all and understand their properties. We only use the best materials to make our skating plates and components. Depending on what skating activity you are doing one plate might be better than another. The main thing here is that when you sacrifice weight you sacrifice strength. These plates can be expensive but when you want the best you always turn to Sure-Grip.

Sure-Grip assembly guide: