T1 – VS AR 400

This is a common discussion that we have with customers because a lot of our competitors use Mild Steel and the better ones use T1. We use T1 minimum and a lot of our attachments are made from AR400 or are AR 400 tipped.

Since so many attachments are built from mild steel, we will deal with it first.
Our response to this is that Mild Steel does not belong anywhere on an attachment except on the attachment plate. Even then only A50 should be used and not A36 for safety reasons. You do not want the plate to release and let the attachment fall back on the operator.
Why do our competitors use A36 on their attachments? Because it is cheap! It allows them to make customers think that they are getting a real deal. Like they are receiving the same attachment they would get from us only cheaper. This is not true. Mild steel costs about 1/3 as much as the materials Skid Steer Solutions uses so there is your savings.

Why should you care? Since our attachments are used in the real world where one user may be a part time operator where another may use the attachment everyday, we must build to the harshest user. This makes for products that will last and last for all users and not let you down when you most need them.

Now for our next comparison: T1 vs AR400 – Firstly, Technical Information off of a steel testing web site.

T-1 Steel - This is a steel with a higher yield strength and it is more difficult to form without cracking. Skid Steer Solutions uses this steel in structural members of attachments where strength is required. It has a minimum yield strength of 100,000 psi and an approximate Brinell hardness of 250-320.

AR 400 Steel - This is a steel with an even higher yield strength and it is more difficult to form than hi-tensile steel. Skid Steer Solutions uses this steel in attachments parts that contact the ground like our grapples. It has a minimum yield strength of 145,000 psi and a Brinell hardness of 400. It is heat treated, quenched and tempered to make AR plate. Other industry uses are where impact or sliding abrasion materials require tougher and harder steels to improve equipment life. High impact areas on tanks and HUMVEES.

When we design attachments, we look at what they will be doing and who will be using them. Cost is the last issue only because it has to work well and last long. If it cannot perform long and hard, it never makes it onto the site. It is a fact that AR steels work best in high abrasion areas. If you do a search on the web for AR400, you will see all of the other industries that use this material and you will see it in the same uses as we use it for.

If you do a search on T1, you will see it in structural environments just like what we do with it. However you may also see it come up on our competitors sites because they are some the few companies that use it in abrasive environments and it is all about making the product cheaper and not better.

In summation, we use three materials in our products. Each type of steel has specific properties which we utilize to build better products. If you are shopping around ask them if they even know why they use a specific material. The conversation usually ends up about their product being more cost competitive. Is that really what you want in an attachment?