

Myth: All Urethane Is Created Equal

This is not an advertisement. It is a public interest article.



By Tom Lincir, President and Founder, Ivanko Barbell Company

Certain segments of the commercial fitness industry thrive on myths. Let's review just a few of them. **Myth:** All rubber stinks. **Myth:** Welds never break. **Myth:** "Pound Test" is a meaningful measurement of an Olympic Bar's strength. **Myth:** Compression dents are contagious. **Myth:** A weight is a weight. Cost per pound is the only important factor. **Myth:** Grip holes in plates, Urethane plates, and Urethane dumbbells are all revolutionary breakthrough ideas.

You can make a pretty good living catering to these myths. Just walk any fitness trade show floor and you can see the myths on display. If you think the only consideration in buying weight plates or dumbbells is cost per pound, there are booths for you. Embrace any myth, and there they are, open for business.

***"Embrace any myth,
and there they are, open for business".***

But you can also make a good living manufacturing products for people who don't buy into the myths. I have spent the past two years writing articles debunking them. I am a student of history. I have a large and growing collection of strength artifacts and literature. I founded The Ivanko Historical society, a non-profit foundation dedicated to the preservation of historical records, products, and paraphernalia relating to the strength industry. I know when

something is an authentic innovation, and not just someone else's idea recycled years later. I know the strengths and weaknesses of the technologies that various companies are spinning out into the marketplace.

And that brings me to the topic of Urethane. In 1981 Greg Greer started a company named Superior Barbell. Initially, Superior made only Olympic Bars and eventually became the largest manufacturer of Olympic bars in the U.S.A., if not the world. Superior also sold iron Olympic plates. In 1985, Superior introduced the first Urethane coated barbell plate. The Superior plate was great looking with vibrant colors, not possible with rubber at that time. According to Greg, "Everyone loved the look of our Urethane bumper plate. Unfortunately, a lot of them split when dropped. In one instance, we sold over \$20,000 of our Urethane bumpers to U.C.L.A. We were forced



Concept



Reality

In the early 1980's, Greg Greer's Superior Barbell Company introduced Urethane bumper plates. The plate at the right is an example of a 15 kilo Superior Urethane plate that split.

to replace all the Urethane plates with Eleiko rubber bumper plates. we came to realize that Our Urethane plate just didn't hold up under heavy dropping."

I know Greg. He truly believed he had a great breakthrough. Unfortunately, the only breakthrough turned out to be the iron core breaking through the Urethane coating.

In 1986, Universal Gym Equipment, the world's

largest manufacturer of exercise equipment at that time, (\$70 million annual sales) introduced the first Urethane coated dumbbell. Their advertising described their Urethane dumbbell as, "industrial strength Urethane" that "won't loosen, flake, crack, peel, deform, or absorb moisture". And my all time favorite



Concept

Reality

The Universal Gym Equipment dumbbell boasted "industrial strength Urethane" that "won't loosen, flake, crack, peel, deform, or absorb moisture".

line: "Duraplex Dumbbells are temperature-neutral so they won't cause 'the shivers' when they touch bare skin like ordinary iron dumbbells".

I'm sure they believed these claims at the time, but sometimes our best intentions and hopes don't hold up in the real world. The reality was apparent only a few years later, as the above photo shows. The Urethane coating flaked, cracked, peeled, and deformed, just like they said it wouldn't. Their customers were stuck with tons of truly breakthrough dumbbells.

"The Urethane coating flaked, cracked, peeled, and deformed just like they said it wouldn't".

So, where am I going with this article i.e. what's the point? That all Urethane splits? Wrong! The point is, had the pioneers from the 1980's, Superior Barbell and Universal Gym Equipment kept trying, they probably would have found a formula and the manufacturing techniques to make Urethane products that would not split, delaminate, or fall apart. Additionally, in the 1990's Urethane plates were used mostly on plate-loading machines rather than on barbells for floor exercises. This meant they were almost always supported by the center hole on posts on the plate rack or on the machine, and were rarely dropped.

Urethane is much improved in 2000 - when made in U.S.A., that is. In my opinion, the U.S.A. Urethane technology is at least 10 years ahead of the imported

material, maybe more. A lot of the production methods and formulas are kept secret. Even the suppliers of the raw materials don't know exactly how their customers blend their ingredients. Just try to get into a successful Urethane manufacturing plant. It would be easier to get into Fort Knox. It's easy to prove this difference to yourself by purchasing a U.S.A. made product and an import product, saw both of them in half, and try to remove the Urethane. The U.S.A. product will be much harder to remove, if you can. Or, slice off an equal piece from both. Put one end of each piece in a vise and pull on the other end with a vice grip pliers. You will notice that the piece made in the U.S.A. takes much greater effort to pull apart, if you can. This is called tensile strength or tear strength. This, by far, is not the only test of a strong Urethane, but it is one test anyone can understand. Also check the thickness of the Urethane coating. Most likely, the product made in the U.S.A. will have a thicker coating of Urethane. This is important because if the Urethane is too thin, it will not have much of a cushioning effect.

When Urethane started to gain popularity a few years ago, there was immense pressure on me to jump on the bandwagon, grab some Urethane off the shelf, and get into it. But I just didn't want to see the Ivanko logo on dumbbells or weight plates like the ones in the infamous photos. I knew it took 64 years from the invention of Urethane in 1937 for

**Gold's Gym Names Ivanko
"Exclusive Licensee" Worldwide**

Under this new licensing agreement, Ivanko will be the only company allowed to produce institutional weight plates and dumbbells worldwide bearing the Gold's Gym name and trademark. Ivanko's leading reputation and position worldwide made it the logical choice to help grow the Gold's Gym brand internationally.



To have your logo engraved next to Ivanko's, in one color or multiple colors, please call Chet at (800) 247-9044 or email chet@ivankobarbell.com.

Amerityre to perfect a Urethane tire. I thought I could justify a few years to produce a Urethane coating that wouldn't break down over time.

Recently Gold's Gym made the decision to select one company to carry the Gold's Gym brand and grow it worldwide. They selected Ivanko. In making this move, they aren't just buying into our products. They're buying into a philosophy. It is a philosophy that sees perfection as an elusive goal, but one that you should never stop pursuing. At Ivanko, we know we'll never get there, but we're continuously inching our products a few steps closer. That's the kind of philosophy that Gold's Gym knows will best help them grow their brand internationally.

Our work in Urethane has progressed to a point where we believe club members will experience the quality they've come to expect from the best equipment and the best facilities. Ivanko Urethane Plates, made in the U.S.A., are round or "fully functional", so that users can perform floor exercises such as power cleans and dead lifts properly. We have fused the urethane plate material to the iron core using proprietary bonding technology that is stronger than the urethane itself. Further, we've given the surface a matte finish that looks better than shiny plastic. Because grip slots are widely perceived as a good thing, we have designed our plates with multiple grip slots for easier handling. Having your logo emblazoned next to ours lets your members know that you share our commitment to the passionate, unending pursuit of perfection.

Ivanko Barbell Company was founded by Tom Lincir in 1967, and it is the leading provider of professional and commercial grade barbell and dumbbell products worldwide. Your comments or questions are welcome. Write Tom Lincir at Ivanko Barbell Company, P.O. Box 1470, San Pedro, CA U.S.A. 90733, e-mail tom@ivankobarbell.com, or call 310.514.1155, ext. 205.

Letters From Readers

The articles I write are for public interest, to further the cause of truth and knowledge relating to the strength industry, and in many cases, to reconstruct the historical record. Here are some of the letters we receive from our readers.

Dear Sir:

We are interested in reprinting in our magazine your excellent article "Strength Archaeology", as first appeared in the "National Fitness Trade Journal." . We feel it will be of particular interest to our readers who follow the history of exercise equipment.

As a former gym owner, your previous articles in the series have been read with great interest. Seldom do we get specific technical information with regard to the manufacture of quality exercise equipment. This information is an invaluable tool to those of us in the fitness industry.

We hope that we may hear from you at your earliest convenience so that we might include the above article in our January issue.

Sincerely,

M. L. BonDurant
Publisher, Muscle Museum Forum

Dear Tom,

I've been looking back over some of the articles you've written lately on the subject of the history of exercise equipment. The articles to which I refer were all published in the "National Fitness Trade Journal." As you know, my wife and I both teach in the Kinesiology Department at the University of Texas at Austin, and since 1990 we have published "Iron Game History"--an academic journal devoted to the history of what used to be called "physical culture." Your articles have been consistently interesting and informative, and we would like to have your permission to reprint one or more of them so that our readers can enjoy the results of your research into a neglected aspect of sports and exercise history.

Best Regards,

Terry Todd, PhD
University of Texas

Acknowledgements:

This article would not have been possible without the help of Greg Greer, 1-877-426-2078, founder of Superior Barbell, Frank Smith, 760-212-9765, national sales manager of the old Universal Gym Equipment Company, and Ron Labrum, 1-800-982-6110, a 30 year sales rep for Universal. People are usually quick to talk about their achievements, but Greg Greer was kind enough to share his "learning experiences" with us.