



BioThane® Equine Family – We hope this paper can help with some of the confusion that is out there on the different finishes/coatings that are available.

---

## **BioThane® Coated Webbing Products Company**

- Founded in 1977
- Slogan: Honesty, innovation, and improvement.
- Made in Streetsboro, Ohio. Feel free to stop in for a tour if you're in the area! (call ahead for tours)
- Competitive Advantage: Continuous Research & Development - always striving to make things better.
- For more information please visit: <https://www.biothane.us/about-us/about-biothane/>
- Also visit: <https://www.biothane.us/faqs/biothane-faqs/>

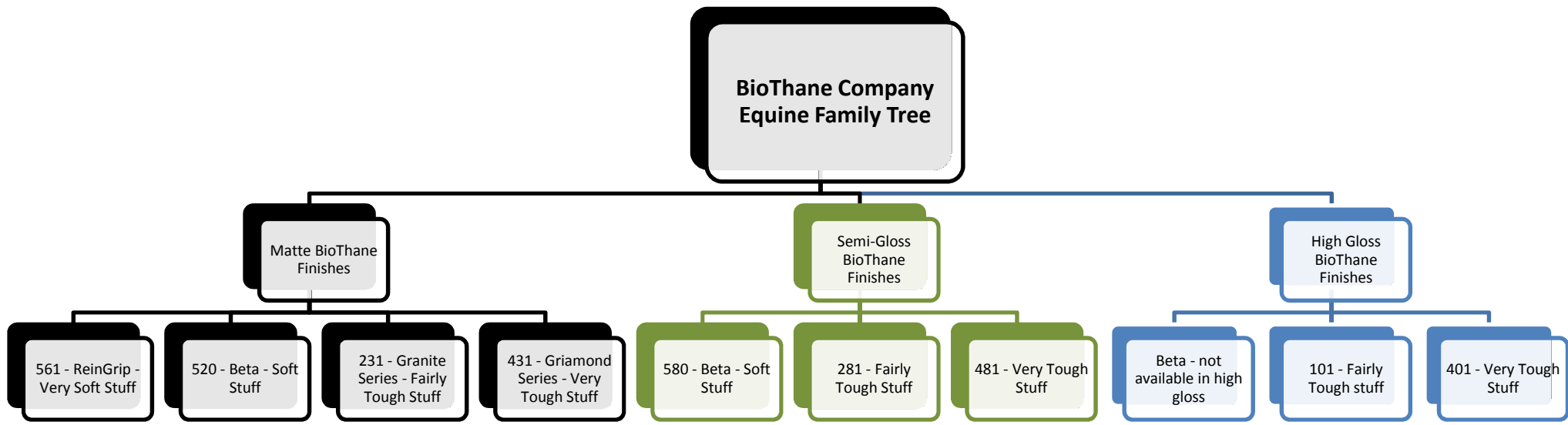
## **BioThane® Family Tree/ coatings**

All finishes are not created Equal.

- **Matte Finish:**
  - Looks like leather
- **Semi-Gloss Finish**
  - Looks like new leather / Dress leather
- **Hi-Gloss Finish**
  - Looks like patent leather – this is the original BioThane that was first available. Has a bit of a “plastic” look to it. This is where the name “Bio” is often used.

All hardnesses are not created Equal.

- **100/200/300 Series**
  - **Medium hard – good for durability.**
- **500/900 Series**
  - **Soft – reins, leads, dog collars, etc.. anywhere that it gets in touch with humans or pets on a frequent basis.**
  - **560 and 950 series are Very soft options.**
- **400 Series**
  - **Very hard – Very durable. Anywhere that the parts get a lot of wear.**



### Thicknesses:

Thicker is not always better. Adding thickness can add durability to an item, makes it sturdier. Thicker does not add strength (that depends on the webbing used)

- Ultra thin
  - Very thin and flexible – most times with B05 webbing
- Super Flex
  - Thin
- Standard
  - Slight body
- Super Heavy
  - Nice for reins
- Extra thick
  - Super Heavy – usually has grooves
- Super Thick
  - Nice for traces – usually used with B30 web and 2 grooves

## Webbings:

Heavier webbing adds strength. Heavier web does not flex as easily.

- B05
  - Rated at 500 lb per inch width
    - Very thin and flexible
- B10
  - Rated at 1000 lb per inch width
    - Most common thickness
- B20
  - Rated at 1750 lb per inch width
    - Rare thickness, great for places needing just a little bit more strength without being too stiff.
- B30
  - Rated at 3000 lb per inch width
    - Very Strong, great for traces or other very heavy applications. Slightly stiffer.

Which BioThane products to use where (suggested uses) :

- **Lines / Reins**

- 560 Reingrip (Super heavy thickness). Available with or without the bumps. Very Soft. Wears easily.
- 520 Beta (Super heavy thickness). Medium softness. Matte finish. This is Yonies' Favorite for lines.
- 580 Beta (Super heavy thickness). Medium softness. Semi-Gloss finish
- 550 Series (Super heavy thickness). Hard. Matte finish

- **Straps that lay against the horse (such as Hip-straps, neckstraps, and other such places.**

- 520 Beta (Extra Thick with 2 grooves) Soft, flexible, and does not rub. This is Yonies' Favorite for Pleasure/padded harness.
  - Longer lasting options (for endurance purposes)
  - 231 Granite. Matte Finish. Medium Hard
  - 431 Griamond. Matte Finish. Very Hard
  - 281 Semi-Gloss. Medium Hard
  - 481 Semi-Gloss. Very Hard
  - 101 Gold. High Gloss. Medium Hard
  - 401 Diamond. High Gloss. Very Hard

- **Billets/Straps on saddle tug bearer strap – you need strength here, or they will wear out.**

- B30 Hi-pull (1 layer) or 2 layers of B10 or B20 webbing (B30=3000 lb per inch width, B10 and B20 are rated at 1000 and 1750 lbs, respectively)
  - 431 Superthick B30 – high strength, especially with molded holes.
  - Suggested to use a 400 series item for this (401, 481, or 431) anything softer than this will possibly have problems with elongated holes

- **Girth Strap on saddle**

- B20 or B30 webbing is preferred. B10 can be used.

Legend: **E** = Excellent; **F** = Fair; **G** = Good; **H** = Hard; **Hi** = High; **L** = Low; **M** = Medium; **P** = Poor; **S** = Soft; **VH** = Very Hard; **VS** = Very Soft

	Look	Feel				Performance					
Coating	Appearance	Hardness	Flex	Cold Flex	Hand Tackiness	Peel Adhesion	Abrasion Resistance	Coating Tear Strength	Weather Resistance	Oil Resistance	Acid/Base Resistance
Diamond 400	Hi-Gloss	VH	F	P	L	G-E	E	E	F	E	F
Gold 100, 300	Hi-Gloss	H	G	G	Hi	G-E	G-E	E	F	E	F
Griamond 480	Semi-Gloss	VH	G	G	M	E	G-E	G-E	G	E	F
Granite 280	Semi-Gloss	H	G-E	G	M	E	G	G-E	G	E	F
Beta 580	Semi-Gloss	S	G-E	G-E	M	G	F	F	G-E	P	P
Griamond 430	No-Gloss	VH	G	G	M	E	G-E	G-E	G	E	F
Granite 230	No-Gloss	H	G-E	G	M	E	G	G-E	G	E	F
Beta 520	No-Gloss	S	G-E	G-E	M	G	F	F	G-E	P	P
Foam 961	No-Gloss	S	E	G-E	M	P	F	G	G	G	P
Foam 951	No-Gloss	VS	E	E	Hi	P	P	F	G	P	P
Beta 560	No-Gloss	VS	E	E	Hi	G	P	P	G-E	P	E

Credit for this chart: Biothane.us