



HAYES

BENCHMARKING
BLACKBOOK

**HAYES**

ANSWER

HAYES

Manitou

SUNringlé

WIPAC

www.HAYESCOMPONENTS.com





- All-weather performance born of extensive cold temperature testing (-15°C/0°F and colder)
- 34mm stanchion provide class leading stiffness
- Travel up to 150mm
- Tire Clearance - up to 26 x 5.15in and 27.5 x 4.5in
- Fits all 26 and 27.5in tires currently available including Vee Rubber Snowshoe XXL
- Pro and Comp levels available



Mastodon Fit Class Leading

Building off the success of the Mattoc, Manitou has taken the same platform and stretched it to accommodate 5 inch tires. Available in up to 150mm of travel.

At Hayes, we know cold. Borrowing from our heritage in snowmobile racing, we know the seals and fluids to keep your suspension working in the coldest of climates. Just because its freezing out, doesn't mean your fork should freeze out.



- Up to 150mm of travel
- Two ride height configurations
- Standard- Direct replacement for competition
- EXT- Extended ride height to accommodate the largest tires available (26inx5in, 27.5inx4.5in, etc.)



Travel (mm)	Ride Height (mm)				
	Competition	Mastodon		Mastodon EXT	
		Pro	Comp	Pro	Comp
80	491	492	492	513	513
100	511	511	511	531	530
120	531	531	530	551	550
140	-	551	551	571	571
150	-	561	-	581	-

Mastodon Fit Largest Range

Mastodon has the largest range of travel for the fat tire market. With two models to choose from, 26in and 27.5in, travel ranges from 80mm to 150mm.



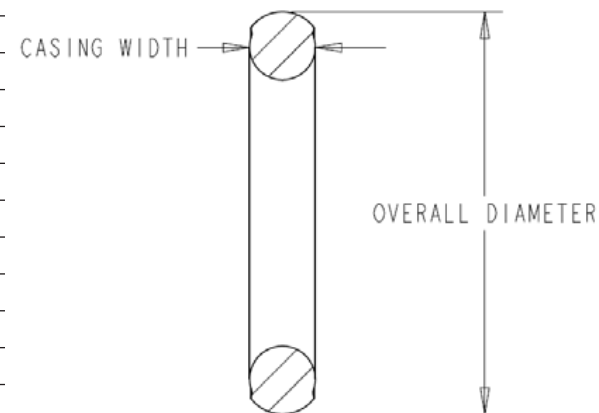


Mastodon Fit Fits All Tire Sizes

Designed to take on the entirety of fat tires available, Mastodon comfortably accepts 26in x 5.15in or 27.5in x 4.5in as well as a 29in x 3in width.

			Allowable Tire Sizes Per Fork				
			Max Overall Diameter	Max Overall Diameter	Max Overall Diameter		
			764	756	796		
			Max Casing Width ⁵	Max Casing Width ⁵	Max Casing Width ⁶		
			127	131	131		
Brand	Tire	Size	Competition	Mastodon Std	Mastodon EXT	Max. Overall Diameter	Max Casing Width
45NRTH	Dillinger 4	26X4	X	X	X	745	106
	Dillinger 5	26X4	X	X	X	759	102
	Dunderbeist	26X4.6	X	X	X	760	116
	Flowbeist	26X4.6	X	X	X	760	115
	Husker Du	26X4	X	X	X	728	105
	Vanhelga	26X4	X	X	X	744	108
Bontrager	Barbegazi2	27.5X4.5		X	X	791	116
Kenda	Juggernaut2	26X4.5		X	X	778	117
Maxxis	Minion FBF3	27.5X3.8	X	X	X	755	97.5
Surly	Big Fat Larry	26X4.7	X	X	X	756.5	118
	Black Floyd	26X3.8	X	X	X	735.5	111
	Bud	26X4.8		X	X	775.5	125
	Endomorph	26X3.7		X	X	736	106
	Knard 3.8	26X3.8		X	X	742	107
	Knard 4.8	26X4.8		X	X	771.5	126
	Larry	26X3.8	X	X	X	745	111
	Lou	26X4.7		X	X	778	124
	Nate	26X3.8	X	X	X	745	112
Schwalbe	Jumbo Jim	26x4.8		X	X		
VeeRubber	Snowshoe 2XL4	26X5.05		X	X	791	116

TIRE CROSS-SECTION





Mastodon Pro Spec Technology Derived from Mattoc Pro

Chassis	Spring	Compression Damping	Rebound Damping	Standard Colors	Options	Offset	WHEELSIZE x MAX TIRE SIZE				Weight
							Standard		EXT		
							Travel	Crown to Axle	Travel	Crown to Axle	
1.5T Alloy Steerer, Deep Bore Hollow Crown, 34mm Tapered 7050 Black Alloy Stanchions, Post Mount for 180mm Rotor, Hexlock SL 150mm Axle	Dorado AIR	New System Derived from MC2: Incremental Platform Adjust, Low Speed Compression	Externally Adjustable TPC Cartridge Rebound	Matte Black	1 1/8 Steerer, Custom Graphics, Custom Colors, Custom Configs	51	100	511	100	531	2210g (26in 100mm)
							120	531	120	551	
							140	551	140	571	
							150	561	150	581	

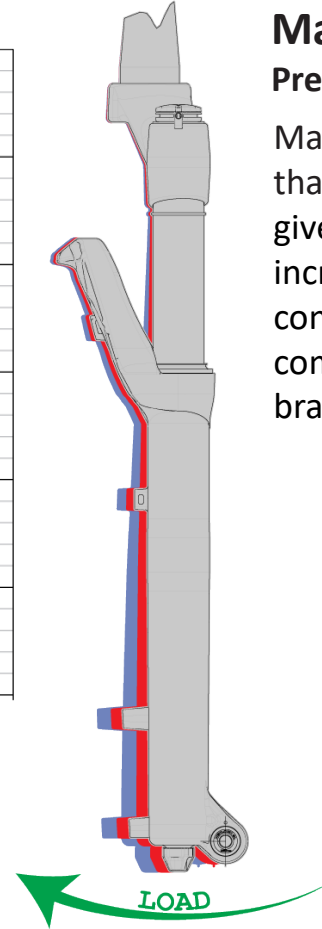
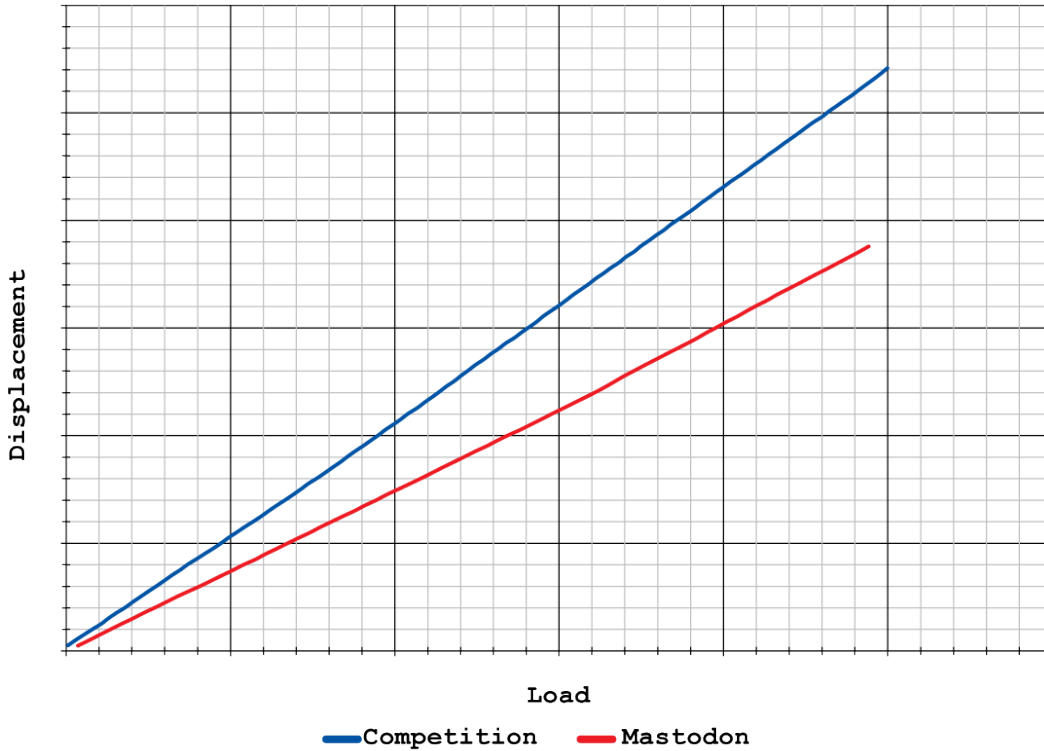


Mastodon Pro Spec Technology Derived from Mattoc Comp

Chassis	Spring	Compression Damping	Rebound Damping	Standard Colors	Options	Offset	WHEELSIZE x MAX TIRE SIZE				Weight
							Standard		EXT		
							Travel	Crown to Axle	Travel	Crown to Axle	
1.5T Alloy Steerer, 34mm 6066AL Straightwall Black Alloy Stanchions, Post Mount for 180mm Rotor, HexlockSL 150mm Axle	ISO AIR	Absolute+ Tuned for Fat Bike	Externally Adjustable TPC Rebound	Matte Black	1 1/8 Steerer, Custom Graphics, Custom Colors, Custom Configs	51	80	492	80	513	2430g (26in100mm)
							100	511	100	530	
							120	531	120	550	
							140	551	140	571	



Fore/Aft Stiffness, Mastodon vs Competition

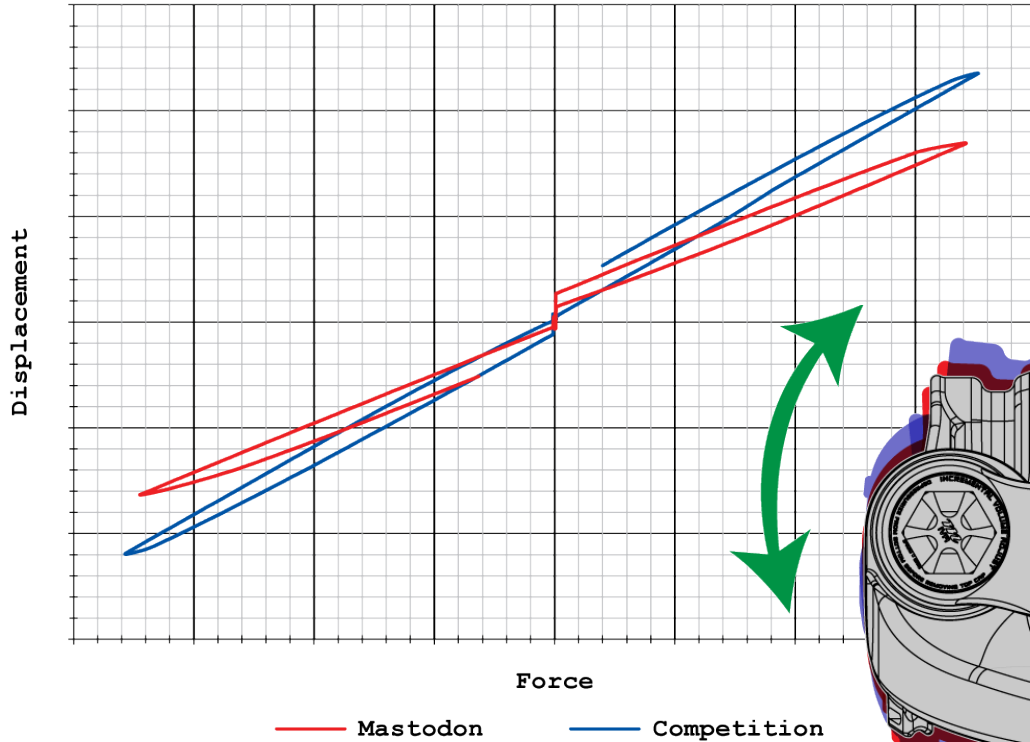


Mastodon Stiffness Precision Under Braking

Mastodon is 26% stiffer fore-aft than the competition. This stiffness gives the rider improved stability, increased precision, and more consistent rebound and compression performance under braking and cornering loads.

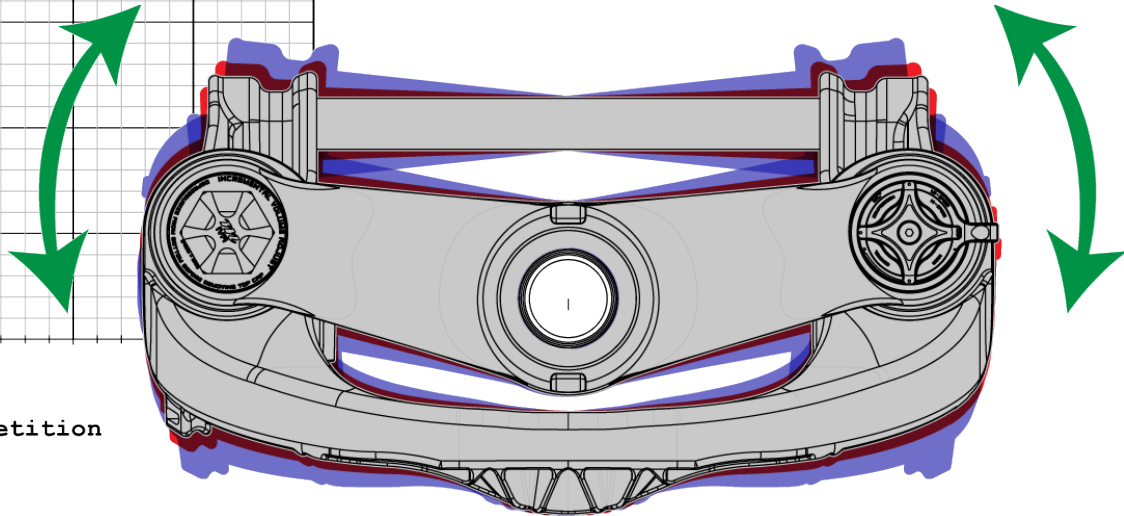


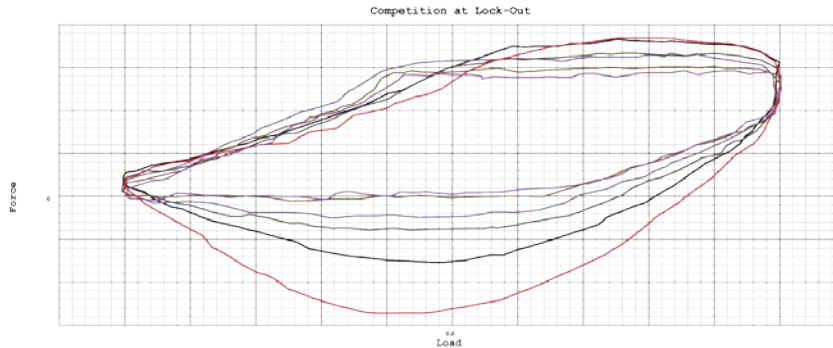
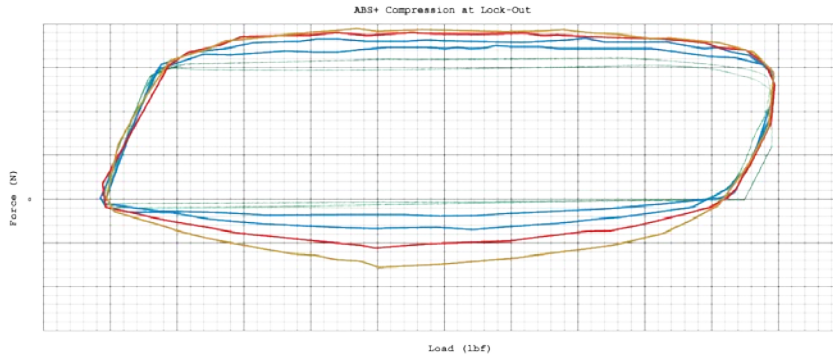
Torsional Stiffness, Mastodon vs Competition



Mastodon Stiffness Precision and Confidence

Mastodon is 25% torsionally stiffer than competition, delivering superior steering precision and cornering confidence.





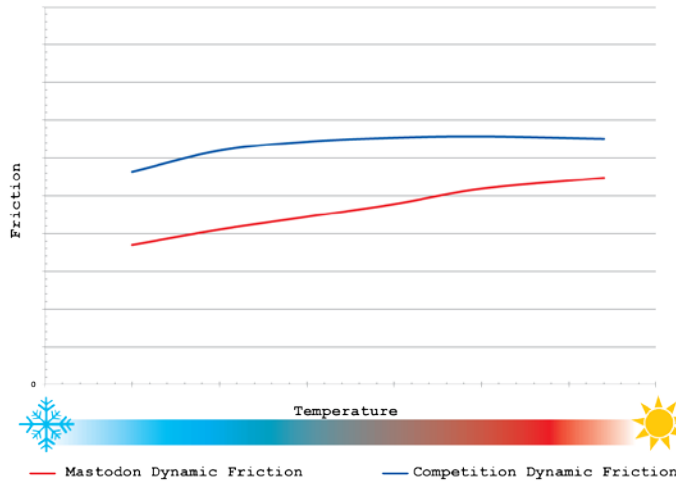
Mastodon Stiffness Firm Platform – Better Control

Mastodon has more robust internal components that are more active than the competition for better traction. Mastodon's firm platform delivers precise damping and predictable wheel travel.

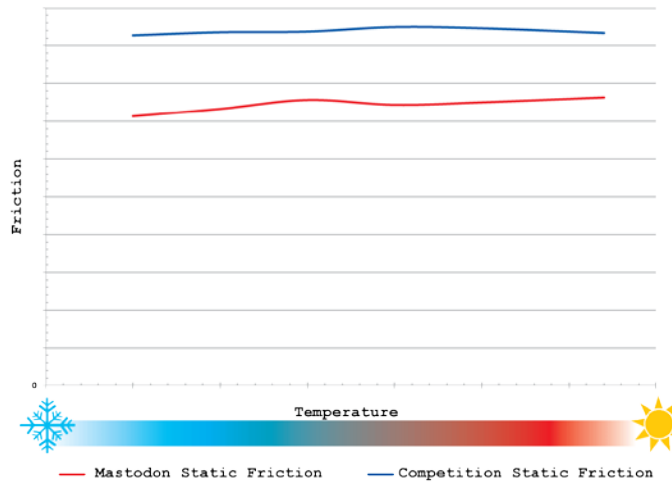
- Firm Lock-Out
- Consistent, Predictable Performance
- Shim-Based Tuneability
- Pro Level with Hi-Lo Speed Adjustment



Dynamic Friction Comparison Data Mastodon vs. Competition



Static Friction Comparison - Data Mastodon vs. Competition



Mastodon Friction Less Friction, Smoother Ride

Mastodon has less static breakaway and dynamic friction, coupling a smoother ride with its superior handling.

- Low friction across all temperature ranges
- 34.3% less dynamic friction than competition @ 20°F
- 15.9% less dynamic friction than competition @ 74°F (ambient)
- 23.1% less static friction than competition @ 20 degrees
- 18.3% less static friction than competition @ 74° (ambient)



Mastodon Upgrade Infinite Rate Tune Kit



Infinite Rate Tune (IRT) allows the rider to control mid-stroke rate independent from bottom-out. The closest thing available to the feel of a perfectly chosen coil spring without additional weight.

- **Optional upgrade for Mastodon**
- **Allows the rider to control mid-stroke rate, independent from bottom-out**
- **IRT is for riders and racers who have more extensive understanding of air spring function who want to custom tune spring rate for more sensitive initial stroke AND more supportive mid-stroke**

