

"Inspired"



SENQCIA Inspire SeriesTM SBR® chains are the highest rated standard roller chains in the world.

Stainless Steel Blast Treatment

Components of our new INSPIRE SERIES® SBR® roller chains are coated with a film of stainless steel achieved through a proprietary blast treatment.

The film works with the high quality pre-lubricant to protect the chain from corrosive attack and extend life. The blast also gives the chain an enhanced silver color appearance.

Features Summary:

45%-50% Higher Fatigue Strength
Highest Rated Roller Chains in the World
Higher Horsepower Capacities
New Ultra-high Hardness Shell On Bearing Parts
Unique Stainless Steel Blast Treatment
Solid Bushings and Solid Rollers
Special Boron Steel Pins on select sizes



The Difference is New PATENTED Production Technology...

The Production Process

Raw Material - High Quality Alloy Steel.

Parts Fabrication.

Heat Treatment.

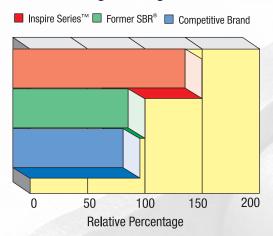
Hi-Energy Mechanical Process (Pat.).
Stainless Steel Blast (Pat. Pend.).

Assembly.
Pre-Lubrication.
Packaging.
Shipping.

	Rated Working Load (lbs)					Rated Working Load (lbs)		
ASME/ANSI Chain Number	Inspire Series TM	Competitive Brand	Percentage Difference	ASME/ANSI Chain Number	Inspire Series TM	Competitive Brand	Percentage Difference	
35	560 lb	480 lb	16.7%	120	8,880	6,830	30.0%	
40	940 lb	810 lb	16.0%	140	11,760	9,040	30.0%	
50	1,625 lb	1,430 lb	13.3%	160	15,510	11,900	30.3%	
60	2,470 lb	1,980 lb	24.7%	180	17,760	13,670	30.0%	
80	4.295 lb	3,300 lb	30.2%	200	20,900	16,090	29.9%	
100	6.610 lb	5,070 lb	30.4%	240	29,000	22,700	27.8%	



Fatigue Strength



Compressive Residual Stress Zones

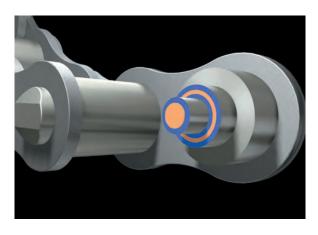
Compressive stress has long been known to improve fatigue strength. Sources of compression in existing chain products include shot peening, high interference fits between pins, bushings and side plates, and the carburized zone found on pins and bushings.

Our unique patented "Hi-Energy Mechanical Process" imparts substantial compressive stresses to the chain components (see chart right) resulting in a 45%-50% increase in fatigue strength. Horsepower ratings as well as the rated working loads are the highest in the world.

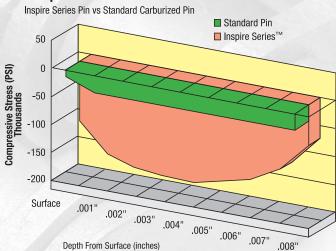
Triple Zone Hardness Wear Protection

A residual, but important benefit of our new "Hi-Energy Mechanical Process" is that an ultra-high hardness shell is developed on the surface of carburized pins. This effectively gives these wearing components three layers of hardness protection:

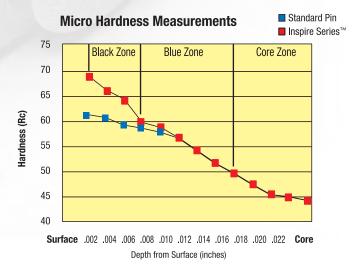
- 1. Ultra-high hardness shell (Black Zone-See Below).
- 2. High hardness carburized case (Blue Zone-See Below).
- 3. Core Hardness (Orange Zone-See Below).



Compressive Residual Stress Measurements



Compressive stress measurements. The deeper trough of the INSPIRE SERIES™SBR® pin means that the part has more compressive residual stress and is therefore more resistant to fatigue failure. Link plates, rollers and bushings undergo the same treatment with similar results.



Micro hardness measurements of the pins and bushings reveal an ultra-hard shell which fights chain elongation far better than can be achieved with conventional carburized parts.

Benefits Summary:

Greater resistance to fatigue failure.

Longer wear life due to high hardness shell.

Smaller chain sizes required (Higher HP ratings).

Corrosion protection from proprietary stainless blast.