

Pricing Trends/Market Size Insight for Rubber Products

Quarterly Pricing Trends

The Producer Price Index (PPI) data presented here provide a snapshot in time of pricing trends for five common industrial product groups sold by NAHAD members. This report provides a national benchmark and comparison of the latest quarterly data with the previous quarter and the same quarter of the previous year. It represents trends in selling prices received by domestic producers and is a good barometer for inflationary pressures felt at the wholesale level.

During the second quarter of 2024, two products increased selling prices while two products had no annual change. From 1Q24 to 2Q24, there was no change for three products while only a minimal decrease in Seals & O-Rings.

Product Categories	Quarterly % Change 1Q24:2Q24	Annual % Change 2Q23:2Q24
Hydraulic Hose	N/A	N/A
Industrial Hose	0.0	0.0
Conveyor Belt	0.0	0.0
Transmission Belt	0.0	+ 0.8
Seals & O-Rings	- 0.4	+ 2.7

Source: Quarterly Producer Price Index, U.S. Bureau of Labor Statistics. For more detail on pricing trends methodology, see appendix at the end of this report.

Quarterly Pricing Trends:

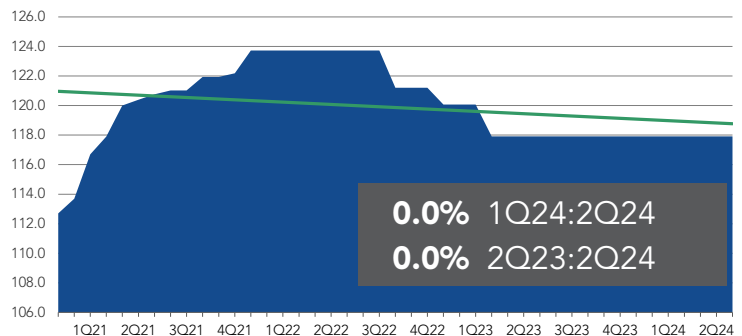
Hose – Hydraulic/Industrial

- NOTE: the Hydraulic Hose Producer Price Index has not been updated by the Department of Labor and so is not included in this report.
- The Industrial Hose Price Index dropped to \$117.9 in 2Q23 and has remained flat through 2Q24.

Hydraulic Hose

NOTE: The Hydraulic Hose Producer Price Index has not been updated by the Department of Labor and so is not included in this quarter's data

Industrial Hose

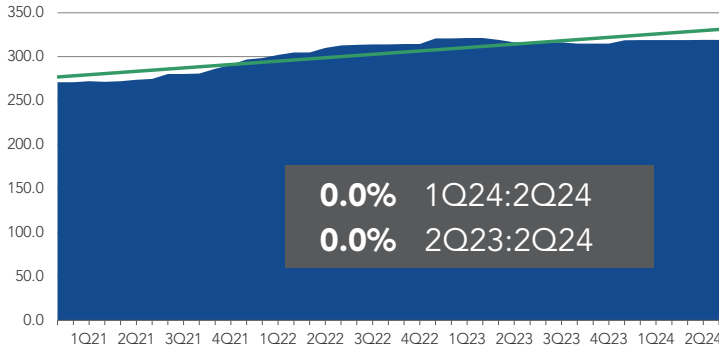


Quarterly Pricing Trends:

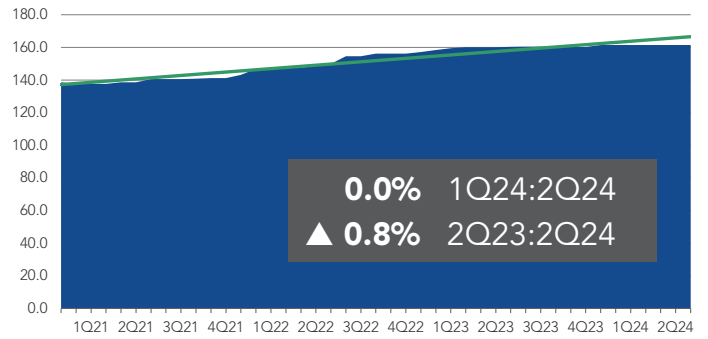
Belt – Conveyor/Transmission

- Conveyor Belt pricing hit \$320M in 1Q23 but hit a low of \$314M in 4Q23 but climbed up 1Q24 and has stayed flat around \$319M.
- Transmission Belt pricing hit \$160M in 2Q23 but has hovered around \$161M in 2024.

Conveyor Belt



Transmission Belt

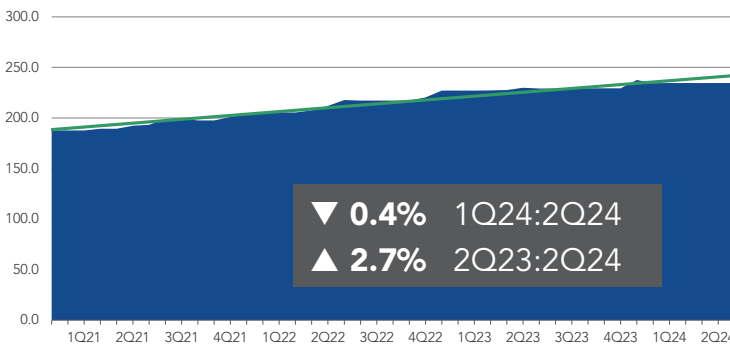


Quarterly Pricing Trends:

Seals & O-Rings

- Pricing had a spike in January 2024 but has remained steady at \$234.5 through 2Q24.

Seals & O-Rings



The indices above are derived from the Producer Price Index, published monthly by the U.S. Bureau of Labor Statistics, which measures the average change over time in selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services. The data from the Producer Price Index tracks wholesale prices, making this index the best source of price trend data for wholesale distribution markets.

Annual Market Size – Rubber Products

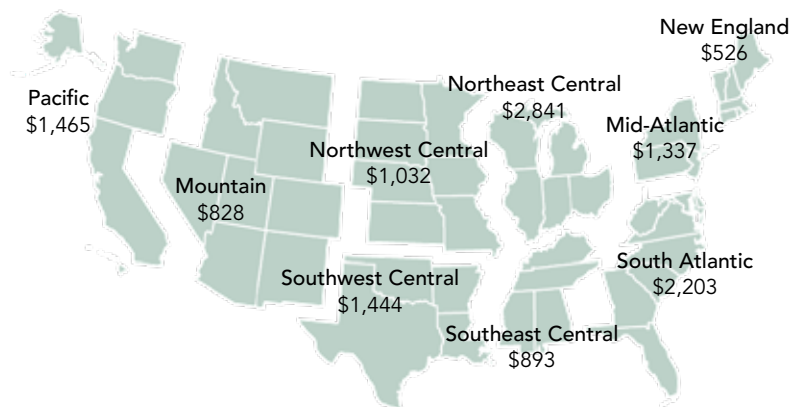
The annual market size decreased from Q2 2023 to Q2 2024 for all five industrial product categories listed below and is estimated at \$12.5 billion.

Product Categories	2024 Estimated Market Size (in \$ Millions)	Annual % Change 2Q23:2Q24
Hydraulic Hose	\$2,775	-3.1%
Industrial Hose	\$2,851	-4.2%
Conveyor Belt	\$2,410	-5.6%
Transmission Belt	\$1,118	-3.6%
Seals & O-Rings	\$3,417	-8.2%
Total Market Potential	\$12,571	-5.3%

Source: MDM Analytics

Annual Market Size – Regions/Top 10 States (2023 data)

National Rubber Products Market Size = \$12.6 Billion



State	Total Demand (in \$ Millions)
Texas	\$1,008
California	\$998
Michigan	\$735
Ohio	\$638
Illinois	\$614
Pennsylvania	\$550
Florida	\$548
New York	\$506
Wisconsin	\$473
Georgia	\$409

All market size analysis in this report is based on five product categories defined at the end of this report. The data reflect estimates of end-use consumption, on an annual basis in U.S. dollars, for maintenance, repair, and operations (MRO) and original equipment manufacturer (OEM) business segments.

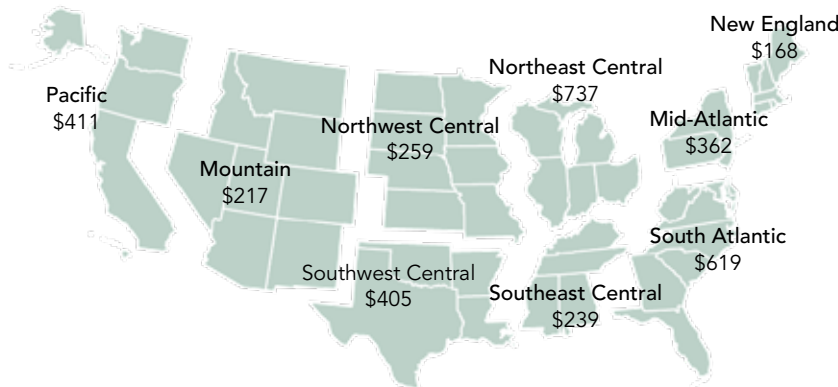
Each quarter, this page profiles a different product category to provide a more in-depth look at the size and make-up of the key customer segments for that category.

Market Size Profile – Seals & O-Rings Hose

The size of the Seals & O-Rings Hose market is \$3.4 billion nationally, according to estimates by MDM Analytics. This page profiles how demand for Seals & O-Rings Hose segmented regionally, across the top 10 states by demand, and the top 10 customer sectors that consume Seals & O-Rings Hose products. Market size is defined as the total available market at the end-user customer level, including a distributor margin estimate, to provide a “street” price estimate, in U.S. dollars.

Market Size – Regions/Top 10 States (2023 data)

Seals & O-Rings Hose Market Size = \$3.4 Billion



State	(in \$ Millions) Total Demand
Texas	\$279
California	\$277
Ohio	\$184
Illinois	\$157
Michigan	\$155
Florida	\$151
Wisconsin	\$145
Pennsylvania	\$145
New York	\$144
Georgia	\$122

Annual Market Size – Top 10 Customer Segments (2023 data)

NAICS 6	Description	Seals & O-Rings Hose (in \$ Millions)	Accounts
322120	Paper Mills	339	2,139
332710	Machine Shops	161	21,873
238210	Electrical Contractors and Other Wiring Installation Contractors	153	115,524
237310	Highway, Street and Bridge Construction	112	28,851
322130	Paperboard Mills	91	674
236220	Commercial and Institutional Building Construction	87	56,794
336412	Aircraft Engine and Engine Parts Manufacturing	74	1,345
238110	Poured Concrete Foundation and Structure Contractors	72	37,494
238910	Site Preparation Contractors	58	39,688
336390	Other Motor Vehicle Parts Manufacturing	55	6,021

Product Category Definitions

The market analysis in this report defines the following five product categories in the following manner, using standardized classifications based on the U.S. Census Bureau's NAICS product codes, as well as the U.S. Bureau of Labor Statistics (BLS) Producer Price Index Commodity Codes. See Methodology and Data Sources below for more detail.

Hydraulic Hose – This category is defined by BLS as All Other Hydraulic/Pneumatic Hose.

Industrial Hose – This category is defined by BLS as Industrial Rubber/Plastics Hose.

Conveyor Belt – This category is defined by BLS as Flat Rubber/Plastics Belts and Belting.

Transmission Belt – This category is defined by BLS as Rubber/Plastics Belts and Belting, except flat rubber, including motor vehicle rubber/plastics transmission belts and belting.

Seals & O-Rings – This category is defined by BLS as Packing and Sealing Devices, which includes compression packings, molded packing and sealing devices, rotary oil seals, and axial mechanical face seals and parts.

Regional Territory Definitions

This report uses the nine statistical divisions defined by the U.S. Census Bureau. States included in each division:

Division 1: New England

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Division 2: Mid-Atlantic

New Jersey, New York, Pennsylvania

Division 3: Northeast Central

Illinois, Indiana, Michigan, Ohio, Wisconsin

Division 4: Northwest Central

Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

Division 5: South Atlantic

Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia

Division 6: Southeast Central

Alabama, Kentucky, Mississippi, Tennessee

Division 7: Southwest Central

Arkansas, Louisiana, Oklahoma, Texas

Division 8: Mountain

Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

Division 9: Pacific

Alaska, California, Hawaii, Oregon, Washington

Methodology & Data Sources

The data in this report was compiled by MDM Analytics, a division of National Association of Wholesaler-Distributors, using an econometrics model developed more than 30 years ago. MDM Analytics' databases provide information on the potential demand for a wide range of key industrial goods across the hundreds of industries encompassed by the North American Industry Classification System (NAICS) system for North America. The following is a general overview of the methodology used to develop MDM Analytics' key reports.

All market analysis in this report is based on five product categories defined above. The data reflect estimates of end-use consumption, on an annual basis in U.S. dollars, by maintenance, repair, operations and production (MROP) accounts, and original equipment manufacturer (OEM) accounts.

First, a total market size for each product category is established using the U.S. Census Bureau's five-year **Economic Census** together with its **Annual Survey of Manufacturers**. This mandatory survey of U.S. manufacturers is conducted at a granular product level using standardized NAICS-based product codes, which MDM Analytics aggregates into specific product class and category groupings. Imports-Exports are then factored and a distributor margin is added to estimate an end-user customer, or "street-level," market sizing nationally.

Consumption rates for MRO products at a given account location are largely driven by the type of manufacturing or unique industry-sector processes and number of employees at a location. This demand relationship can be used to model market potential for defined territories at the county level and higher based on a territory's unique composition of industries and the number of employees in those industries.

Continued next page

MDM Analytics' proprietary statistical model segments the national demand for each product category based on its unique historical consumption patterns by each 6-digit NAICS industry sector. Then the total employment of each industry is divided into the total annual market size to arrive at the dollar-per-employee ratio. Market potential can then be estimated by modeling the types of end-market industries and their size in a given territory. In effect, the "DNA" of a territory and its estimated consumption patterns for defined industrial product categories can be estimated.

This NAHAD Markets Monitor report updates market size estimates annually based on change in employment by sector at a county level, as well as a proprietary model using a number of industry sector indices for manufacturing, construction, mining and energy sectors. U.S. employment is measured by 6-digit NAICS industry sector at a county level, sourced through a combination of U.S. Bureau of Labor Statistics, Dun & Bradstreet and private databases. Annual market size estimates are revised with additional input and validation from annual

Quarterly Pricing Trends Methodology

Data presented here provide a snapshot in time of wholesale pricing trends in five common industrial product groups sold by NAHAD members. The report provides comparison of the latest quarterly data with the previous quarter and the same quarter of the previous year.

The NAHAD Markets Monitor quarterly pricing trends report is based on the Producer Price Index (PPI) published by the U.S. Bureau of Labor Statistics. Quarterly percent change, which is not reported by the U.S. government, is calculated by MDM editors based on quarterly averages using a method developed after consulting with the BLS.

The PPI program measures the average change over time in selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services. The data from the Producer Price Index tracks wholesale prices, making this index the best source of price trend data for the wholesale distribution market. The PPI does not measure the cost of producing an item.

Indexes are organized in three major structures: stage of processing (organized by class of buyer and degree of fabrication); industries and their products (organized by producing industry as defined by NAICS); and type of commodity (organized by similarity of end use or material composition).

To calculate its item-specific index each quarter, MDM uses the PPI organized by commodity. This provides the greatest detail for specific products. It also provides a great deal of historical data. The downside to the commodity index coding system is that no other governmental statistical program uses it. Commodities are grouped according to similarity of material composition and end use, regardless of industry of origin. Because of this, they are not organized by NAICS (North American Industry Classification System).

In addition, when using the commodity indexes, it is inadvisable to roll up products into one overarching index without accounting for double-counting due to stages of processing. This is why MDM presents data at a lower level and as close to an individual product basis as possible, rather than presenting a total index for the products. For overall percent changes by industry (NAICS) or level of processing (crude vs. finished, for example), businesses should use the stage of processing or industry indexes at www.bls.gov/ppi.

How Firms Use the Producer Price Index

According to the BLS, businesses often employ price adjustment clauses in long-term sales and purchase contracts, frequently using the PPI family of indexes, either alone or in conjunction with other sources of economic data. Because the PPI indexes measure price changes objectively, the PPI calculated by the Bureau of Labor Statistics are widely recognized among businesses, economists, statisticians and accountants as useful for this purpose.

MDM Analytics does not encourage or discourage the use of price adjustment measures in purchase and sales agreements.

© 2024 MDM Analytics. All Rights Reserved.

202-872-0885
analytics@mdm.com
www.mdm.com/mdm-analytics/

Produced for: The National Association for Hose and Accessories Distribution, 180 Admiral Cochrane Drive, Suite 370, Annapolis, MD 21401.

Phone: 410-940-6350
800-624-2227
www.nahad.org