

Kromite® Threaded Bars

Heat Treated, Roll Threaded, High Strength Alloy

Kromite Threaded Bars are manufactured using the “*Thread Rolling*” method.

This method of manufacturing threaded bars is widely accepted as the optimum production method to eliminate defects in the root of the thread, to harden the thread, and to improve the overall strength of the thread.

Surface Finish

Kromite Threaded Bars are smoother and have less surface imperfections that may cause possible failure in severe service applications. Thread rolling dies impart smooth burnished roots and flanks to threads. Rolled threads are free from tears or tool marks typically found in cut threads. Those surface imperfections contribute to fatigue, and may lead to catastrophic failure.

Strength of Rolled Thread

The secret to the strength of our **Kromite Threaded Bar** is in the rolling process. Thread rolling deforms the blank material as it is forced along the contour of the die. The worked material is strain hardened, resulting in a product stronger and harder with a defined grain structure. Cut threads encourage fatigue related failure.

Kromite Threaded Bars should be considered as a suitable upgrade where maintenance applications require improved strength and durability. In high torque and high stress applications, **Kromite Threaded Bars** significantly exceed the expected service life of other threaded products.

Our material conforms to specifications for: ASTM A193, Grade B7.

Other Products Available

Kromite Metric Threadedsee p. 17

Kromite Acme Threadedsee p. 18

Cencor Stainless Threadedsee p. 50

Call our Cleveland offices for details about other grades of materials that may be threaded. We also produce double, triple lead threads & left hand threads.



“All Thread”

- Roll Threads
- Improved Finish
- No Nicks or Stress Risers
- Accuracy
- Hardened Threads
- Less Creep
- Resists Surface Initiated Fatigue Failure



HIGH STRENGTH

HEAT TREATED

LONG LASTING

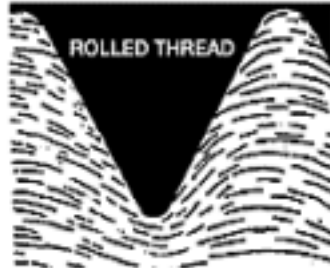
(Past Protected Trade Name of
Ludlow Steel Company – Centrex® Threaded Bar)

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Sharp cuts, with nicks and gouges, weaken threads and can serve as a focal point for stress risers, which lead to fatigue failures.



Grain structure is maintained in continuous unbroken lines, following contours and increasing tensile and shear strength.



Summary

Kromite Threaded Bar is made of heat treated, high strength, alloy material. Designed for bolts and studs, it is the ideal product to be used when strength and toughness are key requirements.

Kromite Threaded Bars are manufactured with a rolled thread vs. a cut thread. This product is virtually free of tears, chatter marks and tool marks that are commonly associated with cut threads. Such imperfections in cut threads are points of stress that cause failure in service.

Typical Physical Properties*

Brinell Hardness	321 BHN
Tensile Strength	155,000 PSI
Yield Strength	135,000 PSI
Grain Size	7
Elongation	19%
Reduction of Area	53%

*Based on 1/2" Diameter Test Specimen

Sizes Available

National Fine		National Coarse				8 Pitch	
Dia.	TPI	Dia.	TPI	Dia.	TPI	Dia.	TPI
1/4"	28	1/4"	20	1-1/8"	7	1"	8
5/16"	24	5/16"	18	1-1/4"	7	1-1/8"	8
3/8"	24	3/8"	16	1-3/8"	6	1-1/4"	8
7/16"	20	7/16"	14	1-1/2"	6	1-3/8"	8
1/2"	20	1/2"	13	1-5/8"	5-1/2	1-1/2"	8
9/16"	18	9/16"	12	1-3/4"	5	1-5/8"	8
5/8"	18	5/8"	11	2"	4-1/2	1-3/4"	8
3/4"	16	3/4"	10	2-1/4"	4-1/2	1-7/8"	8
7/8"	14	7/8"	9	2-1/2"	4	2"	8
1"	12,14	1"	8			2-1/8"	8
1-1/8"	12						
1-1/4"	12						
1-3/8"	12						
1-1/2"	12						
2"	12						

Available Stock Lengths

10 Ft to 12 Ft Random Lengths

Advantages

- Uniformity
- High Strength
- Heat Treated to 28/32 Rc
- Rolled Thread v. Cut Thread

Typical Applications

- Bolts
- Studs
- Lead Screws
- Tie Rods
- Pullers