

Technical Data Sheet

Stainless Steel Bar

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The worldwide leading position of Ugitech SA in stainless steel bar goes far beyond the simple measurement of our global volumes; Ugitech SA is at the forefront of innovation and technological advancements. Today, the North American distribution proudly carries the name of Swiss Steel International and continues the tradition of Quality Service to the US market. Our stocking locations are strategically located throughout the country, and operate with one purpose: making sure customers get the special steel products they need, when and where they need them. Our unique approach to product support sets us apart from all other steel mills and distributors.

Our services include immediate product availability, custom orders, customer-dedicated inventory programs and strong technical support with both in-house metallurgical and mechanical engineering support. We are focused on providing products and service that offer our customers a competitive advantage. If you are looking for a source of stainless value and quality you can depend on, you have found it here.

Common Stocking Grades

303 UGIMA XL™	416/416HT (Rc 26/32)
304/304L UGIMA XL™	430F
316/316L UGIMA XL™	430FR
	630 UGIMA®

Over 150 additional mill grades are available. Please Inquire.

Stocking Sizes Round Bars

1/16" to 4-3/4"

Hexagon, Square, Octagon & Profile Bars

1/8" to 2-2 1/2"

UGIMA XL™

UGIMA XL™ represents the next generation of our UGIMA® technology. Through the use of new and beneficial modifications to the steel-making process, UGIMA XL™ builds upon the UGIMA® technology to allow for excellent machinability across a wider range of operations and cutting conditions. When compared with machinability, UGIMA XL™ is a technologically advanced product that will allow for superior machinability on a broader range of machines and cutting conditions. UGIMA XL™ delivers consistent machinability from lot to lot with the same high performance every time without

surprises. Shops typically report productivity increases of up to 100 % over leading competitive machining grades, and increases of up to 40 % over standard UGIMA®. Additional benefits include improved chip breakability, increased tool life, and better interchangeability with competitor's material, regardless of the producer.

SMQ Screw Machine Quality

Stainless Steel Bar

SMQ is the most recent technology in stainless steel round bars brought exclusively to the market for precision machine part manufacturers. This product was developed specifically in response to the increasing needs of precision machined part manufacturers throughout the world to provide precision bar stock for:

Diameter Consistency designed for Precision Machining
Straightness designed for increased RPMs and reduced vibration

Bar Uniformity [Supports Improved Part Tolerances and Finishes]

End Conditioning for easy bar feeding

Running "Lights Out" Production without worries of material quality issues

Consistent Machinability from lot to lot

Diameter Tolerance Comparison

Example Sizes	ASTM A484	SMQ Tolerance	SMQ Consistency
7/32"	+/- .00100"	+/- .00059"	+/- .00030"
1/4"	+/- .00150"	+/- .00070"	+/- .00035"
1/2"	+/- .00200"	+/- .00084"	+/- .00042"
1"	+/- .00250"	+/- .00102"	+/- .00051"

Superior Tolerances

Diameter Tolerance (ISO J9)

Approximately 50% better when compared to commercial ASTM standards

Diameter Consistency

Diameter variation no more than 50% of SMQ total diameter tolerance



**Swiss
Steel**
International

Superior Tolerances (cont.)

Straightness

1/32" in 5', SMQ is approximately 50% straighter than commercial ASTM standards

Roundness/Ovality

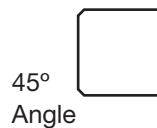
Maximum out of round tolerance 1/3 SMQ diameter tolerance

Surface Finish

Enhanced finish is far superior to commercial ASTM standards

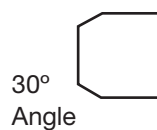
Bar End Conditioning

Chamfered Bar End



- (1) End Chamfered 45° provides a guide to protect and minimize the wear of feed fingers, pads & collets (also available with
- (2) Ends Chamfered on new mill orders)

Pointed Bar End



- (1) End Pointed 30° provides a mated end for use with hydrostatic bar feeders

End conditions are typical, dimensions are approximate
End condition variations available on special order



Headquarters & Technical Support

Swiss Steel USA, Inc.
365 Village Dr. Carol Stream, IL 60188
Phone: 800.323.1233
Fax: 630.879.0498

Manufacturing & Central Stocking Facility

Swiss Steel USA, Inc.
1609 E. Wilson St.
Batavia, IL 60510

Distribution Locations

West Coast

556 Vanguard Way
Brea, CA 92861

Midwest

365 Village Dr.
Carol Stream, IL 60188

1455 Miller Pkwy.
Streetsboro, OH 44241

Southeast

119 Old Airport Rd.
Roebuck, SC 29376

Northeast

370 Franklin Turnpike
Mahwah, NJ 07430

Canada

Swiss Steel Canada, Inc.
6350 Vipond Dr.
Mississauga, ONT L5T 1G2

