



## WCL-20-F


Ruland WCL-20-F, 1 1/4" Double Wide Shaft Collar, Black Oxide Steel, One-Piece Clamp Style, 2 1/16" OD, 1 1/16" Width



### Description

Ruland WCL-20-F is a one-piece double wide shaft collar with a 1.250" bore, 2 1/16" OD, and 1 1/16" width. The clamp style design does not mar the shaft, is easy to remove, and is indefinitely adjustable. It is commonly used for guiding, spacing, stopping, mounting, and component alignment. Equipment manufacturers benefit from the tightly controlled face to bore perpendicularity (TIR of ? .002"). Perpendicularity is critical for alignment when the shaft collar is used as a load bearing face, mechanical stop, or for mounting components such as gears or bearings. Proprietary processes have been developed by Ruland to maintain superior fit, finish, and holding power. WCL-20-F is stamped with the Ruland name and bore size for ease of identification. This double wide shaft collar has 25% higher axial holding power than a round bore of equivalent size. It can also be used as a short rigid coupling for applications where a traditional rigid coupling is too long. Forged screws test beyond DIN 912 12.9 standards to ensure maximum holding power. WCL-20-F is manufactured from solid bar stock sourced from select North American mills and machined to a fine burr free finish. Ruland uses 1215 lead-free steel with a proprietary black oxide finish that produces a fine glossy finish while increasing holding power and resisting corrosion. WCL-20-F is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

### Product Specifications

<b>Bore (B)</b>	1.2500 in	<b>Bore Tolerance</b>	+0.0020 in / +0.0005 in
<b>Outer Diameter (OD)</b>	2 1/16 in	<b>Clearance Diameter (C) MAX</b>	2.295 in
<b>Width (W)</b>	1 1/16 in	<b>Width Tolerance</b>	+0.003 in / -0.010 in
<b>Recommended Shaft Tolerance</b>	+0.0000 in / -0.0005 in	<b>Forged Clamp Screw</b>	1/4-28
<b>Screw Material</b>	Alloy Steel	<b>Hex Wrench Size</b>	3/16 in
<b>Screw Finish</b>	Black Oxide	<b>Seating Torque</b>	170 lb-in
<b>Screw Location (R)</b>	0.828 in	<b>Number of Screws</b>	2 ea
<b>Moment of Inertia</b>	0.4237 lb-in <sup>2</sup>	<b>Material Specification</b>	1215 Carbon Steel Bar
<b>Finish Specification</b>	Hot Process Black Oxide, Impregnated with Naphthenic Oil, Centrifugally Dried	<b>Manufacturer</b>	Ruland Manufacturing
<b>Country of Origin</b>	USA	<b>Temperature</b>	-40°F to 350°F (-40°C to 176°C)
<b>Weight (lbs)</b>	0.584200	<b>UPC</b>	634529136676
<b>Tariff Code</b>	8483.60.8000	<b>UNSPC</b>	31162811
<b>Note 1</b>	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
<b>Prop 65</b>	 <b>WARNING</b> This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> .		

### Installation Instructions

1. Use the WCL-20-F double wide shaft collar as it is received.
2. Wipe the bore clean.
3. Apply a thin coat of light oil to the shaft.
4. Tighten the screws in two stages, starting with the inside screws. Using a torque wrench with 3/16" bit, tighten the inside screws to 85 lb-in which is half the recommended seating torque. Repeat for the outside screws, again tightening to half of the recommended seating torque.
5. Tighten the screws to the full recommended seating torque of 170 lb-in following the same pattern, starting with the inside screws first.