McMASTER-CARR®

Certificate

330-995-5500
330-995-9600 (fax)
cle.sales@mcmaster.com

Purchase Order	Order Date	Placed By	McMaster-Carr Number	Number of Certificates
P1481910	5/23/2023	Jane Beattey	3406175-02	1

Line		Product	Ordered	Status	Certificate
3	8893K1	Tight-Tolerance Oil-Hardening O1 Tool Steel Rod, 0.5000" Diameter, 3 Feet Long	2 each	2 each deliver May 24	210–7910

Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

Certificate of Analysis

Tool Steel Service, Inc.
ILLINOIS CALIFORNIA ARKANSAS

7333 S. 76th Ave - Bridgeview, IL 60455 - Phone: 708-458-7878 - Fax: 708-458-3778

Customer Info:

McMaster Carr Supply Co.
P.O.Box 5516
Chicago, IL 60680

PO #: UH-42349430 **Line:** 4
Order Date: 03/06/2023
Part No: 889304

Analysis / Properties:

Heat	37537	**Carbon (C)**	0.930
Mill ID		**Chromium (Cr)**	0.480
Country	INDIA		
Grade	O1		
ASTM	A681		
Brinell	235	**Manganese (Mn)**	1.050
Rockwell HRb			
Rockwell HRc			
DFARS	No		
		Phosphorus (P)	0.014
		Silicon(Si)	0.200
		Sulphur (S)	0.004
		Vanadium (V)	0.004
		Tungsten (W)	0.470

Product / Shipper Info:

TSS Order No: 956147 **Line:** 4
Product Desc: O1DR 1/2" X 3 FOOT
Pieces: 220

Shipped From: Bridgeview, IL
Shipping Date: 04/07/2023

Tool Steel Service, Inc.



By: M Withey