

MPTA-B4c-2008R 2013

STANDARD SURFACE FINISH for  
TRANSMISSION PULLEYS



MPTA Standard

## Contributors

<b>B&amp;B Manufacturing, Inc.</b>	<b>LaPorte, IN</b>	<a href="http://www.bbman.com">www.bbman.com</a>
<b>Baldor Dodge Maska</b>	<b>Greenville, SC</b>	<a href="http://www.baldor.com">www.baldor.com</a>
<b>Carlisle Transportation Products, Inc.</b>	<b>Franklin, TN</b>	<a href="http://www.carlisletransportationproducts.com">www.carlisletransportationproducts.com</a>
<b>Custom Machine &amp; Tool Co., Inc.</b>	<b>Hanover, MA</b>	<a href="http://www.cmtco.com">www.cmtco.com</a>
<b>Emerson Industrial Automation</b>	<b>Maysville, KY</b>	<a href="http://www.powertransmissionsolutions.com">www.powertransmissionsolutions.com</a>
<b>Gates Corporation</b>	<b>Denver, CO</b>	<a href="http://www.gates.com">www.gates.com</a>
<b>Goldens' Foundry &amp; Machine Co.</b>	<b>Columbus, GA</b>	<a href="http://www.gfmco.com">www.gfmco.com</a>
<b>Lovejoy, Inc.</b>	<b>Downers Grove, IL</b>	<a href="http://www.lovejoy-inc.com">www.lovejoy-inc.com</a>
<b>Martin Sprocket &amp; Gear, Inc.</b>	<b>Arlington, TX</b>	<a href="http://www.martinsprocket.com">www.martinsprocket.com</a>
<b>Maurey Manufacturing Corp.</b>	<b>Holly Springs, MS</b>	<a href="http://www.maurey.com">www.maurey.com</a>
<b>TB Wood's Incorporated</b>	<b>Chambersburg, PA</b>	<a href="http://www.tbwoods.com">www.tbwoods.com</a>
<b>Torque Transmission</b>	<b>Fairport Harbor, OH</b>	<a href="http://www.torquefans.com">www.torquefans.com</a>
<b>Veyance Technologies, Inc. Goodyear Engineered Products</b>	<b>Fairlawn, OH</b>	<a href="http://www.goodyearrep.com/PTP">www.goodyearrep.com/PTP</a>

## Disclaimer Statement

This publication is presented for the purpose of providing reference information only. You should not rely solely on the information contained herein. Mechanical Power Transmission Association (MPTA) recommends that you consult with appropriate engineers and /or other professionals for specific needs. Again, this publication is for reference information only and in no event will MPTA be liable for direct, indirect, incidental or consequential damages arising from the use of this information.

## Abstract

This standard defines the maximum surface finish for transmission pulleys.

## Copyright Position Statement

MPTA publications are not copyrighted to encourage their use throughout industry. It is requested that the MPTA be given recognition when any of this material is copied for any use.

## Foreword

This foreword is provided for informational purposes only and is not to be construed to be part of any technical specification.

This standard was updated to the format defined by MPTA-A1. The contributors list was updated to reflect the current members. No technical revisions were made.

Suggestions for the improvement of, or comments on this publication are welcome. They should be mailed to Mechanical Power Transmission Association, 5672 Strand Court, Suite 2, Naples, FL 34110 on your company letterhead.

## Scope

This informational bulletin applies to v-groove sheaves, cylindrical (flat) pulleys and synchronous sprockets.

The machined surface finish of various areas of transmission pulleys shall not be coarser than the values in Table 1 below:

TABLE 1

	<b>Maximum Surface Roughness Height</b>
<b><u>Machined Surface Area</u></b>	<b><u>Ra (Arithmetic Average)</u></b>
V-Pulley Groove Sidewalls	3.2 Micrometer (125 Microinch)
V-Pulley OD and Rim Edges	6.3 Micrometer (250 Microinch)
Flat Pulley Rim ODs	6.3 Micrometer (250 Microinch)
Trapezoidal Synchronous Pulley Tooth Flanks and Tips	3.2 Micrometer (125 Microinch)
Curvilinear Synchronous Pulley Tooth Flanks and Tips	1.6 Micrometer (63 Microinch)
Rim IDs, Hub Ends, Hub ODs	As Cast Surface
Bores – Straight and Tapered	3.2 Micrometer (125 Microinch)
* Note: The measuring methods defined in ASME-B46.1 shall be used to determine these values.	

## END OF DOCUMENT