

Issued 1942-03
Revised 1996-08
Reaffirmed 2012-11
Superseding AS82A

**Screw Thread Form, American National,
Modified (National Round - NR)**

RATIONALE

AS82B has been reaffirmed to comply with the SAE five-year review policy.

1. SCOPE:

This SAE Aerospace Standard (AS) defines an external thread with a rounded root radius based on a minimum root radius of $.108 \times \text{Pitch}$.

2. REFERENCES:

ANSI/ASME B1.1 Unified Inch Screw Threads (UN and UNR Thread Form)
FED-STD-H28 Screw Thread Standards for Federal Services
MIL-S-8879

3. The external screw thread form with rounded root outlined herein is intended for application to highly stressed parts. Screws conforming to this document will properly mate with parts tapped in accordance with the American National Form of Thread, having a depth of engagement not in excess of 75% of the basic thread.

**PREPARED BY SAE COMMITTEE E-25,
GENERAL STANDARDS FOR AEROSPACE PROPULSION SYSTEMS**

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

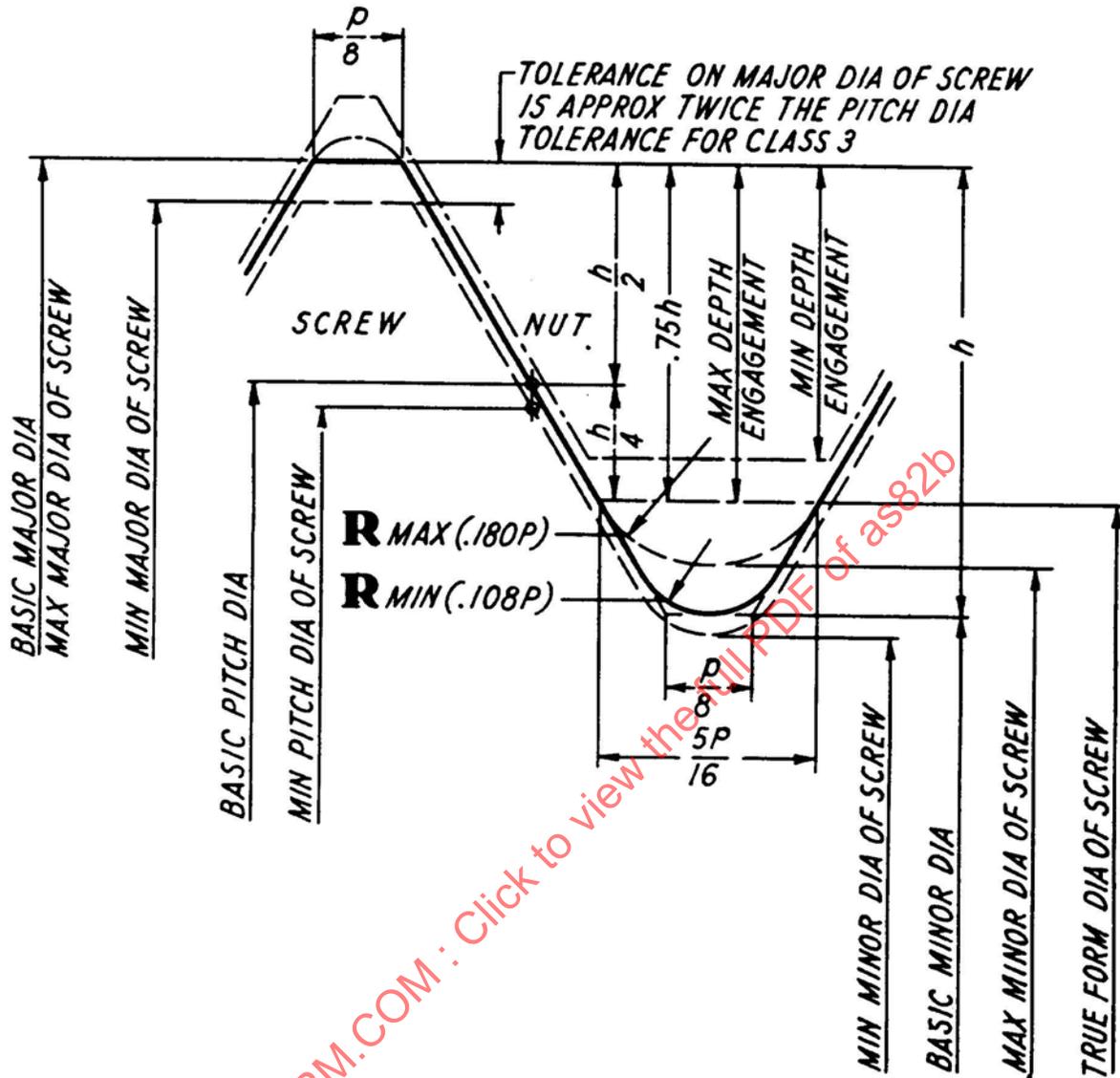
SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2012 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: <http://www.sae.org>

**SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS82B>**



NOTE: The curvature of the round R at the root of the thread may differ from a true circular arc, so long as the minimum radius of any portion of the rounded root profile is not less than that of the prescribed minimum radius.

FIGURE 1