

# TABLE OF CONTENTS

| SECTION    | SECTION TITLE                       | CONTENTS DESCRIPTION   |
|------------|-------------------------------------|--|
|            | <i>Introduction</i>                 | Copyright Notice, Foreword, Metrication and Standardization Background and Preface   |
| <b>GEN</b> | <i>General Information</i>          | Reference Publications, Contacts for Standards, Metric Equivalent Charts, Selected Rules for Communicating in the SI Metric System, Surface Roughness Conversion, Tolerance Information, Component Identification, Page Formatting, Logsheet |
| <b>A</b>   | <i>Air Cylinders</i>                | Air Cylinders, Mounting Brackets & Accessories   |
| <b>C</b>   | <i>Aerial Cam Specs</i>             | Cam Envelope, Cam Performance Calculation, Dimensions and Performance Charts   |
| <b>D</b>   | <i>Stamping Dies Cast Materials</i> | Gray Cast Iron, Ductile Iron, Non-Alloyed and Alloyed Steel, and Tool Steel  |
| <b>F</b>   | <i>Fasteners</i>                    | Screws, Nuts, Washers, Lock Washers and Pull Dowels  |
| <b>G</b>   | <i>Guide &amp;Gage Components</i>   | Guide Blocks, U & V-Blocks, Center Guides & Keys, Guide Pins, Guide Pin Bushings, Pad Bushings, Bushing Toe Clamps, Disappearing Gages   |
| <b>L</b>   | <i>Lift Components</i>              | Reusable Lift Pins, Lift Pin Liners  |
| <b>M</b>   | <i>Miscellaneous</i>                | Tooling Ball, Scrap Chute Bracketry  |
| <b>N</b>   | <i>Nitrogen Cylinders</i>           | Nitrogen Cylinders, Hose Fittings, O-Ring Face Fittings, Control Panel   |
| <b>P</b>   | <i>Punches &amp;Buttons</i>         | Punches, Retainers, Urethane Punch Strippers, Punch Stripper Retainers & Backing Plates, Standard Punches, Ejector Punches, Pilots, Die Buttons (Standard & Tapered Relief)  |
| <b>R</b>   | <i>Retaining Components</i>         | Keeper Blocks, Cam Gibs, Gib Plates, Spool Retainers, Pad Retaining Pins, Pad Standby/ Lock-up Pins  |
| <b>S</b>   | <i>Springs &amp;Accessories</i>     | Wire Springs, Spring Cages, Fiber Belted Rubber Springs  |
| <b>W</b>   | <i>Wear Components</i>              | Standard Wear Plates, Cam Dwell Wear Plates, Wear Strips   |

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These standards are subject to periodic review and may be revised on a page-by-page basis. Users are cautioned to refer to the latest revision.

# METRICATION AND STANDARDIZATION BACKGROUND

The potential benefits for commonized or standardized tooling within the auto industry have been recognized for several decades; however, progress had been virtually nil. At the December, 1991 annual meeting of the Michigan Tooling Association (MTA), the MTA members proposed to the automotive representatives from Chrysler LLC, Ford Motor Company, and General Motors Company in attendance that the auto industry consider the challenge of commonization or standardization one more time. The intent of this type of endeavor would be to:

- Reduce overall stamping and assembly tooling cost
- Provide standardized metric convention for tooling
- Provide standardized metric componentry for tooling
- Reduce the variety of functionally similar items.

The automotive representatives suggested that the Auto/Steel Partnership (A/SP) could provide an appropriate avenue for pursuing this activity since the A/SP had exhibited an excellent success rate for efforts and projects of this nature. Subsequent to the MTA meeting, the A/SP and the Industrial Development Division of the University of Michigan hosted an “ad hoc” group of representatives from the three automotive companies and the Michigan Tooling Association in January, 1992 to determine if they felt further standardization discussions could lead to a mutually satisfactory end point. The participants in this initial meeting concluded that:

1. A mutually satisfactory end point could be reached
2. The Auto/Steel Partnership could provide the appropriate avenue for this effort. In February, 1992 the A/SP Joint Policy Board agreed to sponsor and fund commonization/standardization activities related to automotive stamping and assembly tooling.

After several meetings with the tooling and automotive communities, singularly and collectively, these communities agreed to form the Stamping Tooling Standardization Group (STSG) in May, 1992 to address potential development and adoption of common stamping tooling standards. A similar group, the Assembly Tooling Standardization Group was also formed at the same time to address potential development and adoption of common assembly tooling standards.

The NAAMS Global Standard Components Team, which was originally chartered as the North American Automotive Metric Standards Project Team (NAAMS) is one of several Project Teams organized within the Stamping Tooling Standardization Group. The result of the NAAMS effort is a compendium of recommended automotive tooling practices related to metric convention as well as several thousand standardized hard metric components. Ford, General Motors, and Stellantis have adopted a substantial portion of these standards for use in stamping die design, specification and construction.

In December 2009, the A/SP discontinued its sponsorship of both NAAMS Assembly and NAAMS Stamping. The decision was based on the realization that the steel companies, who jointly funded the projects, were receiving no direct benefits from them. Sponsorship was transferred to the United States Council for Automotive Research (USCAR) effective January 1, 2010.

Both USCAR and the A/SP recognize that the true NAAMS success belongs to the representatives of the supplier and automotive companies who dedicated significant time and effort to this activity. They have participated in numerous meetings since 1992.

The NAAMS Stamping Standards were released as a printed book in January 1995. In 1997 they were placed on the NAAMS website providing worldwide access.

# PREFACE

This set of standards is a companion to the NAAMS Global Standard Components – Assembly. The products described herein are applicable to, or components of, steel stamping tools designed and built for the North American automotive companies, i.e., Ford Motor Company, General Motors Company, and Stellantis and their supplier/support companies. The standards have been developed to establish metric measurements for envelope dimensions and operational characteristics for the various components specified for stamping tools used by the North American automotive companies.

The NAAMS Global Standard Components Project Team was responsible for determining the dimensions and characteristics for each component and organizing the standards in their final form. The only exception is Section F, Fasteners, which was developed jointly with the NAAMS Assembly Teams. Items within this standard reflect a balanced representation of the various manufacturers and users of the products. All agreements and concessions made by the individual participants were for the general good of the standardization process.

Approval and control for these standards, and authority to add, delete, modify, etc., currently rests with the United States Council for Automotive Research. All communication related to the NAAMS Project Team, or standards, should be made through the NAAMS Project Manager, Telephone (248) 867-8840, or e-mail: [bodepm@yahoo.com](mailto:bodepm@yahoo.com).

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