1.0 Purpose

1.1.0 To define the standard tolerances used by D+M Metal Products and their use.

2.0 Scope

2.1.0 This procedure applies to all manufacturing operations at D&M Metal Products. These standard tolerances apply to product produced at D+M when:

1) Tolerances are not stated on the blue print.

2) Customer approval/request to supercede stated blue print tolerances.

3.0 Responsibility

	Responsibility	Authority
Operators	Maintain all tolerances as specified by prints	Stop production of out of tolerance parts and adjust or repair the process.
QC	Maintain all tolerances as specified by prints	Require production to stop because of out of tolerance conditions.

4.0 Definitions

4.1.0 None

5.0 Applicable Documents

5.1.0 MF-WI-004 Standard Job Process

5.2.0 MF-WI-013 Welding Set-Up Procedure

6.0 Work Instruction

6.1.0 The standard tolerances are as stated:

6.2.0 Overall size of a flat section: 11ga and thinner up to 48" long ±0.015; 10ga and thicker up to 48" long ±0.030, all thicknesses over 48" long ±0.030

6.3.0 Feature location on the same surface: 11ga and thinner feature to edge ±0.015; 10ga and thicker feature to edge ±0.030; feature to feature all thicknesses ±0.010.

6.4.0 Hole size: Pem holes - within .003 total range; holes .500 and smaller ±.003; holes .501 to 1.000±0.005; holes 1.001 and larger ±0.010.

6.5.0 Forms: Angle ±1°; Form dimension 14ga and thinner ±0.020 Form dimension 13ga - 10ga ±0.030; Form dimension thicker than 10ga ±0.050

6.6.0 Assemblies: Assembly requirements can vary dramatically from one product to the next and are often fit and function based. See Engineering for needed definition on specific products.

7.0 Figures

7.1.0 None

8.0 Flowchart

8.1.0 None

Revision Date	Description	Written By	Approved By
4/27/2005	Release	GGrund	RBuist
1/26/2006	Revised scope by adding item 2	RBuist	RBuist
2/25/16	Added Applicable Documents	P. Holiday	P. Holiday