

GENERAL DYNAMICS

Ordnance and Tactical Systems

Weapons Systems Supplier Quality Requirements Site 21-Quality – Williston VT / Saco ME

Quality Clause	Revision	Phase In Date
Q800	0	04/05/2019

Q800–Test and Inspect Instructions-Gear Data Table

Requirements

Gear Drawings contain Gear Data Tables that list all pertinent data required to manufacture Gears to AGMA & ANSI requirements as specified. Gear Data Tables contain information that would be categorized in (3) basic types of manufacturing information; 1) Reference Data, 2) Cutting Data & 3) Checking Data.

Some Gear Data Tables on drawings currently list and identify the parameters into the (3) categories and are defined, some drawings do not identify the (3) categories.

For those drawings that do not provide Gear Data Table parameters into the (3) categories use the following instructions to identify the correct parameters with the respective categories.

Data to be recorded for FAI and Sampling Inspections are inclusive to category 3) Checking Data.

Spur Gear - Reference Data: Number of Teeth; Diametral Pitch; Pressure Angle; Arc Tooth Thickness; Tooth Form; Base Diameter; Meshes With

Spur Gear - Cutting Data: Form Diameter; Minor Root Diameter; Minimum Root Fillet Radius; Diameter of Pins; Diameter Measurement Over Pins; Tooth Surface Texture

Spur Gear - Checking Data: Master Gear (Pitch-Number of Teeth); Center Distance Radius; Total Composite Error; Tooth to Tooth Composite Error

Gear Notes: Optional Specialized Information Specific to Gear

Helical Gear - Reference Data: Number of Teeth Normal; Diametral Pitch Normal Pitch; Diameter Normal Pressure; Angle Normal Arc Tooth; Thickness Tooth Form; Base Diameter; Meshes With

Helical Gear - Cutting Data: Form Diameter; Minor Root Diameter; Minimum Root Fillet Radius; Hand of Helix; Helix Angle; Diameter of Balls; Diameter (Measurement) Over Balls; Tooth Surface Texture

Helical Gear - Checking Data: Master Gear (Pitch-Number of Teeth); Center Distance Radius; Total Composite

Printed copy for reference only.

For current version, see: www.gd-ots.com/Williston/QC/

Error; Tooth to Tooth Composite Error

Gear Notes: Optional Specialized Information Specific to Gear