Document No.: ASF742-1-AMS QQP 416-MOD	Revision: J
Document Title: CAD Plating Supplemental	Rev Date: 1/29/2019
Approval: CMCB	Created: 10/27/14

Rev	Date	Rev description
C	9/1/15	Added Finish choices
D	10/4/16	MIL CAD scrubbing process
E	10/18/16	Added reference BEL-QS-0004
F	1/9/18	Adding hub plating thickness requirements
G	2/6/18	Adding inspection report requirement
H	4/27/18	Removing address from header; Removing inspection reporting requirement for hub plating thickness; updated footer.
I	11/2/2018	Removed Finish section; adding requirements for MPI, notch bar handling, packaging and handling of plated parts, plating thickness certification and inspection reporting requirements
J	1/29/2019	Revising inspection frequency and location; added Hydrogen embrittlement reporting requirements

PURCHASE ORDER INFORMATION

Process per attached print for class and type.
Lot traceability must be maintained.

REPORTING REQUIREMENTS
PROCESS CERTIFICATION
INSPECTION REPORT (MIL SPEC YOKES AND DERIVATIVES)
Inspection frequency – per SAE-AMS-QQ-P-416 or four samples; whichever sample size is greater.
Measurement Technique – ASTM B659 if specified on drawing or default to SAE-AMS-QQ-P-416
Measurement Location - plating thickness must be recorded at locations 3, 4, and 5 (specified in note 1) for four samples only. For the remainder of the samples, measure in location 4 only.
(www.beldenuniversal.com/about/suppliers)
Supplier HE Testing – Applicable monthly tank hydrogen embrittlement test report to be provided with order if test report for notch bars run with the order is not available at time of shipment.

NON-DESTRUCTIVE TESTING – as specified on drawing

POST-BAKE HYDROGEN EMBRITTLEMENT RELIEF
For HRc 33 and above – 375 degrees F +/-25 degrees F for 46 hr minimum

NOTCH BARS – as specified on purchase order
SUPPLIER-PROVIDED NOTCH BARS – as specified on purchase order
ASTM F519. Certification must include the certificate of manufacture for notch bars, hydrogen embrittlement test report and supplier's job number on all cert pack documents. Notch Bars also need to be traceable to the certification and test report.
In instances of failed hydrogen embrittlement tests, the supplier shall be liable for rework (stripping and re-plating) and expediting costs.

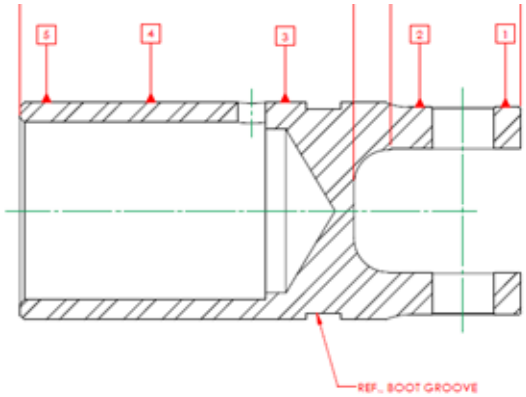
BELDEN-PROVIDED NOTCH BARS
Belden will provide notch bars. Supplier shall ensure the threads are masked and plated notch bars are individually packaged to preserve their integrity during transportation. Refer to Belden's website for details at www.beldenuniversal.com/about/suppliers

In instances of failed hydrogen embrittlement tests, the supplier shall be liable for rework (stripping and re-plating) and expediting costs.

THICKNESS INSPECTION REPORT – applicable to MIL spec yokes and derivatives only

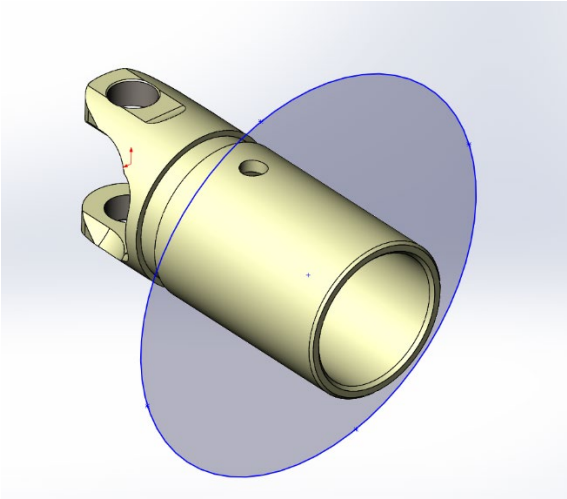
Note 1: Location
Plating thickness to be measured in locations 3, 4, and 5. Average thickness will not be acceptable. Any thickness reading below minimum shall be cause for rejection. Refer to Belden's website for details at www.beldenuniversal.com/about/suppliers

Contact Belden if part geometry prohibits plating thickness inspection when required.



Note 2: Hub plating thickness

Plating thickness must be conforming to SAE-AMS-QQ-P-416 on yoke hub (low current density area). Plating thickness in high current density areas can subsequently be oversized. Refer to Belden's website for details at www.beldenuniversal.com/about/suppliers



PLATING APPEARANCE

Acceptable plating appearance in accordance with BEL-QS-0004. Refer to Belden's website for details at www.beldenuniversal.com/about/suppliers

PACKAGING AND HANDLING

Plated parts must be returned to Belden packaged in such a manner that protects the integrity of the plating.