

SPECIAL CHARACTERISTICS — Section 1

Customer Critical Characteristics are those product requirements (dimensions, performance tests) or process parameters that can affect compliance with government regulations or safe vehicle product function. These are identified on the print: Ford: CC (∇) *Critical Characteristic*, Chrysler: <S> (Shield), and GM: <S/C> (∇) *Safety Compliance*.
ZF Lenksysteme (A)

Customer Special Characteristics are those product features that affect subsequent operations, product function, or customer satisfaction. Special Characteristics are established by the customer engineer, quality representative, and supplier personnel from a review of the Design and Process FMEAs. These are identified on the print: Ford: SC (no symbol) *Significant Characteristic*, Chrysler <D> (◇) *Key Characteristic*, and GM: <F/F> (◇) *Fit/Function*.
ZF Lenksysteme (FK- Function Critical) (PK- Process Critical)

Powers & Sons Special Characteristics consist of two additional special characteristics, which are not Customer Characteristics. These are identified on the print as follows:
M — *Major* — affects customer special characteristics as defined in the AIAG *PPAP Manual*, but are not identified by our customer.
K — *Key* — affects Powers & Sons ability to manufacture.

GENERAL REQUIREMENTS FOR ALL SPECIAL CHARACTERISTICS

All special characteristics will be identified on the part print.
Controls for Special Characteristics must be documented in the PFMEA, Control Plan, and Operator Instructions. Controls are determined by a cross-functional team. The team will include representatives from Powers & Sons and the supplier. The team members will represent Quality, Engineering, Manufacturing and Production respectively. Controls may include, but are not limited to: Poke-Yoke, method of tooling, fixturing, Preventive Maintenance, Tool Maintenance, Inspection, and/or SPC.

CUSTOMER CRITICAL AND SPECIAL CHARACTERISTICS:

There are additional requirements for Customer Critical and Special Characteristics:

Customer Critical and Special Characteristics shall be controlled appropriately, as the APQP team decides. If SPC controlled, the process should be stable and capable. The APQP approved control plan will be the driving document explaining control methods used.

Scheduled periodic (quarterly, annually) capability studies may be required per the APQP team and documented in the control plan and submitted as part of the annual recertification requirements.

Reference AIAG *PPAP Manual* for additional clarification if needed.