材 料 代 用 申 请 单

APPLICATION FORM OF MATERIAL SUBSTITUTION

零件号 Part Number:	零件名称 Part Name:	日期 Date:	
供应厂商 Supplier:			
	材料规格 Material Standard[1]	材料牌号 Material Grade	相关尺寸 Product Form
在图纸上的材料的要求 Material Requirements on the Drawing			
拟代用或拟采用 Substitute Material			

化学成分 Chemical Composition	指定元素 Specified Elements	**C**	**Mn**	**Si**	**S**	**P**			
	拟代用材料 Substitute Material								
材料特性 Material Characteristics		**抗拉强度 Tensile Strength (MPa)**	**屈服强度 Yield Strength (0.2% offset) (MPa)**	**断面伸长率 Ultimate Elongation (%)**	**硬度 Hardness**				
	原设计材料 Original Material								
	拟代用材料 Substitute Material								

申请人 Supplier 日期 Date 申请单位（盖章） Supplier(Signed)	Nexteer Product Engineer Nexteer Materials Engineer 审核 Approval 日期 Date
备注 Remarks：	

[1]Any revision of the substitute material standard requires “re-approval” by Nexteer.

Instructions

Purpose of the form: This form is to be used to document product engineering approval to allow usage of a similar material being manufactured to the material manufacturer's specification in lieu of an industry, Nexteer, or customer standards. This should only be used when the material supplier or part manufacturer
will not certify to an existing industry, Nexteer, or customer standard, and is the best business decision.

When to use the form:
This form should be submitted to Nexteer Global Supply Management, and introduced at the tech review when it is needed.

How to use the form:
The form shall be filled out and signed by the supplier to demonstrate that they understand the original and substitute material. The substitute material specification shall be submitted with the form, and an English translation is required. The form shall then be given to GSM who shall consult the product engineer and the responsible materials engineer. The form will be evaluated to determine if the material information is correct and if the material is suitable for the application. If the substitute standard is approved the form is to be signed by the materials engineer, and the product engineer and stored, by GSM, in the PMD. The drawing shall be revised to include a note referencing this form.

How to fill out specific fields:

Part Number, Part Name, Supplier, Date- Basic information about the part shall be provided.

Material Standard- The standard that the material is made to shall be in this field. For example, GB/T 699, SAE J 403, JIS G 3141, and DIN EN 10305-2. The revision level is to be included. The name of the raw material manufacturer shall be included as well as the material standard.

Material Grade- The name of the grade of material should be in this field. For example, Grade 20, 1010, SPHC, and E235+C.

Product Form- In the case where dimensions can affect the material characteristics listed in the material standard those dimensions should be listed in this field. For example, the wall thickness of a tube.

Chemical Composition- This field shall contain the elements as specified in the substitute material specification. The fields shall include the limits required in the material standard, and not just the values from a specific lot of material, or nominal values.

Material Characteristics- These columns shall be unique requirements of the material as specified on the part drawing or the material standard. If the material standard and the part drawing have the same material characteristic specified, the part drawing is the requirement. Properties in this field are not limited to mechanical properties and includes all material properties specified on the part drawing. The fields should include the limits required in the material standard and not the values from a specific lot of material or nominal values.