ПРИЛОЖЕНИЕ А

Полезно запомнить (PDA Rule)

Direction Measured

11	Uniaxial property in material direction one	
22	Uniaxial property in material direction two	
33	Uniaxial property in material direction thre	
12	Biaxial property in material plane one-two	
13	Biaxial property in material plane one-thre	
23	Biaxial property in material plane two-three	

Attribute

T	Tension		
С	Compression		
В	Bearing, Brinell		
F	Flexure		
SB	Short Beam Shear		
SP	Punch Shear		
SR	Rail Shear		
ST	Torsional Shear		
RX	Rockwell Scale X		
٧	Vickers		
K	Knoop		
E	Extensional (Young's) Modulus		
NU	Poisson Ratio		
G	Shear Modulus		

CTE	Coefficient of Thermal Expansion		
CME	Coefficient of Moisture Expansion		
CTC	Coefficient of Thermal Conductivity		
CMD	Coefficient of Moisture Diffusivity		
CP	Specific Heat at Constant Pressure		
YS	Yield Strenght		
US	Ultimate Strength		
UE	Ultimate Elongation		
GC	Critical Energy Release Rate		
KC	Fracture Toughness Coefficient		
PL	Proportional Limit		
K	Bulk Modulus		
Н	Hardness		
SN	Fatigue Strength		

Шпаргалка по свойствам материалов

Short, descriptive names for the attributes in the database.

Mnemonics Used in MSC Databank Products

XXX	Property Measured (1-3 letters designation)
IJ	Direction Measured (1-2 integers designation)
12002	200 CON 10 20 LCO W WE SEE LOOKED 10

AA Attribute for Direction One (1-2 letters)
KL Secondary Direction (1-2 integers)
BB Attribute for Direction Two (1-2 letters)

Example:

US PROPERTY measured is "ultimate strength"

11 DIRECTION is "11" indicating the fiber or one-direction

TT The ATTRIBUTE is "tensile"

Операторы запросов

Operator	Meaning	Expression Type
"=" or "EQ"	equal	numerical, character
">" or "GT"	greater than	numerical
"<" or "LT"	less than	numerical
">=" or "GE"	greater than or equal to	numerical
"<=" or "LE"	Less than or equal to	numerical
"LIKE"	lexically equal	character
"EX"	Exists	numerical, character
"AND"	Both must be true	numerical, character
"OR"	Either must be true	numerical, character
"NOT"	Must be false	numerical, character

Примеры запросов

E11T > 10 Young's Modulus is greater than 10

E11T > E22T Young's Modulus in the warp direction is

greater than that in the fill direction

E11T/DENS > 10 Specific stiffness is greater than 10

DESIG LIKE 'AL*' Find all aluminum alloys.

(The "*" is a wildcard - the rest of the DESIG character values can be

anything).

CPvsT EX The figure of specific heat versus

temperature exists.