1013.3.b. con't

2. A magnetomechanical coupling factor (k) of more than 0.8; **or**

3. c. Amorphous or nanocrystalline alloy strips having all of the following characteristics:
   1. A composition having a minimum of 75 weight percent of iron, cobalt or nickel;
   2. A saturation magnetic induction (B_s) of 1.6 T or more; **and**
   3. Any of the following:
      a) A strip thickness of 0.02 mm or less; **or**
      b) An electrical resistivity of 2×10^{-4} ohm cm or more.

   Technical Note:
   'Nanocrystalline' materials in 1013.3.c. are those materials having a crystal grain size of 50 nm or less, as determined by X-ray diffraction.

4. Uranium titanium alloys or tungsten alloys with a "matrix" based on iron, nickel or copper, having all of the following:
   a. A density exceeding 17.5 g/cm^3;
   b. An elastic limit exceeding 1,250 MPa;
   c. An ultimate tensile strength exceeding 1,270 Mpa; **and**
   d. An elongation exceeding 8%.

5. "Superconductive" "composite" conductors in lengths exceeding 100 m or with a mass exceeding 100 g, as follows:
   a. Multifilamentary "superconductive" "composite" conductors containing one or more niobium-titanium filaments:
      1. Embedded in a "matrix" other than a copper or copper-based mixed "matrix"; **or**
      2. Having a cross-section area less than 0.28×10^{-4} mm^2 (6 µm in diameter for circular filaments);
   b. "Superconductive" "composite" conductors consisting of one or more "superconductive" filaments other than niobium-titanium, having all of the following:
      1. A "critical temperature" at zero magnetic induction exceeding 9.85 K (-263.31°C) but less than 24 K (-249.16 °C);
      2. With a cross-section area less than 0.28×10^{-4} mm^2; **and**
      3. Remaining in the "superconductive" state at a temperature of 4.2 K (-268.96°C) when exposed to a magnetic field corresponding to a magnetic induction of 12 T.

6. Fluids and lubricating materials, as follows:
   a. Hydraulic fluids containing, as their principal ingredients, any of the following compounds or materials:
      1. Synthetic hydrocarbon oils or silahydrocarbon oils, having all of the following:
         Note:
         For the purpose of 1013.6.a.1., silahydrocarbon oils contain exclusively silicon, hydrogen and carbon.
         a) A flash point exceeding 477 K (204°C);
         b) A pour point at 239 K (-34°C) or less;
         c) A viscosity index of 75 or more; **and**
         d) A thermal stability at 616 K (343°C); **or**
      2. Chlorofluorocarbons, having all of the following:
         Note:
         For the purpose of 1013.6.a.2., chlorofluorocarbons contain exclusively carbon, fluorine and chlorine.
         a) No flash point;
         b) An autogenous ignition temperature exceeding 977 K (704°C);
         c) A pour point at 219 K (-54°C) or less;
         d) A viscosity index of 80 or more; **and**
         e) A boiling point at 473 K (200°C) or higher;
   b. Lubricating materials containing, as their principal ingredients, any of the following compounds or materials:
      1. Phenylene or alkylphenylene ethers or thio-ethers, or their mixtures, containing more than two ether or thio-ether functions or mixtures thereof; **or**
      2. Fluorinated silicone fluids with a kinematic viscosity of less than 5,000 mm^2/s (5,000 centistokes) measured at 298 K (25°C);
   c. Damping or flotation fluids with a purity exceeding 99.8%, containing less than 25 particles of 200 µm or larger in size per 100 ml and made from at least 85% of any of the following compounds or materials:
      1. Dibromotetrafluoroethane;
      2. Polychlorotrifluoroethylene (oily and waxy modifications only); **or**
      3. Polybromotrifluoroethylene;
   d. Fluorocarbon electronic cooling fluids having all of the following characteristics:
      1. Containing 85% by weight or more of any of the following, or mixtures thereof:
         a) Monomeric forms of perfluoropolyalkylether-triazines or perfluoroaliphatic-ethers;
         b) Perfluoroalkylamines;
         c) Perfluorocycloalkanes; **or**
         d) Perfluoroalkanes;
      2. Density at 298 K (25°C) of 1.5 g/ml or more;
      3. In a liquid state at 273 K (0°C); **and**
      4. Containing 60% or more by weight of fluorine.

   Technical Note:
   For the purpose of 1013.6.:
   a. Flash point is determined using the Cleveland Open Cup Method described in ASTM D-92 or national equivalents;
   b. Pour point is determined using the method described in ASTM D-97 or national equivalents;
   c. Viscosity index is determined using the method described in ASTM D-2270 or national equivalents;
   d. Thermal stability is determined by the following test procedure or national equivalents:
   Twenty ml of the fluid under test is placed in a 46 ml type 317 stainless steel chamber containing one each of 12.5 mm (nominal) diameter balls of M-10 tool steel, 52100 steel and naval bronze (60% Cu, 39% Zn, 0.75% Sn);
   The chamber is purged with nitrogen, sealed at atmospheric pressure and the temperature raised to and maintained at 644 ± 6 K (371 ± 6°C) for six hours;
   The specimen will be considered thermally stable if, on completion of the above procedure, all of the following conditions are met:
   1. The loss in weight of each ball is less than 10 mg/mm^2 of ball surface;
   2. The change in original viscosity as determined at 311 K (38°C) is less than 25%; and
   3. The total acid or base number is less than 0.40;
   e. Autogenous ignition temperature is determined using the method described in ASTM E-659 or national equivalents.

7. Ceramic base materials, non-"composite" ceramic materials, ceramic-"matrix" "composite" materials and precursor materials, as follows:
   a. Base materials of single or complex borides of titanium having total metallic impurities, excluding intentional additions, of less than 5,000 ppm, an average particle size equal to or less than 5 µm and no more than 10% of the particles larger than 10 µm;