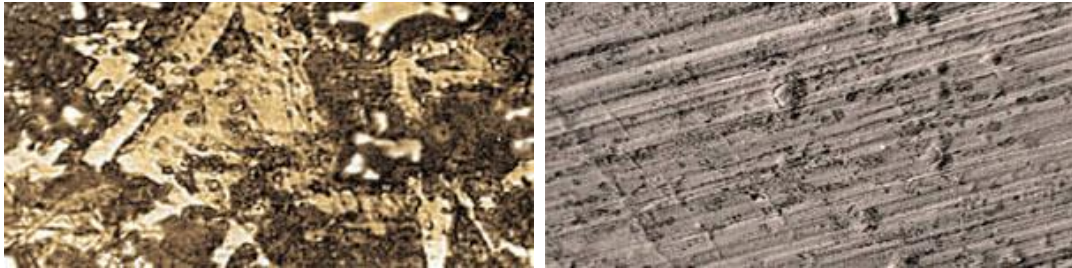


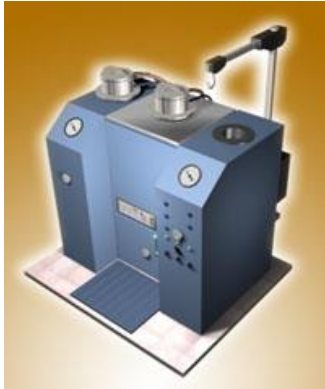


## ADVANCED DEVELOPMENTS IN MATERIALS

- **Wearproof surfacing of component parts by highly efficient doped alloys:**
  - does not contain expensive and scarce components, and is highly efficient;
  - exceeds in abrasive resistance the alloys Sormait-1, ЧХ28 (according to State Standard ГОСТ 17367-71 test);
  - reduces costs by 2-3 times.



- **Design, development and manufacture of parts made of glass-reinforced resin and carbon fiber:**
  - scope – car skins, boat hulls and reusable molds for casting metal and non-metal materials;
  - technological materials with high specific strength characteristics.
- **Diffusion metallized coating of steels and tungsten carbides:**
  - stability of properties under various operating conditions;
  - high adhesion at the expense of mutual penetration.



- **New powder materials design and raising the quality of the existing ones:**
  - making high density product with a fine-grained structure;
  - improvement of mechanical and performance properties;
  - the hardness increase by 1.5 times;
  - the tensile strength increase when tested by 1.6 times.
- **Composite materials based on PTFE-4 (CFFC):**
  - manufacture of parts of friction assemblies and seals of fixed connections;
  - 5-8 times more effective than the existing counterparts.