## **Hardfacing**

- -Also referred to as hardsurfacing
- -ls the melting of very hard metal powders and welding them onto another base metal surface
  - -this may also be done using a special type of welding rod to hardsurface a tool or machine part
- -Some tools and heavy equipment such as bulldozer blades, plow blades, backhoe bucket teeth, etc. are subjected to a great deal of wear in the field. These can be protected against wear by **hardening** the area prone to wear
  - -one way of doing this is to heat the area with a welding torch and then melting a special metal over it. The new metal will be extremely resistant to wear
  - -another common method of hardfacing heavy equipment is to simply lay weld beads on the desired area (much like completing a pad of beads). After running the required amount in one direction parallel to one another, start a new pad on top at a 90 degree angle to the first pad
- -The most common hardfacing materials are non-ferrous cobalt-chromium-tungsten alloys