

# Iran's key nuclear sites

Iran has broken UN seals on its nuclear enrichment facility at Natanz, pledging only to conduct research. The International Atomic Energy Agency has warned that if the centre is run at full capacity, Tehran could be just "months away" from developing its first nuclear weapon

## 1 Saghand – mining:

Uranium ore discovered 1985. Mining set to begin late 2006, with 120,000 tonnes of ore yielding some 50-60 tonnes of uranium annually

## 2 Ardkan – milling:

Ore is purified to uranium ore concentrate (**UOC**), also known as **yellowcake**.

Facility can produce 60-70 tonnes annually

## 3 Gehine: Iran is

developing second mine and milling facility to produce 24 tonnes of yellowcake annually

## 4 Isfahan – conversion:

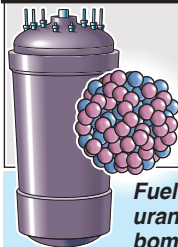
Yellowcake is cleansed of impurities and converted chemically to uranium hexafluoride gas, cooled, and condensed to a solid known as **hex**

## 5 Natanz – enrichment:

Gas centrifuges used to increase proportion of uranium-235 isotope in hex. Fuel for **light water reactor**, used for electricity production, requires around 2.5-3.5% of U-235



**Khuzestan: New reactor planned**



**Fuel for uranium bomb needs**

**U-235 to be enriched to over 90%. Enrichment suspended Nov 2004**

**6 Tehran:** Enrichment facility at **Kalaye Electric Company** dismantled. Research reactor and radioactive waste storage facilities still operating

**7 Bushehr:** Russian-built light water reactor is due to start up 2006. Can produce **reactor-grade** plutonium in spent fuel

**8 Arak:** Heavy water research reactor – better suited for **weapons-grade** plutonium production

**9 Anarak:** Nuclear waste storage site