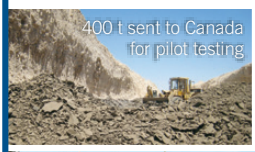
Meeting the Needs of Jordan

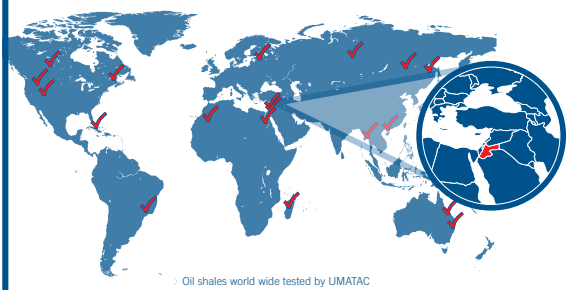


KARAK INTERNATIONAL OIL

JORDAN ENERGY & MINING

ThyssenKrupp

ThyssenKrupp Polysius



Oil shales world wide tested by UMATAC

Global Experience with Local Focus

- Extensive pilot test program on Jordan shale
- Detailed oil and ash testing
- Ongoing optimization work

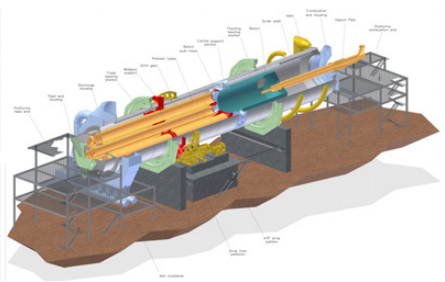
Producing oil in Jordan, for Jordan.

ATP Technology: Efficient, Widely Demonstrated, Proven

Drying

Retorting

Coke combustion & heat transfer



High availability in single train.

Simple to operate.

Successfully piloted on oil shales world wide.

Other technologies rely on separate sub-processes.

The ATP Processor is a single unit, offering integrated solids transport and isolation of process vapours for better recovery efficiencies and greater reliability.

KIO Project: Economically & Environmentally Sound

Benefits to Jordan High oil recovery, electricity for export, sulphur and phosphate for fertilizer, and ash for the cement industry.

Displaces imports, creates jobs and royalties for Jordan.

CO_2 Emissions Comparable Carbon footprint of the project is comparable to other oil resources.

Water Use Low ATP processor requires almost zero water.

Water reduction strategies are in place for the major users: cooling, oil upgrading, flue gas and ash handling.

Ash handling 2012 goal: raw water **0%** ***recycled water*** 100%