## **Case Study: Iron Ore**

Initial Waste Material Concentration in Feed = 30 %



Let us assume that we have a material stream out of the mine with the capacity of 500 t/h. This stream has the waste material content of 30%

The material stream enters the OSX, which in this case has the separation efficiency of 90%.

A typical iron ore processing plant used about 315 kWh/t iron ore.

By implementing OSX into the existing iron ore plant facilities, you can achieve huge cost savings.



Results: Production capacity increase: +37% Waste disposal reduction after processing: -87% Let us assume that we have the same energy consumption. We also assume that the material stream into the processing plant is the same as before (500 t/h). However by using the OSX we reduce the concentration of waste materials in the feed.

By increasing the material stream out of the mine (with the same 30% fraction of waste material), we can increase the production capacity by 37%. In addition we reduce the waste disposal after processing by 87%.

## Comex