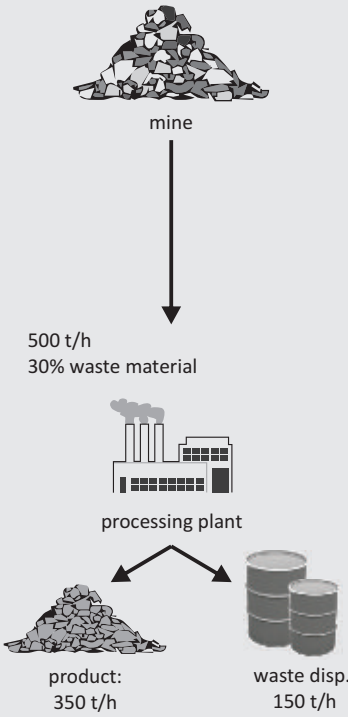
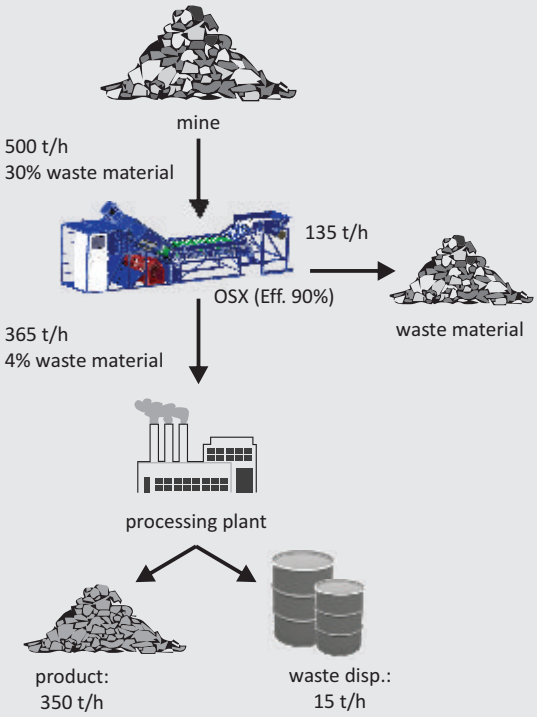
Case Study: Iron Ore

Initial Waste Material Concentration in Feed = 30 %

Today's Solutions



Comex



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 %

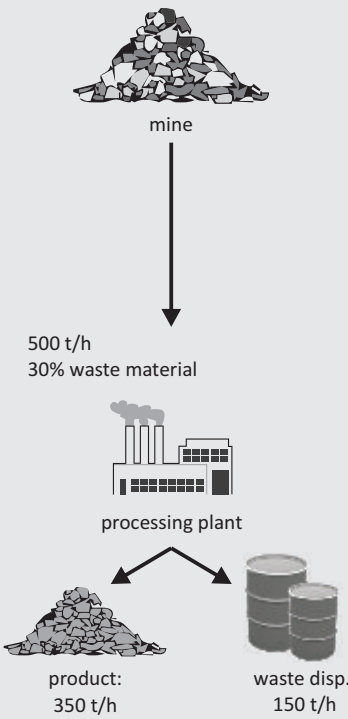
The material stream enters the OSX, which in this case has the separation efficiency of 90 %.

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

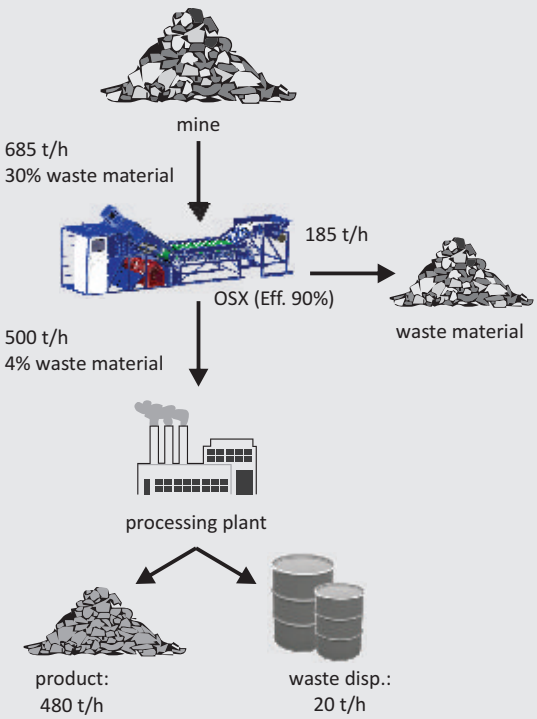
By implementing OSX into the existing iron ore plant facilities, you can achieve huge cost savings.

Results: Energy consumption reduction: -26%
Waste disposal reduction after processing: -90 %
Reduced transport requirement from the mine to the plant: -27%

Today's Solutions



Comex



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.

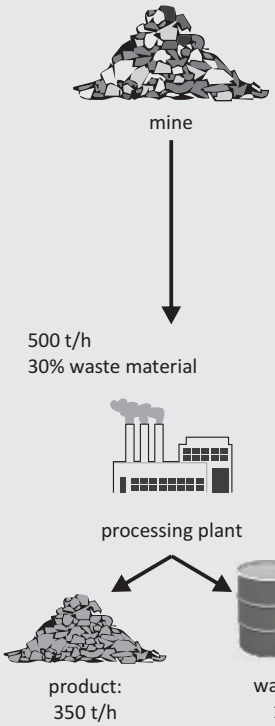
By increasing the material stream out of the mine (with the same 30% fraction of waste material), we can increase the production capacity by 37%. In addition we reduce the waste disposal after processing by 87%.

Results: Production capacity increase: +37%
Waste disposal reduction after processing: -87%

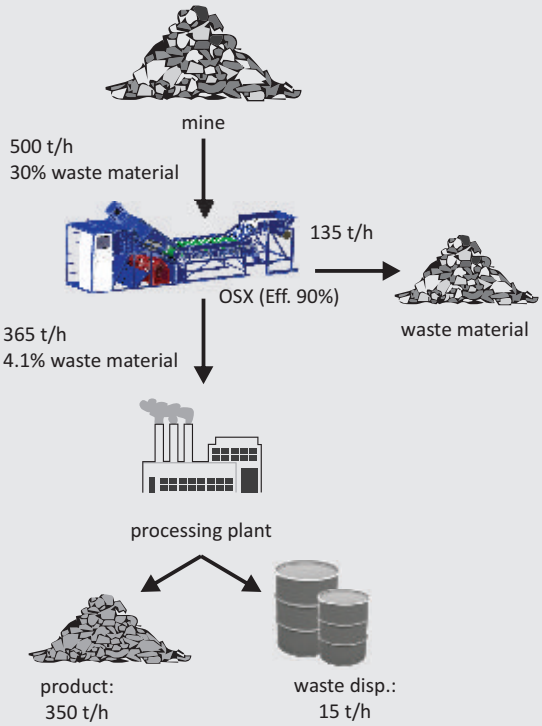
Case Study: Coal

Initial Waste Material Concentration in Feed = 30 %

Today's Solutions



Comex



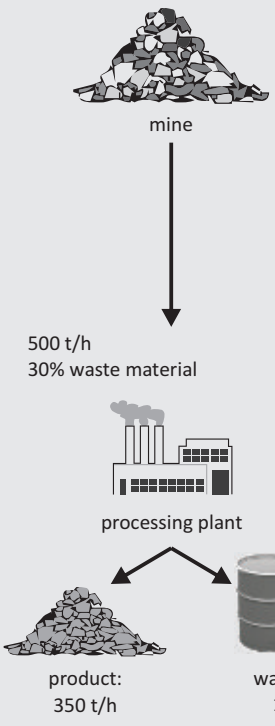
Let us assume that we have the material stream out of the mine with a capacity of 500 t/h. This stream has the waste material content of 30 %

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

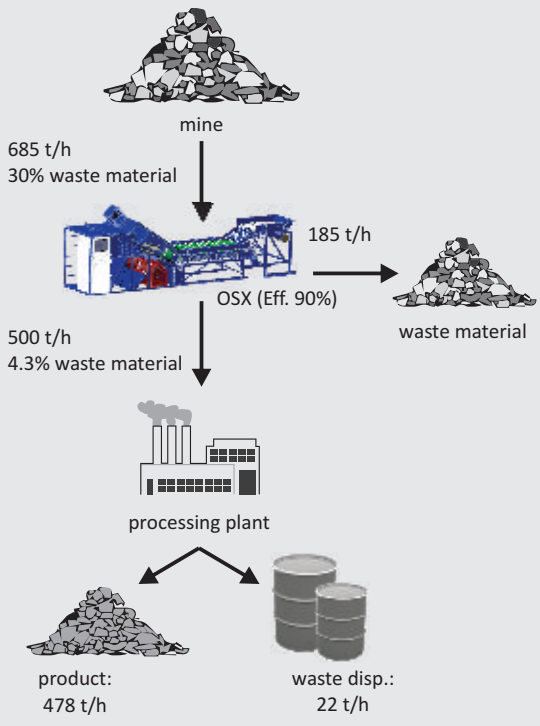
By implementing OSX into the existing coal plant facilities you can achieve huge saving when it comes to waste disposals and transport requirements between the mine and the processing plant.

Results: Waste disposal reduction after processing: - 90%
Reduced transport requirement from the mine to the plant: - 27%

Today's Solutions



Comex



Let us assume that we have the same material stream into the processing plant as before (500 t/h). However by using the OSX we reduce the concentration of waste material in this stream, which affects the production capacity.

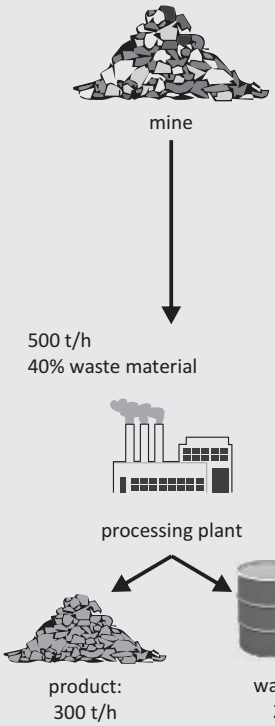
By increasing the material stream out of the mine (with the same 30% fraction of waste material), we can increase the production capacity by 37 % and at the same time we reduce the waste disposal after processing by 85%

Results: Production capacity increase: + 37%
Waste disposal reduction after processing: - 85%

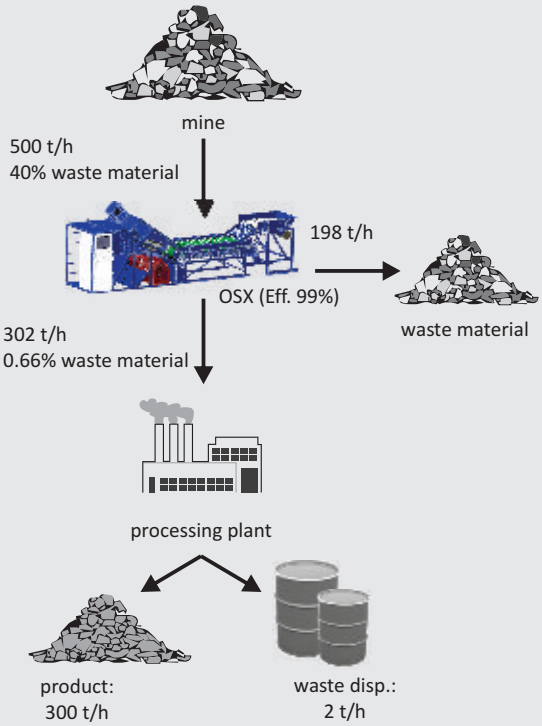
Case Study: Quartz

Initial Waste Material Concentration in Feed = 40 %

Today's Solutions



Comex



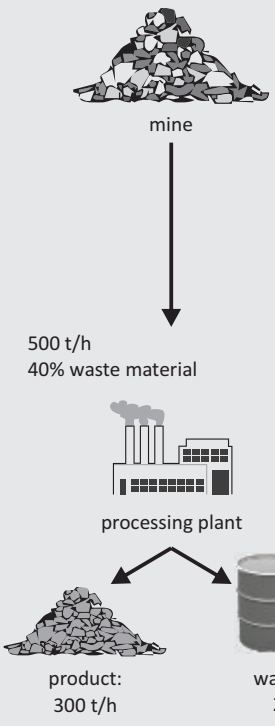
Let us assume that we have a material stream out of the mine with a capacity of 500 t/h. This stream has the waste material content of 40 %

The material stream enters the OSX, which in this case has the separation efficiency of 99 %.

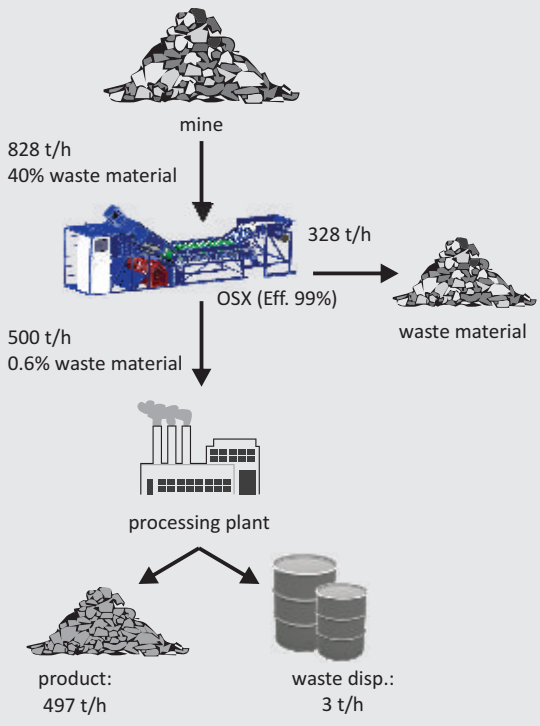
By implementing OSX into the existing quartz plant facilities, you can achieve huge savings when it comes to waste disposals and transport requirements between the mine and the processing plant.

Results: Waste disposal reduction after processing: - 99%
Reduced transport requirement from the mine to the plant: - 40%

Today's Solutions



Comex



Let us assume that we have the same material stream into the processing plant as before (500 t/h). However by using the OSX, we reduce the concentration of the waste materials in this stream, which affects the production capacity.

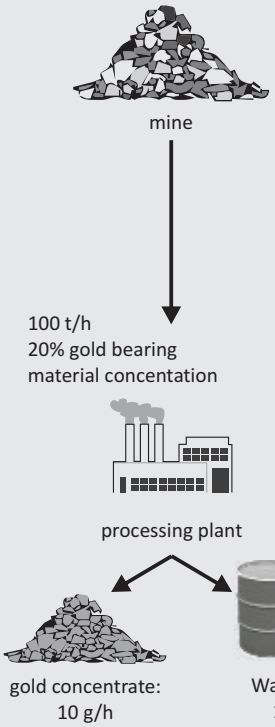
By increasing the material stream out of the mine (with the same 40% fraction of waste material), we can increase the production capacity by 66%. In addition we also reduce the waste disposal after processing by 99%

Results: Production capacity increase: + 66%
Waste disposal reduction after processing: - 99%

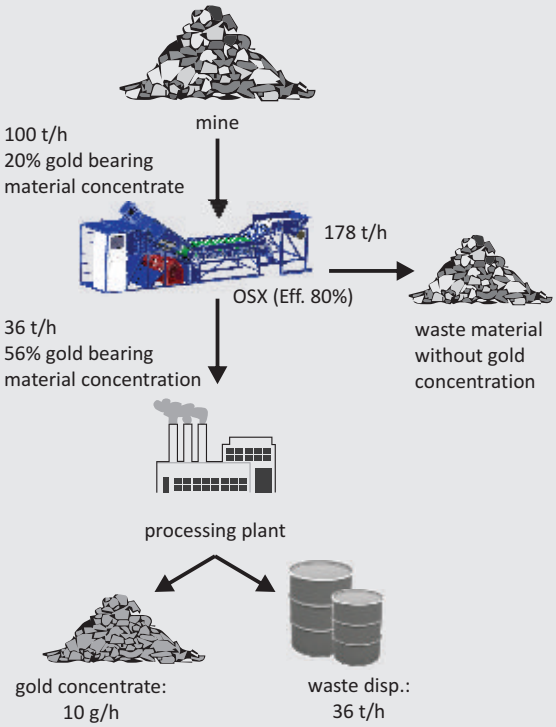
Case Study: Gold

Initial Gold Bearing Material Concentration in Feed = 20%

Today's Solutions



Comex



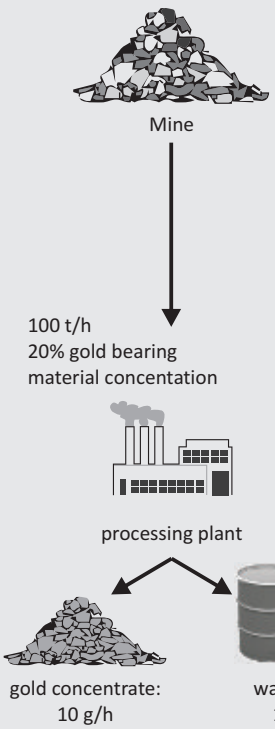
Let us assume that we have the material stream out of the mine with the capacity of 100 t/h. This stream has the gold bearing material concentration of 20 %.

The material stream enters the OSX, which in this case has the separation efficiency of 80 %.

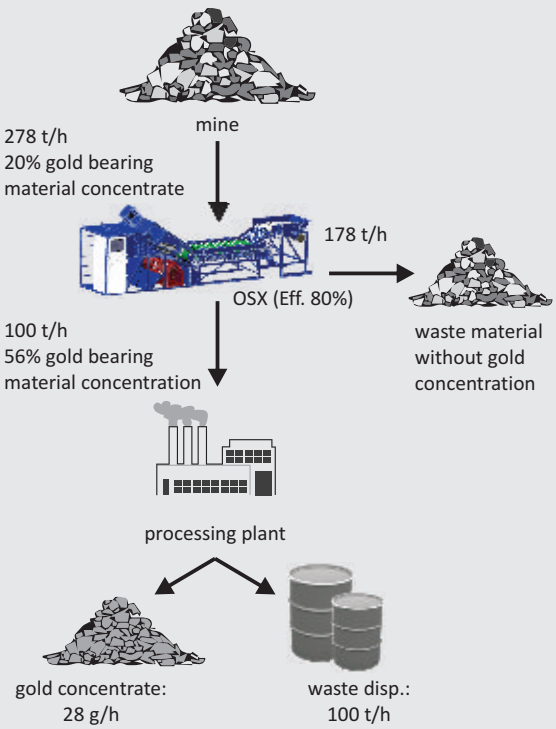
By implementing OSX into the existing gold processing plant facilities, you can achieve huge savings when it comes to energy consumption and waste disposals.

Results: Energy Consumption Reduction: - 67%
Waste Disposal Reduction: - 64%

Today's Solutions



Comex



Let us assume that we have the same material stream into the processing plant as before (100 t/h). However by using the OSX, we upgrade the gold bearing material concentrate from 20 % to 56 %.

In this configuration, it is possible to increase the gold production by 180 %.

Results: Gold production increase: + 180%