

# TSCHUDI

## IT'S TIME TO SHINE

Namibian copper miner and developer *Weatherly International* has forecast its annual production output to increase to 25 000 t by no later than 2016. This is thanks to its new *Tschudi* project which is earmarked to produce first copper cathode in Q2, 2015 and a massive 17 000 tpa of copper at steady-state production CEO *Rod Webster* tells *Laura Cornish*.

### IN SHORT

Emerging new copper mine Tschudi will see owners Weatherly International undergo a major status transformation from small scale to mid-tier miner

Situated in Namibia just 25 km from Tsumeb, the Tschudi copper project has a major year ahead of it. In order to achieve first production early in 2015, the majority of development work must be completed over the next 12 months, starting in January.

"Compared to our two small underground operations Otjihase and Matchless which require technical sophistication to produce relatively small tonnages, Tschudi will be a simple open cast operation with state-

of-the-art high-level metallurgical processing," Webster states. To give perspective between the mining operations, both underground mines employ 600 people to produce 7 000 tpa of copper (estimated production for 2014). Based on a contractor outsourced model, Tschudi requires only 500 employees to deliver 17 000 tpa.

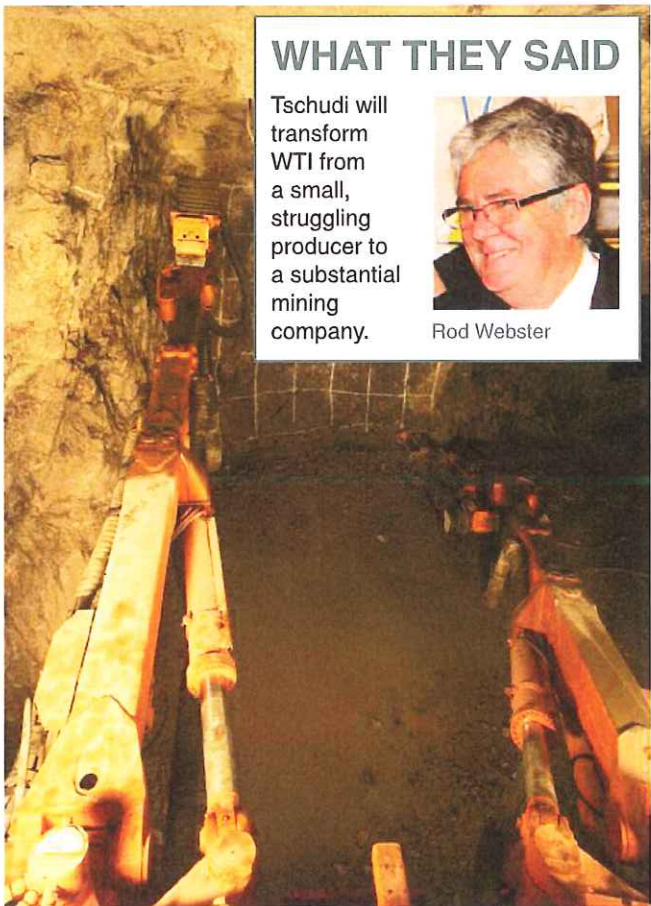
"Based on the current copper price, we have an 11 year operational 200 m deep pit capable of producing 17 000 tpa of copper from a run rate

of 17 Mtpa. With mining contractor Basil Read Mining already appointed to run the operation, it becomes a less risky process," he continues.

And while the average grade is relatively low (just under 1%), Weatherly International (WTI) has spent years working on and refining a process which will compensate accordingly. Thanks to its "unique" ore body which has been deeply weathered, the solution is ideal. The company is set to be the first in Namibia to use heap leaching to extract the copper from the ore, after which it will undergo a solvent extraction/electrowinning (SX-EW) hydrometallurgical process to upgrade the copper from the leached solution to generate a copper cathode product.



Aerial view of Tschudi site



## WHAT THEY SAID

Tschudi will transform WTI from a small, struggling producer to a substantial mining company.



Rod Webster

Going underground at Tschudi to gain access to the ore body and get bulk samples to ascertain their leach potential

The company spent two years working on the leaching process. "We ran 21 test columns over a year at Mintek's facilities in South Africa, simulating every blend of ore. The test columns replicated the height and size of the 6 m high pads which will be erected on site. "Coupled with the fact that 20% of the world's copper production is delivered via this process, we have minimised the chance of failure. SX-EW by-passes both smelting and refining steps, is low in cost and a well understood and simple process."

Financially, WTI is fully covered. In September 2013 the company announced that it had secured a US\$91 million loan facility, divided into three tranches, from mining financier Orion Mine Finance. The first US\$80 million tranche will cover the expected capital expenditure on the project. There is also an

## FEASIBILITY RESULTS

Production mine type	Open pit
Resources	50.1 Mt at 0.86% copper
Reserve	22.7 Mt at 0.95% copper
Mining rate	~ 17 Mtpa
Mine life	11 years
Stripping ratio	7.45:1
Processing method	SX-EW
Processing rate	2-2.6 Mtpa of ore
Recovered copper	184 275 t
Annual production	~17 000 tpa

US\$8 million overrun facility, and an additional US\$3 million loan which will be repaid to commodity group Louis Dreyfus. The debt facility, which has an interest rate of 7% over the London Interbank Borrowed Rate on the main tranche, runs for six and a half years, the first two years have a repayment holiday and the loan will be repaid over a four and a half year period.

WTI drew down on the first tranche a month after securing it and has retained its commitment to deliver first copper 16 months from date of first draw down on loan facility – the beginning of Q2, 2015. "In order for the project construction to flow smoothly, most major item orders were placed late last year along

with outstanding design work. This has enabled the new year to start with full-scale development. "An SX-EW plant is not complicated and comprises very few major long lead items. In simple terms a typical plant consists of the leach pads, ponds, a tank house and pipes, pumps and sumps," Webster points out.

WTI has appointed South African contractors for all major project work which in addition to Basil Read Mining include engineering and project management firm Logiman, who has been awarded the full EPC contract, which although a fixed price is more of a partnership. This arrangement enables WTI to retain the right to sign off on all designs

and awards of various packages. "Our management is and will remain very involved in the project alongside Logiman. They are a boutique group with well-versed experience on this type of process and have brought their A-team to the table, which makes a good recipe for success." Crushing specialist B&E International will oversee the crushing and stacking facility.

Unlike most new mines in Africa, there is sufficient power and water for Tschudi. A nearby sub-station will supply 8 MW of power and there will be surplus water from the open pit to meet the project's water requirements. "The one major challenge which has been fortunately resolved is the acid we will need for leaching. Fortunately, a new \$2.3 billion (Namibian dollars) sulphuric acid plant is under construction in Tsumeb and is due to come online around the same time as Tschudi. It will take care of all our acid requirements."

Although development is the primary focus, Webster notes that the company is continuing with exploration work along strike, adding that there is some potential to pick up satellite pits. There is also the possibility of an underground mine once the pit is finished.

"Tschudi will transform WTI from a small, struggling producer to a substantial mining company, although it must be said that it was the cashflow from our underground operations that have made the Tschudi development possible" **MRA**

## FINANCIAL STATUS (AS AT APRIL 2013)

<b>Focus Projects</b>	Copper in Namibia Tschudi Otjihase Matchless
<b>Stock exchange</b>	London Stock Exchange Alternative Investment Market (AIM)
<b>Date of listing</b>	July 2006
<b>Market cap</b>	GBP16.2 million
<b>Net income/ (loss) from continuing operations</b>	US\$ (425 000)
<b>Basic earnings per share from cont. operations</b>	US cents 0
<b>Net cash flow from operating activities</b>	US\$1.86 million
<b>Employees</b>	600