

# Umbonowethu

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*by Adey Wynne  
(Chief Executive  
Officer)*

# The First Word

in 2012/13, largely because of the diffuser chain failure. The USM Team absorbed this 'knock' well and has responded by fixing the problem PROPERLY! This trial has had a positive 'spinoff' for USM. In an effort to avoid similar trials in future, the USM Team now wants to increase its focus on preventative maintenance. The USM Team wants to improve its systems and reporting. The USM Team wants to capture increased efficiencies and recoveries. The USM Team now effectively wants to focus on: **"ATTENTION TO DETAIL"**.

It is wonderful that this growing momentum of "attention to detail" is something that has developed within the USM Team, by the USM Team. Yes, an increasing focus on "attention to detail" puts pressure on USM Team players, but this growing internal momentum for USM to be the "winning Team" means that this pressure is constructive. A "winning" USM Team means there is more value to be shared through the Team USM Bonus. A "winning" USM Team gives all of us purpose and fosters a competitive and fun atmosphere. Viva USM, viva!

A wise man once told me that "calm seas don't make for good sailors and clear skies don't make for good pilots". Facing challenges and rising up to challenges is what builds character and is what builds excellence. In this regard, the diffuser chain failure has been a wonderful blessing to USM. This particular challenge has 'knitted' the USM Team together and has made us stronger and more determined than ever.

As I mentioned in my general presentation to all USM staff in the factory canteen on 7 March 2013, the coming season will have new challenges; some known and some unknown. Nevertheless, despite our growing passion for "attention to detail" and in our drive to be the "winning Team" we must not forget the 'basics', which includes:

- To continually communicate our team vision, passion and purpose; our focus!
- To continually express our appreciation to one another; we need to actively look for the good people do and to keep saying please and thank-you.

- To continually make people feel part of the USM Team; creating a sense of belonging is important.
- To continually help those around us to grow; we must challenge and develop each other candidly and we must not be too busy to mentor.
- To continually celebrate small results; small wins create energy and momentum that adds up to big wins!

To make a start then, and to lead by example, our team vision, passion and purpose are as follows:

## "To be the most admired sugarcane processor in South Africa"

### Medium Term

260 TCH x 83% OTE x 36 week season = 1.3 million tons of cane

### 2013/14 Season

Cane crushed	1 200 000 tons cane
Overall recovery	85.40 %
LTA	6.25 %
Sugar Bagged (all pack sizes)	93 300 tons sugar
Sugar Cost	R997 / ton sugar
Health and Safety	1.00 Disabling Injury Frequency Rate (DIFR)
Sugar Quality	1 100 ICUMSA
Budgeted Profit	R44 million (subject to final Board approval)

The 2013/14 season is looking to be an exciting one and I look forward to working along-side all of you as we focus on "attention to detail" and face its challenges 'head on'!

As always, work smarter, work together, have fun and be safe!

*Adey*



**On the cover:** Enock Mnyandu is the operator of "Shosholoza" USM's 30 tons lift capacity GROVE RT530 crane. The crane was imported from the United States and arrived at the mill during January 2002. Legend has it that "Shosholoza" as it is affectionately known was the chosen name after USM ran a crane naming competition and refers to how the crane is going forward, always busy in the plant executing its different tasks at different locations.

The new diffuser chain arrived from Belgium, Europe at the end of February and good progress had been made in preparing for its installation. By the time the Umbonowethu will be published the USM Team will in all likelihood be preparing for steam trials, with the expected first cane crush on 3rd April.

We all know that a good off-crop program lays the foundation for a good crushing season. By all accounts the off-crop program has progressed well and I expect the factory will be well prepared for the large cane crop that continues to grow!

As a mill we are budgeting to crush 1.2 million tons, which will be more than USM has crushed since its inception in April 2009. The available crop is, however, estimated to be in excess of 1.28 million tons and the factory has the potential capacity to crush 1.3 million tons in a 36 week season.

There is an opportunity, for the USM Team to exceed the budget and score on the Team USM Bonus system in the 2013/14 season, which unfortunately yielded a zero bonus



*The Mtuba Christian Academy (MCA) was identified as an academic beneficiary due to the lack of high schools with a high academic standard available in the area for USM staff and residents of Mtubatuba. The scholarships are focussed on high school learners and the number of scholarships awarded dependent on the applications received and a selection process by the school. We wish our young students all the best for a very successful 2013.*

*The USM 2013 MCA scholarship beneficiaries are (front) fltr Chante Gordon Gr 8, Nhlanhla Dube Gr 8 and (back) fltr Sibusisiwe Ndwandwe Gr 10 Ntombenhle Maphanga gr 10 and Akiel Bhagwandass Gr 8.*

# Maintenance is key to plant availability

by Samkelo Matsebula, Process Engineer

No doubt that 2012/13 was a difficult year for USM. The Lost Time Available (LTA) of 18.52% was too high and rains made matters worse. The plant did not crush all our cane as a result of the high plant down time. We ended up -150,702 tons cane short of the budget and our coal usage went over the roof too, with 4,952 tons above budget. The Overall Recovery was 2.93 % below budget.

A lot of work is being undertaken this off-crop to address the slow crush and down time we had in the past season. This includes installation of a new diffuser chain. Good plant maintenance in all the sections is key in improving plant availability and cutting down the LTA.

## Bagging Plant

	BUDGET	ACTUAL	VARIANCE
1 Ton	40,000	31,272	-8,728
25 kg	20,000	5,178	-14,822
<b>Total</b>	<b>60,000</b>	<b>36,450</b>	<b>-23,550</b>

There is more focus on sugar quality this coming season and the mill will eliminate quality rejects. Better Rare Earth Magnets will be installed to prevent rust contamination and Better Air Filters on the dryers will eliminate all non-magnetic foreign particles coming into contact with the product. The planned modification should eliminate customer complaints this season.

The sugar screws above the bins are being modified to improve reliability and a better rotary screen performance is expected after a slight planned modification on one of the sugar screws. Better plant availability will allow the plant to meet the new targets.

We also plan to bag most of the sugar as better revenue is generated on bagged sugar than on bulk. Let me take this opportunity to wish USM a prosperous 2013/14 season.

## Weekly Factory Performance Report - Ending: 23 December 2012

DESCRIPTION	WEEK	WK BUDGET	VAR	TODATE	TD BUDGET	VAR
<b>CANE &amp; EXTRACTION</b>						
TONS CANE	15298	0	15298	1029298	1180000	-150702
TCH	182	250	-68	229	250	-21
SUCROSE % CANE	11.08	0.00	11.08	12.88	13.30	-0.42
FIBRE % CANE	15.95	0.00	15.95	14.47	14.04	-0.43
MIXED JUICE PURITY (SUC)	80.75			85.20		
FIBRE/HR	29.11	32.18	-3.07	33.10	32.39	0.71
BRIX/HR	23.50	35.28	-11.78	33.27	36.11	-2.84
EXTRACTION (SUC)	94.18	0.00	94.18	96.45	96.99	-0.54
IMB. % FIBRE	309.05	350	-41	333	350	-17
BAGASSE MOIST.	51.86	50.00	-1.86	51.33	50.00	-1.33
<b>EFFICIENCIES</b>						
ENG EFFICIENCY	93.13	89.80	3.33	86.62	95.61	-8.99
OPS EFFICIENCY	100.00	95.83	4.17	97.82	98.03	-0.21
O.T.E.	63.02	0.00	63.02	72.07	79.85	-7.78
LOST TIME % AVAILABLE	7.33	0.00	-7.33	18.52	6.34	-12.18
HOURS NO CANE STOPS	41.83			396.92		
<b>ENERGY</b>						
STEAM % CANE	86.59	57.00	-29.59	63.29	57.00	-6.29
TONS COAL BURNT	295	0	-295	9648	4696	-4952
POWER EXPORTED				1296800		
BOILER EFFICIENCY						
<b>SUGAR RECOVERIES</b>						
TONS SUGAR M&E	838	0	838	110028	134882	-24854
TONS SUGAR MADE	3361			110030		
TONS MOLASSES M&E	1022	0	-1022	43768	46574	2806
TONS MOLASSES MADE	1974			43837	0	
B.H.R.	52.15	0.00	52.15	85.50	88.04	-2.54
O.R.	49.12	0.00	49.12	82.46	85.39	-2.93
UNDETERMINED LOSS	27.65	1.50	-26.15	3.40	1.50	-1.90
MOLASSES LOSS	19.73	0.00	-19.73	10.79	9.20	-1.59
FILTER CAKE LOSS	0.47			0.31		
MOLASSES PURITY (POL)	35.82			35.23		
LATEST MOLASSES TPD	11.90			6.70		
<b>ENVIRONMENTAL</b>						
RAW WATER CONSUMPTION	13911			64658		
EFFLUENT C.O.D.	0	75	75	53	75	22
EFFLUENT PH	0.0	7.0	7.0	7.7	7.0	-0.7
TONS EFFLUENT	773			45754		
<b>FOOD SAFETY</b>						
MOULDS	1	100	99	47	100	53
YEAST	0	100	100	54	100	46





# The Eagle Has Landed

The long awaited diffuser chain arrived in Durban harbour on 19 February after spending a little over a month at sea. According to engineering manager Bongani Sithole, "The reliability of the equipment must be at the highest standard, there is no room for error. Less LTAs (breakdowns) from the diffuser will improve the plant availability and equate to the smooth running of the plant in general."

The chain was procured from Waterloo, Belgium and shipped by Maersk Caberinto. The route of the chain's shipping vessel took it to ports in Europe, Brazil and other South American ports and only crossed the Atlantic Ocean to reach Durban harbour, during last week. The diffuser chain arrived at USM on Sunday 24 February and is expected to be operational for the start of the new season in April.



# Off-crop feedback

*by Bongani Sithole,  
Engineering Manager*

The silence of the mill during the off-crop season is by no means and indication of the activity levels on the plant. This is, on the contrary a very busy time for our employees. Off-crop is a period during which we do a lot of maintenance in the plant, and it can never be emphasised enough how important working safe and conducting risk assessments are for each activity we undertake. Extreme heat, the additional safety issues with all the contractors on site all adds up to making this time a little bit more challenging.

I am very positive that the 2013/14 season will be a better year for USM team. Applying the attention to details principle in each and every task we do will bring fruitful results at the end of the season.

Please be encouraged and work smart so that you will add value to the supply chain or integrated system by continuously looking for improvements.

Special attention is paid to these three attributes during the 2013 off-crop;

- Attention to detail,
- Continuous improvement, and
- Zero tolerance for unsafe acts in the workplace.

We've also been able to identify and separate off-crop activities so that we can improve on the following targets for 2013/14 season:

- Maximizing the cane to crush to 1.20 million tons
- Engineering efficiencies of 95.71%; the LTA of 6.25% and reduce coal burn to 4295 tons
- Overall recoveries of 85.40%

The following projects and major equipment overhauls are part of the current off-crop, and a word of appreciation must go to all USM employees on the impressive progress of the work done so far.

- The diffuser project is by far the biggest and most exciting project for the mill and is on commissioning on the 22 of March 2013.
- T-Rack project has been completed.
- The bagging station plant modification project will enable the mill to achieve the maximum 1 ton and 25kg bags loaded during the crushing season. The plant equipment reliability is very important and the changes that are taking place will ensure that the throughput and quality are improved. This project will be completed before we start up the plant in April.
- ICW pumps and pipe repairs and V1 piping repairs is progressing well with no issues.
- The boiler 3 coal feeders (2 of 4) modification is also progressing very well.
- The project to partially rewind the APE alternator rotor is complete and fitting would have commenced halfway through March.
- Our evaporator vessel re-tubing project is progressing well and no issues are reported.



*Playing a vital role in our off-crop preparations for the new season is the three masters of their trade in the Hammer and Fabrication workshop. They are from left to right, Thembenkosini Khumalo, Sibusiso Ndabandaba and Bernard Hlongwane.*

# Distribution Control System (DCS) T-RACK UPGRADE

What is a T-Rack, and more important why does the mill need to upgrade it? This article, a collective literary effort by the instrumentation department, should shed more light on the subject of T-Racks. If it does not, the members of the instrumentation department have issued an open invitation to those readers that are keen to learn more about the complex and innovative inners of how sugar is made, to join them for a tour.

*by Instrumentation Department*

More commonly known as I/O (input/output) interface modules T-Racks are used as a gateway to gather critical measured data from the factory. The data, for example pressure, flow and level then transmits corrective action back to field control devices for example valves, drives and trip circuits thus allowing for safe plant operations while maintaining process control within desired parameters.

So simply put, without a T-Rack the DCS is just a very fancy piece of hardware with extremely limited functionality.

The decision to embark on this project stems from a failure of all the IO's between the field and central processing units, with no real time information being processed. This failure eliminated 90% of the protection and control on both turbines which compromised the safety of the people and the plant and could have resulted in huge financial loss and equipment.

In order to minimize the risk and continuous crushing, the failed unit was repaired and swapped with a unit from a different section of the plant. Based on the possible repercussion of such failure and the knowledge that the supplier does not supply nor support our now redundant T-Rack it was decided to upgrade the I/O to the latest Siemens ET200M modules.

Having minimal time during the off-crop season and a vast amount of planning and engineering, the initial deadlines seemed quite a challenge. Needless to say the instrumentation department pulled through with great precision and detail and the project was successfully cold commissioned and handed over to the operations department on time and within budget.

The team is now looking forward to hot commissioning during steam trials and a successful 2013 season.



**BEFORE**

*OLD T-Rack front view*



**AFTER**

*NEW ET200M front view*

## Meeting Etiquette

**Proper etiquette for business meetings establishes respect among meeting participants, helps the meeting begin and end on time, and fosters an atmosphere of cooperation.**

**ARRIVAL:** Arrive to the location of the business meeting at least 15 minutes early.

**AGENDA:** The chairperson of the meeting should circulate a meeting agenda to each participant at least one week in advance.

**BE PREPARED:** Each participant should come to the meeting with all of the materials and data she will need and an understanding of the meeting topic.

**SPEAKING:** Keep the meeting organized by only speaking when you have the floor. Ask questions during the designated question period, and raise your hand to be recognised by the chairperson as having the floor. Do not interrupt someone while they are speaking or asking a question.

**LISTEN:** You may find that many of the questions you have about a topic are answered by the content of the meeting. Listen attentively to the meeting and take notes.

**NERVOUS HABITS:** Avoid nervous habits such as tapping a pen on the table, making audible noises with your mouth, rustling papers or tapping your feet on the floor.

**CELL PHONES AND LAPTOPS:** Turn off your cell phone prior to the start of the meeting. If you are expecting an urgent call, then set your phone to vibrate and excuse yourself from the meeting if the call comes in. Unless laptop computers have been approved for the meeting, turn yours off and lower the screen so that you do not obstruct anyone's view.

**GUESTS:** Do not bring unannounced guests to a meeting. If you have someone you would like to bring to a meeting, and then contact the chairperson for permission to bring your guest.



# Cane Supply

"Sugar cane crops are looking promising," this according to Nhlakanipho Dlodlo, cane supply manager is despite less heat during December and January due to wet weather. Dlodlo said that the mill's estimate crushing for the new season of 1 282 910 tons is a 20% increase compared to this previous season's final deliveries. He said that this estimate was brought about by the good rains in the past couple of months and the increase in the carry over cane. He's also issued a challenge to the factory team for the new season, "Keep crushing and we'll keep the cane coming."

## 2013/2014 Mill estimate breakdown per group

Large Scale Trams	807 421
Small Scale Trams	10 200
Large Scale Road	361 913
Small Scale Road	128 376
Total Home Cane	1 307 910
Inward Diversion	130 000
Outward Diversion	155 000
Mill Total Cane	1 282 910

## RECAP Project

The NFG RECAP program for the Land Reform beneficiaries in Umfolozi is well on track, we have spent about 98% of phase 1 & 2 budget allocation to-date, and we are now waiting for the third phase (final) to be transferred hopefully before April 2013. All necessary requirements requested by the Department including opening of joint bank account and signing of tripartite agreements has been done successfully.

## SSG Development

The Small Scale Grower project in the KwaMbonambi area for the Umhlana Community Co-Operative is in progress, this despite a few challenges like manual field bush clearing which slowed down land preparation. Heavy rainfall in December also contributed to a slow distribution of seedcane. The cane supply division managed to complete 72ha out of 100ha that was targeted. Finance to develop another 200ha was also approved.



Planting operation in progress at KwaMbonambi

# Stay Unmuted

The company recently trained nine communication facilitators on how to improve their interpersonal communication skills and to develop new skills to become more effective communicators. Each division in USM has a communication facilitator that is responsible for the notice boards in their area and for generating news to share with colleagues. The communication facilitators each received a Communication Facilitators badge from Adey Wynne during his recent Imbizo Forum addressing all USM staff.

The facilitators are, Esther Bwambale, Joseph Hlatswayo, Kobus du Plooy, Rachel Calitz, Musa Mbuyazi, Sihle Myeni, Sihle Mthembu, Simphiwe Nhleko and Thulani Nxumalo.



Getting their message across during the training session with paper planes is Sihle Myeni and Esther Bwambale.



# Reaching For The Stars



The mill's NOSA 4 Star rating is in the bag. This, only the second time in the history of Umfolozi Sugar Mill that a 4 star rating has been achieved! According to the mill's safety officer Sihle Mthembu, the success of the audit is the result of a tremendous team effort by all USM employees. "Special thanks to the foremen, their safety representatives, the clinic staff and the quality division for their role in this grand achievement," he said.

## *Failing to plan is planning to fail*

We've completed our 2013/14 budget and with production plans from operations and goals from the engineers and foremen plus cane targets for the year, the company has a plan for the next year to measure itself against.

### **BUDGETS**

On 27 February the Minister of Finance released the government's 2013 budget. The highlights are that personal income tax has been reduced, fuel prices increased and Eskom that will increase by 8%. These changes are effective from 1 March whereas the USM budget is effective from 1 April 2013.

### **INFORMATION SYSTEMS**

There are also changes being made to the systems we use for ordering and buying our goods and services. We will be moving onto the SYSPRO on-line procurement system as soon as the year starts to see how we can increase the efficiencies of the systems and improve the quality of information.

### **MAXIMISING OPPORTUNITIES**

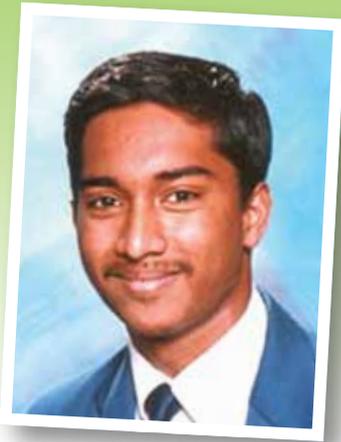
Training sessions will take place during March to get all our staff informed and able to access SYSPRO. Good communication and continuous monitoring of costs and expenditure and maximising of opportunities will see the year through from the great start we had so far.

*by Gerhard Maritz  
Financial Manager*



# Excellence

Kreesan Vandayar, Ravi Vandayar's son excelled in his final matric exams and received 6 A's and 2 B's at Empangeni High School during 2012. Kreesan also received certificates of excellence from the Mayor of uMhlatuze and the District Mayor of Uthungulu and is currently studying at the University Of Pretoria towards a degree in Actuarial Science and Financial Maths.



# Why is team communication important?

*by Vusi Tembe, Human Resources Manager*

It is important for all the team members to understand the importance of being together and working as 'one team'. Collective effort translates into excellent teamwork, and that's what leads the USM team to success.

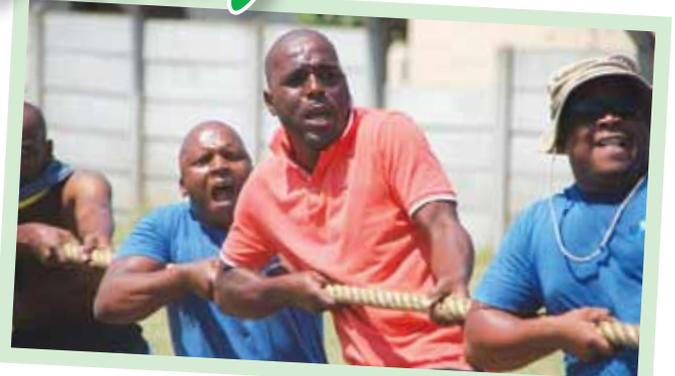
One of the company's most essential qualities is our ability to communicate to achieve success and work through our difficult times. The absence of communication dilutes our teamwork with the result that teams fail to perform to the best of their abilities.

Good team communication is important for developing a loyal and efficient team. Managers or team leaders who pay attention to team communication, have excellent teams and excellent teams translates into successful companies and happy customers.

Our annual sportsday is testimony to the success that can be achieved with good communication and team effort. It is tradition for the plant to celebrate the previous year and welcome the new season with a Sports Day. On this day colleagues race, throw darts, tug and play soccer and volleyball against colleagues and at the end of the day team spirit is the winner. We congratulate our Sports Day Committee for a wonderful day. WOZA 2013/14, we are ready for success!



# USM Sportsday 2013



**Safety & Health**

Wow! You're coughing so much and look so thin!

Cough... cough

Symptoms of TB:  
 - Persistent cough  
 - Constant fatigue  
 - Weight loss  
 - Fever  
 - Night sweats

I must go for a TB test at the clinic.

REMEMBER, you must complete your TB treatment, if you don't you will get sick again.

... 6 months later.

Wow! I feel great, strong and my appetite is back. I will tell others to GO FOR A TB test if they show any symptoms.