

Umbonowethu



New buzz:
Quality sugar and
service makes every day
and audit day.

The First Word

The end of the crushing season is fast approaching with the prospects of a well-deserved break with family and friends after a challenging season. Despite the good performance of Power Generation team as described in the adjacent article, USM's generating licence has still to be amended by the National Energy Regulator of South Africa (NERSA) to enable USM to sell power to a third party. We remain hopeful that such amendments will be forth coming before the start of next year's crushing season and cogenerating to our full potential. The season has also been characterised by the influx of sugar imports into South Africa. Fortunately, the import tariff was amended and further work is in progress between the South African Sugar Association and the relevant government departments to further review the tariff in the new season.

It is also clear that some of our challenges have been self inflicted. Our single biggest mistake in recent history was, for good reasons at the time, to significantly delay the start of our crushing season in the 2016 drought year. As a result, USM diverted cane to Felixton. Due to cane harvesting cycles, to a lesser extent, the start date in 2017 was also delayed, again resulting in USM diverting cane to Felixton in order to finish in time. As a consequence we have lost important revenue making opportunities. Robin Sharma, a world famous business guru once said that successful companies don't get hung up on their mistakes, instead they transform their mistakes into learnings. USM will start crushing in 2018 on 4 April and in 2019 on 19 March.

What we have also learned is to do things properly, first time. Last offcrop, USM spent a significant amount of capital moving the USM bagging plant from the warehouse to the factory, which was essential. Unfortunately, the original design of the sugar screen and sugar bin proved to be inadequate. Modifications have been made in season and further modifications are still to be made in the coming offcrop. We have also learned that the sugar market is changing; customers are very much more discerning now than they were a few years ago, which means that if USM is to "stay in the game", USM's attention to quality sugar and service must increase at the same or faster pace. "Every day MUST be an audit day". Maintaining our FSSC accreditation is paramount. ALWAYS ensuring our customers receive quality sugar and service must be engrained in our USM culture.

Read on in this edition of the Umbonowethu to be encouraged by our very own USM champions who are showing initiative, driving positive change and making a difference in all of our lives. Why? Because this offcrop we intend completing the USM Recapitalisation Project and expectations are that we will have plenty of cane next season that we must crush at USM. Bring it on!

Our intention is to make next season our best season to-date. Let's MAKE IT HAPPEN.

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

Adey

Adey Wynne, CEO

Power Generation

The main focus of the power generation team is to improve efficiencies and performance of the power engine, the boilers as well as to improve plant reliability which would result in reduced loss time available (LTA) and equipment failure.

According to Lawrence Gengan and Johan Bester boiler efficiencies have been good during the season but has recently been hampered by a deteriorating economiser in Boiler 2. This, says Bester resulted in us having to use all three boilers instead of only 2.

'With the current situation we have had to by-pass the economiser resulting in more fuel needed to be burned in order to supply the same amount of steam. The economiser is due for replacement during the 2018 off-crop.' Gengan notes that another major project will be the completing the replacement of boiler 3's air-heater tubes. 'It is expected that this replacement will improve our efficiencies considerably.'

'On the maintenance side we have had a fair run, with the major failures being on our boiler feed water supply pumps, the reason for this is due to old equipment. Good work is going into replacing these pumps with the latest pumps on the market as well reducing the number of pumps currently with bigger and more powerful pumps.

On the operations side the power generation team have had a good run and according to Bester surplus bagasse stocks allowed the company to sell some of their surplus bagasse. Bester says they have crept above 1500 tons coal burned for the season which means going forward the team will have to be very vigilant considering the cost of coal currently is around R 1 300 a ton which will have a direct negative impact on the company's bottom line.



Vusi Khanyile, Senior Power Gen Operator keeps a careful eye on the boilers.

Customer Service with a smile



Sabatha Zuma found a missing cane delivery ticket of a supplier in what can only be described as a mountain of tickets. When Umbonowethu recently paid a visit to the Cane Supply offices, Zuma had already spent hours looking for the ticket. "Without proof of delivery our suppliers cannot be paid and in this case one little ticket had to be found out of a myriad of tickets to tally up the total delivery of sugar cane delivered", she says.

Apprentices Appreciated



Thank you to Rodney Mayere who submitted this picture of USM apprentices' graduation that took place earlier this year. If you have any news to share, send your photo and story to info@usm.co.za.

Mental oil for machine and man

Sugar may be all dainty and sweet but don't be fooled for one minute about the supple machine and man muscle needed to eventually pour the popular fine stuff so freely!

Someone who knows all about what goes on in the process from harvesting sugar cane in the fields to notably crushing it during the extraction phase is Bhekani Dube, Extraction Manager at USM.

Umbonowethu spoke to him near the end of the current season. After six months of hard labour at the extraction plant his dedicated team has now reach the critical point where they have to be on their toes and mentally alert to see the season successfully through.

Bhekani confirms what one suspects while he sketches the tight timetable: it will now be a mental game to the end to ensure the team stay focused and monitor equipment which is already showing signs of fatigue due to handling heavy loads of cane continuously for half the year.

Part of his turnaround strategy at the plant was to speak up about problems and things not working, says Bhekani. He strongly believes in team power and his secret to attain this always starts with mutual respect. Like in big time - think songstress Aretha Franklin belting out R-E-S-P-E-C-T! He respects his team members and expects the same from them and then they tackle everything thrown their way as one!

This teamwork led to USM regaining the FSSC 22000 certificate this year after losing it in June 2016. Inadequate sugar dust extraction was noted in the failed audit. To re-obtain this, focus and hard work were needed in this section.

The sugar dust extraction, which will eliminate sugar dust in the packing and sugar bin areas, has been installed earlier this year which is part of the turnaround strategy.

Extraction is a vital segment of sugar production, explains Bhekani. Machine and man have to become one for maximising extraction levels from the sugar cane. Small actions like adding extra water into the diffuser helps to extract the last drop of sugar.

But it is not all about machines, the people behind it is equally important and in this last part of the season the heat and higher temperatures must be monitored. According to Bhekani Arcers at the mill get regular 15 minutes breaks to help them cope with working in these higher temperatures.

Although stress levels are running high, Bhekani stays calm and collected. He believes in balance to outdo stress. "If I am at work I work hard and the same applies if I'm at home or having fun away from work."

Clearly a man on a life's mission.



"Preventative measures which entails highly technical procedures are now needed and equipment must be checked often. We do condition monitoring of the machines and also send oil samples away for tribology which will tell us what is wrong and needs to be corrected. At present we are also replacing all the worn-out bolts."

#qualitysugar #customerobsessed NEW AND IMPROVED PACKING STATION



25kg loading bin



25kg packing line



25kg packing line



25kg baling machine



1 ton conveyor zone

New buzz: Quality Sugar and Service!

For a business to stay relevant in the tough global markets fresh mindsets are regularly required. For Umfolozi Sugar Mill (USM) the new drive “Quality Sugar and Service” will be critical henceforward.

This new buzz slogan requires buy-in and dedication from every employee as more hard work is waiting for the mill after it re-obtained the prestigious and international food safety system certification or certificate FSSC 22000.

Umbonowethu spoke to Julie Gengan, Quality Assurance Specialist, about the process to get back on track and more vital how to now keep it up. She readily acknowledges the challenges for USM to not losing this prestigious safety accreditation again.

“It was not easy to regain our status and the challenge remains,” stresses Julie. She cites one of the main reasons for failed audits our inability to see the bigger picture of how reliant a business is on their client’s satisfaction..

“We often get so bogged down with the day to day work and tend to focus on our own workstation so much so that we do not always consider how being on the top of our game every day is actually part of the bigger wheel turning successfully.”

To bring this message home of how the greater sum is always made up of all the smaller/different parts, is a continued challenge, adds Julie.

The fact is that if we do not deliver quality sugar and stay accredited to global food safety standards, jobs are on the line. Customers are lost when you don’t comply with the norms and acceptable standards, explains Julie.

“We have to understand the certification is the key to keeping jobs. Without it, there will be poor or no sales and employment opportunities will be severely affected as USM will struggle to operate and survive in the tough local and global arena.”

According to Julie the highlight of the action plan to regain the certificate was the renovations in the packing station where many problems and issues hindered optimal production and impacted the required end product. “The bagging for pre-packing had to be addressed. Sorting out problems at the dust extraction system were also tough and a nice accomplishment.

Every employee can play a part or take initiative towards embedding this drive. Improving ourselves and our quality product and service must be our common goal at all times.” If every employee buys into this, USM will continue to be a player in the relevant markets.

Instant response is the golden ticket to stay on track and keep USM’s international food safety standards intact. Surely also a sure way to safeguard job security.

So wave our new “Quality product and service” flag proudly!



Step #1

Victor Kisten showing the steps taken before you may enter the packing station;

#1 Sign in and health declaration

#2 Sanitize hands

#3 Air dry hands

#4 Food Safety PPE must be worn at all times



Step #2



Step #3



Step #4





Trekkie trooper aim for stars

“To boldly go where no man has gone before...”

This beloved opening line of the original Star Trek series have been uttered with outer space in mind, but if Ravi Vandayar gets his way it will equally infuse others, aiming specifically for the workforce at Umfolozi Sugar Mill (USM).

And this self-acknowledged Trekkie (a die-hard fan of the Star Trek phenomenon) is ready to use his ‘special skills’ to lift the mill and its team to higher heights.

Ravi heads the technical side of things at the mill but in his big task basket, you will also find asset management and the daily operation of the factory.

This variety suits this bright man fine as he is a curious soul with a brilliant brain, honed by being passionate about everything he sets his mind to and always hunger to stay abreast of whatever is happening wherever.

He speaks with insight and wisdom on the path USM has embarked on to turn around the mill towards becoming a leader in its field. This investment has already started to pay off.

Ravi takes it back to the Industrial Revolution where the second one was electrical and the fourth automation. This is where USM is firmly heading to.

But it is step by step and currently the focus is on the maintenance side which is part of asset management (AM). He admits the challenge is to get everyone’s understanding and buy-in in order for the USM team to work as one.

The huge task has been split in smaller parts and three managers each head a section to reach everyone and ensure maximum exposure and visibility. They are Albert Peters, Lawrance Gengan and Drienie Humphries.

Maintenance management is part of AM, which Ravi agrees is the big prize. It is about getting the smaller things right before tackling the big elephant. “We

must take care of asset management but it can be complicated. Therefore we start with basic care and housekeeping and strive to get every step right... starting with the guy who sweeps the floor. Enduring he has the right equipment to do his job properly.”

If every task is properly planned and executed it will rub off on all the others and so a whole system and structure take shape.

“The three planners are tasked to plan every step, see the execution through and eventually evaluate and follow-up on performances. By the time they have been through their drills, detailed plans that aim to be 100% accurate can be finalised and implemented.” Correct and secure planning eliminates wasted time and hours which is a focus of turnaround because time is money.

With his own strong work ethic, Ravi is a strong advocate for the new culture drive at USM of: “everyday is an audit day”. And asset management, he says, is key to induce a pristine and response culture where all employees will strive to leave the plant in an immaculate condition every day.

As a leader he also advocates reflecting back regularly. “As we evolve, we need to do introspection to stay on our toes. He is not shy to lend a hand and help out where he can. “You must lead by example,” is his motto.

Like USM’s other managers he also pushes the notion of thinking outside the box. “The floor is open to come up with innovative ideas. Where there is a will...” This attitude sums up Ravi’s mindset. “It is all about desire – really as simple as that. If we have the will, the plan will follow,” says this visionary.

A feather in Ravi’s cap is the introduction of the distributed control system (DCS) which help with mechanising controls at the plant. “Without the help of employees like Rodney Mayere Instrument Foreman and Aubrey Rankin Electrical Foreman, this project would

have been impossible,” he says.

Furthermore, the DCS project at USM is leading the industry. It is the only one in production in Africa. “We have to keep up as technology is moving at great speeds. We designed the concept ourselves to make it a perfect fit for our mill.

“We had requests from all other big names in the field which want to come and look at our system,” he adds proudly. Automation is clearly Ravi’s passion as it is the driver to future technology. “To see it in action make people happy and motivated.”

As expected this man operates in a clean, tidy and orderly environment. “I have high respect for my staff and we prefer transparency...there is no hidden agendas, we are honest about mistakes and strives to improve all the time.”

Ravi believes a good people manager creates an environment where little management is needed – if all systems are up and running and each person looks after himself the possibilities are endless.

The role of communication in such an oiled machine can never be underestimated, says Ravi. “Systems will collapse if you pull out communication. You have to convey clear instructions and share happenings with everyone as often as possible.”

Ravi credits wide interests and watching lots of TV programmes and movies on science for his excellent general knowledge and human’s skills.”

“Never sell yourself short, rather do something to change things around you. Focus on how little problems can be fixed and the bigger picture will soon fall into place as well.”

And never underestimate nerds...those are the kind of gifted people who often change the future, beams this local Trekkie!

Production Progress

At the time of writing Samkelo Matsebula Process Manager, notes that the mill is 41000 tons of cane behind the crush plan. There is however more focus on the VHP sugar conveying, and inspections to preventing failures in the sugar making plant. There is also an increased focus to iron out bottlenecks and reduce slow crushes," he says.

The mixed juice purity to date is 86.33% while the Boiling House Recovery (BHR) to date is at 87.01%. The Overall Recovery (OR) is 84.29 % to date. Both the BHR and OR are above budget, so well done to the Sugar Operation and Maintenance teams for the good BHR.'

The Target Purity Difference (TPD) is the difference between the final molasses purity less the target purity (calculated based on reducing sugar and ash content) and USM is at 4.1 to date. The sugar industry TPD to date is 6.1 putting USM 2nd in the SA sugar industry statistics.

Description	Wk Actual	Wk Budget	Wk Variance	To Date Actual	To Date Budget	To Date Variance
Tons Cane	33856	28000	5856	765276	806283	-41007
Tons Cane/Hour	231	250	-19	241	250	-9
Mixed Juice Purity (Suc)	87.55	86.15	1.4	86.05	86.33	-0.28
Boiling House Recovery (BHR)	88.5	88.39	0.11	87.01	86.85	0.16
Overall Recovery (OR)	85.85	85.76	0.08	84.33	84.29	0.04
Undetermined Loss (UDL)	1.62	1.8	0.18	2.36	1.8	-0.56
Molasses Loss	9.71	8.76	-0.95	10.37	10.26	-0.11
Target Purity Drop (TPD)	4.7	3	-1.7	4.1	3	-1.1



'The cane quality has been amazing this season, I want to say thank you to the cane supply team for successfully implementing their 'clean cane' campaign.'



Looking ahead to the 2018/19 season: **The USM World Cup**

by Anthony Fowlds, Financial Director

The 2017/18 crushing season is fast drawing to a close and the pressure is on for USM to meet its 1 030 000 tons cane crush target for the season. USM is in its second consecutive season of financial losses which have placed the business under strain. It is important to finish the season strong and keep focus on crushing the cane hour after hour.

We then need to change our focus onto off-crop and make sure we eliminate all waste but also get the plant ready for next season. USM can still break even this year if we pull together as a team and MAKE IT HAPPEN.

Sports teams always build and plan for a major event like a World Cup and a lot of hard work goes into ensuring the team's success. USM has for years now been building for success, accelerated recently by significant spend on the Plant as well as on people.

Next season is the USM World Cup, the cane is there to crush, the hard work has been done, the money has been spent and we have the right people. Let's start preparing to deliver World Cup success in the new season and break all USM crushing and sugar make records, on time and in full.

Let's not for aim for success, lets ensure success, it's our World Cup to win!

Staff have their say

An independent company recently interviewed 85 employees randomly chosen for USM's 5th annual culture survey. According the Human Resources Executive, Vusi Tembe all information supplied is kept private and confidential. He thanked all employees who took part in the survey. Management use the annual culture surveys to gain insight into the well-being of employees and also learn how to improve as an employer. Issues raised are addressed in a transparent way and feedback is provided to employees during a general staff meeting, Imbizo Forum.



Open door for selling SAFETY

In a busy sugar mill where workers work in tandem with heavy machinery around the clock, safety becomes paramount for USM, the workforce, team morale and extended families.

The friendly pair at the helm who oversee safety are Ben Calitz, senior safety and risk officer, and his assistant Thuli Manukuza.

When sitting them down to talk, their commitment and common goals for safety at USM shine through. "USM is a four star-graded institution and we aim to keep it that way," explains Ben.

They are both proud that the plant's DIFR came down to 1.6 after it has been over 2. They hope to bring this key figure further down to a more ideal below 1. At the same time, USM is on par to again achieve the target of 500 000 injury free man hours which the mill reached in July and August 2016. According to Ben it can take up to three months to reach this target.

To maximise safety and prevent incidents at the plant they are tasked to create sufficient structures and put required procedures in place to minimise any safety risk. Part of this is the all-important buy-in from every worker into the safety strategy.

Make no mistake, adds Ben: a good safety officer is in essence a good salesman! "You have to sell your product successfully and ours is the vital business of safety."

Ben explains that workers have to wear their personal protective clothing and equipment, yet the working environment can become stressful when a breakdown of machinery occurs and quick solutions are needed.

The key to a safer working station remains risk assessment beforehand – no matter how small and insignificant the task is. If you sweep floors, check the broom. Minor corrections can minimise accidents," believes Thuli. Ben chips in: "In other words: Know what you have to do and how to do it." And use your common sense, adds Thuli.

They also prefer to walk the talk and regularly do spot inspections on the floors to make sure safety lapses do not occur. And to spread the message that everyone is responsible for their own and the safety of colleagues!

When all is said and done, housekeeping remains the fundamental starting point of safety. "This is a business and you have to sell it.



Ben and Thuli prefer to focus on the office's motto: "Every employee must go back home with all fingers and toes intact."

Cane Supply Report

As of SASA week 33 the mill has crushed 794 056 tons to-date which is 77.1% of the year's crush and the balance for the season is 235 944 tons. The proposed Mill Group Board (MGB) mill closing date is set at 10 December 2017, time elapsed for the season with the extended closing date is 76.2%.

Based on a target of 1 030 000 tons the mill is 0.9% ahead of time. In 8 weeks left taking into account 7 days as estimated rain days the mill is required to crush an average of just above 31 000tons/week in order to achieve the target of 1 030 000tons for the season.

The mill diverted a total of 75 000tons for the season as at the last MGB on the 5 October 2017. "This is not a fixed figure and if the mill crushes well we will pull back tonnage and if we crush bad we divert more, this is managed on a monthly basis by the Cane Supply department.' As a result all UVS cane has been diverted to Felixton mill and Senekal inward has been cut back from 155 000tons to 136 000tons for the season.

Cane Deliveries

USM's cane crushed as at 15 October 2017 is as follows:

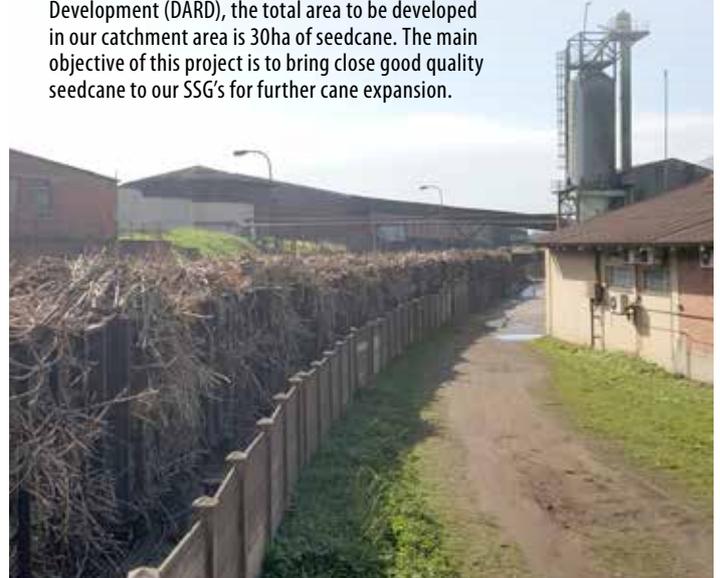
	Deliveries (SASA Week 33)				Variences
	MGB Est	Delivered to date	Balance to Deliver	% Delivered to date	% behind mill crush
Trams (LSG & SSG)	736 550	551 039	185 511	74.8%	-2.3%
UVS (to USM)	35 363	35 363	-	100.0%	22.9%
Senekals	136 000	112 577	23 423	82.8%	5.7%
Other road	27 283	20 152	7 131	73.9%	-3.2%
SSG (road)	45 658	38 389	7 269	84.1%	7.0%
Mposa Group	49 146	36 536	12 610	74.3%	-2.8%
MGB Management Adjustment	-				
MGB Mill Crush Target (June Est)	1 030 000	794 056	235 944	77.1%	

Crush required to finish	
Days left	56
Rain stops	7
Weeks left	8
Weekly crush req	31 299
Daily crush req	4 815

Time efficiency analysis	
USM start date	19-Apr-17
Proposed close date	10-Dec-17
Time Elapsed	76.2%
Crop Crushed	77.1%

Cane Development

Currently we are busy with the seedcane scheme project where USM is supposed to develop 25ha of seedcane plots and 5ha to be developed by SASRI which will be utilised as training plots for small scale growers. This project is funded by Department of Agriculture and Rural Development (DARD), the total area to be developed in our catchment area is 30ha of seedcane. The main objective of this project is to bring close good quality seedcane to our SSG's for further cane expansion.



Madiba Day 2017



Madiba Day 2017 was dedicated to revamping a former class room in the USM Village (former hostel) to establish the USM Edu Centre. During their 67 minutes employees got down and dirty to revamp this long forgotten room. The total duration of the transformation from dump to dashing took weeks let alone 67 minutes. The Edu Centre was officially launched on heritage day during which employees planted two trees in front of the centre for shade in years to come. This Edu Centre serves a dual purpose in that it provides informal after care for a few of the employees' children from 14:00 – 16:00 and the human resources team can now also utilise the space as a spare training room. Read more about Nonto Khoza, volunteer after-care supervisor.



USM's new aftercare angel spread wings



"The problem with the world is that we draw the circle of our family too small," was the timeless wisdom of Mother Teresa, a wonder woman who walked the talk.

Closer to home Umfolozi Sugar Mill (USM) is privileged to also have someone special who teaches what she preaches! Nonto Khoza is the teacher at the brand new USM Educentre which opened its doors on Friday, 20 October 2017.

Nonto will run this aftercare class in the USM Village and what makes this aftercare haven so special is that it will be run on a volunteer basis. She adores children and is in her heart a community soul who likes to help out where she can.

"Most of the kids are from rural areas and their English is poor. I would like to help them improving their language as well as writing and reading skills." Nonto is willing and ready to leave her mark as teacher who will care for these half a dozen children from parents working at USM. She obtained a learnership in community development in 2012.

She was introduced to volunteerism, from a young age. Her mind and heart understand and buy into the "committing yourself and doing something without expecting something back" – the mahala principle!

Nonto Khoza has put up her hand and with this interview the aftercare angel has just given her kind wish to the wind...

Sugar Tournament



Now in its 27th year, the Mtubatuba Primary school Sugar Tournament is testament to the fact that living an active and balanced lifestyle promotes the well-being of children. With more than 11 participating primary schools from around the Mtubatuba area the sport fields soon transformed into a bee hive of activity as 900 exited 9 to 13-year old boys and girls played hockey, rugby, netball.

After the games, the learners were each given a tiny bite-sized bag of USM sugar. These tiny bags are packed each year, specifically for the tournament thanks to efforts of the Warehouse, Laboratory and Human Resources teams!

