

Tomago Aluminium

SPRING EDITION 2017

news



**WE SALUTE OUR
2017 INNOVATORS**

**MOBILE CREW
KEEPS THE
SITE MOVING**

CLIMBING NEW HEIGHTS

FUNDRAISING FOR MARK HUGHES FOUNDATION

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WE SALUTE OUR 2017 INNOVATORS

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CEO MESSAGE



MATT HOWELL – CHIEF EXECUTIVE OFFICER

WELCOME TO THE SPRING EDITION OF TAC NEWS.

Spring is in the air and we're on the home stretch to another very solid year of performance. We are doing it cleaner and safer than we've ever done before and at present rates, we will beat last year's metal production record.

On the safety front, it's appropriate to recognise the extraordinary performance of our engineering alliance partner WorleyParsons, whose team of full-time employees and all associated project contractors, notched up seven consecutive years without a recordable injury. This, together with our own record of consistent improvements in safety outcomes led to our application for a workers compensation self-insurance licence being granted in June. This is a massive vote of confidence in all our people and while it means zero change to the regulations (NSW workers compensation laws), our costs to administer the scheme are much lower. Those savings can better be spent on improving our business and paying for salary increases.

In this edition we feature the winners of the very successful Tomago Innovation Awards. The presentation evening was held at Wests New Lambton

with over 200 people attending. Our overall winner for Excellence in Innovation was Nathan Bevear, who has been with us in the potlines for about two years. His innovation was to improve the tap doors by making several prototypes with a mate in Bathurst until he got it right. This is a perfect example of challenging the accepted way of doing things. Another terrific example is the automation team, who built their own machine monitoring devices and connected them to our wireless network after finding commercial devices were either too expensive or too limited in scope. Innovation is the lifeblood of success and I'm proud to say, we have some of the best innovators in the business.

We've also seen a number of very significant charity fundraising events. The Westpac Rescue Helicopter made a landing on site in late June following our contribution last financial year of \$39,000. A cheque for \$23,513 was also presented to Variety from the employee Out of Pay Donation Scheme. Tomago then matched this and also presented the Mark Hughes Foundation with a cheque for the same amount, both very deserving causes and chosen by the employees. Our site fire protection officer Wayne Pringle, deserves special recognition for organising more than 600 people to sign up

to the Helicopter Donation Scheme of \$2 per week. The recent gala dinner held at the Newcastle Entertainment Centre saw TAC make a further donation of \$15,000 to this very worthy community service.

The hot topic at the moment is of course energy and the impact that the continued penetration of variable renewable energy (wind and solar) into the national electricity market (NEM) is having on prices and reliability. I imagine we all want to see Australia embrace renewable energy where it makes sense. The truth remains however, that the cost of energy storage to allow renewables to become 'dispatchable' (or available on demand 24/7) is plain unaffordable. If we want to be a nation that makes things – like aluminium – we must have guaranteed access to baseload power generation and that means thermal – coal or gas. It has served our business well for 34 years and there is no reason it won't continue to do so. We will continue to represent TAC's interests to ensure the NEM remains affordable and reliable for critical businesses like ours. Despite all the politics about looming generator closures, TAC has an ironclad energy supply agreement out to November 2028, meaning we will be here for many years to come.

Looking forward, we are presently commissioning a range of automation and/or workplace improvement projects that will allow a number of our long serving employees to take up the opportunity of a voluntary redundancy. We have commissioned our robotic anode cleaner, implemented the centralised control room for ingot chain operations and we are presently rolling out the laser anode gauging system in the potlines. This will remove a major exposure to heat by eliminating the need to mark reference lines on spent anodes.

I want to take the opportunity to thank our long serving employees for their commitment to our business over many years and I'm sure I'm not alone in saying we wish them all the best for a well-earned retirement.

Enjoy this edition of TAC News and my thanks to each and every one of you for making our business safe and productive – that's how we ensure a long term future for everyone. 🍷

Best regards,
Matt

Do you have an interesting story to tell? If you have a suggestion for TAC News please contact Katie Burns at katie.burns@tomago.com.au

INSPIRATIONAL
AND ASPIRATIONAL

WE SALUTE OUR 2017 INNOVATORS

**EMPLOYEES
WHOSE INNOVATIONS
HAVE DELIVERED
IMPROVEMENTS TO
TOMAGO ALUMINIUM'S
BUSINESS OPERATIONS
WERE REWARDED AT
THE FOURTH ANNUAL
TOMAGO ALUMINIUM
INNOVATIONS AWARDS
PRESENTATION
RECENTLY.**

Nathan Bevear won the Overall Excellence in Innovation award, taking home flights and accommodation for an international holiday for two people up to the value of \$21,000.

In all, a total of 320 employees were nominated for awards with individual category winners receiving a domestic trip for two to the value of \$2,500 and category team winners receiving a team-building event.





Nathan Bevear (right) with Tomago CEO, Matt Howell.

EXCELLENCE IN INNOVATION OVERALL INDIVIDUAL AWARD WINNER — NATHAN BEVEAR

Not only is Nathan a Potline Operator, he is also a qualified fitter and welder and, as it turns out, an extremely competent designer and engineer.

Nathan designed a tap door which replaces the existing door and effectively eliminates not only manual handling hazards but also reduces emissions.

The redesigned door is a lightweight tapping door. As part of the redesign process, Nathan has eliminated the doors' hinges and pinch points.

As well as the safety and health benefits that are an obvious part of the design, Nathan's re-done doors are cheaper to manufacture than the previous doors and require less maintenance.

TEAM OF THE YEAR WINNER — RELINE AND MAINTENANCE IMPROVEMENT TEAM

Darren Buehler, Brad Dickinson, Sam Cook, Dan O'Hare, Victor Haslam, Will Wilson, Neil Evans, John Shepherd

Great initiative was shown by all team members to identify safer ways to improve on production quality and efficiency in the many areas covered by their roles.

The Shift Three Reline Services team, along with Darren Buehler from Electrolysis Maintenance, displayed excellent team work in all tasks and thought outside the square to improve safety and quality in many areas of Electrolysis.

Focussing on both safety and task efficiency, the team contributed to a wide range of projects including slab realignment, furnace pouring ladle grapple pole, anode stem verticality gauge and graphite bed gauge and the two-tonne spout borer handle.

All of these projects have greatly improved the safety of their crews and limited the amount of reworking required.



(Left to right) Simon Mitchell, Phil Brown, Kate Brown and Simon Treyvaud.

Matt Howell with the Reline & Maintenance Improvement Team – (left to right) Matt Howell, Sam Cook, Will Wilson, Darren Buehler, Vic Haslam.



Peter Fishburn



**EXCELLENCE IN COST/WASTE REDUCTION
INDIVIDUAL AWARD WINNER
— PETER FISHBURN**

Peter has completed a higher than normal level of work that has resulted in a greater potential value for Tomago and led the Engineering team which refurbished Furnace 13 as a VAP scrap re-melt furnace.

This newly-invented equipment and layout dramatically increases the ability for scrap re-melt as VAP billet and speeds-up furnace alloying, treatment and turnaround times.

This means the production bottleneck has been unblocked, allowing the furnace process to achieve greater potential and produce an additional 30,000 billet tonnes of metal.

(Left to right) Zac Middleton, Brandon Graham, Mark O'Connell, Phil Martin, Carly White and Tim Beasley.



**EXCELLENCE IN COST/WASTE REDUCTION
TEAM AWARD WINNER — RACK RAISER TEAM**

Neil Lindus, Mark Bennett, Phil Martin, Mark O'Connell, Steven Kennedy, Brandon Graham, Alexander Deacon, Tim Beasley, Zac Middleton, Carly White

Following-on from completing a Rack Raiser project and bringing it in under budget and ahead of time, the Hydraulic team developed a plan utilising additional support from Central, the Boilermaker team and the Apprentice Workshop.

The plan was instrumental in reducing the anticipated downtime of the number one Rack Raiser.

The Rack Raiser was returned to full service more than two weeks ahead of schedule, allowing the Potlines to maintain stability within their new work organisation and saving \$100,000 by bringing the work back on-site.



Simon Mitchell presenting the award for Innovation in Health, Safety & Environment.

**INNOVATION IN HEALTH, SAFETY AND THE ENVIRONMENT
INDIVIDUAL AWARD WINNER
— SIMON BOWLES**

Working in Electrolysis, Simon has consistently identified and corrected high risk hazards throughout the workplace.

He has consistently ensured that employees working under his control have the correct qualifications and have had High Quality Risk Assessments before they are allowed to start any task.

Interventions and Blue Bus behaviour by Simon has provided excellent opportunities for improvements in our workplace and made for a safer workplace for all employees.

(Left to right) Dennis Moncrieff, Neil Morgan, James Dorrington and Brodie Fairhall.



INNOVATION IN PROCESS STABILITY AND QUALITY TEAM AWARD WINNER — IOT DEVICE TEAM

James Dorrington, Brodie Fairhall, Neil Morgan, Dennis Moncrieff

James and Brodie developed the concept for a Tomago IoT (Internet of Things) device and were also involved heavily in their manufacture and installation.

The IoT devices provide a cheap and reliable way of measuring equipment conditions and providing early warning

signs so action can be taken. A first for Tomago, they have been the subject of interest from PacAI and CSR.

Neil and Dennis are also recognised for the continued innovation in the connection of these devices to our networks and the rapid development of our fibre networks across the site.

INNOVATION IN HEALTH, SAFETY AND THE ENVIRONMENT TEAM AWARD WINNER — BULKA BAG TEAM

Grant Blake, Craig Beneke, Tegan Drage, Corey Smith, Jay Chamberlain

The team identified and executed an idea to improve the process of bagging magnetic separator waste bin material, effectively making a two-person operation into a simple single-person one and eliminating manual handling hazards.

Previously, two employees had to locate a funnel on four pins on the bag stand, with potential for strain and pinch point injuries. An operator would empty the bin contents into the funnel using the rotator forklift and the funnel would be removed so the full bag could be taken to the wash-down bay using the service crane, lowered onto a pallet and removed by forklift.

After brainstorming the problem the team drafted a concept, found equipment that could be modified and sought help from the shift fitters to develop their prototype.

The new design Bulka bag stand incorporates a funnel and is taller than the previous bag stand. Importantly, the design requires only one operator to into the stand. The additional height means a pallet needs to be placed under the bag before filling and the operator can empty the magnetic separator waste bin into the funnel using a rotator forklift.

Once the bag is full, the operator simply unhooks the bag from the stand, using the forklift to take the bag out of the stand on the pallet.

Phil Bartlett



INNOVATION IN PROCESS STABILITY AND QUALITY INDIVIDUAL AWARD WINNER — PHIL BARTLETT

Phil has been involved in the training of the Casthouse ingot chain teams to transition the casting process to an automated system. He has also helped design and implement a sacrificial furnace seal system to improve the seal changeover process which will greatly reduce operator exposure compared to the hazards of using the current system.

Phil has followed through with his own idea for a modified flexible seal retention system, from the initial concept development, through design and development and, finally, trialling a prototype following a rigorous change management process.

His approach in leading the training program has helped minimise the impact of change through the teams, giving them a level of comfort during the transition phase.



Tornago Aluminium Innovations Awards 2017

Left to right, Matt Howell, Mark Westbury and Ben Heil



BLUE BUS AWARD WINNER
— CONTINGENCY BATH RE-INTRODUCTION TEAM

Troy Gorton, Ben Heil, Mark Westbury, Mark Greenwood, Shane McDonald, Jason Monkley, Gordon Turner, Wayne Weiss

This was real outside-the-box thinking because of the work required across a number of departments.

During the Rotary Breaker outage in November and December 2016 the plant's bath stocks were jeopardised when a contingency crusher failed to meet performance standards.

The combined effort of the Rodding Shop team, working hand-in-hand with the Emissions operators, led to new and innovative ways of placing bath into the production streams.

The changes incorporated a variable-speed hopper which added material at the tail of the BS4 conveyor and also the

installation of a feed chute to get extra bath into the processing stream. At the same time, underpot fines were introduced directly onto the BS7 conveyor, delivering material to the rotary breaker where it was screened and added straight into the system.

An opportunity to load the bath tankers using screened underpot fines was also identified and while it was a time-consuming and challenging task for the operators it ensured bath levels were maintained.

Such cross-departmental work required a lot of co-operation, not only in identifying a wide variety of innovative opportunities but taking them from conceptual ideas, through the trial process and risk assessment and on to final execution.

The processes involved and the inter-group assistance serves as an exceptional example of mates looking after mates at a time of need.

WELCOME TO TOMAGO'S NEW STARTERS

MARK FITZMAURICE
DONNA STEPHEN
TIMOTHY SMITH
ADAM BLANDFORD
CHRISTOPHER SOANES
REBEKA REID

Maintenance
Business Services
Business Services
Liquid Metal Maintenance
Cast Products Maintenance
Liquid Metals

HAMAN LOWE
BRYCE OSLAND
JARAD DOLAN
SHANE PATERSON
NICHOLAS LUCKNER

Liquid Metals
Liquid Metals
Cast Products
Liquid Metals
Liquid Metals

CELEBRATING YEARS OF SERVICE

**CONGRATULATIONS TO ALL OUR EMPLOYEES
CELEBRATING MILESTONE YEARS OF SERVICE
FROM APRIL TO THE END OF AUGUST 2017.**

30 YEARS

Glenn Ellicott	Carbon
Amanda Guy	Cast Products
Edmund Payrleitner	Liquid Metals

25 YEARS

Nigel Foote	Liquid Metals
Darren Heaton	Cast Products
Robert Cox	Cast Products
Gary Fleming	Cast Products

20 YEARS

Matthew Cook	Carbon
Lance Skinner	Carbon
Terrence Barclay	Cast Products
Allan Cranney	Cast Products

20 YEARS

Paul Morris	Liquid Metals
David Mitchell	Liquid Metals
Craig Smith	Liquid Metals
Eric Bunder	Liquid Metals
Wayne Weiss	Liquid Metals
Rod Studdert	Liquid Metals
Joseph Naime	Liquid Metals
Michael Philipson	Plant Management

10 YEARS

Craig Broadbent	Carbon
Heath Buman	Cast Products
Matthew Blackmore	Cast Products
Phil Bridges	Cast Products
Michael Marsh	Cast Products
Wayne Curtis	Liquid Metals
Mark Egginton	Liquid Metals
Neil Morgan	Business Services
Brooke McBride	Business Services

MATE LOOKING AFTER HIS MATE ON EVEREST



Mark Hughes (left) and Joel Berry (right) have been mates since kids.

SEVERAL TIMES A WEEK AT TOMAGO, A FIGURE CAN BE SEEN WALKING UP THE COKE SILO STAIRS WHILE EVERYONE ELSE IS HAVING LUNCH.

He climbs 11 flights of stairs enough times to hit 2,000 steps each day, and also ballasts a backpack to 15kg on weekends and power hikes around Glenrock Reserve for up to four hours at least one day of each weekend.

Meet maintenance fitter Joel Berry, a man who is not crazy and not on the world's toughest weight-loss regime but is actually in training for what is shaping as the second-toughest fight of his life, a trek to Nepal's Everest Base Camp later this year.

This is no leisurely jaunt but a high-altitude hike that will test his powers of endurance while bringing him in sight of the world's tallest and most famous mountain, a battle against the elements that will test his physical endurance.

In real terms that means several days of trekking through Nepal in freezing conditions, walking between four and six hours daily, carrying a 20kg backpack and sleeping in a tent along the trail.

Joel will climb thousands of metres above sea level where the cold and thin air combine to test fitness levels.

It begs the question: Why?

"I'm doing it for the Mark Hughes Foundation, to raise money to fight brain cancer. Mark and I have been mates since we were kids so this truly will be a lasting memory (but) it's also about mates helping out a mate," Joel said.

"Instead of spending my money on grog and having a good time I'll be doing something for Mark.

"If you're going to do something you've got to give it 100 per cent and that's what I'm doing with this."

Joel wants to raise at least \$5,000 for the Foundation and is appreciative of every sponsorship dollar he gets. To read his story and make a donation go to his page at: <https://2017everest.everydayhero.com/au/2017-everest-base-camp-joel-berry>

The toughest fight of Joel's life?

He has been in remission from leukaemia for the last eight years and knows he is in for a battle come October.

Mark Hughes not only has a mate by his side, he has a fighter.



Westpac Banking Corporation
ABN 33 007 457 141

On behalf of Westpac Banking Corporation

Mark Hughes Foundation

Twenty Three Thousand, five hundred + Thirteen

Date 14 July 2017

\$ 23,513.00

FUNDRAISING FOR MARK HUGHES FOUNDATION

FORMER NEWCASTLE KNIGHTS CENTRE MARK HUGHES IS JUST AS POPULAR OFF THE FIELD AS HE WAS ON IT BUT, HE SAYS, THE REASON FOR HIS POPULARITY JUST ISN'T VERY APPEALING.

Four years ago, at the ripe old age of 36, Mark was diagnosed with brain cancer.

He had surgery followed by chemotherapy in a bid to halt its progress but, in true Novocastrian fashion, Mark decided that as well as waging war on the invader inside his body he would also fight the rotten disease head-on.

He started his own charity, The Mark Hughes Foundation, and set out to raise

money to take on and defeat what he calls "this horrible disease".

The employees and management of Tomago Aluminium quickly became some of his most loyal supporters, holding fundraisers and selling MHF beanies as part of the Beanies for Brain Cancer fundraiser, and chose the charity as one of the 2017 recipients for the out-of-pay donation scheme.

In July, at a morning tea function at which Mark was the special guest, a cheque for \$23,513 was presented at Tomago. We raised over \$5,000 for the foundation, selling 195 beanies and making \$1,105 from the raffle.

Publicly, Mark thanked his supporters, telling them, "It's huge what you guys are doing for us and it's much appreciated."

Privately, he admitted the wonderful support the Foundation has received from Tomago Aluminium was incredible.

"These guys work hard for their money, they have their own families to support and yet they donate to The Mark Hughes Foundation. It's overwhelming."

As for his ongoing popularity, Mark says it's a tough way to be popular but if it raises money for brain cancer research and awareness he'll take it.

“

THE RESEARCH IS HORRIBLY UNDERFUNDED. GOOD PEOPLE ARE BEING CUT DOWN IN THE PRIME OF THEIR LIVES. WE ARE FOCUSSED ON FAST-TRACKING THE RESEARCH AND \$23,513 IS AMAZING SUPPORT.

”

CLIMBING NEW HEIGHTS

NOT EVERY SUPERHERO WEARS BRIEFS ON THE OUTSIDE AND HAS A CAPE TO HELP THEM FLY.

Take, for example, Tomago Aluminium board member Knut Meel.

Back in 1993 Knut won a bronze medal for Fly Accuracy at the World Games in The Hague before taking up mountain climbing. (Fly Accuracy is fishing rod casting by another name.)

This year he reached, quite literally, the summit of his sporting career when he made it to the top of Mount Everest standing on the very top of the world and joining a very special club.

How did it feel to make it to such a special location?

“I was extremely happy,” he recalled. “I really enjoyed the summit attempt. There was a lot of effort put in but it was worth it. I mostly remember though that I had warm feet and warm fingers!”

“It’s not easy and it’s not nice living above 5,000 metres for a long time,” he said. “It’s a never-ending job just staying in shape.”

The group was two months in training, enduring bitter cold while training for the climb.

They started their summit attempt on May 20, staying two days at 6,600 metres before climbing to 7,400 metres, where they started using oxygen to overcome the thin air, even sleeping with oxygen connected.

From there they climbed to 8,000 metres and waited for their ‘slot’ in the climb queue to attempt the summit. Knut and his team started their final climb at 8pm, reaching the top six hours later and staying for about 15 minutes.

Everest is the tallest mountain of the fabled Seven Summits (the others are Denali, Mont Blanc, Aconcagua, Kilimanjaro, Puncak Jaya and Elbrus).

“I had to climb a lot of mountains before Everest. Now I have just two left to go and I plan to climb them within the next five years.”





STAFF DELIVER MORE **BANG** FOR OUR BUCK

AT SOME POINT IN OUR LIVES WE HAVE ALL HAD A 'LIGHT BULB MOMENT', A GREAT IDEA THAT MAKES LIFE EASIER OR BETTER. OR SOMETIMES BOTH.

Since mid 2015 there have been a lot of work-related light bulb moments among the Tomago Aluminium team and some of them are even being rewarded for their ideas.

A little over two years ago, when the world's commodity markets dropped in value, company management took a "be alert, not alarmed" approach as it moved to protect the plant's integrity.

Tomago looked at smart ways of saving money without changing conditions and did so by moving in two directions. The first move was to ask suppliers for a better deal. The second was to come up with innovative, money-saving ideas.

"It was better to light the fire within rather than the fire beneath," Financial Controller, Jacques Cronje, said of the plan.

"A project was launched in late September 2015 and by the end of last year we had saved over one million dollars."



Jacques (second from left) with his team.

Those savings, known as Green Banners, come in the form of ideas such as leasing – rather than buying – computer software, intensifying recycling efforts to cut waste, changing some production methods, modifying contractor costs through contract negotiation and increasing automation levels in some areas.

"The examples keep coming and the amount of growth has accelerated because of this. We could have pressed the 'STOP' button when the market recovered but we didn't because it's become the backbone of innovation for the business," Jacques said.

Anyone can get involved and it is as easy as going to Good Ideas on the TAC intranet or talking to Finance about an implemented saving. Every idea that provides cost efficiency to the business is rewarded. Individuals get \$200 and teams get \$500 worth of reimbursable expenses. So far, the value of recognised great ideas has topped \$20,000.

The program has been brought into the company's Innovation Awards and it is easy to see why. Up to the end of May this year 52 Green Banners representing a total saving of \$1.8 million have been presented to TAC staff.

"Not surprisingly, we want to keep that momentum going," Jacques said.

BRAINS TRUST KEEPS AHEAD OF THE MARKET

TOMAGO ALUMINIUM HAS AN ABUNDANCE OF CLEVERNESS, WHICH IS A HANDY COMMODITY WHEN PEOPLE ARE BEING ENCOURAGED TO WORK SMARTER RATHER THAN HARDER.

For a perfect example of that, look no further than the team from Automation, which has come up with its own machine monitoring system because it found commercially-available devices lacking.

Known simply as the 'Internet of Things' (IoT), it is a collection of electronics housed neatly in a dustproof plastic casing with an antenna on top.

The electronics have been pre-programmed to monitor the various operating parameters of individual machines and the antenna transmits the information to those who need it.

"It's a safe, cost-effective way for us to collect information from a machine," device co-developer Brodie Fairhall said.

"A machine can tell us when it's going to fail long before it actually fails and this can monitor the pressures and temperatures that tell us when that is due to start happening."

"And what that means is that it gives us enough warning, enough lead-in time, to move its maintenance program

forward in the schedules," said co-developer Peter Horsburgh.

Just as amazing as the IoT itself is its development process. That started from scratch in December last year. The first prototype was ready for testing in February. The second iteration is already in service and the third generation is almost up and running.

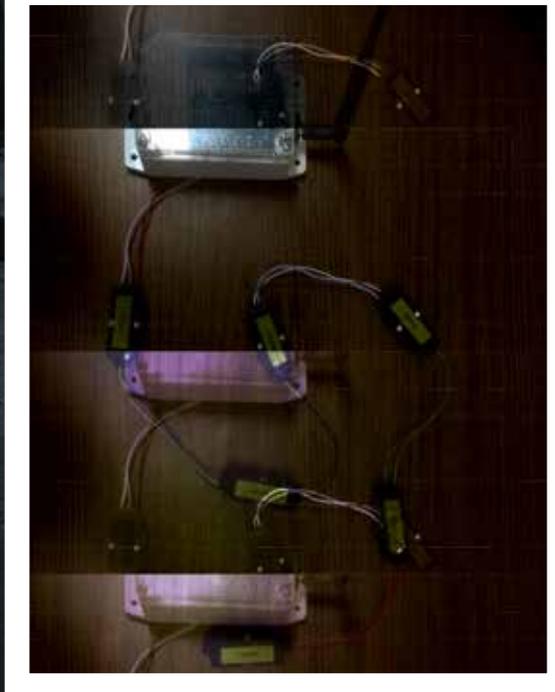
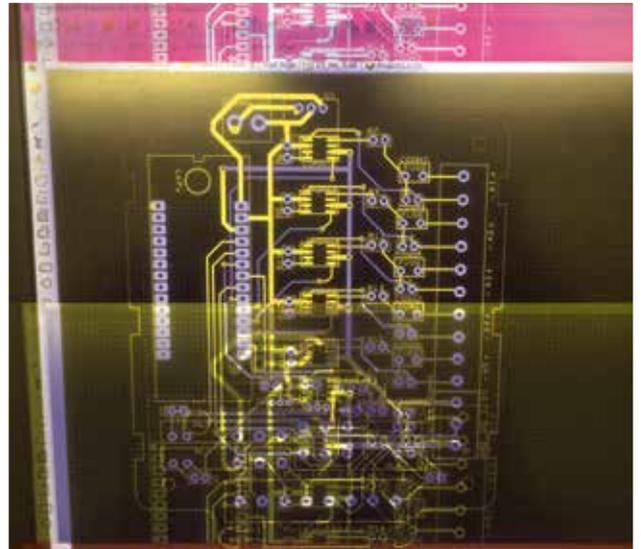
As that happens, costs will come down and functionality will go up. Right now, each unit costs \$150 and performs 13 functions. The next generation device will cost \$100 and will not only do more work but may even be 'department customisable'.

Designed in-house, their units have outlived all the commercially-available designs, are cheaper to build and individually configurable.

Tomago currently has 15 of the little grey boxes in various places. By the middle of 2019 that number will have grown to 200.

And the next plan?

"To open-source the design for other companies," says James Dorrington. "It helps speed-up development."



Power Consumption	13.527	Crushed Bath Potlines	549
Iron	1034	Rodded Anodes Stock	1055
Ladles Tapped	80	Anodes Poured F13	429
Ladles in Advance	13	Green Anodes Stock	2763
Shifts In Advance	4	Baked Anodes Stock	4518
Anodes to Change	0	PP1 Production	114
Anodes Uncovered	0	PP2 Production	213
Bath in Silos	1147	Emissions	0.28
CPO Tonnes	1716	Hazard Event Ratio	21
Good Billet Weight	86	LME AUD	\$2,651
LME USD	\$2,110		
AUD/USD	0.796		

for the 'My Crib Rules' comp to Cookie by 30th Aug.

The TV screens near the security gate keep everyone up-to-date.

ALL IDEAS ARE GOOD IDEAS

WHEN IT COMES TO GOOD IDEAS, MOST OF US HAVE AN ABSOLUTE RIPPER EVERY DAY. PUTTING THEM OUT THERE FOR THE WORLD TO SEE? SURPRISINGLY, IT'S NOT ALL THAT DIFFICULT AT TOMAGO.

At Tomago, we love good ideas and want to hear about them because they could improve safety, save time, save money or simply make for a better workplace.

In times past, businesses would have a Suggestion Box strategically located so employees could post their good ideas so they could be acted on by management.

These days the Suggestion Box is the Tomago Aluminium intranet (T-net) which has a 'Good Ideas' heading on the home page, taking users to a forum on which good ideas can be suggested.

There have been many great ideas and those destined to go further are assigned to the appropriate person for follow-up, making the leap from idea to reality.

Have you noticed, for example, that when you walk through the gates, there are screens displaying the market price of aluminium and the current trading price of the Australian dollar, along with the plant's Key Performance Indicators?

That idea was posted on May 4 and actioned soon afterwards by Lesley-Anne Clifton, who followed-up on another idea involving the plant gates and TV monitors.

This time around the suggestion was that traffic delays could be displayed on the screens so everyone leaving at the end of the day could see if traffic snarls would affect the drive home, allowing them to plan a different route and avoid being stuck in traffic.

“

NO IDEA IS SO OUTLANDISH THAT IT SHOULD NOT BE CONSIDERED.

– WINSTON CHURCHILL

”



The Westpac Rescue helicopter visited Tomago to show its appreciation for our continued support.

SPREADING THE LOVE TO CHARITIES

THERE IS NO SECRET ABOUT THE FACT THAT, WHEN IT COMES TO SUPPORTING LOCAL CHARITIES, TOMAGO EMPLOYEES ARE VERY GENEROUS FOLK WITH MANY CHOOSING TO TAKE PART IN THE OUT OF PAY DONATION SCHEME.

The program started back in 1993 with employees agreeing to have a few dollars a year deducted from their salaries by payroll and donated to charities, helping four small and two larger local charities in alternating years.

The level of support is boosted by the company, which matches the amount donated by the employees. Tomago Aluminium management made the decision to match the employee contributions in 1998, adding a solid boost to the amount of community involvement.

The charities are effectively chosen by those making the donations, too. Each year employees nominate their favourite charities and the nominations are submitted to a panel, which puts together a short list so that everyone taking part can have a final vote.

The Out of Pay Donation Scheme has seen charities such as The Mark Hughes Foundation and Variety, The Children's Charity benefit from Tomago employee donations. Both organisations were overwhelmed with the amount of support from Tomago and were over the moon when presented with cheques for \$23,513.

Mark Hughes was on site on Friday, July 14 for a special morning tea where over \$5,000 was raised, in addition to the Out of Pay Donation money. His response was heartfelt, highlighting the money will not only go towards research into a cure for brain cancer but also to providing support staff to help patients and their families.

Variety was also thrilled with its donation and has plans to put the money towards



a specially-equipped Sunshine Coach that will be used to transport kids living with disabilities, chronic illness or financial hardship in the Newcastle region. Some of it will also be used for the Variety Kids Christmas Party at McDonald Jones Stadium on November 15.

The coach will carry branding for both Variety and Tomago Aluminium so



Tomago employees took part in Variety's Spin 4 Kids Outdoor Spin Challenge, where they presented Variety with their Out of Pay Donation cheque.

employees can keep a look out for it around Newcastle.

One Tomago employee in particular, Wayne Pringle, has become established as the man behind TAC's charity work over the years.

"The three unions on site, the AWU, the AMWU and the CEPU, kicked-off the charity donations about 20 or so years ago. Twelve or so years ago the company started matching our contributions," Wayne said.

Wayne, the Australian Workers' Union Site Delegate, was asked by the AWU to take-over Tomago's fundraising for the Westpac Rescue Helicopter in 2015 and immediately revived something called the \$2 Plan. Similar to the Out of Pay Donation Scheme, the \$2 Plan involves TAC employees deducting \$2 per week from their pay for one particular cause – in this case, it's for the chopper.

When he kick-started the \$2 Plan in 2015 just 250 people were part of the donor

program and while he knew every little bit helped, he thought Tomago employees could do better. By the end of that year he had lifted the number to 420, with a goal of 600 by the end of 2017. At the time of writing this story, Wayne had reached 604 people on the books. Some, he said, have nominated more than the entry-point \$2.

Last year \$90,000 was given to the four nominated charities from the Out of Pay Donation Scheme and \$39,000 to the Westpac Rescue Helicopter from the \$2 Plan.

"Next year the total charity amount will be higher. The donation to the (Westpac Rescue) Helicopter will double and I'll promote the other charities as well.

"We can always do better." Wayne said.

For more information visit:

The Mark Hughes Foundation
facebook.com/markhughesfoundation
Variety, The Children's Charity
variety.org.au



“

THE MONEY WILL NOT ONLY GO TOWARDS RESEARCH INTO A CURE FOR BRAIN CANCER BUT ALSO TO PROVIDING SUPPORT STAFF TO HELP PATIENTS AND THEIR FAMILIES.

”



TOMAGO TURNAROUND — WEIGHT LOSS CHALLENGE

AN ARMY, IT'S SAID, MARCHES ON ITS STOMACH AND WHILE THE TOMAGO WORKFORCE MIGHT NOT BE AN ARMY IT STILL HAS A GOOD COLLECTIVE APPETITE.

Sometimes though, says company Occupational Health and Hygiene Officer Anthony 'Cookie' Cook, a few of the 'soldiers' either eat a bit more or march a bit less and that's where the Health Services team comes in.

Tomago's Health Services team helps promote healthy activities on-site and the most recent campaign was impressively successful.

Called 'The Tomago Turnaround', one of its first tasks was a five percent weight loss challenge, requiring nothing more than participants losing five percent (or more) of their body weight in a six-week period.

To encourage strong competition, each participant put up \$10 (the total matched by the company) with each paid-up entrant achieving their goal taking home a slice of the cash pool at the end of hostilities.

"When you think about it, weight loss is a bit 'anti-survival' for an animal. The early descendants of man that could store nutrients from food survived while those that were not good at storing nutrients died off. As a result, modern man is very good at storing nutrients. This can be a problem nowadays though when food is so readily available and we are moving less. As a result, we are getting bigger," Cookie said.

"It's all about changing our food and eating habits and practices that we have had for so many years so we promote doing one thing at a time, even if it's just a small thing. Big journeys start with small steps."

The good news from The Tomago Turnaround? Of the 69 people who took part almost all lost some weight with a 128.5 kilogram total loss across the group. Eighteen people hit their five per cent

target and received \$75 each from the prize pool. The best results included three entrants who each dropped eight per cent of their starting weight.

"Humans often need to see success to get the drive to succeed and that was what the five percent weight loss challenge was about. It is a great start for some while for others it is their overall goal," Cookie said.

Tomago's health and hygiene guru is following the weight loss challenge with cooking demonstrations which, he believes, will give people the skills they need for the next chapter of the Tomago Turnaround.

Called 'My Crib Room Rules', this competition gives everyone a chance to design a dish that will be added to the canteen menu as well as earning the individual designer or design group a \$300 dinner voucher.

It will be followed by a competition in which participants submit plans for a redesign of the canteen's outside dining area. Again, there will be a prize for the winning team.

In addition to the health promotion activities of the Tomago Turnaround, the Health Services team promotes quit smoking programs, gives dietary advice, offers physiotherapy and a visiting medical service.



FOND FAREWELLS

OVER THE LAST FEW MONTHS TOMAGO ALUMINIUM HAS FAREWELLED A NUMBER OF EMPLOYEES IN THE WAKE OF CHANGES MADE TO INCREASE BOTH SAFETY AND PRODUCTIVITY.

“We have learned how to work smarter so we’ve recently undergone a voluntary redundancy program involving 36 people as part of a restructuring process,” Electrolysis Project Leader Phil Brown said.

As an example, doing an anode change at the very start of the shift means a smoother work flow pattern for the anode changers and haulers, increasing the operation’s flexibility and their ability to meet and beat time constraints.

As well, liquid bath transfers have been simplified with three new, dedicated, bath-tapping forklifts being used, resulting on time savings.

The changes mean people like Mark King, who worked in Liquid Metal for 33 years, had the chance to look at life in a different way after taking voluntary redundancy.

“In retirement I hope to do some travelling – both domestic and overseas – and maybe some gardening to fill-in my time, as well as spending time with my grandchildren,” Mark said.

One of his three children has just started a landscaping business so Mark might find himself doing a bit more gardening than he planned!

Mark worked on Shifts 1 and 2 and said he had “worked with a great bunch of guys” over the years and commended TAC for its ongoing support.

“The company was always compassionate and understanding,” he added.

For Peter Rossetti and Ken Saunders, who both worked as Potline operators, time away from TAC will mean relaxing. Peter will be wandering about Glenrock Reserve and Ken will spend time with his family.



ALLOWING 36 OF OUR LONGEST-SERVING EMPLOYEES TO VOLUNTARILY ENTER RETIREMENT EARLY WHILE AT THE SAME TIME SECURING THE SAFETY AND QUALITY OF TOMAGO’S OPERATION IS SOMETHING WE SHOULD ALL BE VERY PROUD OF.



SUPPORTING LOCAL CHARITIES

BEING PART OF A COMMUNITY MEANS BEING A GOOD NEIGHBOUR AND AT TOMAGO ALUMINIUM WE PRIDE OURSELVES ON BEING GOOD NEIGHBOURS.

We do this by giving back, helping those around us by supporting projects and initiatives that benefit the local community. One of the ways we help is by supporting local charities, something we have been doing actively since 1993.

This year we have supported many organisations, from the Immune Deficiency Foundation Trust to Hunter Medical Research Institute. And even in the few months since the last edition of TAC NEWS was published, we have jumped on board with quite a few more.

If you have a charity you think needs support, contact Communications Advisor Katie Burns on 4966 9936 and get the ball rolling.

New charities in 2017:

Hexham Bowling Club

Rathmines Public School

Variety Bash

Immune Deficiency Foundation Trust

Mark Hughes Foundation

Variety, The Children’s Charity

NSW Hockey Masters Team

U14 Maitland Netball Team

Sporting Hope

Westpac Rescue Helicopter

Port Stephens Academic Scholarship Program

Mattara Festival

Charlie’s Run 4 Kids

SEVEN YEARS INJURY FREE

FOR TOMAGO ALUMINIUM'S WORLEYPARSONS ENGINEERING ALLIANCE TEAM, GETTING ANY JOB DONE PROPERLY MEANS STICKING TO TWO IMPORTANT WORDS – RISK ASSESSMENT.

For the 30-strong WorleyParsons team, headed-up by Brian Crossingham, knowing the detail of the work required, identifying hazards, assessing the risk, putting in place controls and checking the job from every angle means getting it right first time, every time.

The team, which recently celebrated a staggering seven years recordable injury-free (equal to more than 800,000 safe working hours including all contractors working on-site on Engineering projects), is charged with managing and delivering key capital projects and major maintenance projects across the smelter.

The WorleyParsons team has been providing engineering, project and construction management for Tomago Aluminium since 2003 and has been responsible for managing and delivering most of the major projects on-site, with the twin focus of improving business and safety.

Brian Crossingham, who has been Tomago's Engineering Manager for the past 5 years, says the good results come from great team work and the continual focus on safety from everyone involved – engineering / operations / maintenance and contractors.

"We manage complex and difficult tasks on behalf of Tomago and we break the work down into packages," Brian said.

"Everything gets a thorough safety analysis so that we can understand each job's work steps. We measure every parameter," Brian said, adding – "you can't do the job in isolation. You have to be on-site and work with the right people across the business and contractors to get the right result."

Brian sees the work of Construction Manager Mick Byrne and his team, which boasts a collective 350 years' industry experience, as fundamental to achieving high safety outcomes across the many work sites open across the smelter at any given time and operating around-the-clock.



The variety in the projects is also impressive, with the Engineering Team managing high voltage switchyard work, working at height on treatment centres and towers, working in confined spaces and handling complex refurbishment projects against a background of a 24/7 operation.

Brian says pre-planning each job, talking it through, running risk assessments with the team and even working with models to perfect a process ahead of job commencement, are some of the tools for success with no job allowed to start until the team is completely satisfied it has dotted all its 'I's' and crossed all its 'T's'. But it does not end there – effectively managing change through the whole delivery process is essential.

The result, he said, is a safe outcome with jobs completed on time and within budgets.

"At the end of the day," Brian says, "it is about all of us being safe at work and able to go home to our families – Tomago is a great team to work with and one that genuinely values safety – we are all proud to be a part of that."



MOBILE CREW KEEPS THE SITE MOVING

ANYONE TAKING EVEN THE MOST CURSORY GLANCE AT TOMAGO ALUMINIUM UNDERSTANDS, ON A SCALE OF ONE-TO-BIG, IT RATES PRETTY HIGHLY.

And keeping the hive of activity moving 24 hours is the jurisdiction of the Mobile Workshop.

“We’re a bit like blood flowing through the place – the lifeblood of the smelter,” says Maintenance Manager Maurice Schneider.

Tomago has around 200 pieces of mobile equipment. Forklift trucks, haulage trucks carrying crucibles of molten metal, industrial grade road sweepers and the maintenance of all of them falls within the jurisdiction of the 12-strong Mobile Workshop crew.

Maurice says the only time people talk about the mobile equipment is when there are problems with it. And these days, he adds, no one is talking about it very much and all of that is due to the efforts of the Mobile Workshop team.

“We have a meeting every morning and we talk about the mobile equipment and if there have been any problems. Mal Muddle, the Maintenance Superintendent, always has a contingency plan in place so if there are problems we can soon work out a way to deal with them,” Maurice said.

The team, which comprises diesel mechanics and an auto electrician, is a highly skilled unit.

“Primarily, these guys are a one-stop shop and they are always on the front foot. In the past 12 months some new equipment has been introduced and we have had commissioning issues. The crew has been finding ways to sort it out and they have been positive about it the whole time.”

That positivity was rewarded in early July when the Mobile Workshop crew and their partners were taken to McDonald Jones Stadium to see the Knights play the Wests Tigers.

The result might not have been what they were hoping for but it didn’t stop their enthusiasm for a great day out.



TOMAGO APPROVED TO SELF-INSURE

Tomago Aluminium is one of just a handful of companies in the state granted permission to self-insure by the NSW Government's State Insurance Regulatory Authority (SIRA) after an application process lasting more than a year.

"It's a significant achievement to be granted a self-insurance license," People Safety and Environment Manager Simon Mitchell said.

"Quite an achievement.

"Most businesses insure with regular insurance companies. Because there are limited licences approved (by the Government) we had to demonstrate both a robust safety management system as well as excellence in safety performance."

The decision to start the process was approved by Tomago's Board of Directors in June last year and the application was lodged in December, opening the way for SIRA to look at the company's safety history, assess its risk level and its overall safety.

As part of maintaining the self-insurance licence, Tomago is required to demonstrate compliance with the WHS Act and Regulations, and is subject to an audit by SafeWork NSW when indicated.

“

OUR WORKERS HAVE HELPED US ACHIEVE THIS THROUGH THEIR CULTURE OF LOOKING AFTER EACH OTHER AND MAKING SAFE CHOICES. IT REALLY IS A CASE OF MATES LOOKING AFTER MATES.

”

According to Simon the granting of self-insurance was a "feather in Tomago's cap."

In one of those highly-preferred 'win-win' situations it also means a financial benefit to the company through savings made in overall insurance costs while achieving faster and more efficient care of the company's workforce.

"It enables us to reinvest money back into the workplace," Simon said.

Which is never a bad thing!



Health and Safety Committee member Greg McLoughney (left) and Chairman Neil Lindus (right) presenting Ron Vanderweyde with his first aid kit.

RON RECOGNISED

ALMOST EVERY AUSTRALIAN WORKPLACE HAS A GREAT SENSE OF MATESHIP BUT AT TOMAGO ALUMINIUM AN EVEN GREATER CULTURE OF 'MATES LOOKING AFTER MATES' IS BEING FOSTERED.

Here, caring for those around you is taken so seriously that employees are rewarded for their efforts when it comes to workplace safety through the 'Nomination for Safety Behaviour' program run by the Health and Safety Committee.

For a great example of just what that means, look no further than Substation electrician Ron Vanderweyde, who has been with the company for 33 years and is currently working in the Main Substation.

The committee found that not only did Ron strongly demonstrate and reinforce the 'Mates looking after Mates' ethic by positively encouraging and coaching new employees in his work area, he also works to preserve the safety processes put in place, managing risks by maintaining the high standards necessary.

"Working with high voltage you don't get any second chances at all. It's a very dangerous area, you do the job properly and you make it safe" he said, adding: "It doesn't take very much longer to do a job properly."

Ron enjoys working with new employees and mentoring, he says, has become part of his role. "I particularly like to set a good example for the apprentices."

Trish Rapley, Secretary of the Health and Safety Committee, said the committee has a process for team leaders or workmates to nominate fellow workers, recognising employees who have demonstrated safe behaviour.

"There is a 'Nomination for Safety Behaviour' form that needs to be filled-in and approved by their manager prior to submitting it to the Committee for approval," Trish said. "Once approved, the person is then presented with a first aid kit by a member of the committee and recognised for their effort."

BIG BUCKS IN TAX BENEFITS



TAC department representatives (L to R) Senior Mechanical Engineer Jason Couper, Reline Engineer Troy Martin, Major Maintenance Engineer Warren Dixon, Graduate James Dorrington, Senior Reliability Engineer Peter Horsburgh, Automation Engineer Brodie Fairhall, Process Engineer Katherine Russell, Booster engineer Darryl Frew and Process Engineer Phil Brown.

WHEN IT COMES TO OUR INCOME TAX RETURNS, WE ARE ALL HOLDING OUT FOR THE BEST POSSIBLE RESULT.

And if we all do that, why wouldn't we expect that businesses large and small, businesses just like Tomago Aluminium, would want to do exactly the same thing?

When it comes to the world of business though, things are a little different. We keep our receipts in a shoebox, Tomago calls in accounting firm Ernst and Young and every year a team of three research and development tax specialists assist with finding tax opportunities.

"It's a really, really good system we have," said Senior Financial Accountant Luke Rankovich.

"Australian tax legislation allows companies to claim back 40 per cent of the expenditure on research and development activities and each year Ernst and Young asks Tomago Aluminium about its R&D projects."

Last year 11 Tomago projects collectively amounted to a \$23 million

national tax deduction which was turned into a \$2.3 million tax benefit for Tomago's owners and, says Luke, the company is expecting a similar tax benefit for the year ending March 2017.

Ernst and Young achieves that by sitting down in separate interviews with as many as 20 Tomago department heads from all around the plant, sifting through all the development material and discussing current and future developments, looking at each individual department's current spending and factoring-in future spending.

Each interview takes up to three hours and is just a part of the work that needs to be done each year for the tax assessment process.

"It's always a case of learning new ways to do things better. It keeps our guys excited that they can do new and innovative things as well," Luke said.

ANDREW WITHERS

What is your current role?

Emission Control Day Services Operator.

Finish this line:

When I'm not at work...

I'm spending time with my family.

If you had \$100 to spend on yourself what would you do with it?

Put it towards a camping trip with friends and family.

Biggest regret?

No regrets for me. Those things are no good for you.

Favourite food?

Any type of BBQ or campfire cooked item. I have been cooking a few briskets in the camp oven lately.

What were your first thoughts of TAC?

Big. And the first time I'd had access to all the machinery I'd seen in books as a kid.

What's the best piece of advice you've been given?

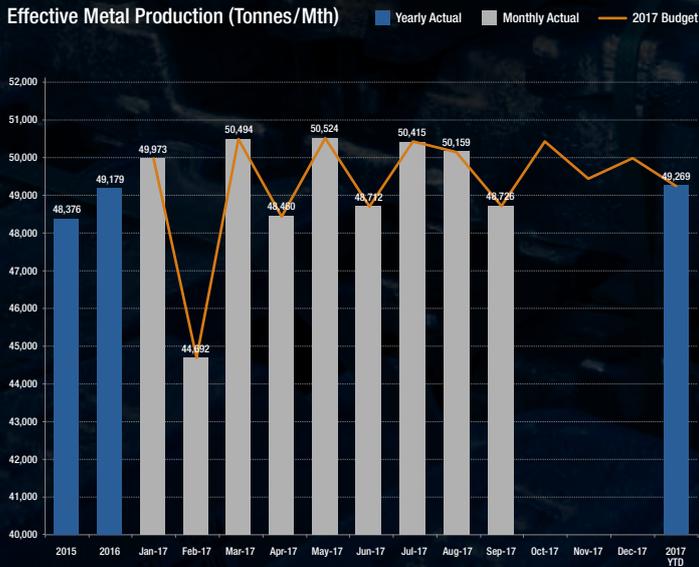
"Take each day as it comes...and enjoy."

FUN FACT:

Each anode weighs 1.4 tonnes. That's about the same as a small to medium passenger car.

TOMAGO'S KEY PERFORMANCE INDICATORS

Effective Metal Production (Tonnes/Mth)



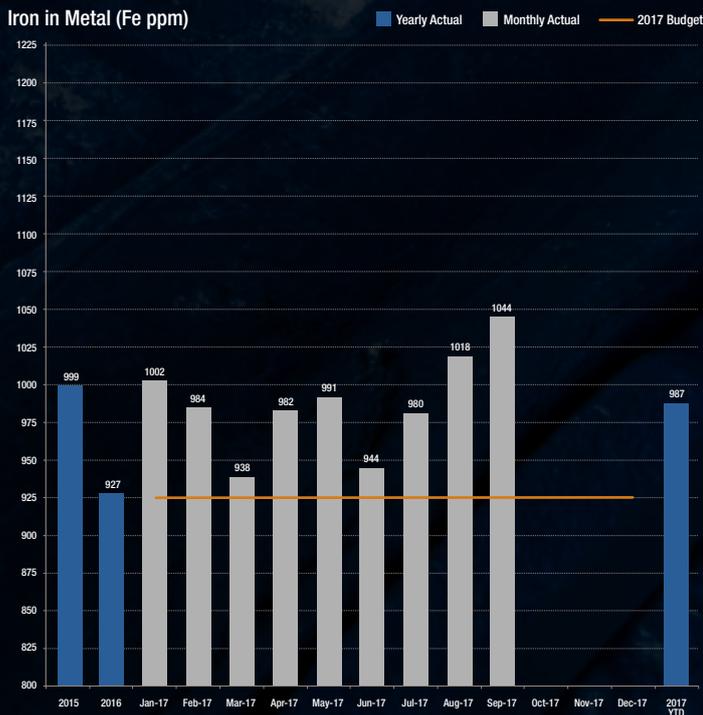
The Effective Metal Production is the total amount of hot metal tapped from the pots. It includes both hot metal tonnes delivered to Cast Products plus any reclaimed cold metal.

DC Energy Consumption (kWh / tAl)



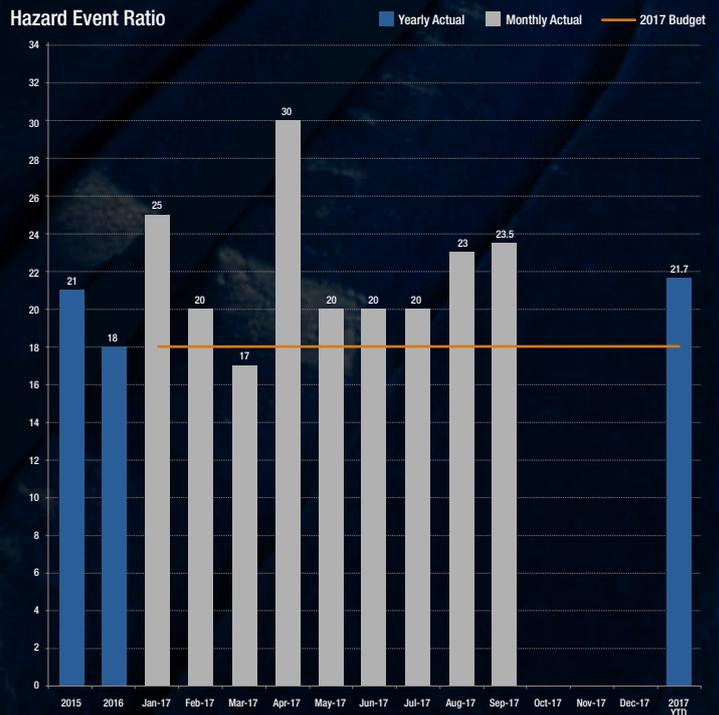
Energy Consumption measures how much power we use to make one tonne of aluminium. The lower this number the better!

Iron in Metal (Fe ppm)



Iron in metal is our main measure of quality and purity. The lower the iron content is, the better.

Hazard Event Ratio



The Hazard Event Ratio measures the number of injuries in proportion to the number of safety related events.