

news



SUPPORTING THOSE IN NEED

TOMAGO GIVES BACK THROUGH IT'S OUT-OF-PAY DONATION SCHEME

COST AND WASTE REDUCTION IN CASTHOUSE

HUNTER RIVER HIGH SCHOOL PROGRAM



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CEO MESSAGE

Matt Howell
Chief Executive Officer

COLLEAGUES, WELCOME TO THIS EDITION OF TAC NEWS.

Hats off to the army of volunteers and supporters of various very worthy causes our people are supporting this quarter, from 'Dry July' (raising funds to care for people affected by cancer), to the 'Bloody long walk' (research on mitochondrial disease), the Duke of Edinburgh awards and the TAC Out-of-Pay Donation scheme, there's a lot going on!

Team Tomago passed-up on the Sunday sleep-in on July 28 and braved the winter chill to tackle The Bloody Long Walk, a 35-kilometre fundraising walk from Belmont to Newcastle Beach to support the fight against mitochondrial disease, a debilitating condition affecting some 5,000 Australians. It was a pleasure joining work colleagues taking part and an ice-cold beer at the end of the walk was a great way to finish.

We should all take particular pride in our strong community spirit. Through the Out-of-Pay Donation Scheme, we have been able to give \$40,000 to charity this year with *Soldier On* and the *John Hunter Children's Hospital* the recipients of that generosity.

We should be very proud that, since 1986, our employees alone have given over a million dollars to more than 400 charities and in the last 15 years another \$700,000-plus to the Westpac Rescue Helicopter. Just last year alone, we donated \$187,000 to charity,

\$96,000 coming directly from you, our employees, which is something to be extremely proud of.

On the other side of the coin, we are feeling the benefits of some smart thinking by the Casthouse team who, six months ago, started recycling swarf briquettes in our own furnaces rather than sending waste off-site, delivering a substantial saving of \$200,000 a year.

It is these sorts of solutions that make a difference and in June we were noticed by Rio Tinto CEO Jean-Sebastien (JS) Jacques. Making his first visit to our site, he was impressed by what he saw.

Not only was he taken with our results, he was taken with us as a business, liking our housekeeping practices and overall appearance.

We are also happy with our new involvement with Hunter River High School through its Pathways to Technology program. Tomago Aluminium has become one of the school's industry partners and from next year, we will be welcoming students into our work experience program.

And we've had a baby! Congratulations to Amanda Wicks and her partner Josh on the birth of their daughter, Frankie.

What makes this little girl particularly special is that Amanda is our first female Operator to have a baby and her workplace experiences during her

pregnancy have helped us prepare a new set of guidelines, so future expectant mums can keep working safely and comfortably.

Finally, and with a degree of sadness, we said farewell to our former Chief Financial Officer and Company Secretary, Steve McIntyre. Steve, who had eight years with us, was the consummate work professional and helped us through some tough times but he always had time for a chat and always had a joke to tell. He and Wendy will now start a new expedition touring Australia by caravan.

From a business perspective, the past six months or so has been tough. The external business environment for smelting is being impacted by a variety of forces. My message to all of us is to focus on the things we can control and let the market take care of itself. There is very strong demand for Aluminium globally and TAC produces some of the highest quality there is. By continuing to look out for one another and take care of our business, we will ride out the present challenges and continue to provide for our employees, their families and the community.

I hope you enjoy this edition of TAC NEWS and thanks again for everyone's work!

Matt

SUPPORTING THOSE IN NEED

AS ONE OF THE HUNTER'S BIGGEST PRIVATE EMPLOYERS, TOMAGO IS ALSO ONE OF THE REGION'S BIGGEST CHARITY DONORS THROUGH A NUMBER OF PROGRAMS, INCLUDING THE OUT-OF-PAY DONATION SCHEME, WHICH WAS ESTABLISHED 33 YEARS AGO.



In that time more than 400 charities have benefited from Tomago's generosity and what started as a \$2000 donation in 1986 has grown incrementally, last year shooting past the magic \$1million mark.

In June we again opened our hearts, giving some \$40,000 from the Out-of-Pay Donation Scheme to two charities, with the John Hunter Children's Hospital and Soldier On each receiving \$20,000.

On Monday, July 8, employees hosted representatives from both organisations onsite for a special morning tea and to hear how the donations will directly support the local community.

"At Tomago Aluminium we believe generosity knows no bounds," company Communications Advisor, Katie Burns, said. "We know there are a lot of people in the Hunter doing it tough for a variety of reasons and everyone who works here takes great pleasure in helping out those who need support."

Employee donations are matched dollar-for-dollar by the business and the money stays local, supporting the community.

Wayne Pringle, Australian Workers' Union site delegate said, "The charities are the ones that do the real work. All

we do is collect money. That is easy by comparison but we can always do better with fewer than 400 in the scheme. If we increased the participation, we could more than double our donation and be able to help very worthwhile charities."

Every year, employees can nominate their favourite local charities and, when the list is compiled, popular vote decides which charities will be supported.

For the John Hunter Children's Hospital, the money will be used for specialist equipment to help with its outreach clinics. The items include a tympanometer to assess middle ear health and eardrum mobility, an audiometer to screen for hearing loss, a printer with which clinicians can print hearing screening results and a hand-held otoscope for viewing ear canals and eardrums.

For its part Soldier On, which works with former military personnel and their families, will use the money to provide ongoing support to veterans and their families, including psychological services and social connections to help veterans and their families secure their futures.

In addition to the Out-of-Pay Donation Scheme, Tomago Aluminium also

supports the Westpac Rescue Helicopter Service through another voluntary payroll deduction scheme.

The company has donated, on average, \$50,000 each year for the last 15 years from employee deductions to the service and this year is no exception with almost \$60,000 raised, bringing the total employee donation in that time to \$710,000.

Last year TAC employees also came together to support struggling farmers and, with the amount raised by employees matched by the company, a total of \$50,000 was achieved for the Buy a Bale campaign.

An additional \$50,000 from the business is also distributed to another 20-plus local charities and community events through donations and sponsorships each year.

Last year the company donated \$91,000 to local charities and employees donated \$96,000 out of their own pay, bringing the total to \$187,000, which was spread across local charities and community events.

"We are part of a great community and we like adding to that community spirit," Katie said, "employees are hoping to raise a similar amount or more this year."



L-R: Wayne Pringle, Matt Howell and Katie Burns with the cheque for the John Hunter Children's Hospital.

Wayne Pringle also knows how important it is for employees to give back to the community of which we are a part of, but adds that sometimes, when workmates experience serious illness or injury or when the worst happens and families need support, the charity gaze has to turn inwards.

For those times, a framework for financial support, known as the Hardship Scheme, was put in place at Tomago. Started in 2017, this is a special employee assistance program that only comes into play when it is needed.

Employees agree to have \$10 deducted from their pay in the event of a hardship and lodge a consent form with the Pay Office. Should an incident occur, the scheme's trustees trigger the necessary actions for the money to be deducted.

Perhaps the words of US war veteran-turned-comic strip author, John Holmes, is best to sum up our community support.

“

There is no exercise better for the heart, than reaching down and lifting people up. ”

John Holmes



3 WAYS TO GIVE BACK

OUT-OF-PAY DONATION SCHEME

Every year employees nominate an amount to be deducted from their pay and the total amount is held and matched by the company. Employees get to nominate their favourite local charities and the successful recipients are chosen by popular vote. Every second year two large charities are selected and every other year four smaller charities are chosen.

WESTPAC RESCUE HELICOPTER SCHEME

Similar to the Out-of-Pay Donation scheme, this is another voluntary payroll deduction scheme with all proceeds going directly to the Westpac Rescue Helicopter Services.

HARDSHIP SCHEME

Set up to support employees facing financial hardship through injury or other circumstances beyond their control. Employees who take part in the scheme agree to have \$10 deducted from their pay, which is only used if an incident occurs and the scheme's five trustees trigger the necessary formalities. Only those signed up to the scheme can benefit should the worst happen.

To join any of the above schemes, please visit the Payroll office or contact Wayne Pringle.



Casthouse Operators Rob Cox (L) and Alan Cranney (R) developed a way of reusing swarf briquettes, potentially saving \$200,000 a year.

CASTHOUSE COST AND WASTE REDUCTION

RE-PROCESSING OUR ALUMINIUM WASTE HAS BEEN COSTING A SMALL FORTUNE, BUT THANKS TO A BIT OF LATERAL THINKING IN THE CASTHOUSE, THIS IS NOW MONEY IN TOMAGO'S POCKET.

Aluminium waste, or swarf, created during the billet cutting process, has been costing the company a small fortune.

Collected and compressed into two kilogram briquettes the waste has, for the past 15 years, been sent offsite to Weston Aluminium at Kurri Kurri to be melted-down into 'sows' (uniform blocks of a particular shape weighing 500 kilograms), which are returned and used in the Tomago furnaces.

The problem is, \$450 was being paid to Weston Aluminium for every tonne of briquettes handled, costing Tomago a hefty \$200,000 a year to effectively have some 445 tonnes of aluminium waste reprocessed.

"So we were paying \$450 a tonne for them to melt the metal," Casthouse Process Superintendent Mark Ball said. "Then they'd cast it into sows and we'd bring them back. The sows are essentially pure aluminium.

"We were basically paying for them to re-melt them (the briquettes) and then give them back to us in a different form."

That was until Casthouse Operator Alan Cranney sat down, thought about this expensive problem and came up with a way to reuse the briquettes in the company's furnaces, effectively cutting-out the middleman and saving Tomago \$200,000 a year.

"He came up with the solution to put the bricks back through our furnaces and had the passion to see the idea through," Mark said. "He and Rob Cox did all the chemical assessments and said it would work so we followed it through."

Alan's idea involved taking small quantities of swarf briquettes, adding them to bins of head and foot cuts and tipping the bins into the furnaces, re-melting the 'bricks' onsite.

"We've been doing it for six months now with no problems at all," Mark said, taking pride in the fact the Casthouse has, in that time, saved the company a cool \$100,000. "

Mark says there could be more to come because Alan, who has been with Tomago for some 20 years, "still has a few good ideas up his sleeve".

“
*JS really liked this innovation,
 all-in-all, we got very good
 feedback from him.*”

Simon Mitchell



Rio Tinto Chief Executive Officer, Jean-Sebastien (JS) Jacques (centre) with the Management team.

RIO TINTO CEO VISIT

TOMAGO ALUMINIUM HAS BEEN A ‘MUST SEE’ FOR A NUMBER OF VIP VISITORS OVER THE YEARS BUT FEW HAVE BEEN AS IMPORTANT AS RIO TINTO CHIEF EXECUTIVE OFFICER, JEAN-SEBASTIEN (JS) JACQUES.

Mr Jacques, who was appointed to the CEO’s role in July 2016, visited us in June as part of a tour of the company’s four Australasian smelters, the occasion marking his first-ever visit to Tomago and making him the first Rio Tinto CEO to visit the site.

No stranger to the aluminium industry, Mr Jacques spent more than 15 years working in various roles in the aluminium, bauxite and steel industries throughout Europe, Southeast Asia, India and the United States before joining Rio Tinto.

Tomago Aluminium’s People, Safety and Environment Manager, Simon Mitchell, said Mr Jacques was in the process of reviewing all the company’s smelters in Australia but had a particular connection with Tomago through his previous work with Pechiney, whose technology was used when the smelter was established.

“We know we are one of the benchmark performers for this cell technology and JS was interested in understanding how we achieved that,” Simon said.

Mr Jacques also took the time to have a look across the site, including the main production areas and his feedback was that three things in particular stood out.

“First, JS mentioned our housekeeping and overall site appearance, which he thought was really good. Furthermore, he commented on our commitment to conducting emergency response drills – not just basic evacuation drills but how we manage potential high risk scenarios that could seriously injure multiple people, like a loss of control of gas or a molten metal explosion.”

The Rio Tinto CEO was also impressed with the innovation shown around process safety risks onsite, such as the electronic pre-start on the VDC area in the Casthouse, indicating an interest in getting other businesses to apply that thinking.

“JS really liked this innovation,” Simon said. “All-in-all, we got very good feedback from him.

He was also very upbeat about the future growth of aluminium, particularly in relation to demands from industry for lightweight materials, such as the automotive and aeronautical industries.”



MAINTENANCE DASHBOARD

TRACKING EQUIPMENT USE AND COSTS ARE MAJOR ISSUES FOR ANY INDUSTRY BUT AT TOMAGO THE PROBLEM IS BEING ADDRESSED WITH A NEWLY-DEVELOPED 'MAINTENANCE DASHBOARD'.

Asset Management team members Jason Giddins and Steve Pfennigwerth have developed the Maintenance Dashboard via the use of PowerBI to monitor and track the entire Tomago vehicle fleet of trucks, cars, trailers, forklifts, tractors, generators and mobile-related items – virtually anything with wheels or a motor.

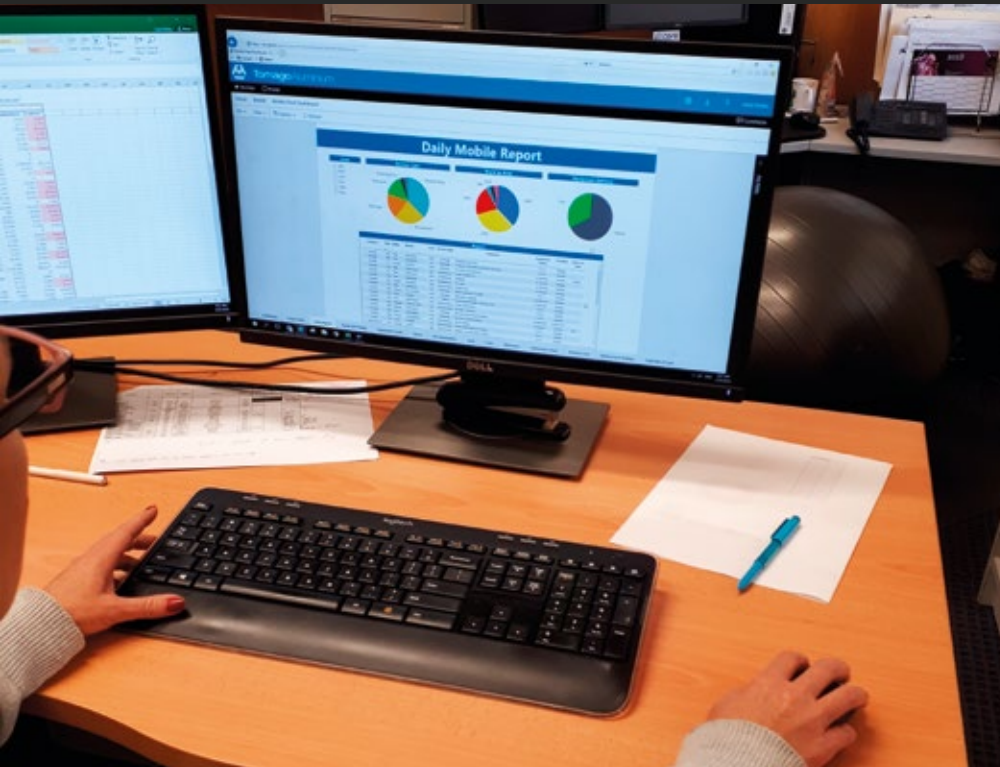
“The idea came to us when we asked what the equipment was doing and the answers were vague.

“We asked how many hours a vehicle has operated and there was no real answer. Somebody would say a machine had done 20 hours when the reality was it had done three hours,” Jason Giddins said.

Two years ago, when he was with Mobile Maintenance, Jason and Steve started working on a simple spreadsheet using their own data to track costs and got back what they described as “good data” from it, realising at the same time that there was more that could be done with it.

He refined it to the point where it not only gave the numbers showing hourly running costs but also tracked things such as reactive work, preventative work, project work and damage.

“We’ve gone really hard on it over the last six months after implementing the Dashboard on Power BI and now we can actually get a run cost per vehicle and see things such as oil consumption and tyre wear for individual pieces of equipment.



An operator accessing the Maintenance Dashboard through a Tomago computer.

“ This tool is actually showing us things we didn’t ask for. It does its own thing in the background and it is giving us more than what we originally intended. It is giving us information at all levels and letting us make good decisions. ”

Antonie Jacobs

“It’s a hard thing to explain but this isn’t just a tool for us, it’s a tool for everybody from the maintainers right through to the manager and that’s the way we started building it.

“PowerBI can pull information from Excel spreadsheets, SAP and it can also pull information from any sort of tabulation document.

“It has overcome a lot of accessibility obstacles,” Jason said. “The data has been turned into a platform for information and the more data we have, the more we can make it do.”

Antonie Jacobs describes the Maintenance Dashboard as “fact driven.”

“This tool is actually showing us things we didn’t ask for. It does its own thing in the background and it is giving us more than what we originally intended. It is giving us information at all levels and letting us make good decisions.”

The dashboard, which can be accessed from any computer, gives an extremely comprehensive picture, giving data that allows faster, more accurate decision making.

It can show any of the host vehicles in real time, check the maintenance and operational data, see how many hours it has worked, analyse component or unit wear and life expectancy and advise on the replacement cost and even work out a maintenance cost ratio.

Vehicle condition is checked by monitoring key health indicators across a wide range of fields and each vehicle is assigned a health score with a regular vehicle report given at a pre-determined time.

Admitting that it took a lot of hard work to make something look simple, Jason and Antonie believe the operating abilities of their development can be expanded to take in forecasting and

budgeting, an area Jason and Steve Pfennigwerth are now exploring.

Because it can give in-depth information and appraisals of the fleet, the Maintenance Dashboard helps track and manage vehicle and other machine costs that are often complex and difficult to control, bringing greater accuracy to forecasts and budgeting.

“It gives information that allows people to make good decisions from it and that’s the whole point of this tool; its to give all levels of management and all levels of trades and operations something to help make good decisions.” Jason said.

As an example, he points to a cost saving of \$70,000 in vehicle tyres alone over a six-month period because the tool allowed rapid identification of the opportunity and its size.

“It’s cool. It’s a really cool tool.”



EMPOWERING TAC WOMEN

WOMEN MAKE UP A VERY SMALL PROPORTION OF THE TOMAGO WORKFORCE BUT A LACK OF NUMBERS IS NOT REFLECTING A LACK OF CONFIDENCE OR ABILITY.

Since May, many of TAC’s female workers have been learning Krav Maga, a form of self-defence, in workshops initiated by HR advisor Kieran Turner.

The workshops were not motivated by a lack of progressiveness on the Tomago worksite but by a desire to reinforce camaraderie among the female workers.

“This is more around working for our women because they are a much smaller group onsite – about seven per cent of the total workforce – and we wanted to reinforce the fact there are other people onsite they can talk to.

“We wanted to create a more supportive environment and we want to give the women who are here the confidence to move up the leadership ladder,” Kieran said.

The workshops were originally created to encourage networking through a fun, shared experience, to get Tomago’s women together and have a talking point through something that was engaging.

Kieran chose Krav Maga (it means ‘contact combat’ in Hebrew), a form of self-defence developed and used by the Israeli Defence Force. The workshops involve short, sharp and (pardon the pun) punchy training sessions where self-defence is learned quickly.

The method has proven useful for building confidence because it changes people’s psychological patterns and opinions of themselves and their lives in general, encouraging the sort of self-discovery in which people realise they are far more capable than they thought.

“During the workshops people have to be positive. It’s hard to be a jerk when you’re getting kicked in the groin!” Kieran says with a laugh.

“I trained in it myself and I know the confidence it can give. It’s about working on a unique set of skills that may actually be useful at some point and could potentially save a person’s life.

“It also gives our female workers a talking point, something with which they can initiate a conversation. They

may see each other in the change rooms at shift change and if they don’t really know each other they immediately have a social contact point, a bonding experience.”

The conversations that start in training, Kieran says, continue long after the sessions have finished.

Training workshops started in May and are held in the main presentation room every second Tuesday between 7-8am to cover each shift. The first session had 14 participants – essentially every woman working on shift that day. The second session comprised 12 people – again, every female on shift.

“We do cram a lot of things in. It’s a great kickstart to the morning and gets the blood pumping.”

“We’ve had very positive feedback – a few of the girls have already said they are more confident,” Kieran said.

Because of the positivity around the workshops, we are hoping to continue them with more opportunities for everyone onsite to be part of the training.



Amanda and Josh Wicks with baby Frankie.

FLEXIBILITY AT TOMAGO

EXPECTING THE FIRST CHILD IS A SPECIAL TIME FOR EVERY NEW MUM BUT AMANDA WICKS' PREGNANCY BECAME A SPECIAL TIME FOR MANY AT TOMAGO.

Amanda, then a Liquid Metals Operator, unwittingly helped the company establish a whole new set of operating procedures when she announced her pregnancy, simply because she was the first person working in the department to do so.

"It was a first for us," said HR Advisor Kate Wagner. "She announced she was expecting and from there we managed her through the pregnancy until the baby was born."

Amanda's requirements were passed-on to the company's upper management and Health Services teams, which assessed various departments to see where she could be placed to lessen any health risks to both her and her baby.

"We needed to find the safest areas for expectant mothers to work in," Kate recalled.

"Once we identified suitable areas we then facilitated her move into the Cast Products department."

It was, says Kate, a "very happy first" for Tomago, adding that the company now has a good grip on the steps needing to be taken when there is a "next time".

"It was the start of a new instruction manual for us!

"During the various stages of Amanda's pregnancy we were able to accommodate the requirement to change her work methods. She was an Ingot Chain Furnace Operator to begin with, pouring ladles, tending furnaces and operating forklift trucks and Furnace Tending Vehicles.

"She then transitioned to the Ingot Chains where she was trained as a Control Room Operator.

For her part, Amanda was pleased with everything done for her by Tomago to help her through a difficult yet happy experience.

"They absolutely gave me a good working environment and everyone was so helpful. I was the first one so none of us really knew what to do.

"As my pregnancy progressed everyone was really helpful and so supportive. Around the 25-week mark I was struggling a little bit and they moved me again just to help make it easier – or as easy as pregnancy can be.

"We weren't sure so we had to work together. I'd give them feedback on how I was doing with it as well and they were all very open to listening, very accommodating, it was great," she said.

Baby Frankie was born in March, arriving with wonderful punctuality. Amanda finished her last shift on a Friday and Frankie popped into the world the very next night.

Simon Mitchell, Tomago's People, Safety and Environment Manager, said the company's Health Services team maintained contact with Amanda's

doctor during her pregnancy so the company could fully understand how to give the best workplace support.

"When Amanda felt she was unable to perform certain parts of her job her doctor advised us of this and our Health Services team worked with the department to make those accommodations," Simon said.

"Each pregnancy is different and our plan is to work closely with our employees to understand how we can keep them safe at work during this time," he added.

Amanda and baby Frankie are a great demonstration of how teams from various departments work together.

"It shows us how accommodating we can be and what we can do to manage events like this as they arise," Kate Wagner said. "It has brought a softer side to the operation."

Amanda's husband, Josh, also works at Tomago as a Metal Operator and the company was able to help the couple by aligning shifts so they could be together as much as possible in the lead-up to their happy event.

Right now Amanda is enjoying being a fulltime mum rather than a fulltime Cast Products Operator and is not planning on changing that situation until March next year, when she will return to work.

And Frankie? Amanda doesn't know yet what role she will be filling at Tomago but suspects she might opt for being Mum's Minder.



“
We are giving the students the skills and confidence needed before sending them out into the workplace, focusing on the essentials rather than the job itself.”

Liana Nadalin



HUNTER RIVER HIGH SCHOOL PROGRAM

ONE OF TOMAGO ALUMINIUM’S CLOSEST NEIGHBOURS, HUNTER RIVER HIGH SCHOOL, IS NOW RANKED AMONG THE STATE’S LEADING TECHNICAL HIGH SCHOOLS AND THAT IS EXCITING NEWS FOR US.

The school recently launched its 2019 ‘Pathways to Technology’ (P-TECH) program and Tomago, as well as a number of other leading businesses based in the Port Stephens region were involved, visiting the school for the launch.

P-TECH, part of the government’s Science, Technology, Engineering and Mathematics (STEM) program, is an approach to learning and development that will help meet future employment needs.

Employer demand for STEM qualifications and skills is high and will continue to grow. Currently, 75 per cent of jobs in Australia’s fastest-growing industries call for workers with these skills.

To be competitive, Australian industry needs people who can adapt to a rapidly changing workplace and Hunter River High’s program has been planned to develop those learning and portable skills pathways, catering for secondary students who have employment in the various advanced manufacturing and engineering trades as their employment goal.

That is a positive for engineering companies in the region and five of them – Tomago, Ampcontrol, BAE Systems, Jetstar and Varley Group – are now the school’s technical partners.

“Our Apprentice Supervisor, Greg Wall, has visited the school several times and this year we invited the staff back to our workshops. In 2020 we will be one of their industry partners,” said Mal Muddle, Tomago’s Site Services Maintenance Superintendent.

Starting next year Tomago Aluminium, as one of the school’s industry partners, will bring Hunter River High’s P-TECH students into its work experience program.

“We’ve always had an affection for our local school and we’ll always have an affection for their students because we can help them and by helping them we are helping ourselves and the local community,” Mal said.

“Hunter River High is one of the most successful schools in Australia doing this (kind of training) and getting it off the ground. They are already partnering with several large businesses and Tomago is one of the biggest players in this area.

“The school is excelling and we are pleased to be part of that success. We’re partnering with a school that is doing great work. It’s a win-win story.”



Maintenance Superintendent Mal Muddle and HR Advisor Keiran Turner with other local industry partners.

Tomago's association with Hunter River High is also particularly special for Mal because it is his old alma mater.

P-TECH was initiated at the school in 2017 by its then-new Partnership Officer, Liana Nadalin. The school may have been a late starter in the technology race but it has proven itself a fast runner, quickly becoming an educational benchmark.

An engineering workshop overseen by head teacher Shane Lloyd was revamped and refurbished to meet current industry standards at Ms Nadalin's suggestion. An impressive high function, industry-led and approved trade school facility was reinvigorated by Mr Lloyd and Ms Nadalin using the P-TECH model.

At the same time, the school reached-out to major engineering companies based in the region and started forming technical partnerships with them, giving students additional hands-on experience.

Ms Nadalin said interaction with local engineering businesses has given the school's 46 Year 11 and 12 students involved with the program a better understanding of the expectations of industry by creating a strong model for them.

"I call it front-end loading," she said. "We are giving the students the skills and confidence needed before sending them out into the workplace, focusing on the essentials rather than the job itself. Industry will teach them the job."

The school's P-TECH program has kicked goals from day one and has already been assessed by the NSW Department of Education as one of the best in the state.

"It gives us a sense of pride to know that the school is excelling and we are part of that," Mal Muddle said.

Several former Hunter River High School students have passed through Tomago Aluminium's apprenticeship program and this new partnership could well see that number increase.

For school principal Deb Dibley it is all about engaging young minds.

"The students don't know what they don't know and they can only benefit from these quality partnerships that engage both our students and their families, both at school and in the workplace," Ms Dibley said.



TAC FAREWELLS ITS CFO

GOODBYES ARE NEVER EASY BUT ARE ESPECIALLY DIFFICULT WHEN IT COMES TO FAREWELLING A FRIEND LIKE STEVE MCINTYRE, WHO RECENTLY FINISHED-UP AFTER EIGHT YEARS WITH TOMAGO.

The former Chief Financial Officer said his last goodbyes at the end of June with a series of small functions, with his own team and managers taking the opportunity to say farewell before he packed the last items from his desk.

In his time with the company Steve earned a reputation as something of a comedian and at one of the functions a light-hearted review by CEO Matt Howell, detailing Steve's eight years at Tomago, was a highlight.

TAC's People, Safety and Environment Manager, Simon Mitchell, says there was a lot more to Steve McIntyre than simply his great sense of humour.

"It was quite light-hearted but on a more serious note it was a reflection on the impact he had as an executive of the business helping Tomago through some challenging times," Simon said.

"He started here in 2011 and has worked tirelessly to transform the business through his capacity to constructively challenge conventional thinking, his passion to bring out the best in others and his dedication to building relationships.

"He has been one of those guys who has the great capacity to make work fun. With Steve around, no one was ever at risk of taking themselves too

seriously. He has the capacity to see the lighter side of life.

"He is not your typical financial officer. Sure, numbers are important to him but he enjoys having good relationships with people. The job is more to him than just managing the costs of the business.

"He will be very sorely missed," Simon added.

Steve and his wife Wendy plan to spend the next 12 months taking the time to explore Australia.



Chase Bennett and Brodie Fairhall with the New Safety Interlock system

NEW SAFETY INTERLOCKS

TOMAGO'S SLAB AND BILLET PITS HAVE ALWAYS BEEN SUBJECT TO SEVERAL CRITICAL SAFETY CHECKS BUT NOW THAT PROCESS HAS CHANGED – FOR THE BETTER.

The check system for the pits has always been an essential one, but up until now they have been handled manually and that, says Casthouse Process Superintendent Mark Ball, has always left them open to human error.

When mistakes are made or the checking process is not done properly, a simple oversight can cause a serious event, people can be injured or equipment damaged.

“We’ve always had the critical process checks. The old system was a manual ‘pre-flight’ process; we had a tick sheet that we would fill-out before starting a cast.

“That was all good but if someone forgot to do one of those checks, if they’d been distracted, then there was potential for the cast to be started without that check being done,” Mark said.

The challenge was to develop a computerised system that could lock the start of the cast until all the necessary checks had been signed-off. The solution was an electronic interlock system to be systematically worked through before anything could happen.

The system that was developed and installed is a computer-based one. Relevant questions appear on a touchscreen and operators must check and sign-off on each one before they can advance to the next.

“The idea is to eliminate human error. There are about 20 critical items we have to check before they start the cast and with the system we’ve installed they all have to be signed-off. It won’t progress to the next step without each question being answered,” Mark said.

“

Essentially, it eliminates the potential for someone to forget. If they haven’t signed it off then the cast cannot start. Once the casters have completed the checklist they swipe their individual clock cards onto the system’s record to show that they were the ones who checked it. ”

Mark Ball



The system, which was designed and built in-house, was installed in October last year and was fully operational by December.

Happily, the risk of human error when it comes to those critical safety checks is now gone and that can only be a good thing.



Cleaning the Paste Plant's walls with a dry ice pressure blaster.



A broken safety light is a perfect example of a Paste Plant fire ignition source.



Cleaned equipment in the Paste Plant.

FUEL REDUCTION IN THE PASTE PLANT

THAT OLD SAYING: 'IT'S A DIRTY JOB BUT SOMEONE HAS TO DO IT' IS NOT A JOKE BUT A SOURCE OF PRIDE FOR FUEL REDUCTION SUPERVISOR SCOTT ASQUITH, WHO HAS SPENT ALMOST TWO YEARS ELIMINATING FIRE RISKS IN TOMAGO'S PASTE PLANT.

The notion of cleaning something from top to bottom takes on a whole new perspective when Scott Asquith explains what he and his team have done in the last two years to make the Paste Plant safe.

Hydrocarbons from the raw materials used in producing green anodes, including pitch, oils and grease as well as any other products that have the potential to build-up and become fuel sources are all in the teams' sights.

The cleaning team understands that stopping any fuel from accumulating, as well as removing potential ignition sources, were key to their success.

"It is difficult to control all ignition sources and we always have the potential for electrical and mechanical failures to create an ignition source but what we can do is remove the fuel sources to reduce the risk of fire," Scott said.

The cleaning team have not only micro-cleaned the buildings – seven floors in one, six in the other – but also continue to hunt-down and eliminate every possible ignition source.

Last year Scott, three cleaners, a fitter and an electrician cleaned-down anything and everything, getting into all

sorts of nooks and crannies, suited-up in overalls and wearing respiratory equipment, they have meticulously cleaned-up grease and oil spills, dust and any other contaminant deposits that could be combustible or present as a hazard.

Even the notion of cleaning took on a whole new meaning. Wiping-down with damp rags, mopping floors, sweeping, dusting and vacuuming barely scratched the surface for this particular Clean Team.

"We used a dry ice blaster, a sort of cross between a Gerni water pressure spray and a sand blaster, to blast that material off, blast every surface with dry ice to remove grease and oil – potentially everything that could be a fuel source," he said, adding: "We not only clean it, we ensure the sources of the materials don't come back."

Supporting the improvement work, team electrician Adam Priestley installed more than 680 LED light fittings, dramatically changing the appearance of the interior and giving the team the ability to see properly while working in the Paste Plant.

The lighting improvements, coupled with the installation of cameras, gave

the team the ability to continually monitor and identify potential hazards, guaranteeing a quick response.

This year the cleaning program has taken a different tack with Scott, an electrician and a fitter focusing on problem mechanical and electrical areas, removing potential ignition sources, reducing pitch fumes, eliminating dust and minimising oil and grease storage.

Faulty switches, power connections and even light fittings are among the potential ignition sources identified and rectified.

The team has also developed its own method of grease storage, storing it in small tanks so up to 800 litres of it can be removed from the plant.

"The Paste Plant is a really big area and a fire in there would be potentially catastrophic for the business," Scott said.

Improving the Paste Plant working environment has brought increased pride and a sense of ownership for the operations and maintenance teams, generating a positive cultural change, confirmed by the way team members identify and react to potential fuel sources.



FEEDING THE TROOPS

THE OLD SAYING THAT AN ARMY MARCHES ON ITS STOMACH COULD EASILY BE APPLIED TO TOMAGO ALUMINIUM'S 1,000-STRONG WORKFORCE.

One of the key people helping to keep our 'army' marching is Frank Brenner, manager and chef at The Food Pad, where he has been feeding Tomago's troops five days a week, 52 weeks of every year since taking-over operations nine years ago.

Frank and his two Food Pad staff, Lisa and Denise, cater for around 200 people daily – "the morning and lunch crowd", to use Frank's own description.

As well, they also cater for company board meetings and VIP functions and serve Christmas lunch and dinner for everyone rostered to work on Christmas Day.

A chef with more than 25 years' experience, Frank takes pride in the fact that The Food Pad is a café serving quality meals, not simply a fast food shop dispensing unsatisfactory offerings.

It was not always so and Frank and his staff have made several changes to it since taking-over almost a decade ago.

"We now see The Food Pad as a café offering healthy options," Frank said. "We make and sell a range of healthy food such as gourmet sandwiches and rolls and gourmet hamburgers.

"We have hot meals in winter – curries, roasts, parmigiana, that kind of thing – and lighter meals like salads and stir fries in summer. We try to use seasonal food as much as we can.

"Sometimes we get requests for particular types of cuisine, such as gluten-free, pescatarian (fish instead of red meat) or vegetarian. We can pretty much cater to any dietary need."

Yes, old favourites such as hearty pies, hot chips and yummy Chiko Rolls are available at The Food Pad but they are now offered more as a snack or an addition to a main meal rather than actually being the meal.

Nine years onsite also means Frank has gotten to know people well and he is, he says, on a first name basis with almost everyone who comes through the door. He particularly has an extremely intimate knowledge of everyone's coffee choices.

"We are here to look after Tomago's staff and give them good food. Our main aim is to keep people healthy and happy," says Frank as he prepares to keep the army marching for another day.

THE FOOD PAD cannot be open 24/7 so, to help those working afternoons and nights, a meal-vending machine has recently been installed on the wall of the main change rooms, near the front gate.

The vending machine offers a wide range of refrigerated meal choices, including vegetarian options. Once purchased, meals can be heated in crib room microwave ovens.

"For anyone who forgets their meal for some reason, the refrigerated offerings are a really good and healthy alternative to a packet of chips and a can of soft drink," said Anthony Cook, Tomago's Dietitian and Occupational Health and Hygiene Officer.

Each meal costs less than \$10 and can be bought using a credit or debit card or good, old-fashioned cash.

SUPERVISOR LEADERSHIP COURSE

THE QUALITY OF A LEADER IS REFLECTED IN THE STANDARDS THEY SET FOR THEMSELVES AND AT TOMAGO, OUR SUPERVISORS ARE LEARNING TO SET SOME IMPRESSIVE STANDARDS.



Last year's graduates from the Supervisor Leadership course.

They are doing that by completing a training program using Sydney-based BSI Learning, a specialist external training organisation.

At the completion of the training, the Supervisors and Superintendents who successfully complete the course will be formally recognised with a Diploma in Leadership and Management.

Human Resources Superintendent Ben Cook, the motivating force behind the initial training program in 2016, said 18 people are currently being trained and the long-term plan is to have formal training available for every Supervisor and Superintendent.

The course is, Ben says, very involved, a 12-month program covering two full days of face-to-face training every two months and a requirement to complete assignments and assessments between the formal classes.

“Candidates are required to do a considerable amount of work, it’s intended to stretch people,” Ben said, adding that there had been great demand from people wanting to attend, to the point where initial applications were oversubscribed.

“The last training intake we had was in 2016 so this current program is actually the second iteration of the Supervisor Training Program. We ran two courses in parallel then so ended-up with 36 graduates.

So 36 last time, 18 this time and the idea is that, over time, we’ll get 100 per cent participation,” Ben said.

The training program recognises people who are in leadership positions and who are prepared to take the time necessary to hone their individual leadership skills. The feedback from the 36 attendees who took part in the previous training has, Ben said, been extremely positive.

“The leadership development journey never ends; they are always continuing to develop and this is one program that can assist people to do that. They are continually investing in themselves. They will learn a lot about themselves.”

Candidates are learning the hard skills of leadership such as choosing the right people for a task, building relationships, giving and accepting feedback and maintaining motivation.

“At Tomago we use a 70-20-10 leadership development model with 70 per cent of things learned on the job, 20 per cent coming from other people such as coaching from a manager or mentor and 10 per cent coming through formal qualifications.

“That 10 per cent is the smallest part of the overall development journey,” says Ben, “the rest is about taking what you learn and putting it into action.”

Tomago currently has some 100 Supervisors and Superintendents across the site.



IN THE HISTORY BOOKS

A LITTLE OVER 53 YEARS AGO THE TOMAGO REGION WAS KNOWN, ALBEIT BRIEFLY, FOR SOMETHING OTHER THAN BEING A TRANQUIL, HISTORIC RURAL AREA.

In May 1966 it was a case of ‘action stations!’ at RAAF Williamtown when things stopped working to a carefully constructed plan.

One of the Air Force’s then-state of the art Dassault Mirage III-O fighter aircraft, A3-29, had suffered an engine failure shortly after taking-off and its pilot, Flight Lieutenant Garry Cooper, from Kotara, had made the decision to land the plane ‘dead stick’, coming down without power.

Rather than aiming the aircraft towards the ocean and ejecting, 28-year-old Flt Lt Cooper, from 75 Squadron, based at the Williamtown RAAF base, demonstrated his superb flying skills by doing the impossible and bringing the two million dollar aircraft down in one piece on an abandoned WWII runway at Tomago.

His actions not only brought to an end a flight that lasted barely six minutes but also saved the \$2 million (about \$1.5bn today) Mirage fighter jet so it could, quite literally, live to fight another day.

The jet’s return to the RAAF base was much longer than its departure, the aircraft towed by a special tractor in a 14-hour recovery operation.

The runway used by Flt Lt Cooper for his emergency landing is now part of the Tomago Aluminium site.

Dassault’s Mirage remained in service with the RAAF until 1988 but sadly, A3-29 was not among those which survived.

The aircraft collided with its sister ship, A3-30, on April 9, 1984, while the pair were flying a low-level mission near Bluff Downs, in far north Queensland. Its pilot, Flight Officer C.R. Wylie, was killed in the crash.

Aluminium and concrete might not always go together but in 1981 the two became partners when Tomago Aluminium donated 25 tonnes of concrete to the Lions Club of Raymond Terrace, allowing the club to complete a project commemorating the 60th anniversary of the Royal Australian Air Force and the 40th anniversary of RAAF Williamtown.

The project? The well-known Avon Sabre jet fighter seemingly sweeping-in over Bettles Park, Raymond Terrace, for a low-level run, just 10 metres above the ground.

The aircraft, which saw service in Malaysia and Thailand, came from Williamtown’s RAAF Historical Group, was moved to Raymond Terrace and mounted on its stand, a project which took around 560 man hours to complete.

Its commemorative plaque was unveiled in September 1981 by Air Commodore William Simmonds.

For the history buffs the aircraft, designation A94/959, was built in Melbourne in 1959. The Mirage was Australia’s front line fighter aircraft until it was superseded by the French-designed Dassault Mirage.



Team Tomago at the starting line.

THE BLOODY LONG WALK

MITOCHONDRIA, EFFECTIVELY MINIATURE POWER PACKS INSIDE OUR CELLS, ARE RESPONSIBLE FOR CREATING THE ENERGY WHICH, IN A PERFECT WORLD, KEEPS US CHARGED-UP AND FULLY FUNCTIONING.

Sometimes though the world becomes a little imperfect, our genes change, the mitochondria fail to produce enough energy for the body to function properly and the power is disrupted, a condition known as mitochondrial disease.

Mitochondrial disease or 'mito' is actually the term used to cover a family of long-term, genetic, often inherited disorders which all affect the body's organs and systems including brain cells, nerves, muscles, kidneys, heart, liver, eyes, ears and pancreas. Not surprisingly, mito can affect people in a variety of ways and with varying degrees of severity.

One in 5,000 people has a mitochondrial disease which, in real terms, means about 5,000 Australians are mito sufferers. Treatments can ease some of the symptoms or slow the disease's progression but at this stage there is no cure.

The Australian Mitochondrial Disease Foundation is working hard to cure mito and needs all the help it can get, especially financially. Locally, the AMDF's Newcastle branch is out to raise \$170,000 with a special event.

Which explains why, on July 28, Team Tomago, led by CEO Matt Howell, pulled-on their most comfortable shoes and hit the road for a 35-kilometre walk from Belmont to Newcastle via the Fernleigh Track, Throsby Creek and Lee Wharf before powering along Honeysuckle Drive to Merewether to join Yuelarbah Track and the Newcastle Memorial Walk before finishing at Newcastle Beach.

The team also raised the most money at the event, an impressive \$10,000.

As a reward for a job well done, Tomago Aluminium made sure Team Tomago was provided with a beer and burger at the Grain Store after the mammoth walk.

TONNE FOR TOMAGO



Health and Hygiene Officer Anthony Cook (R) conducting a weigh-in.

THE JOYS OF WINTER INCLUDE EATING BIG, HEARTY MEALS AND RUGGING-UP TO KEEP THE COLD AT BAY.

The downside of winter is that summer is on the horizon and when we shrug off our jackets and scarves the excesses of our wintery food intake will be there for all to see.

Before summer even gets here, Tomago Aluminium's Dietitian and Occupational Health and Hygiene Officer, Anthony 'Cookie' Cook, has come up with an initiative to promote weight loss.

Called 'Tonne for Tomago', the plan is to take the accumulated amount of weight lost by every participant in a bid to reach 1,000 kilograms. And in a new and novel approach to weight loss, every registered participant will be given \$10 for every kilogram lost – which could come in handy for starting the new slim-look wardrobe reboot!

Tonne for Tomago is an eight-week program. Participants can register for any eight-week period right up until the end of October.

Describing weight as "a real social problem," Cookie said Tomago Aluminium's statistics generally mirror those of Australian industry.

“ Hopefully, this \$10-per-kilogram reward acts as a starting point to trigger people’s goals. We have had success in the past with weight loss programs and I’m hoping that this incentive will help us improve on our previous successes. ”

“And if some people want to convert their reward to a donation to any of the Tomago-supported charities we can help them with that too,” he added.

To register and weigh-in for Tonne for Tomago, simply see Cookie in the area outside the First Aid Room.



Attendees from one of the recent BFP workshops.

BFP PROCESS

BUILDING FULL POTENTIAL (BFP) IS A PROCESS DESIGNED TO GENERATE IDEAS TO FIND THE FULL POTENTIAL OF OUR SMELTER.

Those ideas are drawn from internal and external resources and their ideas are then stopped, trialled or implemented to maximise the financial benefits for Tomago.

The overall aim of the process is to increase value for Tomago Aluminium by evaluating projects that can be implemented in the next five years and with an emphasis on beating the current business plan.

For the most recent workshop, internal participants included Potroom and Carbon. External participants were from PATC (Pacific Aluminium Technical Centre) and also representatives from our owners, CSR, Hydro Aluminium and Rio Tinto Aluminium.

This year, the key pillars evaluated in the workshops were energy savings, cost reductions, value over volume and anode robustness.

Some of the projects currently being undertaken include ALF3 Tracking and pot-to-pot variability, nett carbon reduction, anode density improvement and reduction in anode impurities.



CELEBRATING YEARS OF SERVICE

35 YEARS

Cast Products

Michael Anderson
John Zaino
Peter Mann
Darcy Menchin

Liquid Metals

David McIntosh
Anthony Woodward

Maintenance

Phillip Jones
Adam Blenkinsop

Carbon

Greg Jenkinson
Geoffrey Pyke

30 YEARS

Maintenance

Bruce Lindeboom

Cast Products

David Mullington

HSEC

Charmain Underwood

Liquid Metals

Mark Barwick

Carbon

Rodney Lewis

20 YEARS

Liquid Metals

Allan Roddom

10 YEARS

Liquid Metals

Robert Ramsay
Joel Einam

ALUMINIUM FACT

1 x 10 tonne slab makes enough aluminium foil to roll from Newcastle to Brisbane.

SUPPORTING LOCAL CHARITIES

So far in 2019, we have continued to support and give back to a number of local charities and community events. These include:

- Reflex Social Services
- Tomago Bowling Club
- Hunter Hurricanes
- Port Stephens International Women's Day Breakfast
- Raymond Terrace Police Station
- Cancer Council
- Raymond Terrace Athletics Centre
- Dreams2Live4
- Fiona Thurlow Cambodian School Build
- Shave for a Cure
- Camp Quality
- Immune Deficiency Foundation Trust
- Make-A-Wish Australia
- Mattara Festival
- Soldier On
- The John Hunter Children's Hospital
- Port Stephens Academic Scholarship Program
- The Mito Foundation
- The Mark Hughes Foundation
- StreetCare
- Haemophilia Foundation



LACHLAN SNOWDON

What is your current role?
Graduate Electrical Engineer

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

I would probably spend it on race car parts!

Biggest regret?
I have no regrets.

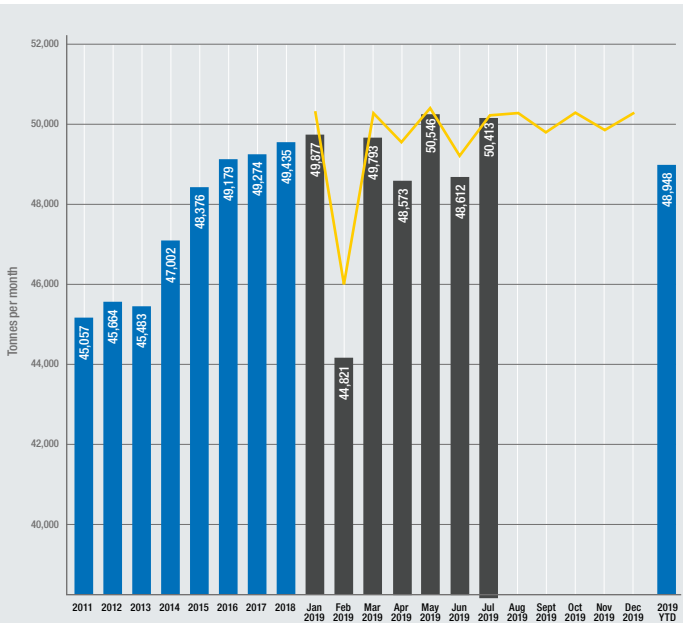
Favourite food?
Thai Food.

What were your first thoughts on TAC?
Coming from a steel mill, the Potlines are very quiet!

What's the best piece of advice you've been given?
Work hard, save as much as you can and invest early.

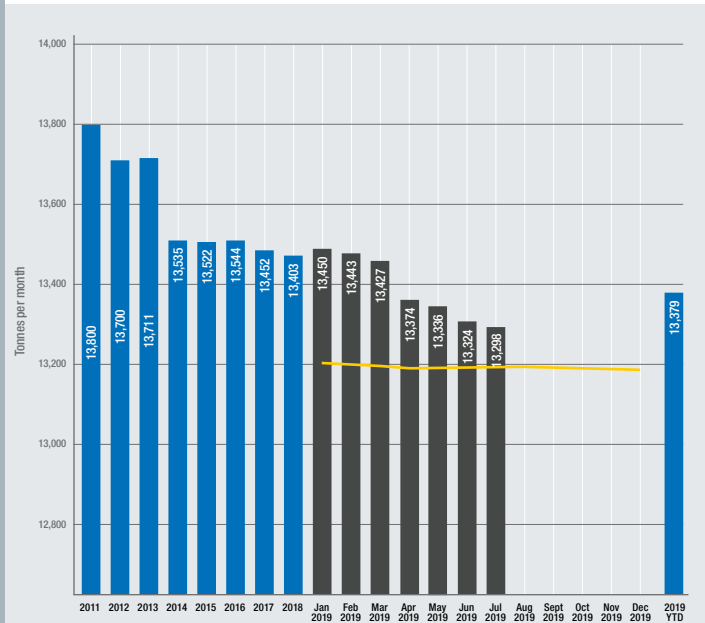
KEY PERFORMANCE INDICATORS

EFFECTIVE METAL PRODUCTION (Tonnes/Mth) ■ Yearly Actual ■ Monthly Actual — 2019 Budget



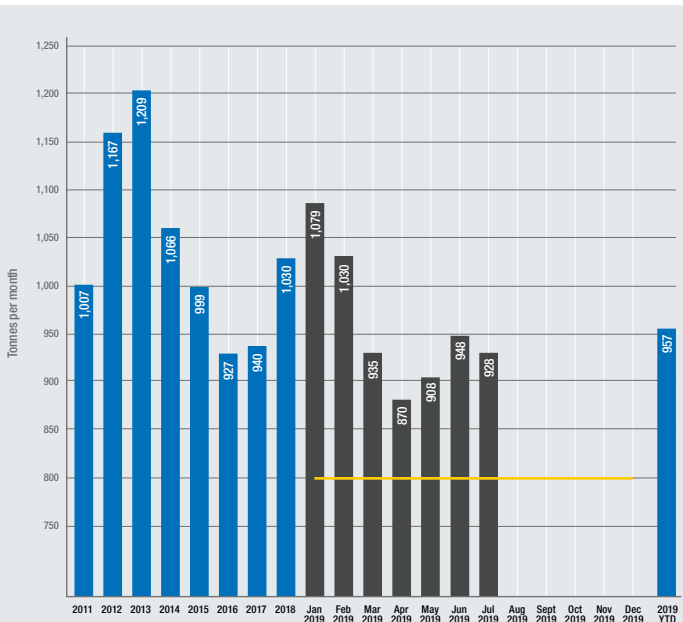
The Effective Metal Production is the total amount of hot metal tapped from the pots. It includes both hot metal tonnes delivered to Cast Products plus any reclaimed cold metal

DC ENERGY CONSUMPTION (kWh/t Al) ■ Yearly Actual ■ Monthly Actual — 2019 Budget



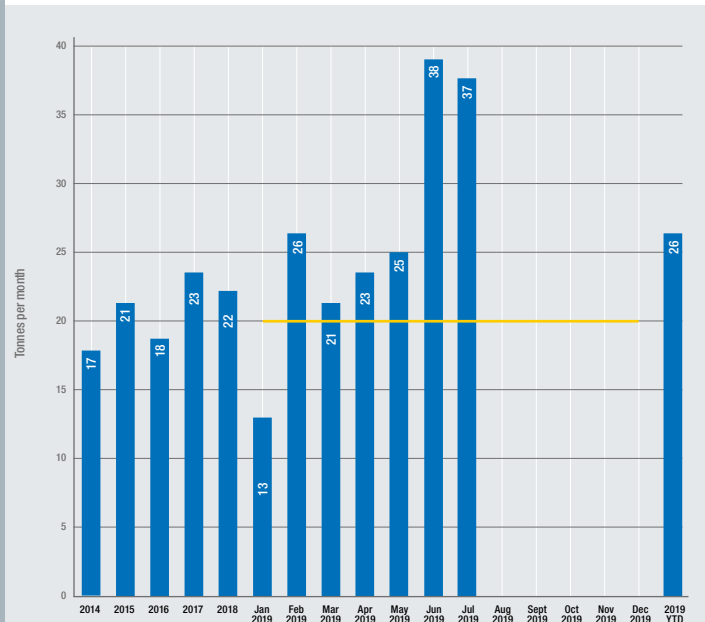
Energy Consumption measures how much power we use to make one tonne of aluminium. The lower this number the better!

IRON IN METAL (Fe ppm) ■ Yearly Actual ■ Monthly Actual — 2019 Budget



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

HAZARD EVENT RATIO ■ Yearly Actual ■ Monthly Actual — 2019 Budget



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