

**2020**

YEAR IN  
**REVIEW**

**2020 HIGHLIGHTS**

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**FOOTSCRAY  
CELEBRATING 80 YEARS  
OF MANUFACTURING**

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**ULTRA TUFF ABRASION  
RESISTANT BELTING  
JUST GOT BETTER**



# WELCOME 2020 YEAR IN REVIEW

## THE FOLLOWING PAGES PROVIDE AN OVERVIEW OF FENNER DUNLOP'S MILESTONE ACHIEVEMENTS OVER THE COURSE OF THIS YEAR.

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It has been well documented the global challenges that we have faced during 2020, and it has also highlighted the resilience of our group of companies to remain in operation during periods of isolation from colleagues, friends, families and loved ones.

As an Australian manufacturer, we have operated and navigated through uncharted waters in 2020 and have along the way, achieved excellence throughout the service, engineering and manufacturing disciplines within our business.

Like so many of my colleagues, I am proud to work for an organisation that designs, innovates, manufactures and supports their products right here in Australia. Through the events of the past twelve months, the efforts of our entire workforce have delivered so much for our customers, and that immense level of pride in our company has been demonstrated from the Pilbara, Hunter Region, Bowen Basin and every customer destination in between.

A big thank you goes out to Renata Hjelmstrom (Fenner Dunlop – Marketing Manager) for her dedication in bringing these stories to life through the various media formats. Without her dedication, this publication would not be a reality.

Please keep in touch with us via our social media pages on LinkedIn, Facebook, Instagram, Twitter and YouTube.

**Trevor Svenson** - General Manager - Sales & Marketing

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**JAN**  
**2020**

**PICTURED:**

Apex conveyor neon sign, believed to be one of the oldest neon signs in Melbourne



# FOOTSCRAY CELEBRATING 80 YEARS OF MANUFACTURING

**FROM HUMBLE BEGINNINGS TO BECOMING A RELIABLE, QUALITY BRAND, FENNER DUNLOP'S FOOTSCRAY RUBBER PLY BELT PLANT IS CELEBRATING EIGHT DECADES OF INDUSTRY SUCCESS.**

The company's roots can be traced back to 1890 when two British belting tradesmen, Arthur and Charles Hopkins began manufacturing leather belting, not far from the site of today's main plant. They were joined in 1891 by Australian George Odlum. The company of Hopkins

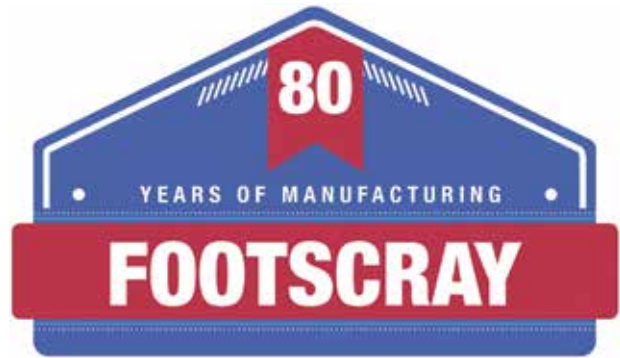
Bros. & Odlum prospered during one of the most exciting periods of Australian mining history, making belting for Mt. Morgan in Queensland, Broken Hill in New South Wales, Mt. Lyell and Mt. Zeehan in Tasmania and Coolgardie and Kalgoorlie in Western Australia.

In the 1920s, rubber and textile began to be used (instead of leather), and those belts were the prototypes of the products in today's market.

In 1940 manufacturing operations commenced at the West Footscray site, only 8km from Melbourne's Central Business District and deliberately located with easy access to all main highways.

In 1952, the brand Apex Belting – for Hopkins Bros & Odlum was formed and is a name that is still synonymous in Australia with high-quality conveyor belts. All Fenner Dunlop's belts are still branded Apex celebrating the heritage and passing on the values and pride of such an iconic brand.

Weaving capacity was established in 2003 in a significant strategic move making a powerful statement about the organisation's commitment to local manufacturing. Producing the fabric in-house allows for compliance to Fenner Dunlop's stringent quality standards, reduces lead times for the customers and reduces material waste. The manufacturing and technical team embraces ISO 9001:2015 that forms the basis of the Quality Management System. The system is also well supported by Continuous Improvement initiatives to increase overall performance, enhance customer satisfaction and design/develop new procedures.



Today the building is of regional historical and architectural significance preserved by the Australian Heritage Commission (AHC), and the original Apex conveyor neon sign is still standing, it is believed to be one of the oldest neon signs in Melbourne.

"We're proud to be celebrating the 80-year milestone of our plant in Footscray. Our commitment to customer service is stronger than ever, and we have a plan for growth which will see us deliver even more for our valued customers" said Hong Koh, Manufacturing Manager.



**PICTURED:**  
Weaving capacity was established in 2003

# WOLLONGONG EXPANSION FOR FENNER DUNLOP

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**PUBLISHED BY:**

The Australian Mining Review

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## **FENNER DUNLOP'S NSW BRANCH RECENTLY RELOCATED TO A MASSIVE NEW FACILITY IN PORT KEMBLA, WOLLONGONG, SITUATED ON 6000SQM OF LAND WITH A 1600SQM HIGH ROOF FACILITY.**

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The convenient location on 2 Flinders Street, adjacent to the Bluescope Steel Plant, gives the company unparalleled access to the main roads that service the wide variety of Fenner Dunlop's many clients – from underground mining, coal washeries, steel manufacturing, hard rock mining, quarries, cement mills, foundries, plasterboard manufacturers, coal terminals, tunneling projects and many more.

The facility has two 25t overhead cranes that gives it the unique advantage of lifting capabilities that can not only store, but handle conveyor belts up to and over 25t as required; and when coupled with Fenner Dunlop Wollongong's largest stands and winders, the company can handle up to 50t rolls of belt, with the hard stand space giving a major advantage for the storage of refurbished belts and various other customer requirements.

The Wollongong branch also stocks more than \$1m worth of inventory of conveyor spares to service local industries, and if Fenner Dunlop doesn't have the parts in stock, the team will source specialty products and have them delivered in a timely manner to customers.

Branch manager Peter Reed said that the company is fully capable of end-to-end services. "Everyone knew

Fenner Dunlop as a belting company, we are the only conveyor belting company to manufacture the complete range of conveyor belts in Australia," he said.

"In 2012 we rebranded to become Fenner Dunlop Engineered Conveyor Solutions (ECS), the company started to acquire local businesses from 2008 and by 2012 we were able to do more than belts.

"Today we are a "one-stop shop", or like we say "head to tail" business, we do everything connected to a conveyor system – from the electrics, pulleys, engineering and belts.

"The benefit of this is that our customers only have to deal with one supplier for everything.

"Although the ECS model was implemented seven years ago, we have customers that still don't know that we can do it all.

"In Wollongong, we have a fully equipped belt service branch with 36 total employees and 27 highly trained and skilled belt splicers from trainees through to level III, leading hands, supervisors along with site-specific coordinators.

"We have an experienced management team and are supported nationally for belt supply, technical expertise or any other conveyor specific requirement.

"We are growing, and in the new year looking at taking on at least another four new employees."

When South32 needed a belt install and splice completed in 24 hours at its Westcliff Washery Plant on CV1-45 conveyor, they called on the Fenner Dunlop Wollongong branch.

**PICTURED:**

Branch manager, Peter Reed,  
with part of the Port Kembla Team



**“TODAY WE ARE A ‘ONE-STOP SHOP’,  
OR LIKE WE SAY ‘HEAD TO TAIL’  
BUSINESS. WE DO EVERYTHING  
CONNECTED TO A CONVEYOR  
SYSTEM FROM THE ELECTRICS,  
PULLEYS, ENGINEERING AND BELTS.”**

The project included the installation of a new drive pulley and alignment, supply and install of 660m of 1200mm wide belt in one reel and splicing on the system.

Customer feedback was that Fenner Dunlop’s 50t belt stand really proved the point of difference for the project.

“It could hold the 4.8m-long belt reel in the stand” he said.

“The branch equipment was really put to the test, and we were able to install the belt in one length meaning there was only one splice, less downtime and less risk of splice issues with a single, continuous length of belt.

“The project was led and completed 100% in-house by Fenner Dunlop’s Wollongong service team.”

Looking forward in 2020, the company will be working with its new neighbour, Bluescope Steel, after being awarded the contract for the Blast Furnace 501 belt installation and splicing. This involves installing a 76T mega roll of belt onto

the conveyor system during a 48hr shutdown.

The project will begin in March 2020 with much of the pre work already started, and the Wollongong branch will team up with Belle Banne Conveyor Services and utilize their specialised equipment and engineering services to complete the project in a safe and timely manner.

And Mr Reed said that the company will continue to work with South32 again in the near future.

“Fenner Dunlop has been awarded the installation and splicing of a large South32 drift belt, a major steel cord belt installation and splicing project which brings together three distinct areas of the Fenner Dunlop business nationally, Belle Banne Conveyor Services Project Group along with Jon Adam Brodie from our Mackay Project team leading the splicing and supported locally by Fenner Dunlop Wollongong,” he said.

# DURABLE AND CONTINUOUS

**PUBLISHED BY:**

International Mining

**TODAY'S MINING OPERATIONS WANT MAXIMUM EFFICIENCY AND DURABILITY FOR THEIR CONVEYOR SYSTEMS, DESPITE THESE INSTALLATIONS BECOMING LARGER AND MORE COMPLEX. BUT THE TECHNOLOGY AND SERVICE PROVIDERS ARE UP TO THE CHALLENGE.**

Paul Moore spoke to David Landgren, Fenner Dunlop Executive Director, about the mining conveyor market and its role as a leading supplier of belting solutions.

**Q.** Are you seeing the mining industry investing in larger and higher capacity conveyors as well as those incorporating steel uphill/downhill sections as well as curves?

**A.** Yes. While the conveyor versus truck choice depends on mine specific conditions, we are seeing a trend with existing miners to expand near field developments and utilise existing infrastructure via long connecting overland conveyors. Iron ore expansion is a good example of this – we are the OEM for BHP's South Flank overland conveyor. Longer conveyors mean logically more geographical challenges, so conveyors with inclines and declines are part of that challenge. The drive for increased production will always drive conveyors to have larger capacity. This is a trend seen over many decades.

**Q.** As a leading global conveyor belt supplier to the mining industry what does that mean in terms of the design of belts and aspects such as durability?

**A.** Longer conveyors mean increased energy requirements to drive larger loads over longer distances. Low rolling resistance rubber on the pulley side of the conveyor belt to reduce friction and therefore energy has been around for a long time in conveyors, as it has been in the tire industry. Fenner Dunlop with the support of Michelin has made great breakthroughs in this area in recent years and is one of the reasons we have been so successful in supplying so many energy efficient overland conveyors.

**Q.** With many big open pits going underground, is there also increasing demand for conveyors that incorporate both surface and underground sections?

**A.** Traditionally materials handling in above ground coal mining has been the domain of trucks and underground the domain of conveyors. When open cut mines go underground it is almost exclusively with conveyors. We are currently designing and supplying the whole conveyor system at Anglo American's Aquila mine as they develop underground.



**Q.** Has the advent of gearless driven conveyors meant any changes to how belts are designed or maintained?

**A.** In a similar line to the requirement of reducing power consumption for high capacity conveyors on the belting side the equipment providing the input power is also critical in the design. Gearless conveyors provide an improvement in efficiency, maintenance requirements and reliability with the removal of the gearbox. A combination of an engineered conveyor solution utilising technologies such as gearless driven conveyors, low rolling resistance belt, dynamic electrical control systems and condition monitoring will continually develop the improvement in belt selection, design and maintenance.

**Q.** Many companies are now looking at on-conveyor analysis and bulk sorting solutions; has this also meant any changes in the conveyor belt approach/strategy?

**A.** As with the rest of the mining industry, the concepts of a smart conveyor is the clear future direction for the materials handling industry. We have invested in technologies focused on asset health and predicting life performance, such as our Online Thickness Tester which we see as key technology to assist mines in better planning conveyor shutdowns. The more information, the better the decisions to increase productivity and lower cost.

**PICTURED:**  
David Landgren, Fenner Dunlop  
Executive Director



# DURABLE AND CONTINUOUS

CONTINUED FROM PREVIOUS PAGE

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**Q.** What are mining operators asking you for today as a conveyor belt solutions supplier?

**A.** The key message remains to increase the life of conveyor. Generally this means better abrasion and impact resistance on the carry cover and lower energy requirements, driven by specialised rubbers and belt constructions. None of this is new - the difference is now mining operators have better information to substantiate the value proposition. The recent trends we've seen is a move away from Steel Cord reinforced to High tension Fabric belts, such as our USFlex product, to improve impact resistance and tear resistance, seeing and a shift away from low cost country supply to consistent quality given increased performance information - this is consistent with our business model.

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**Q.** How closely do you work with the company that builds the conveyor installation itself? Or is the norm just to work mainly with the mining company/operator? Are you normally involved from the design phase?

**A.** Very closely! We design, construct and supply whole conveyors including electrical systems. We have been doing this since 2012 when we acquired Australian Conveyor Engineering and we are the only Conveyor Belting OEM in Australia that do this. We have three pillars to our business – engineering, services and belt supply. Currently we have a 20/40/40 split on sales and our goal is to have them as equal contributors in the near term. Our engineering business is our fastest growing business. When we design, manufacture, supply, service and condition monitor all the conveyor components, we have total accountability for the conveyor performance and that's where our Engineered Conveyor Solutions outshine our competitors.

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**Q.** There has been a lot of industry consolidation to the point where there are now only a few major premium players like Contitech/Phoenix and Fenner Dunlop/Michelin. Has this meant that there is now more competition from lower tier players eg Indian and Chinese suppliers offering slightly lower quality but also a lower price?

**A.** Lower prices from emerging economy suppliers have affected price over the last decade. The difference is now increases in product performance information mean customers can prove performance. We have just been through a tender process with a major miners where we were successful because the customer could prove we had the best product. The value proposition for the customer will always be performance over price because the economic cost of not having tonnes on a ship or train is so high. We are not seeing any real improvements in the quality of emerging economy belts because performance and cost is driven by the quality of inputs used and these countries generally use the cheapest. Customers are also under pressure to keep working capital and particularly inventory to a minimum and Fenner Dunlop's strategy of having the most state of the art manufacturing as close to the end user as possible is a significant advantage for achieving those goals. It not only reduces lead times for our customers but guarantees customers have consistent quality engineered products every time, from a reliable local source that treats their business as a local priority.

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# REVOLUTIONARY DEWATERING TRANSFER ROCKBOX

**WATER IS A SIGNIFICANT OBSTACLE TO THE UNDERGROUND MINE AND WAS CAUSING ONGOING EFFECTS TO THE CONVEYOR SYSTEMS AND COMPONENTS.**

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Due to the low height, typical dewatering systems were not practical with the amount of coal, sandstone and mudstone being mined. The challenge was to design a dewatering system to isolate the water utilising the existing rockboxes and to reduce the liner wear and chute damage.

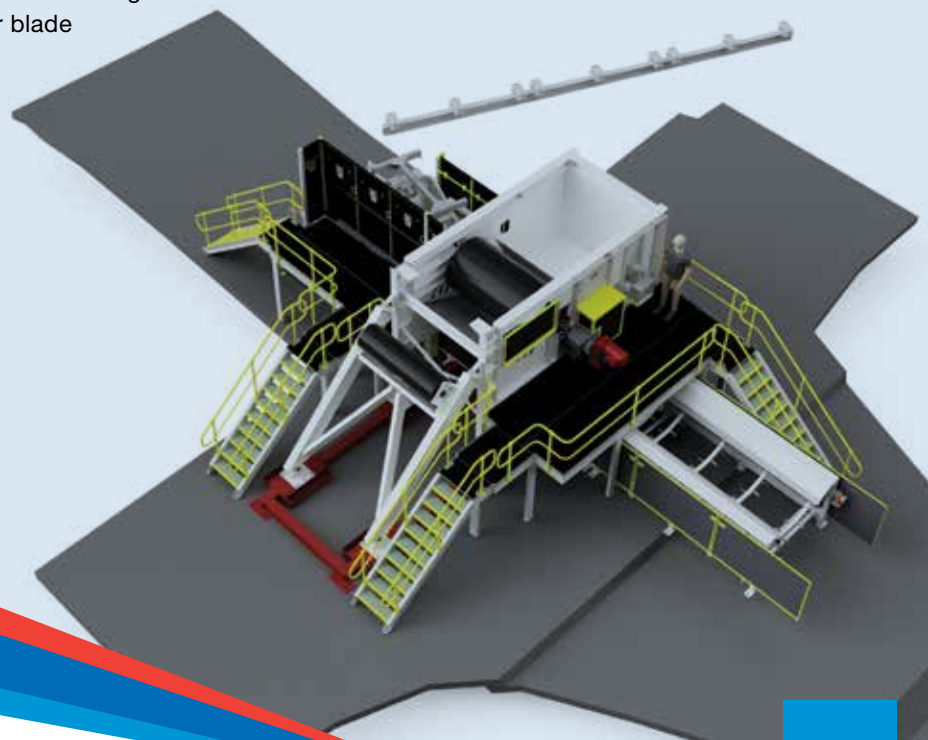
Fenner Dunlop ACE designed a low-height dewatering transfer rockbox utilising auger and cutter blade

technology that efficiently separates water from the material flow and directs it to a sump. This new technology extracts significantly more water than existing technologies while operating in heights of less than 4m. The rock box design eliminates the requirement to maintain wear liners as the material impacts on itself rather than wear surfaces.

The equipment has significantly increased water separation performance compared to conventional dewatering designs based on the increase in the residence time of the material in the dewatering circuit all run by an ACE designed flexible but straightforward control system, integrating the dewatering process into the conveyor's operation, maximising availability.

**PICTURED:**

Low-height dewatering transfer rockbox designed by Fenner Dunlop ACE



# ULTRA TUFF

## ABRASION RESISTANT BELTING

### JUST GOT BETTER

**PUBLISHED BY:**

Australian Mining

#### **EMPLOYING A TEAM OF CHEMISTS AND ENGINEERS, FENNER DUNLOP HAS ENSURED THE NEXT GENERATION ULTRA TUFF COVER COMPOUND MEETS THE DEMANDS FOR THEIR CUSTOMER BASE.**

Fenner Dunlop takes an uncompromising approach to improving its Ultra Tuff abrasion resistant compound with every new generation that is released to the marketplace.

The Next Generation Ultra Tuff, which Fenner Dunlop launched in November 2019, is no exception and has involved in-house chemists, operations personnel and engineers during the development process.

Constantly raising the standard of premium products already established in the market, rather than starting from scratch to improve the design and manufacture, is a key reason why Fenner Dunlop has made Ultra Tuff a recognised name in the iron ore and related industries.

Fenner Dunlop general manager, sales and marketing Trevor Svenson says the company takes pride in constantly improving the abrasion resistance of the Ultra Tuff compound.

“The Ultra Tuff compound development has always had abrasion resistance front of mind, and the main driver was to develop it for the next generation without compromising the other characteristics of the belt performance when placed into operation,” Svenson says.

“We didn’t want to give up the impact resistance and we didn’t want to trade off on the elongation of the product whilst improving the abrasion resistance.”

Ultra Tuff has been available for seven years but Fenner Dunlop has not grown complacent with the standard of the belt compound’s abrasion resistance.

Fenner Dunlop’s commitment to the product is highlighted by the number of key stakeholders from the company and customer base that are involved in the products ongoing development.


Svenson says the product has been independently tested by TUNRA with the results clearing showing a step change in abrasion resistance, taking the product to the next level.

“As it has been independently tested and verified, we are confident that it is the benchmark for abrasion resistance in the Australian mining industry,” Svenson says.

Mine sites, from iron ore, hard rock mines to coal operations, require abrasion resistant compounds to reduce belt wear for conveying material.

One of Ultra Tuff’s latest improvements is ensuring a longer belt life, extending the time between belt changes and reducing shutdown intervals.

“The high abrasion resistance compound is suitable for short cycle high wear applications. For example, ship loading applications for multiple commodities are prime candidates for the Next Generation Ultra Tuff compound.



**“THE ULTRA TUFF COMPOUND DEVELOPMENT HAS ALWAYS HAD ABRASION RESISTANCE FRONT OF MIND, AND THE MAIN DRIVER WAS TO DEVELOP IT FOR THE NEXT GENERATION WITHOUT COMPROMISING THE OTHER CHARACTERISTICS OF THE BELT PERFORMANCE WHEN PLACED INTO OPERATION.”**

Fenner Dunlop’s Western Australian-based Tier 1 mining customers have been among the first to adopt the product, as it is ideally suiting to their highly abrasive mining conditions .

“This product development along with many Fenner Dunlop products was based on feedback from the client in terms of what they’re looking for out of their belts and conveyor systems,” Svenson says.

Fenner Dunlop prioritises designing and manufacturing its products in Australia, with the Next Generation Ultra Tuff being produced locally at its state-of-the-art Kwinana manufacturing facility in Western Australian.

Svenson believes Fenner Dunlop’s locally based team is another contributing factor to the success of Ultra Tuff, as it focuses on developing innovative products based on what the market is asking for and always remaining close to the customer base to support the product is central to Fenner Dunlop’s way of doing business.

“We’ve been working with a number of clients on this product for a number of years,” Svenson says. “Over the years they’ve seen different iterations of the product, and have worked with and supported Fenner Dunlop through trials in mining applications.”

It’s not just the chemists, engineers and designers that are based locally to develop the product; Fenner Dunlop has 20 branches Australia-wide, located in key mining regions to support its clients.

In true Fenner Dunlop style, even though the Next Generation Ultra Tuff is only a recent release, the local team is already working on how to improve the abrasion resistance of this compound.

“At Fenner Dunlop we continue to push the boundaries in terms of product development backed by a support network of 20 branches nationally and 1000 employees in Australia,” Svenson concludes.

# GOLD RUSH TO MINING BOOM

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**PUBLISHED BY:**

Australian Bulk handling Review

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## **FENNER DUNLOP'S HISTORY CAN BE TRACED BACK TO 1890 WHEN TWO BRITISH CONVEYOR BELTING TRADESMEN, ARTHUR AND CHARLES HOPKINS, BEGAN TO MANUFACTURE LEATHER BELTING IN MELBOURNE.**

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In 1891, Australian George Odum joined them, forming Hopkins Bros & Odum. The company went on to prosper during a boom period in Australia's mining industry. At the time, the company made belting for Mt. Morgan in Queensland, Broken Hill in New South Wales, Mt. Lyell and Mt. Zeehan in Tasmania, and Coolgardie and Kalgoorlie in Western Australia.

As technology developed, eventually rubber and textile belts gained popularity, becoming the prototypes of the products found in today's market. In 1940, the company started manufacturing at a site in West Footscray, only eight kilometres from Melbourne's central business district, deliberately located with easy access to the main highways.

In 2020, Fenner Dunlop is celebrating the 80th anniversary of its Footscray plant, which the Australian Heritage Commission has recognised as a building of regional historical and architectural significance. Outside the factory stands the original Apex Belting neon sign, one of the oldest in Melbourne, which harkens back to a brand with almost 70 years of history. The Apex Belting brand was formed in 1952 and can still be found on all Fenner Dunlop belts.

The company has made significant progress since opening its factory. Weaving capacity was established in 2003 in a strategic move that aimed to showcase the organisation's commitment to local manufacturing. Fabric is produced in-house, helping Fenner Dunlop maintain stringent quality standards, reduce lead times and material waste. International Standards Organisation 9001:2015 informs the basis of the quality management system, which is supported by continuous improvement initiatives to increase performance.

"We're proud to be celebrating the 80-year milestone of our plant in Footscray. Our commitment to customer service is stronger than ever, and we have a plan for growth which will see us deliver even more for our valued customers," says Hong Koh, Fenner Dunlop Manufacturing Manager.



**PICTURED:**  
Fenner Dunlop is celebrating the 80th anniversary of its Footscray plant

# GROWING FORWARD

**OVER THE YEARS, FENNER DUNLOP HAS EVOLVED FROM BEING A TRADITIONAL BELT SUPPLIER TO PROVIDING HEAD TO TAIL CONVEYOR SOLUTIONS. AS PART OF THIS, THE COMPANY OFFERS A SUITE OF SERVICES IT CALLS 'ENGINEERED CONVEYOR SOLUTIONS' (ECS).**

This strategy was implemented in 2012 and looks to tackle complex engineering challenges facing mining companies. One example recently is when one of a local longwall coal producers in New South Wales contacted Fenner Dunlop's Australian Conveyor Engineering (ACE) team to develop a unique trunk cover.

A 3.2-kilometre-long trunk conveyor system was needed to improve the mine's productivity, which currently produces 5.5 million tonnes of coal each year. The system needed to include all the terminal equipment, from the transfer and impact station to the drive head, loop take-up, belt maintenance and boot end. The challenge for the engineering team was to ensure all of the equipment was roof mounted and fitted with a power of 2250 kilowatts.

Fenner Dunlop ACE worked alongside the site installation and maintenance teams to develop a system that not only met the specifications, but increased the mine's safety and

ease of installation, operation and maintenance. Integrated belt maintenance, support frames, extra wide access platforms and rail mounted transfer components were also included in the conveyor, which is now hard at work.

Similarly, Fenner Dunlop ACE has redesigned a rockbox transfer system and ongoing conveyor modifications at another underground coal mine.

Water was causing ongoing effects to the mine's conveyor systems and components but due to the low height, typical dewatering systems were not practical with the amount of coal, sandstone and mudstone being mined. The challenge was to design a dewatering system that could isolate the water with the existing rockboxes and reduce the liner wear and chute damage.

Fenner Dunlop ACE designed a low-height dewatering transfer rockbox that uses auger and cutter blade technology. It uses a dedicated dewatering vibrating screen. This has significantly increased water separation performance and increased the residence time of the product in the dewatering circuit, maximising availability.

Since its implementation, the system effectively removes the water from the coal flow, ensuring the product settles efficiently with the water directed to the sump. This new technology can extract significantly more amount of water from the burden than existing technologies while operating in heights of four metres.

# FENNER DUNLOP ELECTRIFIES AUSTRALIAN MINES

**PUBLISHED BY:**  
Australian Mining

**SINCE ACQUIRING AUSTRALIAN CONVEYOR ENGINEERING (ACE) IN 2012, FENNER DUNLOP HAS BECOME RECOGNISED FOR A SERVICE PORTFOLIO THAT INCLUDES ACE'S 25-PLUS YEARS OF EXPERIENCE IN CONVEYOR DESIGN, MANUFACTURING AND INSTALLATION ABILITIES.**

Fenner Dunlop ACE regional manager for New South Wales Shane Wilson says an aspect of the company that sets it apart from competitors is having both the in-house electrical and mechanical engineering teams working collaboratively.

"We work together at the same location to ensure a complete customer engineered solution is provided," Wilson tells Australian Mining.

"We don't look at the problems or projects individually, we work collectively to ensure we produce the best outcome for the customer.

"ACE has been manufacturing electrical solutions for the industry over the past 15 years, these solutions include both hardware and control systems to ensure reliability, market advances and user operability are included in the final solution."

The company used this process when working with a New South Wales coal mine, building not only a positive working relationship, but also helping the mine to improve productivity during all phases of the mining process.

"In mining when an outbye conveyor is stopped all inbye conveyors are also stopped," Wilson explains. "An outbye conveyor could stop due to belt tracking issues, a belt rip or equipment inspection, which can cost 10 to 20 minutes of productivity each time depending on the site.

"While this doesn't sound like much on its own, it quickly adds up.

"To combat the loss of production in these times we have implemented systems to ensure we can continue to maintain coal on these belts until it reaches the conveyor that has stopped.

"This provides the longwall development an opportunity to continue to produce, which reduces start up times whilst enabling some production to continue, especially when the stoppage is a short one.

"This enables coal processing to continue rather than coming to a standstill."

In addition to increased productivity, Fenner Dunlop has developed solutions to improve both safety and productivity for the industry utilising its electrical solutions.

One example that Fenner Dunlop has developed is an online thickness tester, a unit that allows remote monitoring of the cover belt over the entire length and width for the conveyor belt.

This means rather than having people manually measure the belt cover thickness, there is a permanent monitoring system that removes workers from the equation. The data is remotely monitored and reports provided to the customer.



Conveyor belts are considered one of the most dangerous areas on a mine site, due to the sheer number of moving parts, and trip and slip hazards, particularly in poor environmental conditions.

“We spend a lot of time designing how we assemble our equipment to ensure that maintenance or repairs can be completed practically and safely,” Wilson says.

“We have our electricians and engineers on site regularly to provide real-world feedback on our designs and how we can constantly improve to make equipment safer.”

Part of the Fenner Dunlop’s manufacturing process is putting all equipment through its in-house high voltage test bay for function testing before putting it out in the field. This ensures that substation starters and associated equipment are tested at their nominal voltage prior to dispatch.

The testing isn’t limited to Fenner Dunlop’s staff though, with customers also involved in the development of their projects once it is deemed safe for them to do so.

“Once we’ve completed our safety protocols and concluded our internal testing, we open up that test space for customers to do their own testing,” Wilson explains.

“This ensures when it goes in to be commissioned there’s less time spent in that commissioning process on site, as its easier to diagnose and rectify during testing in the workshop.”

This is reflective of Fenner Dunlop’s close relationship with its clients – as a partner instead of a regular supplier.

Fenner Dunlop’s partnership approach goes as far as the company having ongoing support teams on certain sites,

allowing them to be close by to resolve any issues and take on valuable feedback from clients.

The company also offers remote support and monitoring, which is ideal for more isolated sites.

Fenner Dunlop considers itself only a phone call away and able to assist, despite the geographical distance that Australia’s remote mining operations pose.

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**“IF A CLIENT RINGS US MIDDLE OF THE NIGHT OR DURING THE DAY FOR SUPPORT, INSTEAD OF HAVING TO DRIVE OR FLY OUT TO A SITE, WHICH CAN BE FIVE TO SIX HOURS, YOU CAN LOG IN REMOTELY,” WILSON SAYS.**

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“Having experienced support team, we can have a look at appropriate trends and understand what might be happening to remotely fault find. The systems are designed so all information is available to you.”

Even if the Fenner Dunlop team is unable to see what’s physically happening on-site, the remote monitoring system is advanced enough that being connected to the client by phone allows them to troubleshoot most issues.

“The motto of Fenner Dunlop is all about being customer centric and ensuring our customers problems can be resolved quickly,” Wilson concludes. “Our brand is on the equipment, so we want to be a partner with our clients the whole way through.”



**PICTURED:**  
Fenner Dunlop ACE conveyor starters

**JUN  
2020**

**PICTURED:**  
Fenner Dunlop ACE 82 kWh  
solar power system

# FENNER GOES SOLAR

## **LOCATED IN SOMERSBY, NEW SOUTH WALES, THE ACE BRANCH IS FENNER DUNLOP'S ELECTRICAL ENGINEERING CENTRE OF EXCELLENCE.**

Conscious of their energy usage and looking for a solution to reduce their carbon footprint, ACE decided to install a 82 kWh solar power system on their premises.

The solar panels are being installed right now with no interruption to the business and will lower our carbon footprint for the next 20 years.

With close to 243 solar panels on the roof, the ACE business will be less reliant on grid power from the day the system is switched on.

The system powers the mechanical and electrical plants along with the engineering and operations office building. With estimated energy consumption of 400 kw per day, it's the equivalent of supplying 20 large family homes from the sun every day.

As ACE is located in an industrial area, the additional power generated during the warmer months will be supplied to the grid reducing the supply-demand from the system for all users.

This project represents Fenner Dunlop's desire to innovate and operate more sustainably through a renewable energy solution.

As for the future, there is excellent potential to add solar panels to other branches and factories around Australia as we continue to strive to reduce our carbon footprint.

# MANUFACTURING A MINING INDUSTRY THAT STAYS ON TRACK

**PUBLISHED BY:**  
Australian Mining

## **WITH MINING IMPACTED BY THE CORONAVIRUS PANDEMIC, FENNER DUNLOP AND FLEXCO EMPHASISE THE IMPORTANCE OF HAVING AUSTRALIAN-BASED MANUFACTURERS AND SUPPLIERS DURING A CRISIS. SALOMAE HASELGROVE WRITES.**

The coronavirus pandemic has affected Australian jobs, trade and livelihoods since hitting the nation in the early months of 2020.

The Australian Government deemed the mining and resources sectors as essential, meaning work has continued as normal as possible under stringent safety measures, including social distancing, regular health checks and limits to business-related travel.

Having localised services in each Australian state, Fenner Dunlop has been able to keep supplying its clients with conveyor products, including belts, idlers, pulley, drive systems and access to local labour forces to keep their operations running.

Fenner Dunlop Australia chief operating officer Steve Abbott says manufacturing companies with Australian facilities have been critical in keeping the mining industry afloat during this time.

“Being an Australian manufacturer, we are not subject to the shipping constraints that an imported product would be constrained by,” Abbott tells Australian Mining.

“Having a distributed model of Australian localised services enables us to meet our clients’ needs and work

within each state, not just within the country, which is important given flight and border restrictions.”

Fenner Dunlop has been endorsed by many clients from the mining and power industries that have recognised the company’s importance in keeping their operations going.

“We’ve had support from large miners, calling us a critical supply, which is really important in our future to continue operating in the event that COVID-19 escalates,” Abbott says.

“This demonstrates how important we are to the continued operating of mining in Australia.”

While the conveyor is only a part of the long-winded process of unearthing materials and transforming them into the valuable exports and infrastructure Australia depends on, it is one of the most important steps in the process.

As Abbott explains, the conveyor is the bridge between the product coming out of the ground and moving it to port, rail or road so producers earn their keep.

This is particularly so for underground coal mining, where the only way for the mined coal to be taken out of the mine is via the conveyor system, or for iron ore operations where the infrastructure is built around the conveyor system.

“If the conveyor stops, it’s like not having access to a road,” Abbott says. “The goods can’t get to market, and miners can’t get paid for their products.”

“A conveyor is as critical as a train, road or ship in moving material between points, the criticality of conveyors being fundamental in getting goods to market cannot be underestimated.”

# MANUFACTURING A MINING INDUSTRY THAT STAYS ON TRACK

CONTINUED FROM PREVIOUS PAGE

With this in mind, Fenner Dunlop has taken precautionary measures to ensure it remains in action as the virus runs its course, both to prevent the risk of its employees becoming infected and keeping the supply chain updated with regular communication.

The company's employees are working from home where possible and it has also introduced a number of measures for those still working on site, including daily temperature checks when employees start their day, social distancing, initial personal protective equipment (PPE) including masks and hand sanitiser and strict cleaning procedures.

At the time of writing, these measures have worked, with no Fenner Dunlop employees or contractors being diagnosed with the virus so far.

"We put control measures in place in mid-March to ensure we managed the risk of infection as best we could," Abbott says.

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**"IF WE CAN GET THROUGH THIS PROCESS WITHOUT HAVING AN ISSUE IN OUR MANUFACTURING PLANTS OR SERVICE TEAMS, WE'LL BE SATISFIED THAT WE HAVE DONE THE RIGHT THING."**

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As well as promoting physical health, Fenner Dunlop has ensured its workers are supported mentally with initiatives such as sending hampers to families and colouring competitions for workers' children during the school holidays.

"These are only little things, but they all add up and are important to us," Abbott says.

Conveyor solutions company Flexco is another manufacturing business with Australian facilities that is working hard to support its clients and operate as normally as possible.

**PICTURED:**

Following advice from the Australian Government Department of Health on COVID-19, Fenner Dunlop implemented new health and safety procedures to keep the employees safe and healthy while maintaining our operations.



Like Fenner Dunlop, Flexco's operations have changed but it is focused on keeping its clients in the loop and highly productive despite the complications associated with coronavirus.

This has included canceling training sessions with clients and instead introducing an online version. The company has also ramped up production of stock in case Australia moved into a full lockdown.

As Flexco Australia's managing director Mark Colbourn explains, the pandemic has outlined the importance of a healthy Australian manufacturing industry.

"The day we found out about Australia starting to go into lockdown, we started working overtime that afternoon to ensure we had the stock required for critical mining operations," Colbourn tells Australian Mining.

"As a business, we prepared for three possible levels of lockdown; our Sydney or Perth warehouse shutting, both of our warehouses shutting or the whole country shutting down.

"By producing more stock each day, within a couple of weeks our available stock was 20 per cent higher than usual and now we have almost double the amount of stock we make locally for critical mine components."

With shipping times from overseas taking up to 10 weeks normally, let alone during the pandemic, this means that thanks to businesses like Flexco, Australian mines will not be kept waiting for materials during the pandemic.



By manufacturing its conveyors locally, industries including mining, recycling, sewage and food can purchase materials from Flexco without the long waiting period of overseas manufacturers, which has gotten even longer due to shipping hold-ups because of coronavirus.

If the worst case scenario of an Australia-wide lockdown did occur, in addition to its Sydney and Perth warehouses, Flexco has containers removing materials to remote locations so they could be left on site, ensuring mines are equipped with the essentials they need to keep providing the country with power and other essential materials.

Colbourn believes the pandemic has exposed the threat of what outsourcing manufacturing to overseas businesses means for Australia during the time of a crisis.

“It’s exposed that we need to look after our own manufacturing, if it’s all gone and something like this happens again, we can’t just turn the Australian manufacturing switch back on if the skilled labour force and machinery is all gone,” he says.

“We need to ensure that as a nation we continue to invest in our manufacturing industry, so we have that resource.

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**“THE GOVERNMENT NEEDS TO BE PART OF THE PROCESS OF TRYING TO GET A PERCENTAGE OF OUR MANUFACTURING SHORED UP IN AUSTRALIA SO WE CAN KEEP INVESTING IN IT.”**

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Companies manufacturing goods in Australia are allowing the nation to have control over its materials and stocks, which is the first step in keeping the country running as normal during this time of crisis.

“Labour costs may be cheaper overseas but Australian manufacturing is an investment and it’s worth it to have control of our stocks,” Colbourn concludes.

“It means we have a contingency plan, it’s keeping jobs and manufacturing here in Australia. We have that control of the quality and are able to change quickly to respond to market changes and it keeps investment and cash here in Australia for our people and our government.”

# BULK: AN ESSENTIAL SERVICE DEALING WITH THE NEW NORMAL

**PUBLISHED BY:**

Australian Bulk Handling Review

## **MOMENTS OF 2019, THE WORLD HEALTH ORGANISATION WAS ALERTED TO SEVERAL CASES OF PNEUMONIA SYMPTOMS IN WUHAN CITY, IN THE HUBEI PROVINCE OF CHINA.**

The virus, which did not match any other at the time, began to raise concerns. Within weeks, the entire city of Wuhan was under lockdown and COVID-19 had begun to spread across the globe.

In March 2020, Australia began imposing social distancing laws, with State Governments moving to close nonessential services and major events to curb its spread. However, Steve Abbott, Chief Operations Officer at Fenner Dunlop, says the option of shutting or slowing down wasn't available to the bulk handling industry, as it is essential to keep powering the country.

"The industry as a whole is essential for its economic contribution to the country, alongside its support of key forms of infrastructure," Steve says.

"Bulk handling is like the road or rail system. Without it, companies can't get their goods to market.

"The mining industry in particular depends on conveyors. In many cases they are the only way to move the product out of the ground and into a train or a ship. This is recognised by the mining industry - we've received letters from large mining customers recognising Fenner Dunlop as an essential supplier and service provider. This has been done to ensure governments understand our

essential role in mining." Social distancing soon became the new normal for essential workers in the bulk handling sector, with major miners establishing their own methods of reducing risks to keep their employees safe.

Fenner Dunlop established a Crisis Management Team to oversee the evolving situation. It has also ramped up site access controls, personnel hygiene measures and put additional screening procedures in place.

To date, no employee of Fenner Dunlop has tested positive for COVID-19, and the company has not seen a material impact on its ability to supply product.

At the time of writing, the company did not expect the crisis to have a material impact on future supply either, based on current available information.

Abbott says the reason for this is Fenner Dunlop's business model is based on local supply.

"Fenner Dunlop has always had its own local supply chain for its materials.

Our business strategy has been to manufacture our components as close to our customer base as possible. We need to be able to respond quickly and ensure quality standards," he says.

"Every conveyor is different. In order to provide the right engineered solutions for our customers, we need to understand them and have clear lines of communication with them." Fenner Dunlop manufactures its conveyor products in Australia, with facilities located in Melbourne, Sydney, Kwinana (Western Australia), Brisbane, Mackay and on the Central Coast of NSW.

**PICTURED:**

Hong Koh, Manufacturing Manager. Fenner Dunlop has been manufacturing conveyor belts in its Footscray factory for 80 years.



This diversity and regionalisation helps reduce the risks to supply.

As a business, Fenner Dunlop has 1000 employees across every state in Australia. The majority of its workforce are situated near clusters of bulk handling activity, helping insulate the business from restriction to movement across state lines.

“Our focus on local supply has been critical to responding to the crisis.

We’ve seen global supply chains face uncertainty and disruption. This has put the value of a strong, diversified and nearby supply chain into the spotlight,” he says.

“We’ve seen demand from customers rise substantially as existing customers begin firming up their own supply and customers that had traditionally bought from off-shore companies start to look local.” The company has now begun to look to the future, taking the lessons the industry has learned so far and reaching out to policy makers to consider further support of Australian manufacturing.

Daniel Ausling, Operations Manager at TUNRA Bulk Solids, says the industry is as busy as ever, with enquiries up and no drop in business. However, he adds that it is possible a slowdown will hit the industry sometime in the future.

“It takes a while for the lack of demand to wash through the bulk handling industry,” he says. “The nerves are out there, and it may have an effect down the line, though it will not be as steep as some other industries have faced.” “I would like to think it would also put a spotlight on supporting the local supply chain after this, though there remain a number of political factors that make local manufacturing a difficult topic to influence,” he says.

Larger economies of scale and lower prices have made overseas manufacturing attractive to bulk handlers and seen much business move overseas, though this is not limited to the bulk handling industry.

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**“THE INDUSTRY AS A WHOLE IS ESSENTIAL FOR ITS ECONOMIC CONTRIBUTION TO THE COUNTRY, ALONGSIDE ITS SUPPORT OF KEY FORMS OF INFRASTRUCTURE,” STEVE SAYS.**

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“Governments, regulators and mining houses need to understand that if they want Australian made mining supplies, some form of local content legislation for supply to the mining industry will be required. This happens in other countries to ensure there is security of supply.” he says.

“The impact of the long-term decline of Australian manufacturing has been highlighted by COVID-19’s economic impacts. We need to make sure that this topic enters industry debate and reaches the policy makers.”

“Our focus on local supply has been critical to responding to the crisis. We’ve seen global supply chains face uncertainty and nearby supply chain into the spotlight.”

**JUL  
2020**

**PICTURED:**  
Karatha branch in Western Australia

# ONE YEAR IN THE PILBARA



## **OUR WORKSHOP AND SERVICE CENTRE IN KARRATHA TURNS ONE IN JULY MARKING OUR SUCCESSFUL EXPANSION INTO REGIONAL WESTERN AUSTRALIA.**

The vision for the branch was to be a part of the local economy and to create opportunities for the community. To achieve this Fenner Dunlop set out to create a sustainable workshop that attracted a residential workforce and provided a training ground for new local employees. The invaluable partnership of our local maintenance contracts has helped us achieve this goal.

The branch has a geographical advantage to the coastal sites, vastly reducing logistic and cost constraints, giving the customers the convenience to inspect the equipment before delivery and allowing for immediate discussions around design and innovation improvements.

“Fenner Dunlop has always taken immense pride in being close to the customers, and this branch is another example of this approach,” Said Dan Luther, Area Manager. “We’re proud that our employees, many of who are locals, have been hard at work to make our rapid growth a reality”.

The workshop offers mechanical and electrical services, including equipment refurbishment and fabrication, extending to field and breakdown services, including belt splicing. With the support of our engineering and technical experts, we can also provide preventative maintenance programs, design consultation and bespoke innovation.

The facility is extensively furnished with precision machining and welding equipment to allow repairs, modification and assembly of mining assets.

As part of the preventative maintenance schedule, we track the future and history of the asset giving the customer peace of mind that the equipment is fit for purpose and ready to use.

The off-site capabilities for belt preparation include the ability to fit all reels up to 51 tonnes from cotton to full race tracks, up to 25 tonnes and 500 meters. This offers the customers the reduction of critical risk exposure on-site and a decrease in belt cost as larger reels are significantly cheaper. It also gives the site team more time to focus on conveyor optimisation instead of belt preparation.

Fenner Dunlop will continue to invest in the branch to keep delivering the best Australian made products and premium service to our local customers.



# ONE YEAR WITHOUT A RECORDABLE INJURY



**PICTURED:**  
Fenner Dunlop's Hunter branch team

## **THE LAST 365 DAYS HAVE BEEN FILLED WITH PASSION AND HARD WORK! AS OUR HUNTER BRANCH TURNS ONE, WE'RE LOOKING BACK AND CELEBRATING THE MILESTONES THAT HAPPENED ALONG THE WAY.**

Our journey started in July 2019 with the establishment of the branch in Beresfield. Since then, we have followed an aggressive growth strategy, extended the branch network to Muswellbrook, doubled the size of the team and the service capacity. This growth is the result of consistent investment in training and developing our staff and adapting to the market demands.

As part of the ongoing commitment for a safer workplace, Fenner Dunlop takes pride in leading the way in training and assessment ensuring employees are experts in all high-risk activities, through the Verification of Competency (VOC) process. The service team is evaluated by a Nationally Accredited assessor and subject matter experts ensuring the quality of their work is above the expected standards and that all equipment is operated safely.

Reaching 12 months without a recordable injury reflects on the importance of the safety culture and the adoption of the Safety Circle program with a focus on a behaviour-based safety process.

"This milestone is only possible because of the commitment of our hardworking and dedicated employees and of course the support of the Fenner Dunlop Management Team," Ross Vandyke, Branch manager said. "The plan was to build a customer focused team who brought local experience and industry expertise. Our employee's dedication is something to be admired, with the right people we were able to take our vision into action very quickly."

In addition to building a service centre fully capable of end-to-end services, supported by an arsenal of mine compliant equipment, capable of maintaining any size conveyor belt, the Hunter branch sustains its commitment to the strategic plan focused on the customers and continuous innovation. The relationships the branch has built – and will continue to build – with the local customers will always be the number one motivator for success.

The branch has received positive feedback, and today 8 of the major mine sites in the region are part of the loyal customers.

# ACE IS NOW ISO ACCREDITED

**AUSTRALIAN CONVEYOR ENGINEERING (ACE) HAS SUCCESSFULLY FULFILLED THE REQUIREMENTS OF THE ISO STANDARD AND EARNED THE RESPECTED ISO 9001-2015 CERTIFICATION EFFECTIVE FROM JULY 2020.**

The ISO 9001:2015 certification indicates that ACE can consistently provide products and services through a risk-based approach that meets customer and regulatory requirements. ACE pursued this certification to provide

customers with increased confidence in their quality processes, products, and services.

“Receiving this certification is an important milestone, it demonstrates our commitment to delivering high-quality products to our customers, particularly as we continue to innovate to bring the best in conveyor technology”, said Mark Wilcock, Branch Manager ACE QLD.


The certificate is issued based on satisfactory completion of several audits and ensuring that we work in full compliance with the requirements of the ISO standard while also continually working to improve safety.

“This is an ongoing process, and we will continue to do what we can to ensure we serve our customers in the best way possible while following the highest industry standards.”

Fulfilling the strict requirements of the ISO standards highlights ACE's focus and commitment to always deliver total customer satisfaction and safety.



**ACE**  
ENGINEERED CONVEYOR SOLUTIONS



**PICTURED:**  
ACE has successfully fulfilled the requirements of the ISO standard

**AUG  
2020**

**PICTURED:**  
Dan Luther,  
Branch Manager  
for Karratha

# BRANCHING OUT

**PUBLISHED BY:**  
Australian Bulk Handling



**FENNER DUNLOP TAKES PRIDE IN ITS CLOSE PROXIMITY TO ITS CUSTOMERS. THE CONVEYOR MANUFACTURER'S MISSION IS TO KEEP ITS RESOURCES NEAR THOSE THAT NEED THEM. AS SUCH, IT BEGAN LOOKING AT REGIONS ACROSS AUSTRALIA WHERE IT COULD EXPAND.**

In 2019, the company's fast-paced growth strategy saw two new branches set up from scratch, one in the Hunter Valley, New South Wales and one in Karratha, Western Australia.

When Fenner Dunlop first established a branch in Beresfield, NSW, it started with just three employees. Since July 2019, that number has quickly expanded to 44 and another service facility opened in the Muswellbrook region of the Hunter Valley.

The branch offers the local mining companies complete end-to-end services, equipped with the staff and equipment to carry out offsite belt maintenance and repair on any size belt. It also stocks a number of components, such as belts, rollers and belt cleaners, to ensure the company can respond quickly if necessary.

According to Ross Vandyke, the Branch Manager, building a solid, customer-focused team was the first priority.

"When we began recruiting, we were looking for people that were passionate about what they were doing and who would create the right culture," he says.

Almost everyone hired had never worked at Fenner Dunlop before. According to Vandyke, the team was hand-picked to understand the needs of the customers in the region and have a keen focus on safety.

"From our perspective, we want to deliver what the customer wants, which is safe, efficient and effective products and services," he says.

"Business relationships are built on mutual respect and trust. Our team helps save time and money for the industry in the region, and because of that, we've seen eight of the major mine sites become loyal customers."

Employees who are new to the belting industry undertake two one-month sessions in Perth to learn the basics of belt splicing, belt repair and pulley lagging. After this, they begin learning on the job and applying what they have learned in the field.

# BRANCHING OUT

CONTINUED FROM PREVIOUS PAGE

In addition, Fenner Dunlop ensures all of the branch's employees go through the Verification of Competency process to train them in high-risk activities. The service team is evaluated by a nationally accredited assessor and subject matter experts ensuring the quality of their work is above the expected standards and that all equipment is operated safely.

This has resulted in the branch meeting its first anniversary without a single recordable injury.

Vandyke says the achievement reflects on the team's focus on behaviour-based safety processes and the importance of safety culture.

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**“THIS MILESTONE IS ONLY POSSIBLE BECAUSE OF THE COMMITMENT OF OUR HARDWORKING AND DEDICATED EMPLOYEES, AND OF COURSE THE SUPPORT OF OUR DEDICATED TEAM OF SUPERVISORS AND MANAGERS,” HE SAYS.**

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Fenner Dunlop takes a decentralised approach in Australia, with its management team in Melbourne providing support to branches around the country.

Located around 1500 kilometres from Perth – more than a 15-hour drive away – in WA's Pilbara region, is Fenner Dunlop's Karratha facility.

Initially, the branch was established to assist a Western Australia iron ore producer with a major belt maintenance contract. While Fenner Dunlop had a presence in the town, it aimed to further reduce the logistical challenges and high freight charges that faced iron ore businesses in the region.

Dan Luther, the Branch Manager for Karratha, explains that branch has a full fabrication and mechanical/electrical services workshop, significantly reducing turnaround times.

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**“BEFORE, IF ANYTHING NEEDED TO BE MANUFACTURED, MAINTAINED OR REFURBISHED, IT WOULD NEED TO GO TO PERTH TO BE FIXED AND TRANSPORTED BACK. BY OPENING THE BRANCH IN KARRATHA, IT MEANS WE CAN CUT DOWN A MONTH-LONG TURN AROUND TO AROUND A WEEK.”**

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The off-site capabilities for belt preparation include the ability to fit all reels up to 51 tonnes from cotton to full race tracks, up to 25 tonnes and 500 meters. This offers the customers the reduction of critical risk exposure on-site and a decrease in belt cost as larger reels are significantly cheaper.

One of the early challenges the branch faced was building the team. Karratha has a population of around 17,000, with many people already employed by major companies in the region. On top of that, Luther says housing restrictions means it can be an expensive place to rent.

To account for this, the company took a two-pronged approach. It focused heavily on building up a team of locals while also encouraging workers from elsewhere in Australia to relocate to the town.

Luther says the company plans to remain in the town permanently, supporting the regional economy and the industry.

“We want to become ingrained as part of the community, we will continue to invest in the branch to keep delivering the best Australian made products and premium service to our local customers.,” he says.

“One of our team members even has his son moving here to join the team.

“We're really grateful to be up here. The town has been really welcoming and accommodating. We're looking forward to a long future here.”



**PICTURED:**

Fenner Dunlop ACE team hard at work assessing the Aquila overland conveyor project in QLD.

# FENNER DUNLOP ACE WINS AQUILA OVERLAND CONVEYOR CONTRACT

## FENNER DUNLOP ACE HAS BEEN CONTRACTED TO DELIVER AN OVERLAND CONVEYOR SYSTEM FOR ANGLO AMERICAN'S AQUILA PROJECT.

Anglo American is a leading global mining company, with significant investments in Australia and particularly in Queensland. Aquila is an underground hard coking coal mine near Middlemount, which will extend the life of Anglo American's existing Capcoal underground operations.

Under the new contract award, Fenner Dunlop ACE will undertake the complete design, supply and installation of the ACV002 Overland Conveyor. Works will include the overland structure, belting, electrics and an elevated stacker to load coal onto the site stockpile. Several conveyor components

including mechanical supply, electrical supply and belting, will be manufactured in Australia.

"After delivery of the initial underground development works, we are very excited to be working on this project. We believe we have created a culture of delivering on our promises. Completing the design, supply and installation give us a great opportunity to ensure effective conveyor operation for our client," said Brendon Harms, Regional Manager ACE QLD.

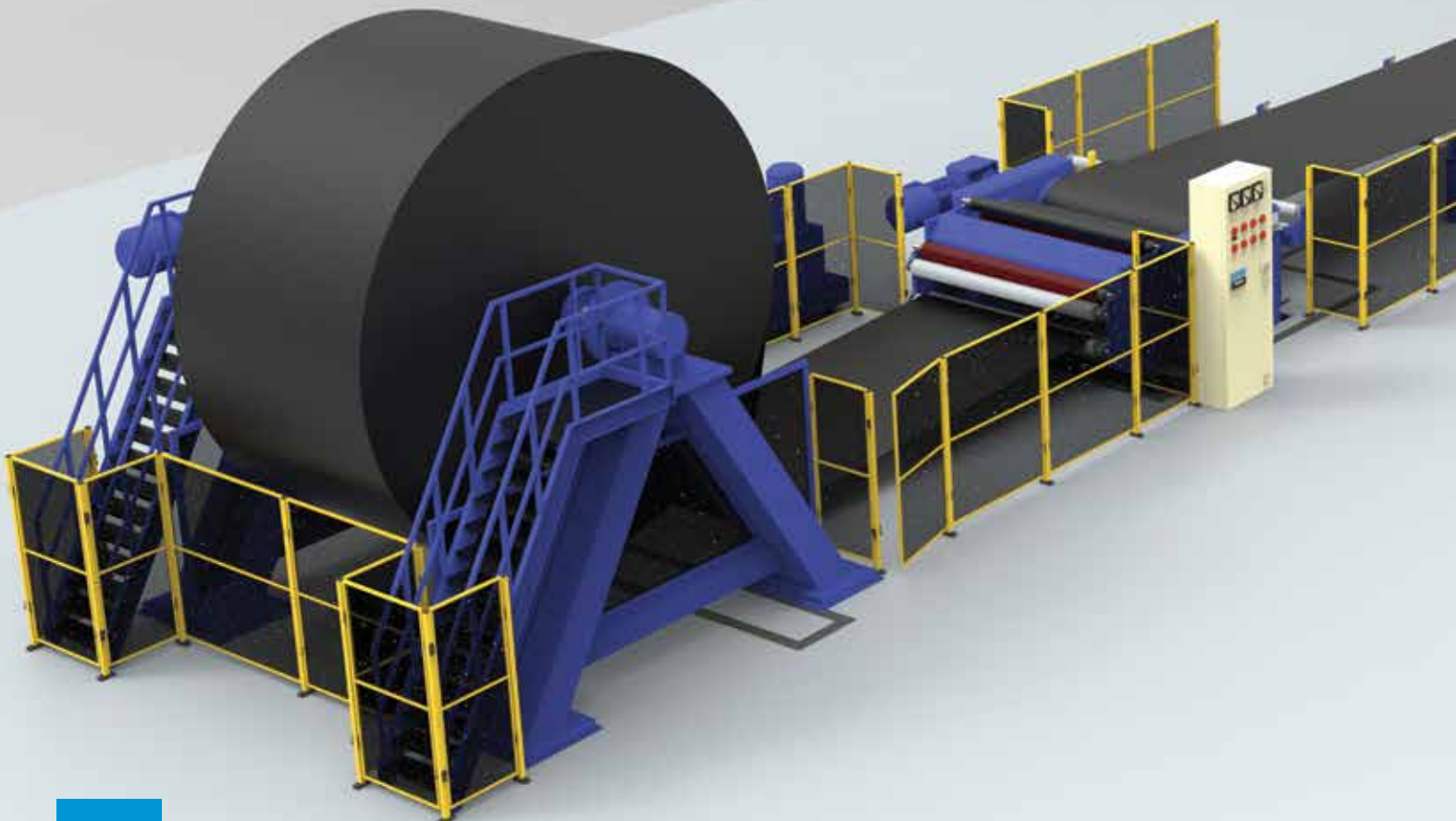
Fenner Dunlop ACE will also be responsible for the complete install and commissioning of the overland conveyor, providing even further responsibility and ownership for the project.

The Overland Conveyor project is expected to be commissioned in the 2nd half of 2021.

# FENNER DUNLOP ANNOUNCES \$23.5 MILLION PLANT EXPANSION IN KWINANA

**PICTURED:**

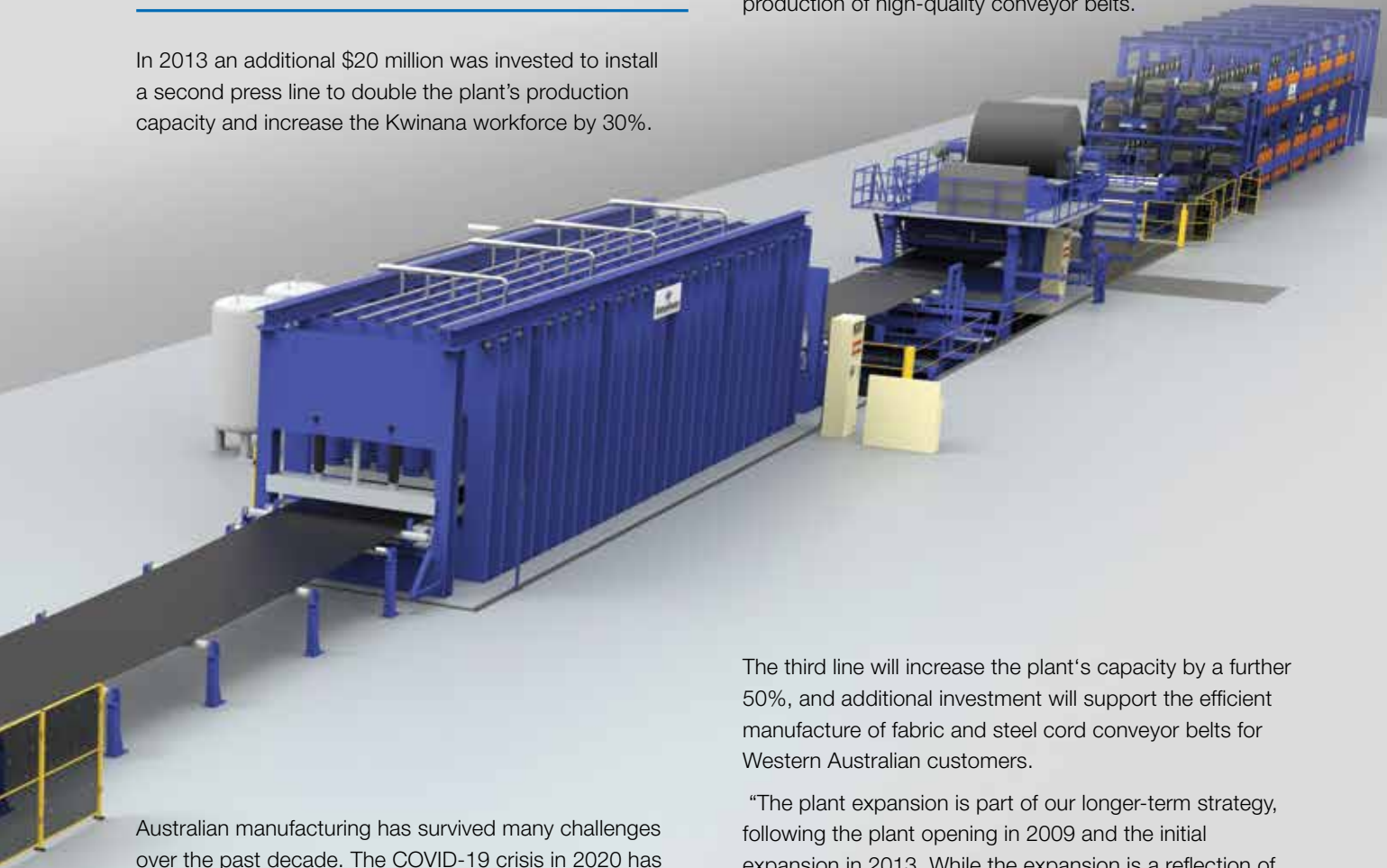
The third line will increase the plant's capacity by a further 50%



**IN 2009, FENNER DUNLOP OPENED A \$70 MILLION STATE-OF-THE-ART MANUFACTURING FACILITY IN KWINANA, WESTERN AUSTRALIA, SPECIFICALLY BUILT TO PRODUCE STEEL CORD BELTING. AT THE TIME, IT REPRESENTED THE LARGEST INVESTMENT IN CONVEYOR BELTING MANUFACTURER EVER MADE IN AUSTRALIA BY ANY COMPANY.**

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In 2013 an additional \$20 million was invested to install a second press line to double the plant's production capacity and increase the Kwinana workforce by 30%.



Australian manufacturing has survived many challenges over the past decade. The COVID-19 crisis in 2020 has demonstrated the value of Australian manufacturing to the economy and to the mining sector in particular.

While other companies are contracting and moving their manufacturing operations offshore, Fenner Dunlop continues to support the local economy and is proud to be the largest conveyor belt supplier in Australia and the only company to manufacture the complete range of conveyor belts for all mining applications locally. "Kwinana is close to its main customers, allowing us to provide a quality product with reduced lead times while keeping the investment in WA. Our customers have the convenience of dealing with a global business, supported by a state-of-the-art conveyor belt manufacturing facility in their backyard and the assurance of technical support that

understands the local operational environment." Said Steve Abbott, Chief Operating Officer.

Today the facility houses two of the world's largest steel cord press lines and has the capability to produce steel cord and rubber ply belting up to 3200mm wide and up to 50mm thick.

Fenner Dunlop has once again partnered with Siempelkamp to commission the third line, which is the finest multi-piston press and associated equipment in the world, continuing the long-standing partnership in the production of high-quality conveyor belts.

The third line will increase the plant's capacity by a further 50%, and additional investment will support the efficient manufacture of fabric and steel cord conveyor belts for Western Australian customers.

"The plant expansion is part of our longer-term strategy, following the plant opening in 2009 and the initial expansion in 2013. While the expansion is a reflection of our success, it allows us to maintain our responsiveness in quoting, production and delivery to meet the constantly changing requirements of our customers", said Steve. The \$23.5 million investment is part of the company continued commitment to grow its conveyor belt production to meet the increasing demand in Western Australia.

The manufacturing plant also incorporates an innovative testing and R&D laboratory to ensure that all work is done to the highest quality and safety standards and all systems are under constant review and continual improvement.

Site work is scheduled to start in March 2021 with the commissioning in December 2021. The new press line will start full production in January 2022.

# THE UNDERGRADUATE EXPERIENCE THAT MATTERS

**FENNER DUNLOP ACE IN MACKAY IS ALWAYS LOOKING OUT FOR THE NEXT GENERATION OF EXPERT ENGINEERS. THE TEAM IS COMMITTED TO ASSISTING THE NEW ENTRANTS TO SUCCEED, OFFERING MULTIPLE PROGRAMS DESIGNED TO ADVANCE AND ENHANCE THE HOLISTIC WORK EXPERIENCE.**

Combining theoretical tutoring with practical activities is by far, the most effective way of learning. “We work together with our customers to offer our undergraduates practical experience working on real-world projects” explains Mark Wilcock, Branch Manager ACE QLD. Two employees stand out from the crowd in the team, both started with ACE in their second year of university studies and now are key personnel in our business.

Cameron Slack Spent the last 4 years working as an undergraduate, giving him a new perspective on the world of engineering. “Looking at everything holistically, being able to get a sort of top-down view of the mining industry, but also the outlook of the entire business has been great”. Cameron just finished his last exams and now runs the pulley overhaul and manufacturing division of ACE QLD.

Joel Hingst says that Fenner Dunlop ACE helped him with networking, but that the value of the experience goes well beyond. “The high-calibre employees you get to work with is incredible. The perspective that you get is extremely important for people starting their career. I don’t want to work for an organisation that’s just a bunch of plain, cookie-cutter people who do the same thing every day. Meaningful work is critical to me”. Joel has been working in the Mackay branch for over 5 years, now fully graduated he leads major conveyor design projects for our key customers.

At the Fenner Dunlop ACE undergraduate program, entrants will build practical skills as complete engineers while providing a real contribution to the success of the Australian mining industry. The Mackay branch is open to applications, a unique opportunity to kickstart a great career.





# DEFYING THE TREND: NO SIGN OF SLOWDOWN FOR FENNER DUNLOP

**PUBLISHED BY:**  
Australian Mining

## **THE MINING INDUSTRY'S INCREASING DEMAND FOR EFFICIENT CONVEYOR BELT SOLUTIONS HAS DRIVEN CONVEYOR BELT MANUFACTURER, FENNER DUNLOP, TO EXPAND ITS WESTERN AUSTRALIA MANUFACTURING FACILITY TO KEEP UP.**

While many Australian manufacturers have seen a slowdown in business as a result of the COVID-19 pandemic, conveyor company Fenner Dunlop is defying this trend by investing in more production capacity.

After investing \$70 million to build its steel cord plant at Kwinana in Western Australia in 2009, Fenner Dunlop spent another \$20 million in 2013 to double the plant's production capacity by installing a second press line.

In July this year, the company announced a decision to invest a further \$23.5 million to commission a third press line for the plant, boosting its capacity by another 50 per cent.

Fenner Dunlop chief operating officer Steve Abbott believes the company's consistent growth has been in line with its mining clients' objectives of higher production efficiencies and "near-field" mine development.

"Over the past years, demand for conveyors has followed the general trends in mining, which is a demand for increased productivity, production volumes and speed. To keep pace with the requirements of our mining clients, we have had to invest in manufacturing stronger and wider belts," he tells Australian Mining.

"Our plan has always been to make incremental investments when the existing capacity becomes constrained, going from one to two to three press lines at Kwinana. We will eventually fill that capacity and look for further incremental investments once another constraint emerges. Last year we invested in a new idler plant in Brisbane which is approaching a capacity constraint. By the end of the year we will open a new state-of-the-art pulley manufacturing facility, also in Brisbane."

The Kwinana plant is Fenner Dunlop's 15th global conveyor belt manufacturing facility and its fourth steel cord plant. The facility currently houses two of the world's largest steel cord press lines, measuring 18.5 metre in length and having the capability to produce steel cord and rubber ply belts up to 3200 millimetres wide and up to 50 millimetres thick.

Kwinana's third press line, which is expected to become operational by January 2022, will increase the plant's belt making capacity by 50% per year.

For the third press line, Fenner Dunlop has again partnered with German company Siempelkamp to develop a 18.5-metre long multi-piston press line, offering enhanced features to produce ply belts more efficiently, Abbott says.

"The technology that we use at Kwinana is the best in class. Being German-manufactured, the press line is designed to last many decades. One of the key features that helps increase the plant's efficiency is that the press line can be set up for the next job even as the current order is being processed, which offers significant time and cost-savings," Abbott says.

# NO SIGN OF SLOWDOWN

CONTINUED FROM PREVIOUS PAGE

While many companies are moving their manufacturing operations offshore, Abbott says Fenner Dunlop is proud to be manufacturing close to its key mining clients in Western Australia, while still maintaining its globally competitive prices.

“One of the main reasons why we are keeping our cost competitiveness is our focus on efficiency and making investments in the plant. We are an extremely efficient producer,” he says.

“The size and quality of the equipment, the commitment of the team to make sure we are efficient with raw material sourcing and that there’s no waste, these are things that we have really been focused on over the past years and that’s put us in a price-competitive position.”

Another factor behind Fenner Dunlop’s success, according to Abbott, has been focusing on providing complete conveyor system solutions, rather than only focussing on conveyor belts.

“In 2012 we developed the business model of engineering conveyor solutions. Our focus has been on being the best in class in providing solutions to customers in total conveyor systems. We’ve been consistent in this focus and have developed a great team with a shared ambition to succeed,” Abbott says.

“It’s been an eight-year journey, but I think now we are seeing the benefit, where increased demand from our customers has prompted us to invest in more capacity and more in our people.

“We’ve recently extended contracts with some of our largest customers and in their assessments, we’ve ranked first in factors such as product quality, security of supply, technical support, continuous improvement and innovation and lead time. It is our focus on these factors that has placed us at that number one spot with our customers.”

In 2018, Fenner Dunlop was acquired by the multinational tyre manufacturer, Michelin. Abbott says the acquisition has not changed the way the business is operated internally, but it has assisted with transfer of technical knowhow from Michelin.

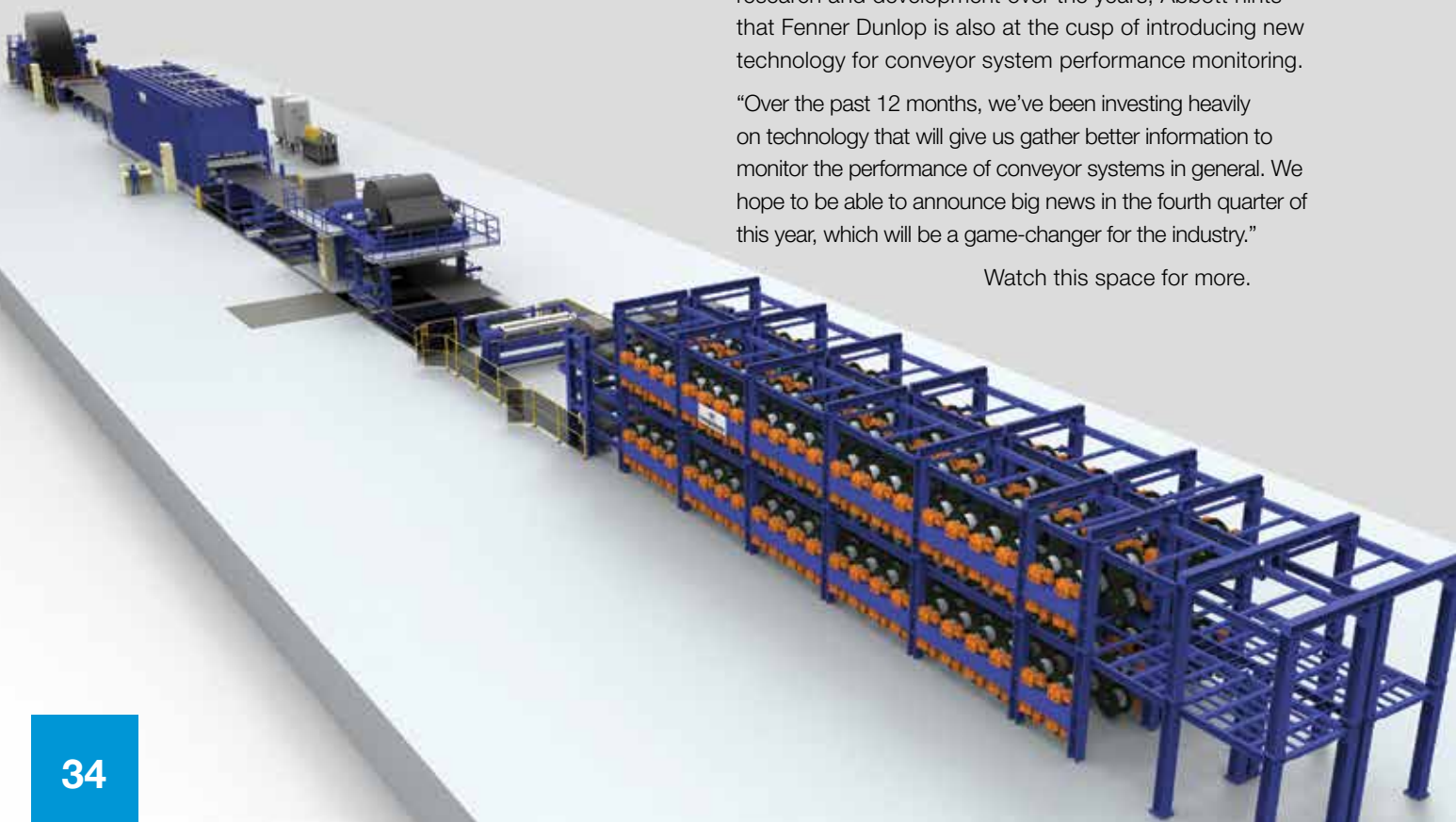
“Both Fenner Dunlop and Michelin have an ambitious goal to improve in the re-use and recycling of used conveyor belts and tires. It’s a big challenge, not just for us, but for the industry as a whole,” he says.

“But we are taking a long-term approach to make sure that we put our business in a position that we can meet our customers’ requirements, while also meeting our environmental goals.”

Having spent heavily on technology improvements and research and development over the years, Abbott hints that Fenner Dunlop is also at the cusp of introducing new technology for conveyor system performance monitoring.

“Over the past 12 months, we’ve been investing heavily on technology that will give us gather better information to monitor the performance of conveyor systems in general. We hope to be able to announce big news in the fourth quarter of this year, which will be a game-changer for the industry.”

Watch this space for more.



PICTURED:  
Statewide Belting Team



# STATEWIDE BELTING IS ON THE MOVE!

**STATEWIDE BELTING IS THE ONLY SINGLE-SOLUTION PROVIDER IN TASMANIA WHO CAN PROVIDE TECHNICAL EXPERTISE AND ENGINEERING SUPPORT 24 HOURS A DAY, ALL BACKED BY A HIGHLY QUALIFIED TEAM OF ENGINEERS AND CONVEYOR EXPERTS.**

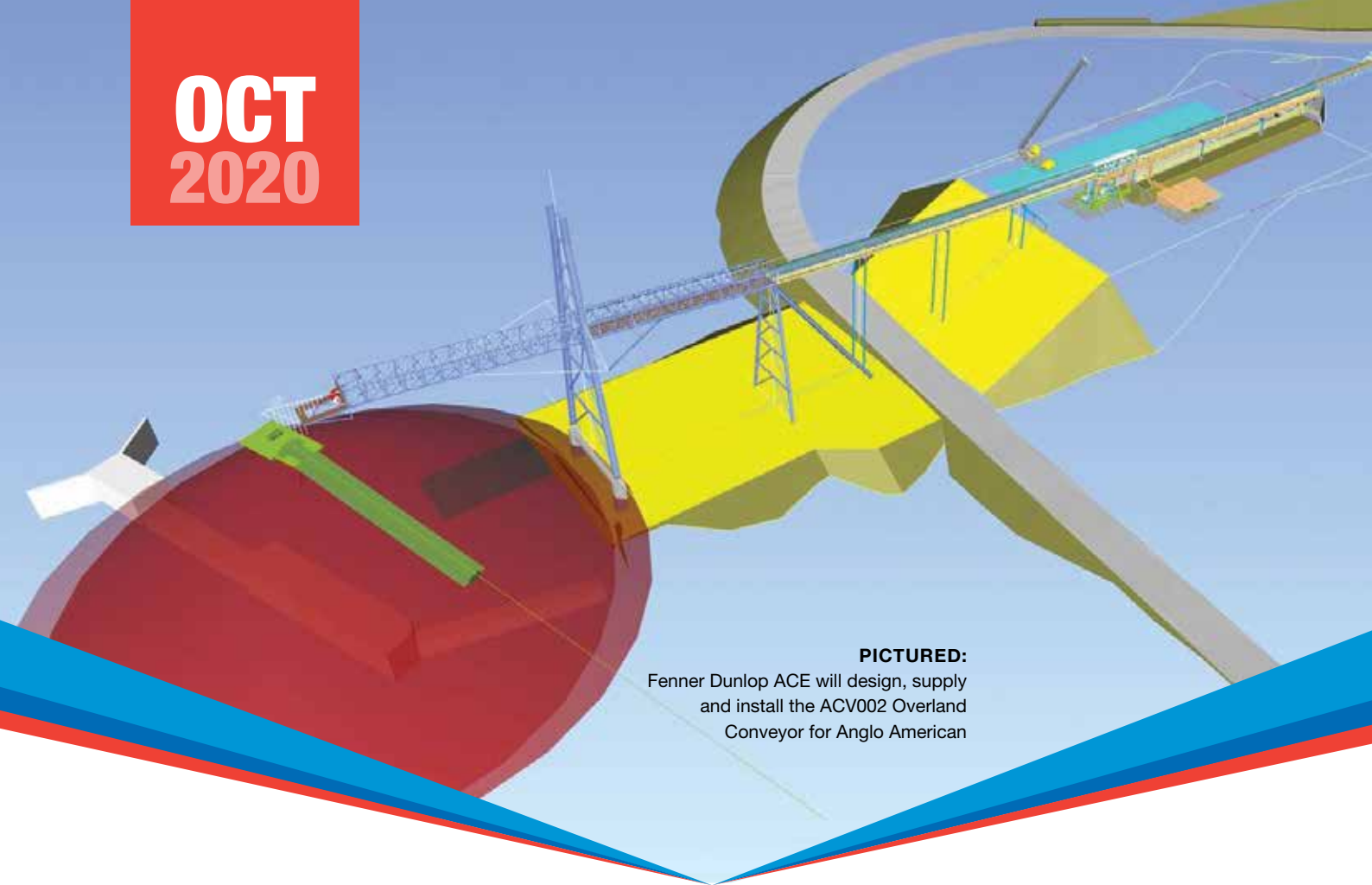
The Team have invested in new, more extensive facilities and extra equipment to build upon and improve their services to support the local customers with their unique requirements. The new service centre is part of the

company strategy to maintain high standards and to improve the level of service.

Tim Briggs, Statewide Belting Branch Manager, said: "We're a business that takes immense pride in delivering innovation and quality products. This move is a reflection of our long-term commitment to the Tasmanian market, always ensuring each client is at the centre of everything we do."

Statewide Belting phone number, e-mail addresses and open hours will all stay the same. The new location is at 32 Pearl Street, Derwent Park, TAS, 7009.

**OCT  
2020**



**PICTURED:**  
Fenner Dunlop ACE will design, supply  
and install the ACV002 Overland  
Conveyor for Anglo American

# FENNER DUNLOP WINS HEAD TO TAIL OVERLAND CONVEYOR CONTRACT

**PUBLISHED BY:**

Australian Bulk Handling Review

**THE BOWEN BASIN COALFIELDS IS HOME TO ONE OF THE LARGEST COAL RESERVES IN AUSTRALIA, PRODUCING ALMOST 100 PER CENT OF QUEENSLAND'S COKING COAL AND 60 PER CENT OF ITS THERMAL COAL.**

The region is home to dozens of coal projects, including Anglo American's Aquila – an underground hard coking coal mine near Middlemount.

As part of this project, Anglo American selected Fenner Dunlop ACE to design, supply and install the ACV002 Overland Conveyor. The conveyor measures 2.6-kilometres long and includes four drives, a transformer, loop take-up, elevated gantry sections, overland structure and belting. Included within the scope of works are the mechanical and electrical installation, belt installation and commissioning.

Brendon Harms, Regional Manager of Australian Conveyor Engineering (ACE) Queensland, says the conveyor is a key piece of infrastructure for the mine, as it

will be the sole source of product transportation from the underground works to the stockpile.

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**“FENNER DUNLOP ACE WILL BE RESPONSIBLE FOR THE COMPLETE INSTALL AND COMMISSIONING OF THE OVERLAND CONVEYOR, PROVIDING EVEN FURTHER RESPONSIBILITY AND OWNERSHIP FOR THE PROJECT,” HE SAYS.**

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“We’re very excited to be working on this project, as we believe we have created a culture of delivering on our promises. Completing the design, supply and installation give us a great opportunity to ensure effective conveyor operation for our client.”

The overland conveyor will run from the underground to the surface and then move up to the stockpile. Often, the product will be put onto a stockpile outside the mine, but because the project will make use of an existing stockpile and wash plant, the conveyor will help connect the infrastructure together.

Included within the design are a number of custom components, such as a horizontal curve in the conveyor and an elevated stacker to load onto the stockpile.

Fenner Dunlop ACE will provide support from the beginning of the design phase to commissioning and throughout operation. Harms says this is part of the company’s head to tail approach which can significantly simplify communications and increases the accountability of a project.

“Accountability is a key part of Fenner Dunlop ACE,” he says. “We take pride in building something right the first time, every time.”

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**“IF SOMETHING DOES GO WRONG, IT MEANS THAT THERE ARE NO ARGUMENTS BETWEEN MULTIPLE SUPPLIERS, WE SIMPLY PROVIDE THE MOST EFFECTIVE SUPPORT POSSIBLE TO SOLVE ANY PROBLEMS AS EARLY AS POSSIBLE.”**

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Ongoing maintenance will be offered by teams in Mackay and Emerald, providing belt works and servicing over the life of the project. The company’s ACE team in Mackay has expanded significantly over the past seven years to ensure it can handle large projects such as this.

The Overland Conveyor project is expected to be commissioned in the second half of 2021.

# MONDIUM CHOOSES FENNER DUNLOP

**FOR RIO TINTO’S WESTERN TURNER SYNCLINE  
PHASE 2 (WTS2) PROJECT IN THE PILBARA**



**EARLIER THIS YEAR, RIO TINTO AWARDED MONDIUM ALL ENGINEERING AND DESIGN AS WELL AS PROCUREMENT AND CONSTRUCTION WORKS ASSOCIATED WITH THE DEVELOPMENT OF THE PROCESS PLANT, OVERLAND CONVEYOR AND NON-PROCESS INFRASTRUCTURE AS PART OF THE WESTERN TURNER SYNCLINE PHASE 2 (WTS2) PROJECT.**

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Fenner Dunlop will manufacture 27,854 meters of steelcord belt and will supply splice kits. The ability to manufacture locally in Western Australia and its proximity to the Pilbara is a vital component of the partnership.

The large racetrack reel will be manufactured by JAF, part of the Fenner Dunlop Australia group of companies, and will maximise reel length, reduce splicing on site and installation time.

The WTS2 project is expected to be completed in 2021.

**NOV  
2020**



**PICTURED:**  
Fenner Dunlop ACE will design, supply  
and install the ACV002 Overland  
Conveyor for Anglo American

# TAKING SAFETY PROCEDURES FULL CIRCLE

**PUBLISHED BY:**  
SAFE TO WORK

**FENNER DUNLOP'S HIGHEST PRIORITY HAS ALWAYS BEEN SAFETY, DUE TO THE EXPOSURE ITS WORKERS HAVE TO DANGEROUS EQUIPMENT AND WORK ENVIRONMENTS. SAFE TO WORK FINDS OUT HOW FENNER DUNLOP HAS PUT THE FOCUS ON ITS PEOPLE TO ENSURE SAFE OPERATIONS.**

**PICTURED:**  
Although already a key priority, Fenner Dunlop has continued to broaden its focus on health and safety, continuously striving towards an injury free zero-harm workplace across its Australian operations.

While Fenner Dunlop's previous work to underline the importance of and improve its safety procedures often concentrated on operations and equipment, its latest initiative aims to put people at the forefront of implementing safe practice, from upper management through to its workforce.

To do so, Fenner Dunlop joined forces with SafetyCircle, a company that designs powerful cultural changes in the workplace to build a positive health and safety-first culture, to roll out workforce engagement and effective field leadership initiatives.

SafetyCircle uses direct language and straight-forward ideas that appeal to workers at all levels of a business and brings teams together by focussing on the human element of a well, healthy and safe work culture.

It was developed enhanced following a research project directed by University of Tasmania Associate Professor, Benjamin Brooks, who identified three key areas for creating a more effective work culture: personal engagement, supportive leadership and regular reinforcement.

A key aspect of this is moving the emphasis from negatives, such as injuries and danger, to positives by reminding businesses and workers that the simplest, yet most important point of a safety culture is sending workers home safely each day to enjoy their life to the fullest.

SafetyCircle Managing Director, and specialist work, health and safety consultant Martyn Bradfield says connecting people to their 'why' is part of personalising their experience in building a safe work culture.

"The more we connect together and understand that everyone has their own why, the more likely we are to speak up and fully participate in making a difference at a local level," Bradfield tells Safe to Work.

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## **"GETTING WORKERS CONNECTED TO WHAT IS IN IT FOR THEM AND WHAT IS THEIR WHY HELPS TO BUILD THAT SOCIAL EXPECTATION."**

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One of SafetyCircle's core techniques is working with companies like Fenner Dunlop to build a culture where workers feel comfortable interrupting their colleagues if they are doing something potentially hazardous at work.

This active involvement gives workers ownership and connection with their workplace's health and safety procedures.

SafetyCircle has helped Fenner Dunlop to improve its total recordable injury frequency rate (TRIFR) by 40 per cent and has recorded improvement as high as 98 per cent across its versatile range of Australian clients.

"Safety is all framed around the goal of everyone wanting to go home safely every day," Bradfield says.

"The people we work with all have great lives and a lot to be grateful for, so it makes sense for them to make the effort to not get hurt at work. Switching people on to that is what makes a difference."

Working in environments such as mine sites, workshops and warehouses, Fenner Dunlop already had a stringent existing occupational work, health and safety plan in place.

SafetyCircle's people-focussed program fit in well to allow Fenner Dunlop to enhance its existing safety measures and engage its workforce with its procedures.

Fenner Dunlop surveyed its employees, who responded that they wanted to be more actively engaged in managing their own safety, prompting the company to implement a program that allowed this, which is when it turned to SafetyCircle.

As Fenner Dunlop chief operating officer Steve Abbott explains, SafetyCircle has given the employees confidence to break down the culture of being hesitant to speak out against with colleagues and helping one another to improve their own safety measures for a safer all-round workplace.

"For us, implementing SafetyCircle is really about generating a common language for the people involved in the work to interact with each other and enable them to feel comfortable interrupting each other," Abbott says.

"It's not just the language itself, it's also about the culture. Generally in Australia, interrupting your workmates who are potentially undertaking an at risk behaviour is something we are not often comfortable with.

# TAKING SAFETY PROCEDURES FULL CIRCLE

CONTINUED FROM PREVIOUS PAGE

**“SAFETYCIRCLE HAS ALLOWED FENNER DUNLOP TO BREAK DOWN THAT CULTURE OF NOT SPEAKING OUT AND GETTING OUR WORKFORCE TO BE MORE ACTIVELY INVOLVED IN DETERMINING THE WAY THE BUSINESS SHOULD WILL OPERATE FROM A SAFETY PERSPECTIVE.”**

Having the same common language explaining simple concepts that are regularly reinforced to the workers meant that SafetyCircle resonated with Fenner Dunlop’s diverse workforce and the simplicity of it enabled the company to roll it out across their Australian operations.

Abbott says the versatility of SafetyCircle allowed Fenner Dunlop to implement it within their manufacturing business, which is a more factory-oriented environment, as well as its services business, which is vastly different as employees visit multiple customer sites.

“Following a universal program enables that engagement with the different styles of work,” he says. “This is what SafetyCircle does; it’s not generic to a particular work style.”

**“IT IS ALSO VERSATILE TO THE WORKERS; YOU NEED TO HAVE NOT JUST THE ENGAGEMENT OF SENIOR EXECUTIVES, BUT ALSO THROUGH TO THE NEXT LEVEL OR IT JUST WON’T ENGAGE CONSISTENTLY WITH THE INDIVIDUALS.”**

Applying SafetyCircle to its operations allowed Fenner Dunlop to fill the gap in its safety procedures and for its workers to choose the types of localised solutions they wanted to introduce under Fenner Dunlop’s existing safety system framework.

Despite a people-based solution not being the usual type of safety framework Fenner Dunlop invests in, Abbott is impressed with the positive change in safety culture within the business.

“The nature of the business we are in leads itself to procedures, equipment and training so SafetyCircle filled the people gap really well in that sense,” he says.

“Having a really different people-based solution to safety filled that gap really well and to see a 40 per cent improvement in the overall TRIFR is particularly pleasing.

“It has been a significant change effort to roll out, then to see the results that have come through is really pleasing for the team.”



**SafetyCircle®**



# FENNER DUNLOP'S VISION OF INTELLIGENT CONVEYING

**PUBLISHED BY:**  
Australian Bulk Handling Review

## **FENNER DUNLOP HAS RESTRUCTURED AND CREATED A CONVEYOR TECHNOLOGY TEAM. ABHR SPEAKS WITH THE TEAM TO LEARN MORE ABOUT WHAT'S IN STORE FOR THE FUTURE AND HOW THEY WILL HARNESS INDUSTRY 4.0 TECHNOLOGY.**

British mathematician Clive Humby was quoted in 2006 to have said "data is the new oil". While that fragment may have caught on, Humby elaborated, saying that data, like oil, is valuable but if unrefined, cannot really be used.

According to software company Domo's sixth edition of its Data Never Sleeps report, more than 2.5 quintillion bytes of data were created every day in 2018. It also estimated that by 2020, 1.7 megabytes of data will be created every second for every person on earth.

To find new ways of turning this flood of information into something useful for its customers, Fenner Dunlop created a new team focused solely on the development of new conveyor technologies.

Following the mantra of "Intelligent Conveying," the Conveyor Technology Team attempts to develop new

solutions and better ways to intelligently improve the performance of conveyor belt systems for their customers.

At the helm of this new division is Alan Clout, Fenner Dunlop's National Technical Manager and Samuel Wiffen, the Conveyor Technology Manager. The company's national and global network of subject matter experts and manufacturing facilities are a support to Clout and Wiffen, along with local business partnerships to collaborate on niche work.

"It's hard to develop new products when you're focused on the day to day running of the business," Clout says. "Creating a dedicated team is a fantastic change and has given us the infrastructure to develop and deploy new tools for new challenges.

"Samuel joining the team has opened up whole new vistas for myself, giving us new perspectives and further enhancing our teams knowledge base and capabilities"

The team's first major project is to upgrade its Online Thickness Tester (OTT). Fenner Dunlop has used the technology to scan conveyor belts since 2013 but is now undergoing a rebuild from the ground up to incorporate the latest technology.

Designed for both fixed and mobile options, this new OTT has been named BeltGauge and measures not only the

# FENNER DUNLOP'S VISION OF INTELLIGENT CONVEYING

CONTINUED FROM PREVIOUS PAGE

belt thickness, but also the belt tracking and width. Most wear monitoring today relies on labour intensive manual thickness gauge monitoring, that requires belts to be stopped and hundreds of manual measurements to be done, collated and interpreted. BeltGauge solves all the human intervention of data collection, as data is streamed into the DigitalHub, where insights are provided to our customers in real time.

Wiffen says previous units could measure the profile of the belt and determine wear, but that was only one part of determining a belt's lifecycle performance.

"Selecting a high-quality belt is just the start of the lifecycle. To ensure you get the most out of your investment, the belt must be monitored to detect performance issues optimising its return," he says.

"BeltGauge doesn't just measure belt thickness, it intelligently takes into account a range of other potential factors that could lead to a damaged belt. This includes monitoring for belt misalignment and edge damage events.

"Autonomously monitoring the conveyor belt in real time allows customers to quickly understand the issue and make decisions, optimising their belts life and offers the necessary insights for programmed maintenance and replacement."

Traditional methods of belt thickness measurement involve tests performed after a period of months – which can mean operators are in the dark if something occurs between tests. BeltGauge scans the belt every revolution and then sends the data to Fenner Dunlop's DigitalHub cloud using a highly secure network.

When an abnormal event is identified, depending on its severity, an SMS or email notification is sent to site staff, allowing operators to stop a problem from escalating.

Clout says the final product is the result of several years of experimentation with a number of different sensors.

"I've always been keen to see the different ways sensors can be used to monitor this kind of outcome. We used some exotic sensors and through a process of elimination managed to find some that ticked more boxes than anything else," he says.

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**"WHEN WE STARTED WORK ON VERSION ONE – A TRIAL DEVICE MADE UP OF A BUNCH OF SENSORS AND DATA LOGGERS – WE POINTED IT AT A BELT AND SAW IT WORK. IT WAS A SMALL EUREKA MOMENT. PROGRESSION SAW US INCREASE THE SENSOR COUNTS AND WORKING IN THE LOGGING SIDE OF THINGS TO DEVELOP WHAT WE HAVE TODAY."**

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Industry feedback was also used in the design of the BeltGauge. The team went to the business and its customers to learn what they were looking for and learned that the way this kind of technology was deployed, was changing.

Wiffen says customers were looking for something safe and easy to install. Developing a design that didn't require site welding eliminated the need for hot work. No structural modifications are required beyond mounting holes in the existing structure. The devices weight and assembly were also considered resulting in a more lightweight and adjustable design.

The device is set to be launched in the final quarter of 2020, following trials at sites around Australia.

Clout says 2021 will be an exciting time for the Conveyor Technology Team, with multiple projects in development using concepts like data analytics, AI and machine learning.

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**"IT'S CLEAR THAT TECHNOLOGY AND DATA ARE THE FUTURE FOR NEW PRODUCTS," HE SAYS. "ALREADY WE'RE TAKING AND ANALYSING REAL WORLD DATA FROM ACTUAL BELTS IN THE MINING INDUSTRY IN FAIRLY TORRID ENVIRONMENTS – AND IF IT WILL WORK THERE, IT'LL WORK ANYWHERE."**

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"It's a real boon for our development team to be able to sink our teeth into that and use it to differentiate ourselves and add value to our products."

# IBELT - DIGITALHUB

The DigitalHub is Fenner Dunlop's digital intelligence hub that connects the conveyor technology tools and data sources to its front-end applications.

It allows customers to understand real-time predictions and performance of their asset, enabling effective planning for maintenance activities.

A portal has been developed for customers to interact with and use real-time data, in interactive visuals, digital processes and other ways to help review wear trends, forecasts and manage the belts replacement.

Wiffen says that previous units would require a diagnostics technician to generate a PDF report that would be emailed to a customer, but this wasn't always helpful.

"Our customers are looking to continually improve their valuable use of time with operations becoming leaner and rapid. Email is a good communication medium, but reports can quickly be lost or outdated as they sit in an overwhelming inbox of emails to be addressed. We make it easy for site personnel and ensure effective time management." he says.

"DigitalHub automates that process and moves away from the traditional idea of PDF reports. Now, customers can log into DigitalHub and get the results from a central point with easy-to-understand visualisations. Furthermore, for those who don't have the opportunity to regularly log in, can rely on the SMS notifications, being called to action only when something needs to be looked at"

As other conveyor technology products are released or upgraded, they will also use the DigitalHub solution to consolidate the information into one place. This continues the journey towards Fenner Dunlop's ultimate vision of Intelligent Conveying.

## SERVICE RECOGNITION

### 40 YEARS SERVICE

William Shanks

### 35 YEARS SERVICE

Janeane Diamond

Paramjit Samra

### 30 YEARS SERVICE

Joe Cumbo

### 25 YEARS SERVICE

David Carter

Nyree Lee

Romano Kapiteli

### 20 YEARS SERVICE

Robyn Arnold

David Johnson

Michael Kelly

David Landgren

Tony Maguire

Anh Nguyen

Mark Partington

Mary Stevens

Peter Williams

### 15 YEARS SERVICE

Alan Clout

Rolando Ferrer

Scott Haywood

Igor Kucheryavy

Ranjit Kumarasiri

Stuart Mcmillan

Jade Meyers

Brett Peterson

Ayhan Pravadali

Chuong Vu

### 10 YEARS SERVICE

Stephen Abbott

Scott Anwyl

Mark Arena

David Bates

Cole Brechin

Garry Cooper

Rick Ealdama

Anushka Fernando

Craig Fleming

Paul Foster

Grant Giuliani

Joshua Meredith

Andrew Morgan

Rick Murray

Dean Nightingale

Silvio Pelikan

Peter Smart

Terry Taylor

Leesa Waters

### 5 YEARS SERVICE

Emil Bloomfield

Mark Blundell

Robert Bray

Cornelis Broodkoorn

Joshua Brown

Richard Cole

Stefan Dumitru

Brian Fletcher

German Cardenas

Scott Greenwood

Ronald Hector

Taylor Jobson

George Koukoullides

Minh Lam

David Martin

Alicia Mcdonald

Matthew Mcdonald

Dean Meurer

David Mitchley

Craig Moffett

Cameron Moore

Tony Moussallem

Bradley Page

Beau Rochford

Tristan Sarnadsky

Rana Singh

Ray Moretti

Steven Webb

Mitchell Webster

Nigel Wooldridge

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