Our Sponsors
AFSA is the only recognized representative of the South African aluminum industry. Recently, AFSA has been called upon by numerous stakeholders within the metals sector locally, and internationally to provide invaluable insights not only about local issues affecting the aluminum industry but also on a global scale.

At the Aluminium USA 2019 exhibition, AFSA, as represented by its CEO, participated in a keynote address hosted by the Aluminium Association (USA) to delve into the challenges facing the industry globally. This discussion featured other leaders from Australia, Europe, and Brazil.

It emerged from the deliberations that, indeed, the global aluminum industry operates under constrained economic conditions and some markets are experiencing some level of over-capacity in primary aluminium production. In South Africa, although the industry continues to report a surplus on trade, the pressure of imports on local production persists resulting in announcements by some local companies of restructuring.

In fulfilling the aspirations of the South African Aluminum Industry Roadmap (SAAIR), AFSA continues to showcase the country’s capability and capacity as a significant player in aluminum production as well as being a significant alternative source of supply. Over the past few months, AFSA has exhibited in shows such as Automechanika in Johannesburg, Aluminium USA in Nashville, Tennessee, as well as in the China International Import Expo (CIIE) in Shanghai in November 2019. AFSA’s participation in this shows have resulted in a number of inquiries being received and forwarded to members.

Our industry and the construction sector remain tight at the hip since construction provides the biggest demand for aluminum among the market segments. With the construction sector continuing to struggle as evidenced by the number of major companies undergoing restructuring and some being in business rescue. The prospects of the aluminum industry will remain lackluster and subdued in the short to medium term. The latest report, that the country’s economy has contracted by 0.6% in the third quarter of 2019, is likely to delay the economic recovery. A further damper to the economic outlook is the recent decision by the South African Reserve Bank to keep the repurchase rate unchanged at 6.5%, resulting in the commercial banks keeping the prime lending rate at 10.5%. The industry remains optimistic that the new year will bring with it the much-needed uptick in economic activity. This is so because of the rally which followed the Finance Minister's mini-budget speech at the end of October. The country’s economic fortunes are now hinged on the GDP performance outcomes of the fourth quarter.

The SAAIR has become the industry’s planning and implementation blueprint. More and more stakeholders are beginning to associate the development of the various industry masterplans with the SAAIR. AFSA is one of the views that, albeit the SAAIR being the much talked about industry development strategy, the roadmap is due for a review which should immediately be followed by the release of an updated roadmap. The founding stakeholders of the SAAIR (AFSA, CSIR, DSI) are engaging around the establishment of the AlCoC, one of the major deliverables of the roadmap. You will hear more about developments in this area in future editions of the AFSA newsletter, and that should be reason enough to keep your eyes on the AFSA website as well as on our LinkedIn account.

Index

From the CEO’s Desk..........................02
Editor’s Corner..............................03
Competition..................................04
Meeting Schedule..........................04
Upcoming Events..........................04
Deputy President Mabuza calls for a healthy trade balance between China and South Africa..............05
Alumin(i)um USA 2019 Show...........06
China’s high per-capita Aluminium consumption is evident in Shanghai...............................07
Aluminium Stewardship Initiative...09
Technical Talk..............................10
Member Profile............................13
EDITOR’S CORNER

By Sarinah Mukwevho

It is delightful to introduce to AFSA members, the latest edition of the SA Aluminum News. It is also encouraging to observe a phenomenal growth in demand and circulation amongst AFSA members and non-members alike. There were many number of inquiries from suppliers to the aluminum industry, manufacturers, and stockists for advertising opportunities and at the rate at which these are being received. It is only a matter of time that the newsletter will be filled with member advertisements. There is absolutely no doubt that with reach the newsletter has, advertisers will benefit a great deal from an investment in the newsletter.

A special message of thanks to all those who made a contribution to this quarter’s edition. It is hoped that this edition will once again be well-received by members, the same way the previous one was received, and that they will be thrilled by the presentation of this quarter’s edition. We hope that it matches the quality of the content produced.

This issue highlights the issues of sustainable production by introducing to members, the Aluminum stewardship initiative of AFSA has been a member for several years now. This issue also profiles Astro Holdings, as well as gives a technical discussion on Aluminum and its contribution to the circular economy and its contribution to the reduction of greenhouse gas emissions.

The newsletter will not be complete without giving members all the important dates of AFSA meetings and events taking place locally and internationally in the first quarter of 2020. Members are encouraged to contact AFSA for further details about any of these events.

This is a newsletter for the members by the members and as such can only succeed if shared widely within the industry. Members are encouraged to forward this newsletter far and wide, and to also contribute content. Should you have stories to share within the industry, please contact AFSA, and a news crew will swiftly be on its way to come and cover the story.

AFSA wishes all its members the very best of the festive season and hopes that the year 2020 brings with it the much needed uptick in economic activity.
In order to increase the readership of this newsletter, AFSA is offering a prize to readers who can share the newsletter with others. All you have to do is forward this email to your colleagues, friends or any of your contacts who give consent to receive future editions of our newsletter to afsa@afsa.org.za, and every 10th email received is guaranteed to receive a copy of the renowned Introduction to Aluminium book. Please enter the competition today because there are only 10 copies up for grabs.

MEETING SCHEDULE

- ANNUAL GENERAL MEETING (AGM):
  THURSDAY, 9 JULY 2020.
  The date of the AFSA AGM will take place as proposed Subject to the availability of audited accounts and a three weeks’ notice period. Confirmation will be forwarded closer to the proposed date.

- AFSA EXECUTIVE COMMITTEE MEETINGS:
  VENUE: AFSA OFFICES, 4 SKEEN BOULEVARD TIME: 14HRS
  - 12th March (Budget approval)
  - 09th July
  - 03rd September
  - 26 November

- AFSA TECHNICAL MEETINGS:
  (Combined meetings of the former Aluminium Casters Association, Aluminium Surface Finishers Association and Aluminium Fabricators/Sheet Products Association)
  VENUE: AFSA OFFICES, 4 SKEEN BOULEVARD TIME: 10HRS
  - 12th March (Nomination of EXCO Representatives)
  - 09th July
  - 03rd September
  - 26 November

UPCOMING EVENTS

- CRU World Aluminium Conference
  20 – 21 April 2020. Sentinel Hotel, St James London
  https://events.crugroup.com/aluminium/home

- Harbour Aluminium Summit:
  02 – 04 June 2020. Chicago, IL, USA.
  https://www.harboraluminiumsummit.com/
Deputy President Mabuza calls for a healthy trade balance between China and South Africa

A FSA was invited to take part in a China-South Africa Business Roundtable in Shanghai on the occasion of the Deputy President’s working visit to the People’s Republic of China. This invitation came at a very opportune moment since AFSA was already preparing to participate at the 2019 China International Import Expo, also taking place in Shanghai. The roundtable was well attended by major South African and Chinese enterprises in areas such as financial services, metals fabrication, chemicals and agro-processing. The Deputy President painted a picture of an ever-widening trade balance between the countries which currently skewed in China’s favour and further lamented the fact that South Africa’s exports to China comprise largely of commodities and raw materials. He further implored China to deal urgently with both tariffs and non-tariff barriers to trade which stifle South Africa’s ability to sell beneficiated and finished goods rather than the current situation which favours Chinese value-added products in the opposite direction.

Currently, China produces slightly more than half of the global primary aluminium resulting in an imbalance of supply and demand for a number of years now. The country’s production grew from a modest 5% in 2000 to become slightly more than 50% of global production according to current reports. It was during this period that China’s economy was growing at unprecedentedly higher levels and internal consumption provided a cushion to the global market. The recent slowdown in economic growth in China has not consequently seen a reciprocal reduction in production but rather a strong push towards the exportation of what now has become an excess capacity in aluminium production. It is AFSA’s view that these are some of the factors that continue to put undue pressure on South African aluminium industry in recent years.

The South African aluminium industry recorded a R3.3 billion deficits in 2018 against China, despite maintaining a surplus with all its major export markets. On the other hand, when considering the South African market as an export destination for China, it remains insignificant in such a way that South Africa does not even feature China’s top 20 lists of its aluminium export destinations. It is the small size of the South African market which makes it vulnerable to an influx of imported semi-fabricated and finished aluminium products. AFSA hopes that the Deputy President’s message will be heeded by the Chinese government and consumers alike to consider sourcing South African products; aluminium products in particular. AFSA will continue to position the country as having the required capability and capacity to meet a diverse customer base looking for alternative supply markets.

The government further announced the establishment of a permanent presence at China’s (exhibition in Shanghai) whereby South African produced goods can be on display on a rotational basis as part of a momentous drive to showcase the country products and stimulate the much-needed interest from the Chinese markets. This feat was hailed by some of the businesses in attendance at the event, saying that this effort will go a long way in connecting businessmen from the two countries for collaboration.

The DP further announced South Africa’s participation at the 2019 China International Import Expo as another of government’s increase trade with China with AFSA being one of the many entities approved by DTI to represent the manufacturing sector. AFSA will explore these opportunities presented by the Deputy President and share with the members as soon as further details become available.
AFSA received financial backing from the Department of Trade and Industry (DTI) to participate in this year’s show which ran between 12 to 13 September this year. Although AFSA’s participation was premised on it representing five of South Africa’s companies in Hu-lamin, Aluminium and Metal Traders, Ampliform, Windsor Metals and Armadillo Concepts, it surely became a showcase for the local aluminium industry which comprises of AFSA members and non-members alike.

The AFSA stand proved to be popular with show attendees owing to the fact that the CEO used the occasion of his keynote address to position AFSA members and the SA Aluminium industry as a supply base worthy of consideration. Numerous inquiries about some AFSA members are still being received and forwarded to the specific members to this day.

As it is always the case, this year’s show hosted a number of the Aluminium Association’s courses on the sidelines of the exhibition as well as a site visit to the Nissan Infiniti engine plant in Decherd, Tennessee. It was at this plant where AFSA witnessed the manufacture of Mercedes Benz engines which were fitted into the South African made C Class derivative of the German automaker factory in East London in the Eastern Cape.

The factory is a state-of-the-art facility, with an onsite Aluminium foundry supplying all its castings requirements for the combined 1 million engines per annum production facility. Apart from the Mercedes Benz engines, the factory also produces engines for Nissan Leaf and other high-end models of Infiniti. Furthermore, the Aluminium Association hosted the International Aluminium Institute’s biannual Leaders Meeting on the sidelines of this August biennial exhibition. AFSA was duly represented at this meeting where the global leaders shared their respective countries’ reports on the developments affecting aluminium.

The show will be held during 01 to 02 September 2021 in Louisville, Kentucky after a stopover in Nashville this year, which understandably is its original home. AFSA plans to return to this show in 2021 and therefore invites members too.

AFSA CEO Muzi Manzi participating in a panel discussion at Aluminium USA 2019

AFSA CEO Muzi Manzi hosting IAI Leaders at the AFSA stand
China’s high per-capita Aluminium consumption is evident in Shanghai

China has emerged in recent years as a significant producer of primary aluminium and on the last count the country grew from contributing to less than 5% in 2000 to over 50% of global production in 2018. One does not have to look far in a city like Shanghai to see where all the Chinese produced aluminium in the past few decades has gone to. The highest levels of aluminium intensity are visible everywhere with building facades that extend as high and as far as the eyes can see on some of the tall skyscrapers, which define the ever-changing Shanghai skyline. The level of aluminium-intensity increases from one building to another and it would not be a farfetched notion to think that there was a race to see who can create or design a building with more aluminium than the other. On second thought, it is definitely not farfetched considering that aluminium is an undisputed champion in building and construction as it provides such visually appealing facades and plays a significant role in the achievement of energy-efficient building envelopes.

When you thought you have seen it all, you will encounter rows upon rows of aluminium wind barriers along several kilometers of freeways and highways. Highways and freeways, Shanghai has it must be said. If you are familiar with the double-decker section on the Johannesburg inner city’s M1 highway, add three more roads on top of it and you get China vs South Africa per capita aluminium consumption

Aluminium and stainless steel combination in balustrading
A typical Shanghai highway interchange. These aluminium wind barriers are fully fitted with so many windows to rival any typical skyscraper in many central business districts globally.

One cannot just visit Shanghai but doesn’t visit the Bund, which is Shanghai Downtown’s very own promenade along the banks of the Huangpu River and an attractive favourite among visitors to this magnificent city. A glance through the precinct easily explains why it is sometimes referred as the "International Architecture Exhibition Group". The surrounding buildings paint a skyline which is likely to remain engrained in your memory for many years to come. To someone with an aluminium eye, you cannot help but marvel at the amount of aluminium used in shaping the Bund.

If you thought the Bund and the elevated freeways were aluminium-intensive, wait until your mind gets boggled by the amount of aluminium used around the China International Import Expo (CIIE) and the surrounding areas. Aluminium usage is so common around Shanghai and sometimes, it gets used in combination with stainless steel in such applications as balustrading in subways and buildings alike.

The growth in aluminium production has seen China’s per capita aluminium rise from below that of South Africa since 1994, culminating in the rate reaching 25.0kg in 2018, whereas that of South Africa remained stagnant at a measly 5.4kg. China’s consumption is some 10kg shy that of Germany, which occupies the number one spot in per capita aluminium consumption globally. With South Africa aspiring to increase its per capita aluminium consumption as envisaged in the 2017 industry roadmap, it is only prudent to look globally for pockets of excellence, and these can be found in places like Shanghai.

These observations surely explain the reason why China’s per capita aluminium consumption grew rapidly in the most recent past and continues to do so by challenging some of the highly placed countries in the per capita aluminium consumption stakes.
The Aluminium Stewardship Initiative (ASI) is a non-profit standards-setting and certification organization which brings together, under one umbrella, the interests of numerous stakeholders globally. ASI was formed by bringing together producers, users and stakeholders in the aluminium value chain to maximize the contribution of aluminium to a sustainable society and a circular economy. The ASI further sought to combine and elevate the work which, for the past two decades, has been collectively done by organizations such as the International Aluminium Institute (IAI), European Aluminium Association (EAA) as well as the Aluminium Association (AA) on aluminium sustainability, stewardship and materials chain of custody. AFSA is currently an active member of the IAI and participates in the biannual leaders’ meetings and has been a member of the ASI since December 2016. Accredited by ASI provides the assurance that a company adheres to the following principles:

- Governance, business integrity and transparency.
- Material stewardship – recycling and resource efficiency.
- Environmental management.
- Human rights.
- Labour relations, and occupational health and safety.

ASI further convenes multi-stakeholder working groups that conduct aluminium industry-relevant research covering technological advances, biodiversity and ecosystem services, standards systems harmonization, recycling and material stewardship, greenhouse gases, environmental impacts and human rights issues.

The ASI continues to gain momentum globally and has experienced a significant growth in membership numbers from about 25 members at inception in 2012 to the current 107. Among the members of ASI are two AFSA members, namely Alba and South32. The growth in the number of entities joining ASI demonstrates the significance and the importance of this initiative globally. It appears that South African companies are lagging behind in becoming members of ASI despite AFSA having taken up membership as a representative association of the local industry.

AFSA would like to encourage its members to learn more about ASI and to consider becoming members so that the local industry does not get left behind by the advances in sustainable aluminium production. Further details about ASI can be obtained from the organization’s website details at https://aluminium-stewardship.org/.
Technical Talk

1) Is Aluminium a greenhouse / eco-friendly / ozone positive product?

*Short answer, yes it is.*

Does the manufacturing process have chemical fumes that are absorbed into the atmosphere, and is there a required level not to be exceeded?

Aluminium is derived from two sources. Primary Aluminium is Aluminium smelter from Aluminium oxide. Secondary Aluminium is reclaimed after use. Over half of the world products demand volume is derived from reclaimed Aluminium.

The primary manufacturing process does not normally emit chemical fumes. The system is a closed system. Possible fume emission in the smelter environment is monitored by the planting of sensitive foliage (as this is more sensitive than instruments) monitored independently by the University of Zululand in the case of BHP Billiton. Part of the primary aluminium manufacturing process involves the so-called anode effects which do emit Per-Fluorocarbons (PFC’s), these are measured from a global warming point of view in CO2 equivalents. The world average Aluminium primary smelter emission was 100 tons of CO2 per ton Aluminium in 2005 down from 442 tons per ton in 1990, and aiming at 88 tons of CO2/ton Aluminium by 2010. These figures are world averages and were achieved by reducing the frequency and duration of the anode effects to that technically and economically practical. As the BHP Billiton smelters use the most modern, computer-managed, designs, one may expect that the anode effect emissions are lower than the world average.

The most significant emissions resulting from Aluminium recycling are emissions released into the air. These include dust and smoke metal compounds, organic materials, nitrogen oxides, sulphur dioxides and chlorides. These are captured by fume extractors and are subject to the strict legislated limits operating in the country.

One of the byproducts of Aluminium production is dross. This is a mixture of Aluminium metal oxides and another residue. The Aluminium is separated out in a salt solution. The remaining salt slag is a mixture of salts, aluminium oxides, metallic aluminium and impurities. The salt itself is recovered for reuse. The remaining residue, mainly Aluminium Oxide and impurities are neutralized and used in either the cement industry or in the landfill.

2) Is Aluminium biodegradable?

*Short answer – Aluminium does not degrade – it is recovered and used again and again without property loss.*

Biodegradable is a term that generally refers to the organic products. Both organic (plants, etc.) and inorganic products (acid and alkalis) are made up of the elements the basic building blocks of which is the Aluminium, element number (13), like Oxygen (8) and Iron (26). Aluminium is thus not biodegradable. To degrade an element implies breaking it down to the atomic particles from which it is formed – as are all elements. A second interpretation could be a reduction to the oxide like steel rusting. Aluminium has a very active relationship with oxygen. The surface oxidizes to form a hard, tenacious, thin shell of Aluminium oxide which precludes further action. It is this shell (similar to the chromium oxide film on stainless steel) that gives Aluminium its corrosion resistance. Steel, on the other hand, forms a soft and fragile surface oxide which continues rusting. Given access to oxygen, Aluminium will not degrade. End of life material forms the basis of the recovery and recycling of Aluminium described below.

3) Is Aluminium reusable?

*Short answer – Aluminium is very economically reusable in either the original form or some other form.*

The answer is yes, very much so. It is reusable, and reused to the extent that it is internationally traded. The London Metal Exchange even prices recycled metal, separately from primary metal (as Aluminium alloy). As mentioned above, Aluminium does not degrade with reuse. Theoretically, it can be used forever over and over again.

Aluminium is both readily and very economically recyclable. As Aluminium can be readily recycled with economic as well as environmental benefit to form the same or new products without loss of quality, we do not need to pressurize people to recycle. There is a ready market. The energy required to remit Aluminium metal as distinct from claiming it from the oxide is 95% lower. It has been recycled for well over a century. Recycled Aluminium is produced from both new and used recovered metal. New material is drawn from surpluses that arise during fabrication and manufacture while old refers to an existing product that has been used on average for 12 years and discarded. About 40% of recycled Aluminium is based on old material, on average 12 years old. The industry recycles all it can get. Unfortunately, while the vast majority, typically around 80-90%, is recovered, not all is recoverable. Some is lost through use, e.g., Aluminium eliminated steel used for galvanizing, and metal used in paint lacquers, some is lost due to inadequate collection from municipal waste streams, for instance in some laminated packaging products, some is lost in the recycling process itself. The only reason why the recycled product is only half the product demand is the fact that the industry is growing and the period before reuse is 12 years on average.

As it is an element and as the Aluminium doesn’t degrade,
The reflectivity of Aluminium results in its use in optical mirrors, in the lighting industry and in reflective insulation where over 95% or better of energy is reflected and not absorbed.

- The non-toxicity and oxygen barrier properties combined with the ductility of Aluminium pure are used in the pharmaceutical and packaging industry to protect the content.
- The non-magnetic properties suit Aluminium to applications in electronic applications typically housings and heat sinks.
- The formability of Aluminium gives rise to a range of benefits not least of which is the extrudability of the metal. This enables the development of complex solid and hollow shapes putting the metal where it best serves the customer needs. The commercial transport and building sector use of extrusions are examples of extensive use.

4) Are there substitutes for Aluminium?

Short answer – Aluminium has specific attributes not matched by other materials in some applications and can substitute for many materials over a range of applications.

Considering whether no other material can be used in a number of applications, there are a number of applications where other material will form the same function, often at a greater cost. Rationally, materials are chosen because in a specific niche they represent the best solution.

Any alternative has negative effects. Often materials are used in combination to give the best benefits to users. Aluminium, the second most commonly used metal after steel, has a range of qualities that are unique to metals.

The inherent characteristics of Aluminium give rise to a range of benefits. These include, but are not limited to:

- Aluminium is readily alloyed with a small percentage of other elements to form a family of Aluminium alloys. Alloying enables the development of a suite of opportunity. While one of the most important results of alloying is the development of a stronger metal, the range is an opportunity not limited to strength.
- Lightness combined with strength makes Aluminium the workhorse of the aerospace industry. Its extensive use in the automotive industry seeks to exploit these benefits alongside the rapid heat transfer which enables better engine efficiency and reduced fuel use.
- One of the major attributes of Aluminium is its corrosion resistance. This results in durability, the lack of need for protection and decreased maintenance.
- The electrical and thermal conductivity of Aluminium results in its extensive use in energy transmission (for instance, all overhead power lines are of Aluminium) and it is the preferred material for automotive radiators.
- The reflectivity of Aluminium results in its use in optical mirrors, in the lighting industry and in reflective insulation where over 95% or better of energy is reflected and not absorbed.

5) Is Aluminium sustainable?

Short answer – Aluminium is sustainable at the level of both availability and, though its life cycle, makes a net contribution to meeting the overall sustainability objectives of improving quality of life at people, planet and prosperity levels.

Sustainability as a concept relates to the contribution to a better tomorrow at the levels of people, planet and prosperity measured globally, regionally and locally.

The first level is availability. Aluminium is the third most common element on earth – after oxygen and silicon. Known deposits of bauxite are sufficient for another 150 years at the present rate of exploitation. Availability is not an adequate response in itself. The questions of energy, emissions, benefits of use and recycling are pertinent. Emissions have been covered in previous questions. At one level, as noted above the primary production of aluminium is energy intensive, this, incidentally, related to breaking the strong bond with oxygen that gives rise to its corrosion resistance qualities. It is anticipated that, as older less efficient primary aluminium smelters reach the end of life and are phased out, an up to 10% energy saving can be achieved at this level. However as only 5% of the energy required for primary smelting is required for re-melting; recycling is a core benefit. Taking this into account, the average use of energy in aluminium products is very much the same as competing materials which degrade in time such as plastics and steels. But the major energy benefit in aluminium comes from use, particularly use in the transport and packaging sectors.

The value in packaging stems from prevention of degradation. European Foil Association research shows that some 30% of agricultural product grown in developing countries rots before it is used. The use of aluminium as an oxygen barrier inhibits such decay so contributing to regional prosperity. As the world progressively moves towards urbanization, the benefits of aluminium as a protective barrier will...
increase.

Turning to transport, the Institute for Energy and Environmental Research (IEER) reports that, light weighting the world's transportation fleet has the potential of reducing GHG emission by 660 million tons annually - 09% of global transportation related GHG emissions. As an example, approximately 140 million tons of greenhouse gasses will result from the application of aluminium in passenger cars manufactured in 2006. This results from the energy savings equivalent to about 60 billion liters of crude oil over the vehicle lifetime. With a projected vehicle production increase of 3%-4% per annum combined with an increased average aluminium content per vehicle, aluminium has far more to offer.

In summary, aluminium taken through its life cycle of extraction through use to reuse is fully sustainable and makes a contribution to the future generations of tomorrow through a combination of exploitation of its inherent properties combined with active interventions by the industry to reduce production energy, to enhance recovery processes after use, and to reduce or control emissions using to the best available technology.
The Astro Group of Companies is South Africa’s leading aluminium surface finisher and one of the country’s foremost suppliers of aluminium and aluminium products. Andrew Dawson, Managing Director, founded Astro Aluminium in 1998. Shortly afterwards, sister company Astro Anodising was established as a supporting venture. Growth was rapid and gave rise to the development of various operating divisions emerging from these two core units. Today, the group is gratified to have achieved 21 years being in business and operational success. The enterprise is active in many spheres related to aluminium product manufacture and surface finishing, where Astro Anodising is a dominant force.

The Group of Companies are justly proud of the reputation they have built as suppliers to the local railway industry, the South African Motor Industry, various large OEMs and many other manufacturers across a diversity of categories. Driving this rapid growth trajectory was the decision to gear up to accommodate the supply of purpose designed configurations needed by specific industries. An early objective was to establish a comprehensive manufacturing capability to produce high-quality finished and semi-finished aluminium products to client specification. This division continues to expand with the latest acquisition being a CNC router which will be commissioned in February 2020.

This ongoing investment in machinery has led to the further widening of the group’s scope to include the manufacture and distribution of their own products. These include aluminium motor vehicle side steps, clamp-on cycle carriers and an impressive range of assistive mobility devices encompassing elbow crutches, walking frames, walking sticks and other related items.

A visitor to their premises is immediately struck by the enthusiasm of the staff for all the things aluminium and their willingness to embrace new projects with verve and dedication. It’s easy to predict that they will retain their position on the industry leader board for many years to come.