# WINTER CASICOLING SYSTEMS

December 2024

Precision in Motion

Adapting to Industry Change

Trade Show Update

What we do around the world!

www.castool.com

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## HAPPY HOLIDAYS

As we approach the festive season, I want to take a moment to extend my heartfelt greetings to each one of you. Christmas is a time of joy, reflection, and gratitude, and I am incredibly thankful for the dedication and hard work of our employees, as well as the unwavering support of our customers. Your contributions have been instrumental in making this year a success, and I am truly grateful for the trust and commitment you have shown.

This year has been filled with challenges and triumphs, and together, we have navigated through them with resilience and determination. As we celebrate the holiday season, I hope you find time to relax, recharge, and enjoy the company of your loved ones. May this Christmas bring you peace, happiness, and a renewed sense of purpose as we look forward to the opportunities and adventures that the new year will bring. As we bid farewell to this year and welcome the new one, I am excited about the future and the possibilities it holds. Our journey together has been remarkable, and I am confident that with your continued support and collaboration, we will achieve even greater heights in the coming year. Let us embrace the new year with optimism, enthusiasm, and a shared vision for success.

Wishing you all a Merry Christmas and a prosperous New Year!

PAUL ROBBINS Vice President / General Manager



## PRECISION IN MOTION

Our theme, "Precision in Motion," has shaped our operational and strategic efforts this past year. By enhancing the precision of our products and processes, we are building a robust foundation to address market challenges and seize opportunities for sustainable growth.

#### **ADAPTING TO INDUSTRY CHANGE**

The automotive industry, our primary market, is undergoing significant transformation. While recent years have seen strong demand for light vehicles, the near-term outlook reflects softer conditions driven by economic pressures with production adjustments taking effect. At the same time, the pace of electric vehicle (EV) adoption has moderated, the lifespan of internal combustion engines (ICE) is extending, and the use of hybrid powertrains is gaining momentum. However, the longer-term outlook for the automotive industry remains very positive, with easing interest rates expected to improve vehicle affordability and the need to replace an aging fleet driving renewed growth in consumer demand. Additionally, improving safety and technology features are creating new opportunities, as advancements such as advanced driver-assistance systems (ADAS) and enhanced connectivity are increasingly influencing consumer preferences and fostering greater demand.

Exco is uniquely positioned to thrive in this evolving landscape. Our operations are designed to serve all powertrain types—EVs, ICE, and hybrids—without reliance on infrastructure dedicated to any single technology. While EVs remain a critical component of our growth strategy, and we are confident in their long-term potential, our adaptability ensures we can meet the diverse needs of the market, regardless which direction it takes. Over time, we expect the transition towards EVs will drive the increasing adoption of transformative technologies like giga-presses, which enable the production of entire vehicle subframes in a single aluminum casting. This technology significantly improves OEM manufacturing efficiency, reduces complexity, and enhances sustainability. As giga-press technology gains traction, Exco is well-equipped to deliver the advanced tooling solutions required for their implementation.

Beyond the die-cast market, the extrusion market is also expected to experience long-term growth fueled by global sustainability initiatives. Lightweight, recyclable materials like aluminum are increasingly favored as industries prioritize reducing their environmental footprint. Simultaneously, extruders are focused on improving productivity and workplace safety, and Exco's products are specifically designed to support these goals with innovative features that enhance operational efficiency and safety. As extrusion tooling becomes larger and more complex, Exco's advanced capabilities and expertise position us as a trusted leader in delivering innovative solutions tailored to these evolving demands.

Darren M.Kirk, MBA, CFA President and CEO EXCO TECHNOLOGIES LTD

# **D**<sup>th</sup>**NNVERSARY CASTOOL180 (THAILAND)**

Castool 180 proudly commemorated its 10th anniversary this year. To honor this significant milestone, we invited nine monks to bless our facility and employees, imbuing the occasion with a profound sense of gratitude and positive energy.

Since our establishment in 2013 with a modest team of three employees, we have experienced remarkable growth and now boast a dedicated workforce of 40 individuals, 23 of whom have been with us since the beginning. This exceptional growth underscores our unwavering commitment to excellence and the strong relationships we have cultivated within our industry.



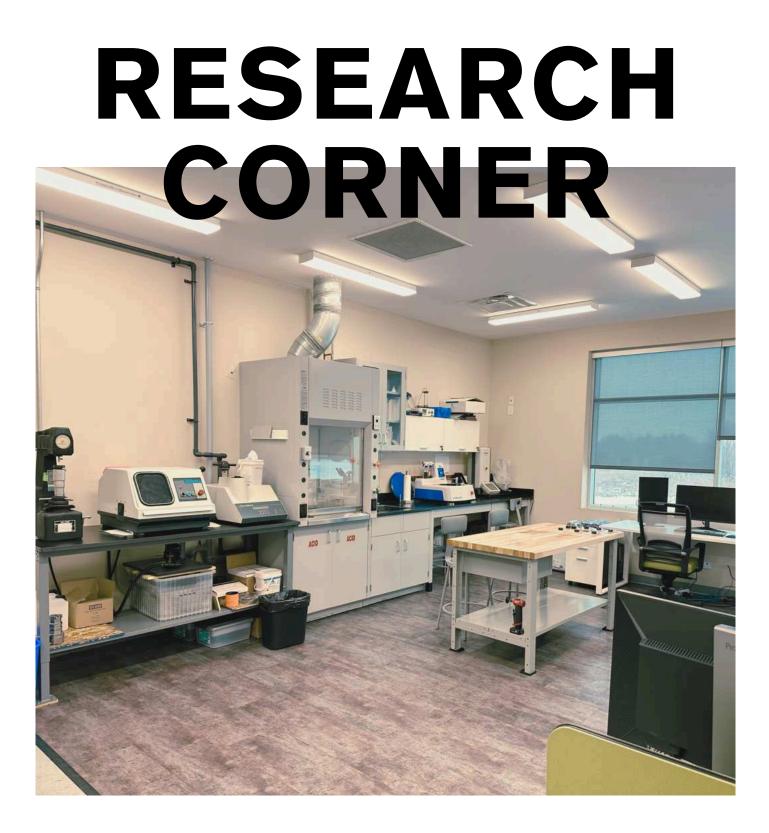


**KEEP GOING** 

Situated in Thailand, Castool 180 has been dedicated to serving the casting and extrusion markets across Asia. Over the past decade, we have successfully built a reputation for reliable delivery and exceptional service. As we look to the future, we are eager to continue expanding our sales in Asia and enhancing our offerings to better meet the needs of our customers. Here's to many more years of growth and success at Castool 180!

### SIMULATION : DIE CASTING

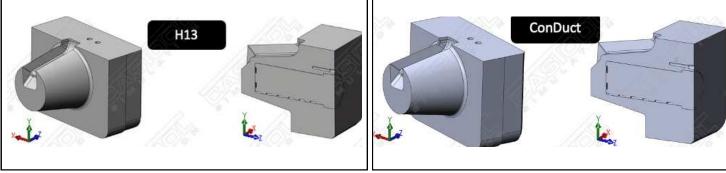
SHOT BLOCK RISER SIMULATION	COMPARISON OF SHOT BLOCKS 3D PRINTED, H-13 AND CON-DUCT	COMPUTATIONAL FLUID DYNAMIC (CFD) AND STATIC ANALYSIS
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### SHOT BLOCK RISER DESIGN

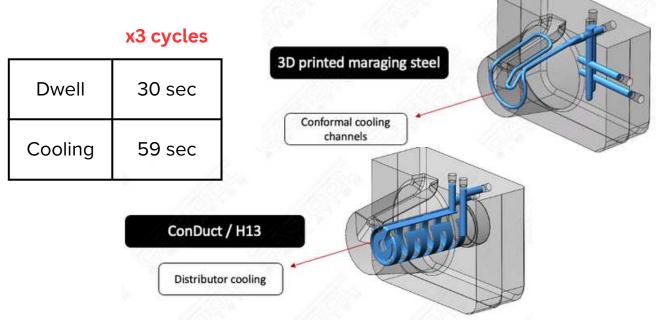
• This report Investigates the performance of the three different shot blocks designs and material including 3D printed maraging steel with conformal channels, Con-duct shot block with distributor, and H-13 shot block with distributor:





### **PROCESS PARAMETERS**

- Coolant flow is 30°C water with 20 L/min flow rate
- Simulation performed for 3 cycles. The details for each cycle indicated below:



### **TEMPERATURE DISTRIBUTION**

300.00

260.00

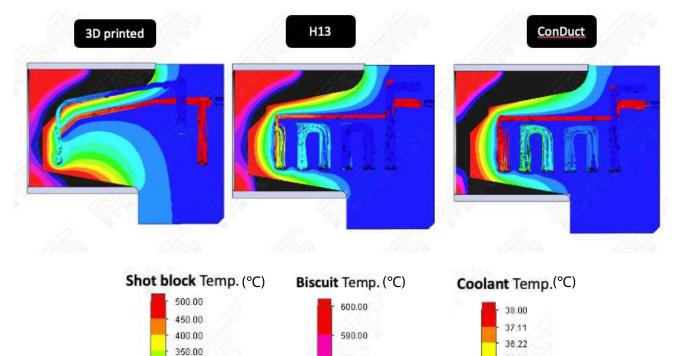
200.00

150.00

100.00

50.00

 Solidus point for aluminum alloy is 560°C All the black colored areas shows solidified biscuit.



580.00

570.00

560.00

550.00

35.33

34.44

33.56

32.67

31.78

30.89

30.00

Shot Block Temperature During Dwell (Third Cycle)

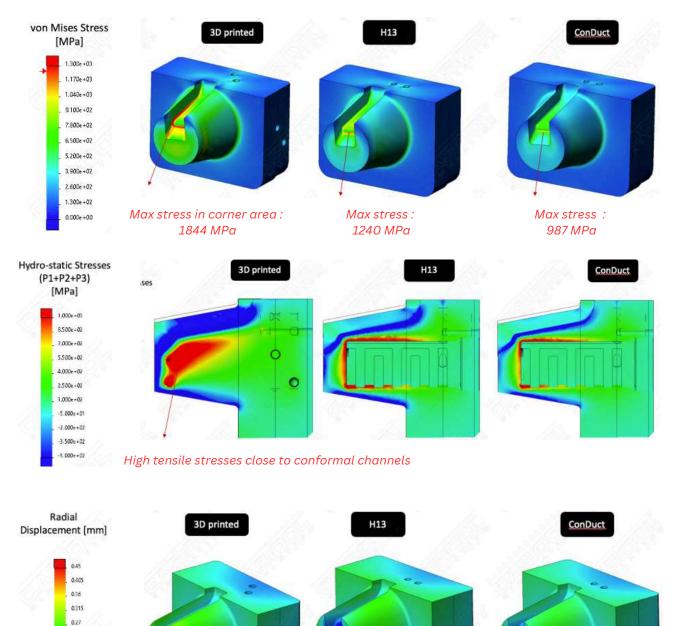
• The average temperature of shot block during the dwell time is plotted.

		550			
Shot Block	Heat Extraction capacity	100 Januar (.C)			
3D printed	778 KJ	adeau 400	**********		/
H13	745 KJ	364 C	10.		
Con-Duct	985 KJ	350		12027	123
				15 20 Time [sec] re. Temp ConDuct A	25 30

35

### STATIC ANALYSIS

- Deformation scale : True scale
- End of dwell (30 sec)





SUMMARY

0.225 0.18 0.135 0.05 0.045

• The thermal analysis results showed that Con-Duct shot block has higher heat extraction capacity.

• The stresses and deformation of the Con-Duct shot block is significantly lower compared to other shot blocks.

# **CUSTOMER VISITS**



#### **Educational Sales**

An educational sales approach offers numerous benefits that can significantly enhance the effectiveness of a sales strategy. At its core, this approach focuses on providing valuable information and insights to potential customers, helping them make informed decisions. By prioritizing education over traditional sales tactics, companies can build trust and credibility with their audience. This trust is crucial, as it fosters long-term relationships and customer loyalty, which are essential for sustained business growth.





#### **Sustained Business Growth**

One of the primary advantages of an educational sales approach is the ability to establish a company as an authority in its industry. By sharing knowledge and position expertise. businesses can themselves as thought leaders, which can attract more customers and generate higher-quality leads. This approach also encourages a deeper understanding of customer needs and challenges, allowing sales teams to tailor their solutions more effectively. As a result, customers are more likely to perceive the value of the products or services offered, leading to increased conversion rates.

Fostering Strong, Trust-Based Relationships





www.castool.com

sales@castool.com



Additionally, an educational sales approach can enhance customer engagement and satisfaction. When customers feel that a company is genuinely interested in helping them solve their problems, they are more likely to engage with the brand and remain loyal over time. This approach also provides opportunities for upselling and cross-selling, as customers who trust a brand are more open to exploring additional products or services. Overall, the educational sales approach not only drives immediate sales but also contributes to long-term business success by fostering strong, trust-based relationships with customers.

## CASTOOL GLOBAL CUSTOMER SERVICE



### **Technical Service**

A technical and service-oriented sales approach emphasizes the importance of in-depth product knowledge and exceptional customer service. This method is particularly effective in industries where products are complex and require a high level of expertise to understand and utilize fully. Sales representatives adopting this approach act as consultants, providing detailed technical information and demonstrating how the product can solve specific problems for the customer. This builds trust and positions the salesperson as a valuable resource, rather than just a vendor.



### Key Benefits

One of the key benefits of a technical sales approach is the ability to address the specific needs and concerns of the customer. By thoroughly understanding the technical aspects of the product, sales representatives can offer tailored solutions that directly address the customer's pain points. This not only enhances the perceived value of the product but also increases the likelihood of a successful sale. Additionally, this approach often involves providing ongoing support and training, which can lead to higher customer satisfaction and loyalty.





### Service-Oriented Sales

Service-oriented sales, on the other hand, focus on delivering exceptional customer service throughout the sales process and beyond. This approach ensures that customers feel supported and valued at every stage, from initial contact to post-purchase follow-up. By prioritizing customer satisfaction, companies can foster long-term relationships and encourage repeat business. This method also allows for better handling of customer feedback and complaints, turning potential issues into opportunities for improvement and demonstrating a commitment to customer care.



Combining technical expertise with a strong service orientation creates a powerful sales strategy that not only drives immediate sales but also builds a loyal customer base. This dual approach ensures that customers receive both the technical information they need to make informed decisions and the support they require to maximize the value of their purchase. Ultimately, this leads to higher customer retention rates and a stronger reputation in the market.

# CUSTOMER SERVICE

### **Technical Support**

A technical support sales approach integrates in-depth product knowledge with exceptional customer service to create a comprehensive and effective sales strategy. This approach is particularly beneficial in industries where products are complex and require detailed understanding. Sales representatives adopting this method act as consultants, providing technical insights and demonstrating how the product can address specific customer needs. This not only builds trust but also positions the salesperson as a valuable resource, rather than just a vendor.

One of the primary advantages of a technical support sales approach is the ability to offer tailored solutions. By thoroughly understanding the technical aspects of the product, sales representatives can address the unique challenges faced by each customer. This personalized service enhances the perceived value of the product and increases the likelihood of a successful sale. Additionally, this approach often involves providing ongoing support and training, which can lead to higher customer satisfaction and loyalty.

Moreover, a technical support sales approach emphasizes the importance of post-sale service. Ensuring that customers receive continuous support after the purchase helps in maintaining strong relationships and encourages repeat business. This method also allows for better handling of customer feedback and issues, turning potential problems into opportunities for improvement and demonstrating a commitment to customer care.



Overall, combining technical expertise with a strong service orientation creates a powerful sales strategy that not only drives immediate sales but also builds a loyal customer base. This dual approach ensures that customers receive both the technical information they need to make informed decisions and the support required to maximize the value of their purchase.

# NORTH AMERICA, EUROPE, ASIA AND AUSTRALIA

### ENGINEERS

At Castool, we pride ourselves on having a dedicated team of hands-on engineers, programmers, technicians, and press operators. This diverse group of professionals works collaboratively to help our customers achieve their goals. Our team is committed to enhancing safety, conserving energy, and increasing productivity for our clients.





### PROGRAMMERS

By leveraging their extensive expertise and practical experience, our team members provide tailored solutions that address the unique challenges faced by each customer. Whether it's optimizing production processes, implementing energy-efficient technologies, or ensuring the highest safety standards, our team is equipped to deliver exceptional results.

### TECHNICIANS

We believe that our hands-on approach not only improves operational efficiency but also fosters strong, long-term relationships with our customers. By working closely with them, we ensure that they receive the support and guidance needed to maximize the value of their investments.



"At Castool, our goal is to empower our customers to succeed and thrive in their respective industries"

### TRADE SHOW UPDATE

# WHAT WE DO

As we step into 2025, we're gearing up for a busy year at Castool. We're thrilled to share our global endeavors with you. From expanding our presence in key markets to introducing innovative solutions, we are dedicated to making a positive impact in the industry.

Stay tuned for updates on our activities and initiatives as we continue to grow and connect with our global partners. Here's to a successful year ahead!

### **AEC MANAGEMENT CONFERENCE**

Chicago, USA September 17-19, 2024

The AEC Management Conference is an annual event typically held in Chicago. It is attended by middle and senior management.

This year, there was a tabletop exhibit available between sessions and during social events. Additionally, a "Take 5" advertisement promoted the afternoon sessions. Richard Dickson and I delivered three one-hour sessions based on our ET2O24 paper "Connecting the Dots, to Approach Optimization, not just Efficiency."

The event and sessions attracted many attendees, and the feedback received was positive.





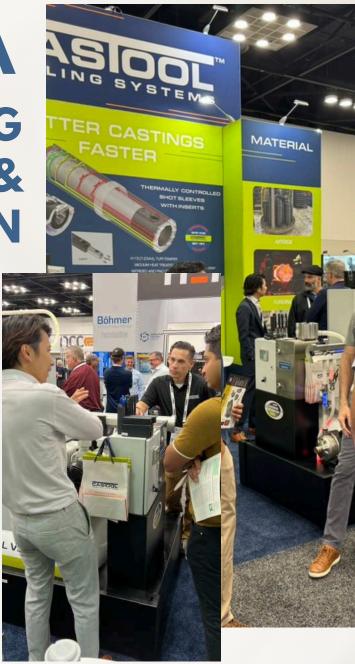
# NADCA DIE CASTING CONGRESS & EXPOSITION

### Indianapolis, USA September 30 - October 2, 2024

NADCA holds a large show and congress every other year and organizes a smaller show on the odd years. This year, Castool shared a space with Exco Engineering. The combined booth aimed to promote synergies and attract more traffic.

This year, the show had good attendance, with many die casters visiting and discussing products and their benefits.

The booth designers effectively highlighted the products and services.







# ALUMINIUM 2024

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Dusseldorf, Germany October 8-10, 2024



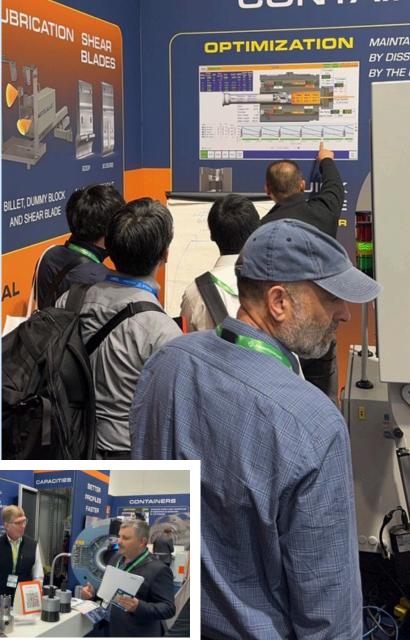


Aluminium 2024 takes place in Dusseldorf, Germany every other year. The exhibition includes our extrusion representatives for Europe, Comaxle, who also present their complementary products such as heat felts and dry lubricants.

This year, Castool featured a container model demonstrating how heat is dissipated during extrusion compared to other technologies, along with a single cell die oven. We also showcased a Master Controller and VOS (Visual Optimizing System) for demonstrations. The event was attended by extruders from Europe, the Middle East, and Asia.



### CONTAIN



YOKOHAMA , JAPAN November 14-16, 2024

# JAPAN DIE CASTING CONGRESS & EXPOSITION

J-Dec, Japan Die Casting Congress and Exposition, occurs biennially in Yokohama and is a key die cast event for Asia. We have long shared an exhibit with KBS, our sales representatives in Japan.



Castool showcased the Conformal Ring Plunger, Con Duct Plunger, Gigapress Tooling, and heat treatment capabilities. There was notable interest in our lubrication systems, Vacuum controller, and InterGuss chill vents.

> "The show was successful, generating many new sales"









CASIOOL

BETTER CASTINGS AND PROFILES FASTER

### Bangkok, Thailand November 20-23, 2024

Metalex is an annual trade show held in Bangkok. We share a booth with our sales representatives for Thailand, Vietnam, and Malaysia SAA. They also present their alloy products.

The show is a general industrial event where we present products and services for both die casting and extrusion.

The traffic this year was higher compared to last year, and most customers and potential customers visited during the 4 days of the show.

"Several new leads were generated, and opportunities with existing customers were promoted!"



DIE HEATERS

# **ALUCAST 2024**

DECEMBER 5-6, 2024 : YASHOBHOOMI, DELHI, INDIA



Presenting

Palm (Keattikhun Chaichana) Technical Manager (Castool180) December 5, 2025 India

Gigapress Tooling (Bigger Castings means Bigger Problems)"





Our partner Proterial invited us to join their booth at Alucast 2024, the largest die cast show and congress in India, held every two years.

ALUCAST<sup>®</sup> 2024 aims to highlight precision, lightweight components, and technological advancements in the Die Casting & Allied Industry.





Castool presented on Gigacast Tooling and the challenges with larger castings.

"The well-attended show generated numerous leads in India"



The Technical Conference will feature Research Paper Presentations and Technical Presentations from global experts on leveraging innovation for competitiveness and improvements in Aluminium Casting Technology.



# EDUCATION - BASED



### **BUSINESS**

As proficient marketers and entrepreneurs, you will be aware that modern customers dislike interruptive modes of marketing. They don't like to be told what to buy and from where. That's precisely why educational marketing can do wonders for business.

They subtly create a need in consumer for the products and brands by educating customers about the features and benefits of using the products/services. Although it's indirect marketing, it doesn't involve blatant promotion.



### WHY YOU ASK?

Educational marketing is customer-centric. It revolves around the main points and needs of your customers, and strategically positions your products as their best solution.



To put it simply, educational marketing can give you multiple benefits,

### **INCLUDING:**

- Build customer engagement and trust
- Ensure customer loyalty
- Generate and convert leads
- Upsell to existing customers
- Establish domain authority

All these benefits eventually lead to increased revenue. On top of that, you build a solid brand reputation and lasting relationships with customers. These can lead to repeat sales and new customers, without additional effort on your part.

# 

Our team at Castool is made up of talented individuals from around the globe. We are always ready to assist you with your tooling systems whenever the opportunity arises. Contact us today to see how we can help you achieve your goals!



#### CASTOOL

**NORTH AMERICA** 

Technical Sales

Kautec America

Garciduenas

Plus One Infinite LLC

Forcato Technologia

Carlos Alberto Maciel

DP Inc.

Dan Dunn Jean Dembowski Keattikhun Chaichana (Palm) **Ploy Robbins** Sue Lotton Sue Biliu Su Yothin Budnampeth

Sales Director Commercial Manager Technical Manager Asia Marketing Director **Customer Service** Customer Service **Customer Service** 

### CANADA/USA

Krystean Rose David Purdy Jeff Gosnell

### LATIN AMERICA

Valentin Meneses Alberto Forcato Carlos Maciel

### **EUROPE**

Emmanuel Bach Olivier Druhen Bertrand Schnell Emmanuel Mandrelli Daniela Buda Matt Binns

#### Comexale Comexale Comexale Comexale Eucastool S.R.L. Techical Sales Representitive

### UNITED ARAB EMIRATES

Emmannuel Mandrelli

Comexale

### **ISRAEL / TURKEY**

Tuvid Kornfeld

NTK Plant Management



### AFRICA / EGYPT

Olivier Druhen

Comexale

ASIA



Daniel Cheng Long Shun Cheng Tony Chein

#### JAPAN

Hisashi Manda Tetsuya Ishida Shin Tamura

### **KORFA**

JH Song SW Song

### TAIWAN

Wan-Han Lee

#### **INDONESIA**

Yovinus Krisananto

### VIETNAM

Manu Mekdhanasarn Nattapat Mekdhanasarn Patcharee Parkong JH Song SW Song Tran Thi Thanh Thuy

Siam Anglo Alloy Co.Ltd Siam Anglo Alloy Co.Ltd Siam Anglo Alloy Co.Ltd ANK Ltd ANK Ltd Thang Long Mechnics Equipment Co.Ltd

### THAILAND / MALAYSIA / SINGAPORE

Manu Mekdhanasarn Nattapat Mekdhanasarn Patcharee Parkong

Siam Anglo Alloy Co.Ltd Siam Anglo Alloy Co.Ltd

### INDIA

Sachin Kumar Shin Tamura

Doug Loader Glen Titmuss

Siam Anglo Alloy Co.Ltd

Technical Sales Representitive Proterial Ltd.

### AUSTRALIA / NEW ZEALAND

Extrusion Machine Co New Zealand GT Ex-Press Pty.Ltd

OEA Bridge Link OEA Bridge Link OEA Bridge Link

Technical Sales Representitive Tandem Technologies Proterial Ltd.

ANK Ltd ANK Ltd

Shiny Lee

PT Willisindomas Indahnakmur