

October 2025

Fogmaker News

Technical and market-related information for our partners

**News from Busworld
and New Product for
Battery-Electric Vehicles**

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FOGMAKER
INTERNATIONAL AB

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Lars Alrutz, CEO
Fogmaker International AB.

A word from the CEO

As autumn arrives and the lack of daylight becomes more obvious, especially in Sweden, we enjoy the stillness and peace to work. During the last few months we have seen a better business climate, but it is still unpredictable. Predicting how the market will recover is a challenge. The Bus business continues to give great volumes and we get more and more understanding from the market for the need for our solutions in BEVs. Busworld was a success and we gain traction both in new markets and by new OEMs, at the same time as the current customer base is happy with our solutions and the Partner network - which you represent.

The work with BLEVE for Trucks has been intense the last 6 months and the new regulation is planned to be launched within a year. We have high hopes for this segment and you as Partners have a large role to play through contacts with Fleet Managers and Body builders going forward.

We also see that we take market shares in both Material Handling and Mining & Tunneling, and we see a higher interest in Airport, Forestry and Agriculture as well. The geographical location decides which segments have the most potential, but I think we will have huge opportunities to increase business during the coming years.

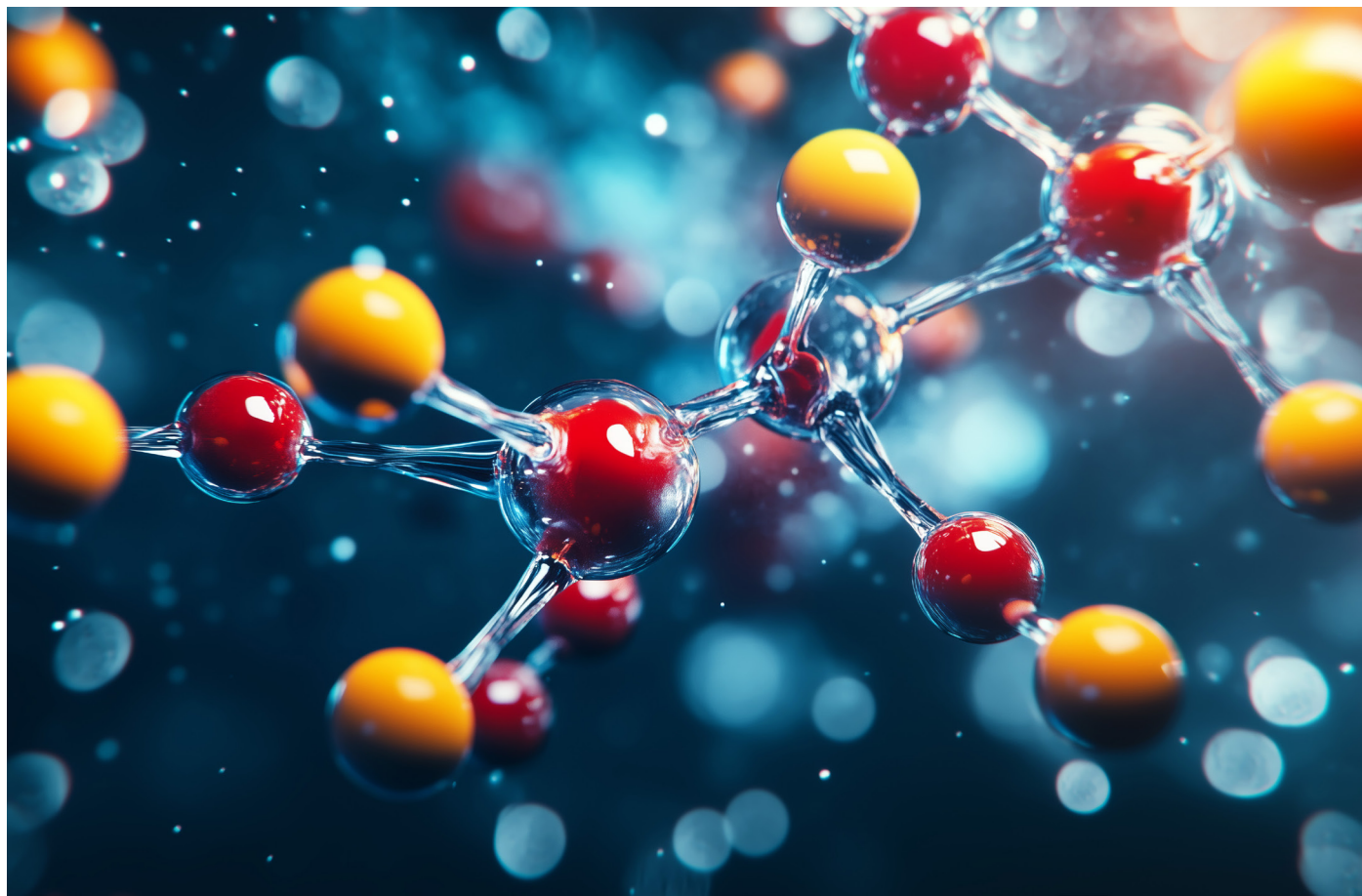
Keep up the good work and I hope to see many of you at next years Partner Days. We will send a place holder to you before Christmas.

Lasse

Suppression Liquid -35 Update

The shortage of Suppression Liquid -35 we experienced earlier this year was a great challenge for all of us, and the last 6 months have been a battle, making a speedy transition from Suppression Liquid -35 to Eco1 for new installations. Fogmaker has strived to be as transparent as possible, making decisions based on the most current information.

When the information that the PFAS-compound in Suppression Liquid -35 was discontinued first reached us, Fogmaker prepared for a hard stop, trying to use the Suppression Liquid -35 for those who needed most time to change to Eco1. A few months after this, we received information that the PFAS production plant opened again and could serve us with a final batch. We received this during summer 2025.



Today, all major customers are in the transition phase to Eco1 and some are through it. We have a very good picture of the remaining stock level of Suppression liquid -35 and we have product left, thanks to hard work from the market, changing to Eco1.

Service is a challenge. Next year we will see the full effect of the R107 introduction reaching the 5-year service interval, and a lot of services for buses in Europe must take place. A challenge is also that it has been hard to get attention in the OEM's after-sales channels for the Eco1 transition, and get them to guide their network.

What we can offer

Our goal is that all orders placed before December 2025 will be shipped in 2025. Contact us with your volumes ASAP to secure the delivery. Flexible payment terms and discounts can be negotiated for larger amounts of 200L or 1000L units. Talk to your sales contact.

1831-200 Suppression liquid -35C 200L
1831-1000 Suppression liquid -35C 1000L

3 different ways to perform a 5-year service

1. Transfer customers into Eco1 according to our instructions. This ensures that the system is ready for the future and easy to repair if needed.
Challenge: Time-consuming and cost driving
2. Re-use the Suppression liquid -35 in accordance with Fogmaker's instructions.
Challenge 1: Can not be used for re-setting systems
Challenge 2: Fluid must be inspected and fulfill quality criteria
3. Change the Suppression liquid -35 in accordance with the manual. Fogmaker can offer our distributor network a substantial amount of liquid for service.
Challenges: Limited amount available, will be sold out, Suppression Liquid -35 must be secured 2025 for coming services

What is best practice?

A combination of the above tools will give the best possibilities to achieve an acceptable service level. All have different pros and cons. The most important thing is that we together work hard to get all services done, so our end users have safe vehicles.

Important: Piston Accumulators with 1831

We are reaching end of production for piston accumulators containing PFAS liquid, and we are switching to only Eco1 after New Years 2025/2026. Please send us your need for piston accumulators with the old liquid ASAP, so we can plan the production.
If you have any questions, please talk to your sales contact.

Fogmaker's New FSS Technology for BEV: Closing the Safety Gap

The Fogmaker Sectioning Deployment Valve offers targeted fire suppression for all critical compartments of your customer's electric vehicle, ensuring optimal safety during worst-case scenarios.

While significant efforts have been made to reduce the likelihood of battery fires, the "What If" question remains at the forefront of everyone's mind, particularly in the public transport industry using battery electric buses (BEB).

In the RATP BEB fire on April 4th, 2022, the driver successfully evacuated 14 passengers within 20–30 seconds. However, the bus was fully engulfed in flames just 30–45 seconds after the first indication of fire. Similarly, in the second RATP fire on April 29th, 2022, it took just 17 seconds from initial smoke to full vehicle ignition, although this time there were no passengers on board. These are just a couple of numerous examples over recent years.

Evacuation times for buses globally have been studied extensively, with data indicating that *it can take anywhere from 1.5 to 2.5 minutes to evacuate a bus*. This varies with bus size—from an 8-meter school bus to a 12-meter double-decker. The introduction of BEV coaches, often operating at highway speeds and possibly carrying sleeping passengers, increases the challenge further.

In the event of a thermal runaway—whether in a city, a tunnel, or on a bridge—every second counts. Passengers with reduced mobility, or those unfamiliar with emergency procedures, may require more time. The critical issue is the narrow time window between the first signs of fire and the vehicle becoming fully engulfed in flames. The challenge is clear: how can it be ensured the vehicle is evacuated before it's too late?

This is where Fogmaker provides a vital solution—providing time for a safe evacuation before

conditions escalate beyond control.

Introducing the Fogmaker Sectioning Deployment Valve

The new Fogmaker system, using the Sectioning Deployment Valve, addresses this challenge by covering up to four deployment zones. It automatically detects a fire and suppresses it directly within the affected battery compartment—buying crucial time when it's needed most.

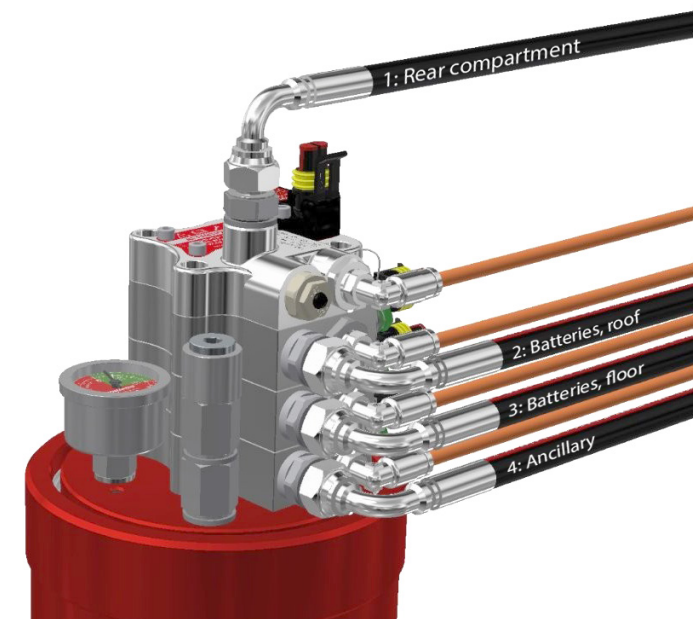


For example, with 11.5 L of suppression agent and 20–25 nozzles covering the defined risk areas, deployed in a 1 cubic meter compartment through 6 nozzles, the system offers 2 minutes of sustained suppression. Adding another 11.5 L increases this to 4 minutes—a valuable window in any evacuation scenario.

Why This Is a Game-Changer for Public Transport

Electric buses are rapidly becoming the backbone of modern public transport. With Fogmaker's new

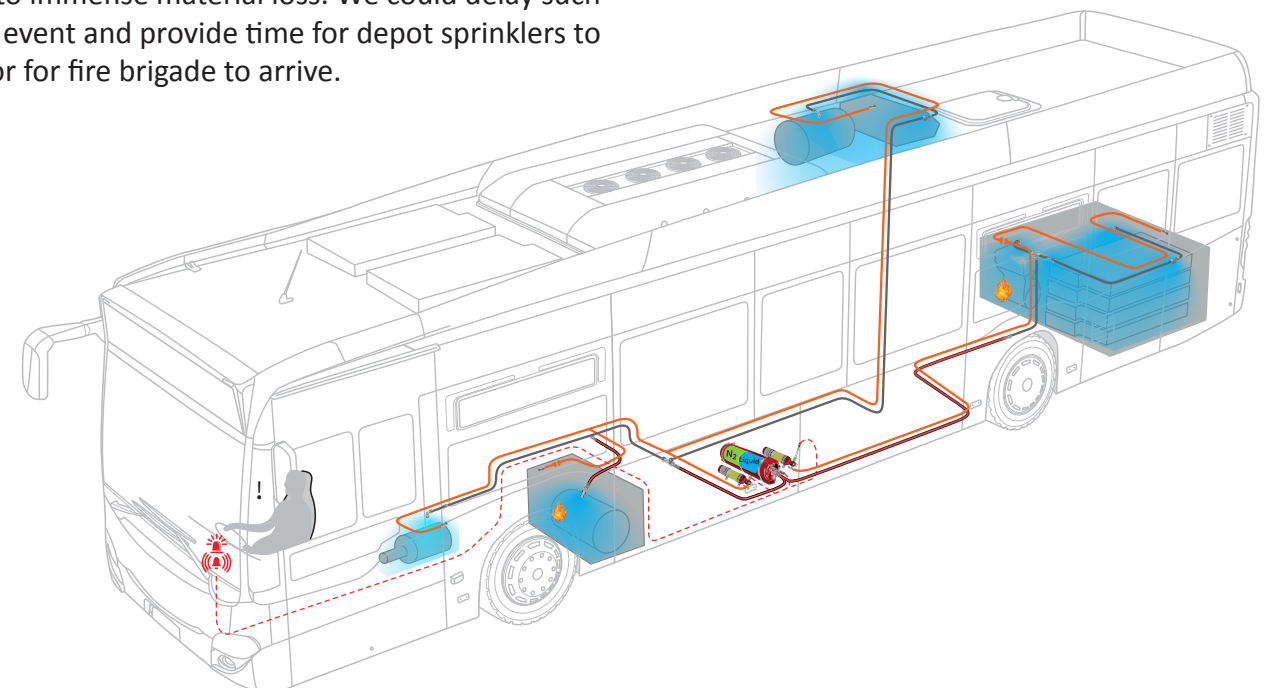
system, they can now be equipped with an intelligent, responsive fire suppression solution that directly addresses the greatest safety concern of the BEV era. It bridges the critical gap between fire onset and passenger evacuation—finally delivering the protection the industry has been waiting for.



Also...

We should not forget that the fire in BEB often starts outside the battery, which means that our technology could completely extinguish a fire and prevent it from reaching the battery packs.

Many times the BEB fire occurred during charging, leading to immense material loss. We could delay such thermal event and provide time for depot sprinklers to deploy or for fire brigade to arrive.



Insurers are notably hesitant to BEB, also strengthening the need for our product as a last resort reactive fire protection.

RISE is planning for a full scale BEB fire test, applying AFSS as part of the project, and Fogmaker was number one to sign up.

Key Information

- Developed fully in-house by Fogmaker International's R&D department, maintaining the simplicity and all proven benefits of the original Fogmaker fire suppression system
- First revealed to distributors at the Fogmaker Partner Days 2024
- Showcased at UITP Exhibition, Hamburg, June 2025
- Official press release planned for September 2025
- Formal launch at Busworld, Brussels, October 4–9, 2025
- Trial installations completed
- Part numbers available for 7.5 and 11.5 L systems

Contact us for more information and to discuss how the Sectioning Deployment Valve can improve the safety of your customer's electric vehicle fleet.

//Carl Zandler

Busworld Europe, 2025

Fogmaker International AB exhibited at Busworld in Brussels early October. We had a great show and returned to the office energized and filled with ideas for the future.

It's always exciting to see what's happening in the business, not to mention what our competitors are up to. We also took the opportunity to release the new Section Valve to the public.

A special Thank You to the partners who supported us and helped make our presence at the show such a success!



There is a new brochure for the Section Valve which will be available on the marketing portal shortly. Translation to Spanish is pending. Please contact marketing@fogmaker.com if you need it in another language.



Fire Suppression for Battery Electric Buses

Fogmaker's New Fire Suppression Technology for Battery Electric Buses

Battery electric buses (BEBs) are transforming public transport. Yet, alongside their environmental and operational benefits lies a critical challenge: fire safety. The risk of battery fires is often described in terms of probability. But risk is not just about how likely an event is - it is also about its consequences. While the probability of a thermal runaway is low, the consequences when it does occur are brutal and devastating.

Some incidents highlight this reality. On April 4th, 2022, a BEB in Paris caught fire. The driver evacuated 14 passengers within 20-30 seconds. Just 30-45 seconds after the first signs of fire, the bus was completely engulfed in flames. Only weeks later, on April 29th, a second Paris BEB fire escalated even faster - from initial smoke to full ignition in just 17 seconds. In that case no passengers were on board, but the incident underscored the razor-thin margin for evacuation.

Evacuating a full bus typically takes 1.5-2.5 minutes, depending on vehicle size and passenger profile. This gap between available time and required time is the central safety challenge for BEBs - especially for coaches operating at highway speeds or with sleeping passengers.

Fogmaker Closes this Safety Gap

Fogmaker's new Sectioning Deployment Valve delivers targeted suppression to multiple critical compartments from a single fire suppression unit. Once a fire is detected, suppression is directed immediately to the affected zone.

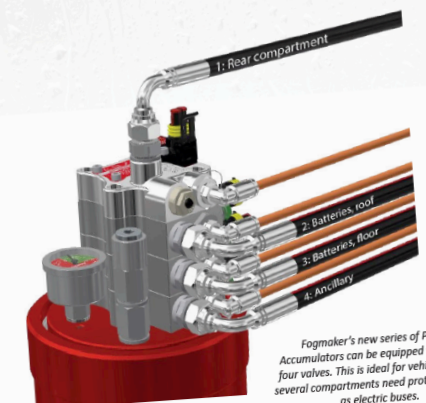
From just one Fogmaker suppression cylinder, two minutes of sustained suppression in a battery compartment can be achieved. Adding a second unit doubles this window to four minutes - precious time for passengers to evacuate before conditions escalate beyond control.



The system deploys high-pressure water mist at 105 bar, combined with a PFAS-free foam additive and potassium salts. This unique formula rapidly cools extreme heat, disrupts the chemical chain reaction of combustion, and displaces oxygen through steam expansion. Unlike conventional solutions, Fogmaker is fully independent of the vehicle's power supply, ensuring reliability even in a total electrical shutdown.

Fogmaker Sectioning Valve: a Game-Changer for the Bus and Coach Industry

Fogmaker's Sectioning Deployment Valve is more than technology - it is peace of mind. By bridging the gap between fire onset and safe evacuation, it enables operators, regulators, and insurers to move forward with confidence in the BEV era.



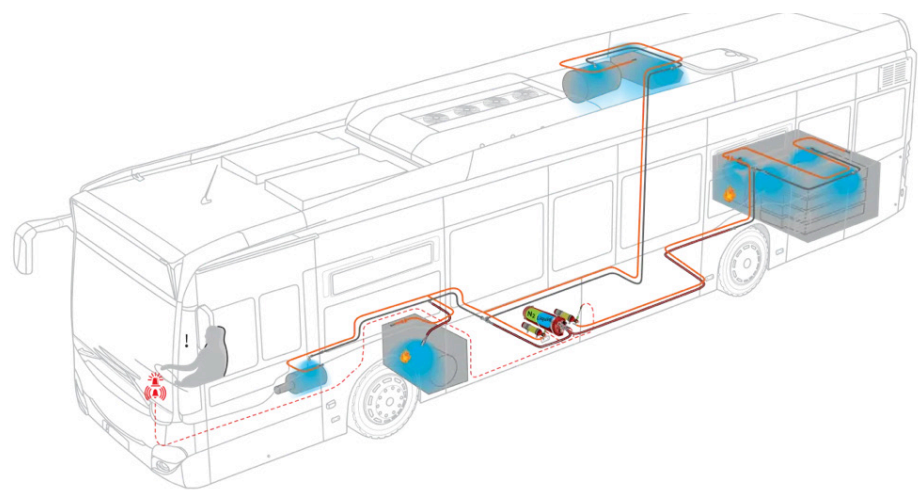
For the Section Valve market introduction, we also issued a press release that has been welcomed by various international magazines. Here is an example from International Fire and Safety Journal.



Categories: [Featured News](#), [Fire Suppression](#), [Products](#)
Tags: [fire suppression](#), [fogmaker](#)

Why Fogmaker’s new section valve matters for electric vehicle fire suppression

October 3, 2025 11:30 am



Fogmaker introduces section valve for multi-zone fire suppression

Fogmaker International AB has announced the launch of its section valve, a new component designed to deliver targeted fire suppression across multiple zones in vehicles with several critical compartments.

The company said that traditional vehicle fire suppression systems could previously handle only one deployment zone using a single piston accumulator.

The new section valve, however, enables control of up to four deployment zones from the same accumulator.

Fogmaker stated that this development could transform fire suppression for commercial electric vehicles.

Designed for the needs of electric vehicles

According to Fogmaker, vehicles with diesel engines typically present most fire hazards within one compartment.

By contrast, the design of battery-electric vehicles means that risk areas are distributed across several locations.

The company explained that the section valve was created to address this challenge by directing fire suppressant to up to four individual zones.

It added that the system improves fire control efficiency by focusing suppression where it is most needed during an emergency.

Application for battery-electric buses

Fogmaker said the section valve will be particularly valuable in electric buses, which require additional evacuation time in the event of a thermal incident.

Carl Zandler, responsible for the bus segment at Fogmaker International, said: “With the section valve, the system offers cooling for two minutes. This is vital time when evacuating a bus.”

“It also means the time can easily be increased to four minutes. This is a valuable window in any evacuation scenario.”

Supporting safer electrified transport

Fogmaker noted that electric buses are increasingly forming the backbone of public transport networks worldwide.

The company said the section valve represents an intelligent and responsive fire suppression solution, addressing the key safety concern of the battery-electric vehicle era by bridging the gap between fire onset and passenger evacuation.

It added that the firm has partners in more than 60 countries, three subsidiaries and almost 400,000 systems installed globally.

Relevance for fire and safety professionals

The launch of Fogmaker International’s section valve is relevant for professionals involved in transport fire safety, vehicle design and system specification.

For manufacturers and operators of battery-electric buses, the technology provides a practical means of enhancing evacuation safety and maintaining suppression performance across multiple risk zones.

For fire safety engineers and fleet safety managers, the valve’s capacity to manage four deployment zones with one piston accumulator could simplify system design and reduce maintenance requirements while supporting compliance with future electric vehicle safety standards.

This article was informed by information from the following source: [Fogmaker International AB](#)

Important Notes and Product News

Watch out for SCAMS!

We regularly get information from partners about scam messages that claim Fogmaker has changed its account numbers or request sensitive information. These messages can look very formal and correct.



Make sure to always double-check the sending address before opening any files or clicking on any links in a message. If Fogmaker were to change an account number, a person you know would contact you personally or on the phone, we would never do that through e-mail. If you are in any doubt about a message, contact us.

Updated Price List

The updated price list for Q4, 2025 has been distributed. It is important to always refer to the most recent version to ensure using the correct part numbers.

If you have questions, contact us at order@fogmaker.com



CDP Disclosure 2025

Every year, monitoring organizations request disclosing organizations to report and share environmental information through CDP.

Fogmaker has successfully submitted its climate disclosure in the CDP portal for the 2024 reporting year. We are now awaiting our official score, which will provide valuable insights into our environmental performance and help guide future improvements.



Plastic Piston in more Piston Accumulators

The plastic piston is already in use in the 3,3 and 4 liter piston accumulators. Starting this fall it will also be used in the 6,5 and 7,5 liter piston accumulators. That is, it will be used in all the "narrow" PAs.



Is your Certificate Up-To-Date?

The certificates for servicing and installing Fogmaker systems are valid for three years from the date of issue. Please check that you are still qualified according to the date on your certificate.

In case your certification needs renewing, please contact your account manager. Additionally, if you are going to work with Fogmaker's fire suppression systems according to the R107 standard with Eco 1 or under FM Approval, you need to extend your existing certificate. Contact your sales representative to learn more.

New Bus Alarm from Fogmaker – Launching December

Starting in December, Fogmaker will launch a new bus alarm unit that replaces the previous 1747-020-XX models.

The new alarm comes with an integrated buzzer and clearly labeled connectors for power, pressure switch (x2), output for green light and relay output. It is fully backwards compatible with the 1747-020-40 model.

The previous bus alarm unit is being discontinued due to component availability, making a transition to the new bus alarm necessary.

Designed for ease of installation, reliability, and cost efficiency, the new alarm operates on 10–30 V, carries an IP40 rating, and is UNECE R10 approved. No wire cutting or manual connections are required—simply click the connectors into place. The housing includes grooves for zip-ties to ensure quick and secure mounting.

Further details regarding technical documentation, availability, and pricing will be provided shortly.

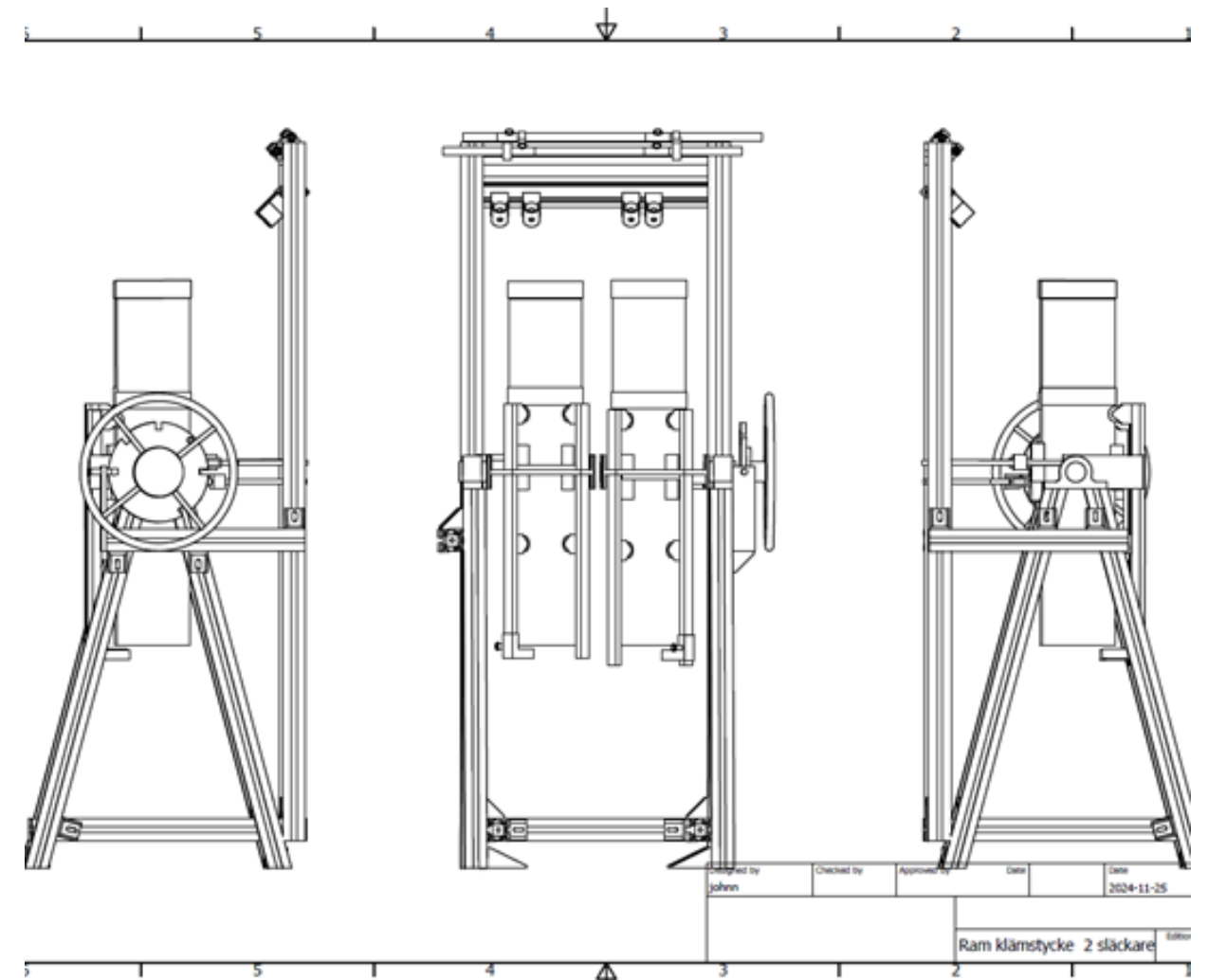
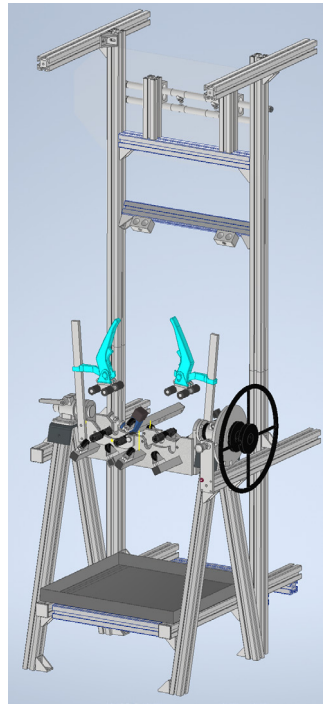


Reminder: There is a new Assembly Station

Contact your Key Account Manager for pricing and more information.

Key features include:

- Convenient way to handle 2 or 4 PAs at the same time
- Rotating cradle makes it possible to work on the PAs in different positions
- Able to handle all sizes of cylinders and double piston accumulators
- Ergonomic working height



Mongolia Mining Week

Fredrik Rönqvist and Helena Ador recently visited the Mongolian Mining Week.

Helena says, "The Mongolian economy is growing and there is a lot of investments in infrastructure and buildings. The mining industry is remaining one of the key pillars in the economy."

We visited this outdoor exhibition situated in the middle of nowhere out on the steppe (1,45 hours drive from Ulanbaataar).

We got good connections with some of the biggest mining companies as well as some potential suppliers and we are now in the process of establishing a local distributor in this country.

When it comes to Fire suppression on mining machines, it is common and we saw both some of our "traditional competitors" as well as new Chinese brands. There is quite some potential in this market.

The nature is stunning, and the mix of modern and traditional culture is very interesting – by the way, we found a Hard Rock Café, so we could enjoy a beer instead of warm horse milk!



Visit to Morocco

This fall, Peter Andersson and Maria Sadowski packed their bags for Morocco to take the pulse of the TOC Africa trade show and catch up with Fogmaker's partner, Jobson Morocco.

Fogmaker wasn't on the exhibitor floor this time, but as TOC Global Safety Sponsor for 2025, our presence was unmistakable. The Fogmaker logo appeared on signs and screens across the exhibition halls and conference rooms, making sure our brand stood out even without a booth. The show offered plenty of networking opportunities and valuable conversations with industry professionals – many of whom already know and trust Fogmaker.

A highlight of the trip was visiting Jobson's facility and meeting the team in person. In the photo below, you can see Outman Naamane, Commercial Officer at Jobson (left), alongside Peter Andersson from Fogmaker (right).



Outman also treated us to a behind-the-scenes tour of the Port of Tanger Med – an experience that truly put things into perspective. Tanger Med is Africa's largest container port and the 19th largest worldwide, handling a staggering 142 million tons of goods each year. As a major logistics hub, it plays a pivotal role in connecting Africa to the global market.

And of course, Fogmaker is part of that story. Several terminal operators at Tanger Med rely on our systems to protect their machinery – including 22 Rubber-Tyred Gantry cranes currently safeguarded by Fogmaker technology.



New Face at Fogmaker

Johanna Gustafsson

Hi partners and colleagues,

My name is Johanna Gustafsson, and since June I've been working as a Certification Engineer here at Fogmaker.

My main responsibilities include maintaining existing certificates and managing new product certifications, as well as working with regulatory requirements related to our products and markets. I enjoy combining technical problem-solving with a strong focus on safety and compliance.

Before joining Fogmaker, I spent nearly 20 years as a Technical Writer across various industries. In recent years, I also led a team of technical writers as a department manager. That experience gave me a solid foundation in both technical communication and leadership, which I now bring into my certification work.

Outside of work, I have a large family that keeps me busy, and I enjoy training and biohacking – always exploring new ways to optimize both body and mind.



Fall Trade Shows

We are busy planning Fogmaker's 2026 trade show participation - but 2025 isn't over yet! Fogmaker International AB will exhibit at TOC Americas in Panama, October 21-23, and at TOC Asia in Singapore, November 25-26. Fogmaker Brazil LTDA will be at Exposibram, October 28-30. This year, we will not have a stand at Agritechnica, but we will be there to walk the show.

Don't forget to get in touch with us if you need some form of support at a trade show.



Interview with Fredrik Rönqvist, Manager Fogmaker Southeast Asia

Fredrik Rönqvist is well-known to most of Fogmaker's partners through his work with the Material Handling segment as well as being Key Account Manager and responsible for several markets. He has been with Fogmaker International AB since February 2020, and now he adds managing the newly started Fogmaker Southeast Asia to his list.

Q: Have you worked in this region before?

A: Yes and No. I have been doing some inroads and some business here and there (mainly China) but never worked continuously here. 'My' markets have historically been Europe, Middle East, Northern Africa and South Africa. So in essence this will be very new. I do, however, think that if you are adaptable then you can work anywhere in the world. Time will tell, I am nevertheless very humbled by the trust Fogmaker puts on me and by the challenges. I am 100% certain that this will NOT be easy but I am confident that in the end we will prevail.

Q: You will be based in Thailand. Moving to the other side of the world is a big step. How do you feel about it?

A: In the words of Tony Tiger "Grrreat". It is a formidable challenge to be assigned to set up a foreign branch office and to create and grow something which will hopefully add lots of revenue and profit to the company as well as build new relationships with new partners and increase the FM brand visibility and installed base of our systems in this part of the world.

Q: What are your main priorities for Fogmaker SEA for its first year?

A: We hired Panfah Treelao locally at the office in Thailand and my number one priority is to make her feel welcome and guide her into the family and the team that is Fogmaker. On equal footing with that is: get the sales. Cut it anyway you want it, we are here to WIN business and make money so that will be in the top priorities: get new partners, get new customers, create new alliances and make money. After that, I want to grow the organization in FM SEA BUT nothing will be done until we have the revenue – there is no need for a large organization unless we have the sales. I have jokingly said that when I return to Sweden I want FMI to be a representative office of FM SEA.



So in essence:

- 1a) Make my colleague feel welcome and as one of the FM family
- 1b) WIN business (new partners, new customers, new alliances, make money)
- 2) grow the organization

If we succeed here the rest will come on its own.

Q: Do you think this market differs from others where Fogmaker operates, and if so, how?

A: EVERY market is different. Even on a national level. In Sweden, Stockholm is different from Halmstad and Halmstad is different from Växjö. I hear from customers and partners ALL the time 'but Fredrik you must remember XX or YY is a special country and everything is special here, it is not like in the rest of the world.' The truth is that there is no such thing as the rest of the world, all markets differ one way or other. So yes, I do think that this market is different. How? That remains to be seen but what I imagine is the pace is higher and the demands on availability and responsiveness is higher. I do not think that 'I will get back tomorrow' cuts it in this part of the world. I also think that this region might leapfrog some technologies and instead of going from version 2 to version 3 they might go straight for version 5.

Q: What do you find most exciting and rewarding about this new venture?

A: The number one thrill here is being the new kid on the block and stirring up a fight with the competition. We have done a good job in SEA and we are known. I want to take this to the next level.

Q: Many partners used to working with you probably wonder if you will still be their main point of contact or if they will need to get used to someone new. Do you plan to hand some of your old responsibilities over to another KAM, or will you just add tasks?

A: Ultimately that decision is up to the sales manager and there is also a difference between what I would like to do and what WE as a company must do. I would always prefer to just keep adding and not let go of any of the wonderful partners I am working with. But we need to make sure that we do not overload our staff (including me) and that we get the highest quality for our partners and if we concentrate too much work on any individual the quality will be suffering for the partners. I think inevitably there will be changes but we will try to disrupt status quo as little as possible.



Fall is in the air!

In Sweden, October means fall with colorful trees and crisp air. We celebrate this each year with a special "Fogmaker Day" on October 31st, and both production and logistics will have very limited capacity that day.

Please also plan for limited capacity:

Inventory:
November 27-28

Christmas/New Years:
December 23 - January 6

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I N T E R N A T I O N A L A B

