# MAHLERS NEWS #1 2019



# You drive,

# we control and support you

It might sound dramatic, but it's important that we can now help you steer tipping, ploughs, graders and activate sanding and gritting equipment on your truck with a single joystick. If you need help with troubleshooting or adjusting the functions, we can do this quickly and efficiently via your mobile phone.

I am proud to be able to present MC3, Mählers Control System 3, an intelligent, flexible and safe control system which has over a number of years been developed and hard-tested by our product developers and a number of entrepreneurs. The MC3 controls all functions via our new ergonomic joystick and the corresponding button-palette that is easily accessible in the comfortable armrest that you rest your arm on.

And yes, you read correctly, in addition to controlling ploughs and plane blades with MC3, there is also the opportunity to manoeuvre tilt function and spreader hatches on vehicles and trailers, or to activate the sand/salt spreader. You do not need to look for a separate button on the dashboard, or install a separate lever.

If you need help adjusting the functions or troubleshooting, just call us or one of our service partners, and we'll connect up to your MC3 in your truck no matter where you are.



Read more about MC3 later in this magazine and if you have further questions, just get in touch and we will tell you more.

Controlling the truck itself is still something you still have to do by yourself - so far:)

Roar Wehn Head of Sales at Mählers

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# "MÄHLERS PLOUGH SNOW WELL OVER T

It has snowed all day and the light snow continues to float down as fine flakes in the cold of January. Soon it's time to start ploughing Route 761 in the region of Jämtland Hammerdal. The road starting from Route 45 in Lorås and continuing towards the small village of Trekilen, is a so-called Class 4 road.



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# "The DPH runs smoothly, is stable and behaves quietly.

On the smaller and narrower roads like this, I derive a great benefit from the plough lifting the snow over the plough edges"

INGEMAR ANDERSSON, FJÄLS ÅKERI & BYGG AB



The Highways Agency state, that for that particular road class, if 3 cms of snow falls, the plough normally has 6 hours in which to plough the distance. 6 hours after the end of snowfall, there may be a maximum of 3 cm of snow on the road.

"So far, they don't normally have to wait, as I take this when I plough Route 45", says the haulier Ingemar Andersson, who has a total of about: 170 km one-way to look after for his client Svevia using his Volvo FH540 8x4.

The Volvo is one of two industrial construction vehicles in Ingemar's company, Fjäls Åkeri & Bygg AB, which also has a logging truck and a wheel loader. As the Swedish company name reveals, there is also a construction business involved here. In total, the company employs 11-12 people.

"It can all be a bit much sometimes, but the construction business is taken care of my wife for the most part and I focus more on the haulage company", continues Ingemar during the short break he takes to allow us to take some pictures of Volvo and Mählers-plough, the DPH high-throw model.

The construction business that focuses on turnkey houses and larger housing improvement projects is not more than 6 years old, while the foundations for the haulage section were initiated already in 1910 by Ingemar's grandfather. The first truck, a Ford-32 was then used to run the so-called jettison wood. After that, Ingemar's father and uncle took over and a few years later the company was divided, with Ingemar's father then forming the haulage company Fjäls Åkeri. Ingemar started working for the company in 1988, and in 1992 became a partner, taking over as sole owner in 2005.

"And now my boy runs my timber truck in the company so the inheritance is kept intact", says Ingemar.

Ingemar also tells us that he is happy with Mähler's new high-throw plough that

is well suited to both larger and smaller roads. The only comment made is that it can feel a bit high when clearing bus stops and other smaller areas, but at the same time Ingemar would not want to be without the high sweep when he needs to throw the snow on the narrower roads.

"The DPH runs easily, is stable and behaves quietly. On the smaller and narrower roads like this, I derive a great benefit from the plough lifting the snow over the plough edges", says Ingemar.

January means short days in northern Sweden and during the short time we talked to Ingemar, it had already become dark. We hurry to take a few pictures of him in front of the truck before it's time to plough the last bit up on the narrow, twisting road towards Trekilen. The darkness and blowing snow quickly hide the blue Volvo and it doesn't take many seconds before Ingemar completely disappears from our sight. Thankfully, we have a newly-ploughed road to drive on as we head home.











# Sören paves the way for Spring

During the beginning of 2018, many snow records were made in the northern parts of Sweden and in many places the snow plough edges were 1.5 – 2 meters high. This meant both lots of snow ploughing and also implied a significant need for snow-ditching all the roads for the spring snowmelt.

Jämtland was no exception and between the towns of Rossön and Grundsjö we met Sören Gustafsson when he was snow-ditching Route 993 with a Volvo G930 grader owned by the Engqvist Åkeri & Son.

"The snow-ditching technique is a must for the road to thaw as quickly as possible and to avoid melting water flowing onto the roadway", Sören tells us.

The Volvo is equipped with a Mählers SVH-4 wing and Sören is pleased with how it works.

"The SVH-4 is very stable with functions that enable it to be angled in so many working positions makes it incredibly flexible. It is as easy to keep it level a decimeter or so above the road to cut down the plough edge, such as skewing it downwards and below the road level to snow-ditch", says Sören.

Sören is one of the more experienced grader operators with many years' experience behind the levers, so there's no doubt he knows what he's talking about.

"The road grader runs almost exclusively on snow removal in the winter months. During the summer it is mainly the gravel roads and tracks and their adjustment that takes time", says Sören, before heading off to continue snow ditching in the direction of Rossön.

Once there, Sören turns and in the rearview mirror I see how he manoeuvred the wing deep down below the road level, throwing the snow far beyond the roadway.



"The SVH-4 is very stable with functions that enable it to

be angled in so many working positions, making it incredibly versatile".

SÖREN GUSTAFSSON





# **SMOOTH** OPERATOR

The Brynhildsvoll family have been in the industry for nearly 50 years. Mählers arrived at their farm quite recently, in the guise of a plough and a control system, which meets the tough demands of the mountains.

The owner and CEO of Ola B. Transport AS, Steffen Brynhildsvoll (40), sits in his fully equipped Volvo FH540. This equipment includes a HB3N grading blade, a DPH3700 diagonal plough and the new control system MC3 from Mählers.

"The advantage of the new control system is that I can control everything with a single lever – both the plough, the grading blade and the tipping body on the vehicle. The latter is especially useful, so I don't have to change my sitting position and bend forward to find the buttons when I'm driving gravel. With one single button on the unit, I am able to switch between the equipment. It is very practical and ergonomic. The strain on the body becomes smaller", he says.

#### Headhunted Mählers-plough

Steffens father, Ole, started his own company 1972, in Glåmos in Røros municipality in Trøndelag. In 2001 operations continued operations as a limited share company. The company has three permanent employees and takes on traditional machine contracting assignments. During the summer time, there is much work to be done on building up grounds for cottages and infrastructure for landowners in the municipality. The company also has sales of gravel from its own gravel pit.

Winter time is the ploughing time, both on major roads, private driveways and communal cottage areas. It was, however, only three years ago that the first Mählers plough was bought by

OLA B. TRANSPORT

the company. The grading blade was fitted last autumn.

"We are subcontractors for Svevia Norge, which has a functional agreement with Norway's highways authority, Vegvesen. The contract was established six years ago and they were to continue using the ploughs. This was the case, but we were not entirely satisfied with the rsults of the ploughs on our roads. I had seen the Mählers ploughs at trade fairs and heard from other users that they were very satisfied. We agreed with Svevia that we would buy the plough ourselves and rent it out to them. The contract, not to mention the equipment, has worked out very well.

#### Infamously notorious road

Ola B. Transport ploughs on behalf of Svevia a section of Route 561, plus a detour between Glåmos and Brekken. A total of eighty kilometres round trip and 20 000 ploughed kilometres each season. It is not an everyday or easy job to plough over this distance. Route 561 runs along the mountain lake of Aursunden.

The road is in poor condition, is narrow, twisting and extermely vulnerable to snow storms. The mountainous areas in Røros are no joke. In addition to the mountain pass over Langsvola towards Stugudal in the municipality of Tydal in the east, this stretch of road is considered the most challenging in the district.

"We have ploughed this route for over 40 years, so we know it well. The DPH plough works well here, as it jettisons the snow high and far, even at low speeds. Low speeds are the key here. We frequently have to stop when we meet oncoming traffic. This is definitely the best plough we have ever had for clearing snow and the road surface is incredibly clean", says Steffen.

#### The service express

The Volvo that runs along Aursunden is operated by two men in shifts. In extreme cases a second vehicle has to be called in. In the mountains it is extremely important that things work properly, and when they should.

"Mählers is an incredible service organisation. I'm happy to give a few examples: One Thursday at 12:00 we managed to break a DPH plough. We felt an emerging crisis thinking of the coming weekend. The next morning a new plough was at the gates. We could use it freely until our own had been repaired, free of charge, even if the warranty had expired. On another occasion a chap came up from the factory in Sweden on the 22nd December. He stayed here until nine in the evening before he returned to celebrate Christmas. I'd love to see how other suppliers would be able to manage this.

# Mählers' smart & safe control system controls everything on the truck

After a few years of development and hard field testing Mählers new proportional control system MC3 is now ready to roll out for sale. The system has been developed for softer and safer control as well as better fingertip sensitivity when ploughing, grading, sanding or tipping.

The MC3 is built for remote support where it is possible to connect the control system via the mobile network and receive technical support, regardless of where the customer is located. The MC3 also meets the latest & leading machine

safety standard EN ISO 13849 which makes it

one of the market's safest control systems for road maintenance products.

"The mission was to develop a modular control system with focus on the right feeling, ergonomics and highest safety level. This is what both we and our customers think we have succeeded in", says Ingemar Nyberg, CEO Mählers and Project Manager for MC3.

The MC3 is a proportional control system which means that all ploughing equipment can be operated steplessly. In addition, the software in the MC3 is adapted to support the control of other types of functions such as tipping, spreader hatches, etc.

"That's exactly what we mean by modularity and our ambition is that the MC3 will manage to control all the extra equipment on the truck", Ingemar continues.

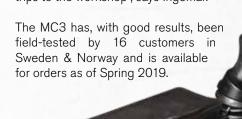
The control of the plough and other equipment is achieved via MIG2, an ergonomic and multifunctional joystick that was originally developed to con-

trol engcon's tiltrotators for excavators.

"Yes, we already had a great joystick within the 'family' so it wasn't a quantum leap to also use it for Mählers needs", says Ingemar.

Support and update of the software on the MC3 is possible to provide via the "Mählers Control System 3" app which can be downloaded to an Android device via Google Play Shop. Thereafter the customer calls the support service that can connect to the MC3 regardless of where the truck is.

"The workshop will in this way be able to read fault codes, make adjustments to the system, send software updates, etc. regardless of where the truck stands. This will save many unnecessary trips to the workshop", says Ingemar.





## PROPERTIES Mählers MC3 control system & MIG2 joystick

## **USER-FRIENDLINESS**

- + Proportional control for smooth operation
- + Ergonomic lever with a multifunctional control palette mounted on a comfortable armrest to give a pleasant control
- + Simultaneous control of functions streamlines operation
- + Double potentiometers to facilitate regulation of constant pressure functions.
- Android application for remote support and update of the control system via a mobile network simplifies support

## **FULL FUNCTIONALITY**

- + Tipping bed control, possibility to adapt to different attachments
- + Modular, easy to expand with extra modules
- Salt/Sand spreader activation and the opportunity to connect the MIO for control
- + Advanced internal fault-detection, operational information and status indication

## SAFETY

- + Complies with EN ISO 13849, third-party certified
- + All controls meet the PLD Safety Directive
- + CANopen Safety compatible for safer control
- Monitoring of overflow functions with sleeve monitoring of hydraulics
- + Safety valves in all hydraulic blocks



VEING

# Sven-Åke Lindén: "TWO works faultlessly"







Sven-Åke Lindén in Mjölby likes to follow his own head. At 64 years of age in 2014, he resigned his post at VTI, the Swedish National Road and Transport Institute, where he had worked since 1976. As responsible for a variety of friction-on-road projects – often with different types of tires and asphalt in focus – he more or less stumbled across a business idea.

"I'd really intended to work for a while longer and retire when I got to the age of 67. I am soon 69 years now, self-employed and think the job is more enjoyable than ever

The background is the so-called "Road of Death", the E4 motorway off Vagnhärad, where several MC-accidents have occurred. It turned out that the new road actually "bled". Bitumen, a binding agent in the asphalt, came up to the surface when it became hot. When It then rained, it became slippery as glass.. This meant that SMC, Sweden's Motorcyclists, the police reported the Swedish Transport Agency and the contractor, but the investigation was closed down. Even a Swedish national consumers' rights TV programme Uppdrag Granskning drew attention to the problems of the "Road Of Death". "The Transport Agency then decided that the friction on newly-surfaced roads would be monitored more accurately and systematically. But who's going to do that? I resigned and invested in starting my company Roadfriction with the vision that people should be able to travel safely on our roads.

#### So much water

The first friction tester, a Volvo V70, was acquired in Spring 2014. It was actually made for airports and had a water tank with only 500 liters. Water is required to measure wet friction and after every seven kilometres Sven-Åke needed to replenish the water tank.

"When It was time for vehicle number two, I wanted something better. That was a VW Transporter with space for 1 200 litres of water and TWO's friction meter. I'd known about TWO since my days at VTI, so I knew what I wanted.

Now, a third friction tester is incoming, a VW Caravelle, also with TWO's friction meter.

"I mainly work with newly-laid roads. Nowadays the Transport Agency requires that the contractor friction-

tests all new roads before final inspection. Not just parts of the route, but the newly laid stretch of road in its entirety.

#### Flexible measurement

If the newly asphalted road does not pass the friction test, it will be expensive. Then the road must be made less slippery, for example by rolling-in fine sand or by water-blasting the surface.

And The TWO equipment is user-friendly, rugged and at the same time easy to handle.

"It weighs only 75 kilos and I can easily move it on the beam it is installed on, then I can choose whether to measure the friction to the right or left wheel track or on the road markings.

Currently Sven-Åke has friction testers located in Mjölby and Ängelholm. He and his son Christoffer do the driving. Recently Sven-Åke tested the TWO's Twinfunction Tests on his VW Transporter in Sälen.

"I can then measure the friction in both the right and left wheel tracks at the same time. It is good, it does happen that friction is different in the two wheel tracks, so-called split friction.

Soon even a third friction tester will be ready for delivery, a VW Caravelle to be based in Östersund and run by son Daniel.

"What if there's a fourth vehicle? I don't know, we'll have to see. But in that case I have another son in Gothenburg", laughs Sven-Åke.

### **IN BRIEF**

- + In the autumn of 2018 Mählers broadened its product range with Norwegian TWO, Traction Watcher One.
- + TWO is a friction tester and consists of wheels that fold down in the roadway to measure current friction. The equipment can be connected to any vehicle and is designed for use on both roads and airports.
- + TWO measures friction in the range of 2-110 km/h, which means it can also be used on walking and cycling tracks.



When Frida Östman started driving her EPA tractor, she knew exactly what she wanted to do when she was older. She was intent on becoming a lorry driver. Said and done: after 3 years in the High School Vehicle & Transport programme, Frida now sits in a Volvo FH 540 8x4, ploughing snow up in northern Jämtland.

It all started at the age of 15 when Frida acquired an EPA tractor that she tootled around in at home in Rossön. At that time, vehicles & motor interest were seriously awakened.

"Well, after I got my EPA tractor, it just took off from there. I became interested in everything with an engine", says Frida with a broad smile during our interview.

We conduct the interview rolling along in her "office" a Volvo FH 8x4 equipped with Mählers latest addition, the combi-plough DPD that can be driven both in left.- and right-hand alignment. Frida maintains an average speed of about: 45-50 km/h on Route 992, a snow-covered, narrow and crooked road that winds its way through the forest. The few cars we meet drive to the side and stop, when they see how Frida's plough takes up most of the road width.

The CB radio crackles. It's logging driver Elias Sundqvist calling Frida to ask if it is okay to drive up to Route 45 that Route 992 connects to.

"I'll soon be on the last left-hand bend and then I am on Route 45, so it's okay for you to do so", Frida retorts on the radio whilst she continues to plough with a steady hand.

Frida hangs the microphone back in its cradle and

continues.

"I completed the high school Vehicles & Transport programme in Strömsund and then did my internship at DHL in Strömsund where I also had a summer job", says

After school, Frida missed her home town and asked Hans Johansson, a partner of Fjällsjö Åkeri in Backe if he might have a job for her. It happened that he did, and consequently gravel and snow took the place of transporting goods.

"Although It was fun to transport goods, I have a very varied and interesting job now. One day I might be ploughing snow and the next day it might be gravel, and then I might also be operating wheel loaders whilst loading the truck", says Frida when we arrive at Route 45.

While Frida clears the intersection, the conversation turns to the gender perspective. Frida thinks she was accepted well as a girl in the male dominated haulage industry.

"I think most guys & blokes appreciate the fact that more girls are coming into the industry. Some also think that it takes big muscles to cope with the job but it is absolutely not the case", says Frida



Frida remembers when she told her parents that she was going to start driving a truck.

"My Mum maybe didn't say so much but Dad was probably a little more hesitant. But now I'm better than Dad when he operated his drill and I drive a truck", says Frida with a laugh.

Frida's advice to other girls who are curious about a career in driving a truck is crystal clear.

"If they're the least bit interested in driving a truck, they should absolutely try it, they will not regret it. It is fun with girls who dare to follow their own head and it is necessary absolutely", says Frida without the slightest hesitation, before she stops in the small village of Hällvattnet to drop me off.

I take a couple of pictures of Frida in front of the truck and then she heads off towards Backe to plough the return sector of her plough route. On a fine, sunny day such as this, it is easy to be jealous of Frida's work. At the same time you know that there are other days filled with blizzards, drifting snow and non-existent visibility. Regardless of whether it's a man or a woman driving it can be really tough to operate a snowplough in such conditions.



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"Although It was fun to transport goods, I have a very varied and

interesting job now".

FRIDA ÖSTMAN



## Increase your capacity 365 days a year

Make greater use of your truck. Clear snow and maintain gravel roads with equipment from Mählers. Our tools are built to last season after season and raise your capacity summer and winter alike. Flexible hitches facilitate mounting and plough changes. The System Mählers parallelogram allows ploughs for wheel loaders to be used with trucks. The product range includes grader blades for trucks and side ploughs, snow guards, trenching blades and gravel spreaders for road graders.

Want to know more or do you need support? Do not hesitate to get in touch with us!

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