

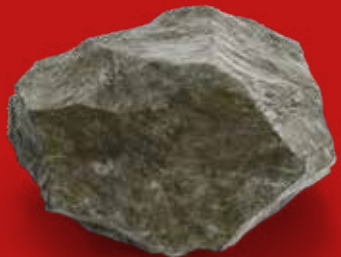


# **NO MORE BROKEN GLASS**

**A BRIEF INTRO TO **HAMMERGLASS** FOR THE NOT YET CONVINCED.**



**40 % of all  
European  
machine  
drivers experience  
glass breakages more  
than 5 times per year.  
I don't have to put up  
with that!**



*It's great that you're not in that club, since many glass breakages lead to unstable operating economy and, also, it's not good for the environment to produce more screens than necessary.*

*We wish you all the best with your choice of safety screen and remind you of another bonus that comes with awareness:*

*Time saving.*

# 1



MIRKO FRANCESCHI. ITALY.



**WITH THIS  
SOLUTION WE  
DON'T NEED ANY  
METAL GRID**

Alfeo De Franceschi is a Hitachi customer in Friuli and both he and his son have been Hammerglass enthusiasts for some time. Their brand new machine, a Hitachi ZX 135 US, is equipped with our RABS solution and they are currently preparing for new construction in the village of Paluzza.

*- We're very happy of the choice we did on this new machine, especially since we don't need any metal grid and at the same time we have a safer solution. We have experienced some tough stone chips and woods parts flying on the front screen without any troubles, while doing forestry and demolition.*



”

**I choose  
superior  
sustainability  
and quality because  
it saves me and my  
business money and  
hassle.**



*Stand stills due to broken machines are expensive and stressful.*

*The machines need to be rolling for every business to thrive. We provide the solutions that eliminate downtime due to broken windows to a minimum. The solutions that contribute to a healthy operating economy.*

*Great quality gives great relief!*

# 2



**STEFAN JOHANSSON. SWEDEN.**

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**SAFETY ALWAYS  
COMES FIRST  
FOR ME!**

Stefan Johansson has chosen Hammerglass for many years and recently he invested in a brand new machine entirely equipped with Hammerglass superior safety solution RABS. Why? Well it's like he says: When the working day is over he wants to get home to his family.

*- I have been a machine driver all my life, and as a machine owner I have always made sure to equip my machine with the best safety equipment available. Hammerglass gives me the security I want. Nothing is more important than your own life and health and with RABS I don't have to worry. The screens will take the hit, not me.*



”

***I prioritize a safe working environment for the drivers and therefore I invest in screens that will keep them safe in the cabin.***



We have a slogan of our own:  
“Replace the screen. Not the driver.”

We think this is a pretty clear definition of what really matters. People matters. People that spend every day doing the work that needs to be done and then want to get home to their own lives, their families, their personal responsibilities. With Hammerglass safety solutions they can.

# 3



**JÖRGEN STJERNKVIST. SWEDEN.**

”

***I'M HERE BECAUSE  
WE DIDN'T RELY ON  
LUCK!***

Machine driver Jörgen Stjernkvist got really unlucky one day at work, when he was clearing dynamite chutes. A large block of granite unexpectedly came loose from the mountain and fell to the ground in numerous pieces. His cabin was hit by a 10-tonne rock.

Between Jörgen and this weight was a Hammerglass RABS-solution, with full cab protection.

*– If I would have had a different front screen, I might not be standing here today. The rock had a pointed front, making it even more dangerous. The point itself pushed into the front screen a little bit, but then stopped. Without Hammerglass RABS, I think the point would have got through to me. The way I see it, I made it because Scandinavian Stone doesn't rely on luck. The company is investing in the right kind of safety.*



”

***Sitting behind  
bars all day  
isn't what I  
would call a pleasant  
work-day. That's why  
I choose a window  
solution that is so  
safe, that a grid isn't  
necessary!***



*Good for you!*

*Why choose bad visibility due to a safety grid when you can have clear sight and an even stronger protection with our FOPS-tested AND explosion safe RABS-solution?*

*Safety is fun when taken seriously.*



# 4



**MARIUS HALNES. NORWAY.**

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## **A SAFE OPERATOR IS AN EFFECTIVE OPERATOR**

Driver safety is always highly prioritized for all equipment Pon Equipment AS makes and delivers. Cat machines focus on improving safety features, as these directly increase the safety for the operators. Pon Equipment AS offers Hammerglass as a retrofitted option for their machines.

*– We rate Hammerglass products highly and are satisfied with the feedback we get from customers who opted for the brand. It's important to keep developing better safety features and improving machines to maintain safety aspects, but also to help the operators so they can focus on work operations. A safe operator is an effective operator. Thanks to a positive collaboration and a mutual understanding for the market, we know the customer's needs will be met with products from Hammerglass.*





***There are polycarbonate screens on the market that won't do the job. However, I know that Hammerglass uniquely coated screens don't come with the same issues.***



*Ordinary, uncoated polycarbonate turns yellow over time when the surface is exposed to sun radiation.*

*Hammerglass is protected with nanotechnology, a silica based shield that is resistant to the sun and also makes the material much harder to scratch.*

*The smoothness of this unique cover, however, simplifies cleaning and maintenance.*

# 5



MALIN PÅHLSSON. HAMMERGLASS. SWEDEN



## **WE SET HIGHER STANDARDS FOR OUR PRODUCTS!**

Malin Pålsson is a senior designer and compliance engineer at Hammerglass, and she knows that the safety standards don't always match all the risks that protective glazing can be exposed to.

*– It's up to the employer to carry out a broad risk analysis which takes the machine's work environment and type of work into account. The Swedish Work Environment Administration refers to the fact that a protective roof for a cab should be able to withstand a weight of 227 kg being dropped onto the roof from a height of 5 metres. The Hammerglass RABS frame is tested in the same way as a roof, even though in the equivalent standard for a front guard only half that force is actually required. We do this because a landslide could just as easily fall on the front of the machine as on top of it, and the RABS frame should also protect the operator against projectiles from an explosion.*



”

**Of course,  
I choose a  
certified and  
heavily tested safety  
product that will  
perform, rather than an  
alternative that won't  
do the job.**



*When you choose your safety screen you need to check what it's tested and approved for.*

*Is it explosion-safe but may break due to stone projectiles – or the other way around? In situations do you need to protect the driver and the machine?*

*Simply... which screen is best for YOUR business?*

*You aren't safe until you know you are.*

# 6



**ALFREDO. ITALY.**

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## **MY NEW SCREEN IS A BIG CHANGE FOR ME**

To work in the famous Palissandro marble quarry is a tough everyday life for machine operators. Alfredo knows, he has been hammering marble here for almost 15 years. Gravel, dust, stone fragments and the risk of collapse are encountered daily, and his screen has served as a shield more than once during work shifts. In 2021 he had a new windshield from Hammerglass installed in his CAT 336F and this was a positive turning point for his work satisfaction.

*- I'm really happy about this front screen. Seven months after installation it looks as good as new, despite that it is grid free. This is a big change for me since I have been used to work behind metal bars all my life.*

No broken glass, no stand stills, no installation of new screens. Just the way we like it!



”

***I have  
equipped my  
machine with  
tempered glass so it is  
already safe enough!***

***Is it...?***



*You might think that tempered glass is safe. But that really depends on what business you have. What type of environment the machine works in.*

*If there is a risk of flying debris, stones and sharp objects, the tempered glass is not a suitable choice. It will break and cost you money. And, further more, expose the driver to danger. This makes tempered glass very expensive, although the initial low price might have been the trigger in the first place.*

# 7



MARTIN MELLERHAV. HAMMERGLASS. SWEDEN

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## **EXPLOSION-PROOF DOESN'T MEAN UNBREAKABLE**

Martin Mellerhav is a research and development manager at Hammerglass and he constantly educates new customers in the difference between "explosion safe" and "unbreakable". It's a common mistake that the first means the second, but this is not the reality.

*- An explosion safe windshield can withstand the pressure wave from an explosion and is not pushed into the cab, so it holds for what it has been tested for. BUT. It can break due to a sharp rock projectile fired by the blast from the same explosion. Therefore it is not a sufficient protection for the driver. The combination with a grid is also not a complete safety solution, as both can let through potentially life-threatening rock projectiles. Hammerglass RABS solution is the only one in the industry being able to deliver this double and complete security to the end customers, at the same time as it is grid-free and increases the work satisfaction in the cab.*





***Yeah, yeah...  
it all sounds  
really good, but  
I need some hard facts.  
What is Hammerglass  
really about?***



*Well, here you go...*

*Hammerglass is 300 times stronger than glass and virtually unbreakable.*

*The material has a patented and unique coating which makes it outstanding.*

*Our screens are tested and approved for:*

- FOPS level II*
- R43 (ECE Regulation No.43)*
- Axe-test (EN 356, P8B)*
- Blast test (EN 13124-2, EXR 2)*
- Stone Test (EN 15152-2)*

*They are also resistant to scratching, chemicals and fire... That's about it.*



# 8



**TRULS ØSTERUD. NORGE.**

”

**EVERYTHING  
MUST BE TOP  
NOTCH!**

Where the need for driver safety is great in combination with tough terrain and challenging work environment, unbreakable solutions should be given. Swiss Menzi Muck manufactures machines that are completely unique and which can operate in environments that few others can. Praise to all drivers who pass the challenge, in a Menzi Muck-machine it is important not to lose track of the horizon and what is up and down. This requires a safety analysis that is as solid as the machine.

*– It will probably not be more special than this when it comes to machines, says Truls Østerud at Menzi Muck in Norway. And our machines deserve the best equipment, it's obvious that everything has to be top notch. In Norway, we sell 2 to 5 machines a year, so it is very niched.*





## **FOPS the MOVIE**

*Standards are not enough.*

*Protect yourself!*

*Sometimes you must see with your own eyes what safety really looks like. We would say this film hits the bull's eye...*

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