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#004 Sealing Expansion Joints with Dennis Wagner of Normet

In today's episode of Concrete Injection Made Easy, I discuss sealing expansion joints with my guest Dennis Wagner.... who is a Product Manager of Injection Products at Normet.

We explore a common problem on the job site, which is typically caused by mistakes with installing water stops, namely leaking expansion joints.

When it comes to injecting resin to fix leaking expansion joints, there are three options: one, injecting into the structure. Two, injecting between the structures, meaning into the expansion joint itself. And three—injecting outside the structure. When to use which is of key consideration whenever setting out to repair a leak.

Today's episode of Concrete Injection Made Easy gives you key tips and tricks to help you choose the right method for sealing a leaking expansion joint.

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This is Dennis Wagner from Normet!

Mateusz Furs:

Dennis. Hello. It's great to have your on my concrete injection made easy podcast. How are you man today?

Dennis Wagner:

Hello Mateusz, many thanks for inviting me. I'm doing quite well. Hope same for you. Okay.

Mateusz Furs:

Yeah, I'm, I'm fine. I everything's absolutely perfect. I'm really happy because today we are going to discuss really important stuff from our injection business that is sitting and expansion joints. You are perfectly a perfect person for this conversation. From my point to you, when I had the first phone call conversation with you, you immediately started to ask me very technical questions, which I really liked because it showed me that, you know this topic very well. So I'm really happy to have you on this, on this podcast.

Dennis Wagner:

Well, many things, anything's materials and I think especially the questions. So gaining information before we start doing a job, that's one of the main things we need to do. Then we can better decide actually which method or which material we choose to go on and solve a problem.

Mateusz Furs:

Yeah, exactly. That was this question. You started to ask me about this project of mine in Poland like three weeks ago. Maybe one of the first questions was like, where is this water stop situated? Is it internal or external? Can you elaborate a little bit on this for our listeners? Where can this water stop can be installed and why is it installed for how, how does it work and so on.

Dennis Wagner:

There are different water stuff of course, and we want to talk about an expansion joint here where we have two concrete structures and that allows some movement in that position. And then we can add an expansion water stop there, which is actually yeah, a water stop made of different materials that will be attached between the moving structures. Okay. Most concrete parts that say that always has an exponential part in the middle that allows some movement. Yeah. And then you all also have the joint profile part of the expanded and water stop, which is placed into the concrete. Yeah. And that part, just if the water is coming, yeah. The, the part which is attached in the, in the concrete is, yeah, let's say makes the road of the water long run, stops it in some places, makes it harder for the water to penetrate. And the expansion part itself is absorbing the energy when there is movement in that, that's between that structures.

Mateusz Furs:

Okay. So I assumed that different dimensions of expansion joint needs different dimensions of this water stop. Am I right?

Dennis Wagner:

Exactly. The dimensions is the designers calculate that. How much movement will that expansion joint or movement joint we'll have, et cetera, et cetera. Thought there are different types of engines on the market and different types. Of course, there are also like types where the part which is attached in the concrete, the joint profile part it's also having a, an injection tube or whatever for remedial injection. So there are different types, different types, dimensions, and that's also one of the things we should know before we start any, any injection, of course. I see. Okay.

Mateusz Furs:

So let's let's talk a little bit about this situation where this water stop is installed in between of the ...in the middle of the concrete wall thickness. How to handle this situation and what are the injection ways to stop the water?

Dennis Wagner:

First, of course we forgot to say that there are internal and external water stops. So the internal ones as the name says that are placed in the middle of the structure and the external ones are exterior to the construction parts. And again, it's, it's really important to, to know or to get informations. Again, is it an internal external water stop? What is the type, the dimensions of that? Is there any, any information which part is actually damaged? Isn't the expansion part itself or is it the joint sealing part in the concrete? If not, we can do of course an observation, but sometimes the people know what happens then. What is the material? Is it PVC PE or elastomer water stop? Is there any chemical impact when there's water in flowing? That's also necessary because we then need to choose also a material which has no problem with the chemical impact. Any words done before any injections made before to get an idea? Maybe they, they tried something before and they failed and always important to have a drawing.

Mateusz Furs:

So, but can you can you tell me like what's the difference if there's what to stop is inside, in between in the middle of the, on the, on the concrete wall, like and if it's installed external to from this water pressure part how do we how do we inject if we are pretty sure or someone tell us that this concrete didn't go inside of this attachment part of the water stop. How we can you know, take this information as our advantage during the injection

Dennis Wagner:

If we just, let's say clean, clean the, joint self and we observe and we see that the expansion part is ready, it can be definitely that there are like a Holy Combs or small voids and doing the concrete pouring that makes the problem. So there the water can penetrate. Of course, what we could do in that position is that if we know that I mentioned, of course we would drill on the right side and left side, if both parts are damaged, let's say we drill on that.

Mateusz Furs:

Well, we have to, I think we have to assume that both of them are damaged because that will be useless and a waste of time to just, you know, go on the job site and to drill on only the half of it. You know, assuming that maybe we are, we have chosen the right half that will be a gambling.

Dennis Wagner:

No, of course. But like I said, sometimes they know that they have problems, they're doing concrete proving. But I'm also would say it's better to, to do that. But actually that's also not the common practice. We can do that there and then we could drill on that positions where we expect the votes only comes and then we could inject material on that positions where the water stop is attached into the concrete to seal that position there. That could be one way.

Mateusz Furs:

Okay. I just reminded the story from a couple of years ago and that there was a concrete pouring eh, in the winter time and in the spring time of course the expansion joint was leaking and someone told that there was an ice attached to this you know, water stop part that was outside of of the still this part that's was still not concreted. So when they put concrete so of course the ice prevents the concrete go into, into this attachment part. So when the ice was gone a couple of months later, the leakage was huge because this water stop has not been

concreted at all. So that was it. And we were pretty sure that this is the reason for the leakage and we could drill as you mentioned before through the concrete to this attachment and we just feel this huge void with a resin and it really helped. It really stopped then water from going. And the linkage was stopped for that. That was my story from like four years ago, maybe five.

Dennis Wagner:

Yeah, exactly know what happened there. There's always good,

Mateusz Furs:

Well I was, I was in shock that they didn't stop the concrete and they just didn't, you know, remove the, the ice. Everyone was so much in hurry, that no one cared for this.

Dennis Wagner:

But, but that's, that's one of the problems there. That's why the information gaining is so important because sometimes they know and if you talk with the people, they can tell you sometimes what happened and then you can of course better choose the right methods to do that. But that would be then the case. We could drill into the, onto the top and you will feel it when you, when you have an experienced thriller during the drilling that let's say the drill bit falls a little bit into that honey camp or into that small void.

And you see also the dust coming out. If you hit the water stop and you will see that and then you can place the Packers and start injecting.

Mateusz Furs:

Okay. So let me ask like we have this hole drilled, what is the spacing between the holes? If you can say something about it?

Dennis Wagner:

I would say roughly we can say that like 25 to 30 centimeters distance between the peckers. So let's say we would have around 3 to 4 packers per meter. But that's also it's necessarily

Mateusz Furs:

each site I assume, right? Because there is no connection between this two separated parts of the conference. So for four to five packers, each side of the con of this expansion joint.

Dennis Wagner:

Let's say three to five, three to four packers, more or less for the space in between, the pickers should be 25 to 30 centimeters roughly.

But that's the starting point, let's say. And it's necessary to adjust that if necessary because sometimes you know, you have a a spot on a few centimeters where the concrete is okay. And

then we don't have the traveling. Maybe that can happen as well. So it's also awesome to adjust that if necessary. But I would say 25 to 30 centimeter distance would be, would be good.

Mateusz Furs:

How we can check if the, the, the resin travels through for this what our scope while in being injected.

Dennis Wagner:

I think important is when you place, or when you install or attach the peckers to the drill holes that you connect the head of the pecker just to the first podcast and screw off the heads of the peckers in the other way. And then the rest of them. Exactly. So on one side we don't build up too much pressure because it's not a closed system anymore. And when we start injecting the first packer and the material will move, it will come out of the next packer and then we can screw the head on, on that piker and start injecting from the position. Then you will really see the trembling of the material.

Mateusz Furs:

Yeah, I'm really happy to hear this because this is like from my point of view, one of the biggest mistakes, like we don't see through the concrete, so we cannot be sure what's going on inside while running in injection. So if we use already closed, screwed packers with this nipples installed, then we like, you know, we are putting ourselves in a position that we know even less. We cannot control the injection process. So I'm really happy that you are mentioning this and we are agreed on this that we should we should use open packers while injecting.

Dennis Wagner:

Absolutely. Absolutely.

Mateusz Furs:

Great. Great. Okay. So this is one of these solutions that can be very rare used on the job sites because sometimes as you mentioned in the very beginning of this conversation, it's really hard to, really observe if the, if the water stop is attached improperly to the concrete and if there is no one to to tell what what was going on during the construction site, absolutely. We simply won't want to know it

Dennis Wagner:

Because it's possible possibly that the doing the construction phase, someone destroyed the water stop that can have been like, how can you destroy it if you attached it and then the guys from the concrete proving are coming and someone is destroying it. That can happen also doing the storage on the site. It can happen. And I saw that before that the water stops our light laying around somewhere someone is driving over it with a forklift or something. And that can happen during the construction process as well. Even the guys responsible for attaching it and they

made it really correct and some other guys from the construction site, they destroyed or displaced. It also, it's also possible.

Mateusz Furs:

Wow. Wow. So this is like a, so the waterproofing and injection will never go away. If, if this situation taking place on the job site. Have you heard, have you heard by the way that there are some companies that install injection houses to this place of attachment of the water stop? How do you find this idea?

Dennis Wagner:

Of course, that's possible also for other water stops and that we have the combat combined. Let's say ceiling or you have a second chance. And also you don't need any drillings in that position because you have the, the tubes attached. Actually it's something available on the market, but it's of course a bit more expensive. So from my experience in most the time, this is not so much used. So it is nice. It would make our lives much easier because we can tout the attention inject into the, into the injection house and hit the spot where we need it without any drillings. And I don't know how you see it much. I don't see it often. That's the point.

Mateusz Furs:

I don't, unfortunately, I have to admit that I found out this way of, you know, using injection hoses. Maybe five years ago in Czech Republic when I was visiting an Anton's Vorek company. I was on my way back from holidays from Croatia and you know, I was buying some packers from him. And then we agreed to meet on Saturday at his company to have a little chat. And then he showed me this this way of you know, gluing the injection hoses to the water stops.

And I really fell in love with this solution, but I have to admit, at the same time, I have never seen anyone using this in Poland. Really! So this is a great solution never used.

Dennis Wagner:

And it would have always, let's say it's a second chance directly if something went WinCo,

Mateusz Furs:

well, I, this is the, this was this point when I always asked myself why people don't use insurance, possibly policy and many the injection holes. It is so great solution for many, many, and I know situations on the, on the job sites. I have really no idea. Why, well, let's, let's leave it with this as the, I guess this is the long, long topic for the all night conversation.

Okay. So we described a little bit this injection, let's say injection in this structure because we have to drill and then we inject the resin in this structure.

I mean in, in the concrete and the concrete itself, there is another way of water tightening, the expansion joint that is injection between these structures. Can you elaborate a little bit for us about this, this kind of injection?

Dennis Wagner:

Exactly. And I would say that it's more common practice and, and we see it more often. There are two ways actually if we have an internal into water stock and one way is to of course inject above the expansion part or let's say below that are two ways. First, if we inject the buff one of the advantages is we can clean the joint proper cleaning there even with the grinder or with the help of water or whatever. Make sure that it's cleaned properly. And then we can let's say

Inject the space between the water stop and the, and the surface itself. We can reach it, reach it better. We can maybe observe also. Therefore I would really use something which is really important. And this is something, let's say what we, what we call a circle profile or code also like circular backer rod. And that's something we can use to close the joint but allows movement. Yeah. So that's a, it's a profile. Most of the time it's polyurethane, but there are different on the market of course, that's the profile knocked into the joint once it cleans out. And we of course need to select the profile where the diameter and ensures that the pre compression of the, of the profile is achieved. Then as soon as it's knocked in and then we can knock it in, let's say roughly 20 meters below, and then we have a plaque already in the, in the joint so that there is no uncontrolled outflowing of the injection that you will say, Oh, well this product,

Mateusz Furs:

I know this product of the by the name of the back filler, yeah. And or the round PE cord also very common name for this product, different to, you know, to be sure that the resin, while being injecting and while the resin is still flowing on place in the expansion joint. Right?

Dennis Wagner:

Right. Exactly, exactly. And there are also some sometimes combined versions of that where they put that profile inside, sometimes also with like a hydrophilic filler, et cetera, et cetera. So there are different different application times of that. Sometimes also they put the high pylon strip or like a ceiling, Rembrandt and on top of the joint to have also one or two, let's say safety barriers here. And then you have the injection in the whole or in hydrophilic rubber can be used. Sometimes. I also saw that it touched also an injection house and together with the backer rod or with it circular profanity.

Dennis Wagner:

It's possible to do that. But the question is of course, is it necessary? And that depends on a bit on the, on the water flow and how much water is coming in, et cetera, et cetera. So at least I would do at least let's say one safety barrier with the circular backer rod. In my opinion this is, is this is just better. And then we can inject, let's say between the circular backer rod or back filler, if you call it like that and the expansion part itself and feel that with the material you're doing injections. And then another one that's above and then we can do it of course below. So between the expansion part and let's say the ground itself and, and feel that, and there is also a solution I would go on when we have a lot of water in flowing. Yeah. Anyway, I'm afraid.

Dennis Wagner:

Well they wanted to mention no, now it's, it's, it's important. And there again, we have to see of course, what is what is this, what are the site conditions? Yeah. And even when you, when you inject below, I would prefer going on and use a backer rod and maybe also Hoople and Stripe to put it on top of the, of the movement joints to assure a better, a better feeling. It's just something from my experience, which, which is a good solution if you ask me the problem of course if we inject below, we have no chance to clean that properly out because we cannot reduce it. Yeah.

Mateusz Furs:

Actually we don't have the, not, not all, not only the, and the clean can be around the properly. There's no cleaning and they'll just inject. You don't make as much as possible resin over there to make this a watertight. And that's all we can do actually.

Dennis Wagner:

Yeah, absolutely. Absolutely. And then let's say if there's really a big problem going on we can also drill between the concrete structure itself and inject like a grout curtain and which is more or less a curtain. We will inject behind the structure and the soil itself or the ground. We will have a bit of penetration in the soil of course. That depends on the soil. But it's also a solution when it's really hard to stop it or stop the water there. Then again, we have to do it through the structure and make a curtain behind the concrete structure itself. Yeah,

Mateusz Furs:

I just wanted to mention that while we are injecting between the structures. We can assemble a little bit the amount of the resin you know, the consumption of the resident because we know exactly the dimension of the expansion joint. But can you tell me when is the best time to inject the resin in in between the structures? I mean if, if, if it's possible to choose the best time, when will it be this this time?

Dennis Wagner:

As we have a movement joint, the best time actually is to inject with the given point when the joint is more open or let's say reach the maximum with, if it's possible to do it at that position. Normally it is doing the colder months, let's say.

Mateusz Furs:

Okay. The concrete is colder than the volume of the concrete is smaller and then it makes the, the width of the expansion joint bigger and then we just feel that bigger void with, let's say, bigger amount of the resin. But then during the summer time when the concrete is the concrete's volume is much bigger and then the expansion joint is smaller and it squeezes the, this material inside.

Dennis Wagner:

Exactly. And then it makes it even even more a watertight. Absolutely. So that's how I see it. That would be the best. Best. yeah, time to, to inject. We can also observe it because you know what, sometimes we have emergencies and they want to start something, but I would observe it and see if there is any movement then it's a big advantage and it will have much more to have a proper sealing.

Mateusz Furs:

I see. Okay. Yeah. And they observation and collecting information as we mentioned and we will keep, keep mentioning this all the time. That is the best advantage you can. You can have that collect information and use them, really use them while preparing and then injection.

I can tell you that I have prepared and the calculator to help us to you know, calculate the amount of resin needed for the job site and this calculator will be available for our listeners. They can download this and use it on their job site. So anyone interested, please visit the podcast webpage and just for you to be sure that the, you will know exactly how much resin to order in order to feel the and expansion joint.

Okay. Is there any situation that we need to use two back fillers?

Dennis Wagner:

It's one situation and that's where there is no water stop in the expansions. I would say that can happen as well. Again, can be also be destroyed during the, during the construction process

Mateusz Furs:

You mentioned that one of the destroying possibilities is removing this. So it was so much destroyed that it was remote from from the expansion joint even before it was concreted. So yeah, that's it, two back fillers and then we inject the resin in between of them.

Dennis Wagner:

Exactly. So we stop the material to, to when we inject to go just outside where we inject, let's say, and also to just uncontrollably flow into the soil or ground or behind the structure that we need of course, to, to plucks let's say two pixels.

Mateusz Furs:

Okay. So let me in just mention that we have so far we discussed to a place of injection. The first one, the injection in infrastructure structure, the second one just finished, it was injection between the structures and we have one place of injection left.

What is that?

Dennis Wagner:

That's in behind the structure. Yeah, we talked about that a bit. It's also when you have the external sealant there's also the two chances we discussed before is to try to draw on that what

to stop. When you, you almost will feel the complete concrete structure there as well. And there also another solution would be to inject that grout curtain and so behind the structure,

Mateusz Furs:

when would you use this way of injection, injecting the expansion joint and like most cases, like when would you say, okay, let's don't, let's don't feel the in between the structures we have to make the cocktail.

Dennis Wagner:

I would, I would go on when we really have a lot of water in flowing that will be the best. Yeah. Or let's say that would be the reason why I would inject the grout curtain.

Mateusz Furs:

I have another you know, situation when we absolutely know that there were three or four contractors before and they injected whatever available in, in between, I mean, into the expansion joint. And it was so full of all kinds of resins that it's nearly impossible to clean. And then it will be, it would cost too much and it will take too much time to clean and remove the old kind of residence, especially when we have at least two two kinds of PU based resins and two kinds of gels. Everything, you know, mixed that up. I would say let's do it with the curtain. Let's, let's, you know, forget what's inside of this expansion joint and just drill through the concrete and inject in the ground. That would be my my answer for, for this situation. How do you find it?

Dennis Wagner:

Good point actually. Really good point. And I had a similar situation there. It was not the movement jointed was correct. Where a company already injected water bearing cracks and the customer, they're asked me also if I can do a crack injection at their positions. And I also denied it and I said, no, it's not possible anymore.

Mateusz Furs:

Too many holes I assume here in the concrete..?

Dennis Wagner:

Also one point, but also because there were some injections, all the crack was filled with some material. But then to re-inject the crack with it where material was already injected, it was also not possible and it's the same year. So they are also set the only way we can do it but the only way for me to do it properly and is then to do a grout curtain to inject the crack because I cannot go on again and that injected correct again.

And that's why we mentioned that before when we started our conversation that it's also an important question is any injections before. Yeah. Any injections done before because then I would go absolutely. It can just be what you said. Go on with the ground curtain because you cannot make sure that you have a proper fitting.

Mateusz Furs:

Yeah. So we can say that like looking at this table and that will be also available for our listeners that the ground injection or injection out of the structure, whatever we call it, is the solution that is available for whatever the situation on the job site. Because we have this, when the water stop is installed in the middle of the concrete wall, we can use this when the water stop is installed externally. And of course when there is no water stop at all. So is this from your experience really most common way of injecting the expansion joints?

Dennis Wagner:

I will say injecting into the joint itself is most common practices with proper ceiling or backfilling like you call it. That's I think most most common practice. Okay. Okay. Yeah.

Mateusz Furs:

Comparing this free free ways of injecting the expansion joint, can you ask her where can we expect the biggest consumption of the red and why?

Dennis Wagner:

I would say the biggest consumption we have differently when we will through the structure and go on with the grout curtain. It depends, of course on the soil we, we were meeting behind the concrete structure, but there can be also possible voids, et cetera, et cetera, especially when water was flowing in. So sediments would be can be washed out, et cetera. So we will have gaps there. Probably, again, depending on the soil, we need to feel them. So I would say that's the, the injection where we had the most or where we need the most material.

Mateusz Furs:

Okay. The opposite question where, where in which situation we can explain the consumption being the smallest,

Dennis Wagner:

the smallest would be from my point of view, definitely when we try to inject into the concrete itself because the voids for the first, the first described situation exactly to fill the honeycombs let's say all the small voids which appear doing concrete pouring because they will definitely not be so huge that you can compare it of course to the ground curtain and, and in the middle it would be from my opinion where we inject into the, into the movement itself because of course there will be some space we need to fill up,

Mateusz Furs:

I see Okay. So let's, like we both know that the most common injection material for injecting the expansion joint is acrylic gel. Right?

Dennis Wagner:

Exactly, exactly.

Mateusz Furs:

And we both know exactly the, this material allows us to set the reaction time.

Why is it important and what reaction time for each of these situations would you recommend?

Dennis Wagner:

That that depends Of course as well. It's necessarily that the material or the reaction time is slow enough that it allows the material to travel properly and it's more so important that it's not just if you could also for the grout curtain and that is not just uncontrolled going somewhere in the soil, let's say. But it's also important to have the adjustable at reaction times because we will have different surrounding temperatures, maybe the water, different temperatures, et cetera, et cetera. So that's why it's also necessary to adjust the reaction time. And we, as you know, it's also possible to adjust that on site as necessary. So for me, it's always important to make the cup test with the water temperature, with the surrounding temperature, air temperature, et cetera, et cetera.

Mateusz Furs:

Okay. Yeah, we do it all the time. Like even now, we use the same material yesterday with do the cap test today to be sure if, if there isn't still reacts that the first question and if the reaction time hasn't changed so much. So in general we can say that the, when we inject out of the structure, the reaction time should be, should be shorter.

They're resin going somewhere. We don't know where like, yeah,

Dennis Wagner:

Exactly. Depending on the soul because what we don't want is the ground stabilization. We want the curtain behind the concrete structure. So, so varied is important. And one thing I just want to mention also is for me it's also important to make the cup test with the pump because if you just make a cup test with the material itself and not through the pump and mixing unit, you don't know if we have any mixing problems or problems with the pump itself. So my way of doing it is always the cup test but also with the, with the injection pump you're using because the point,

Mateusz Furs:

Very good point. It also can, you know, check if the mixing head is clean enough and if it makes us, and if you know, you have the one to one mixing ratio consumption from two components of the acrylic gel.

Dennis Wagner:

Absolute, very, very important point.

Mateusz Furs:

Very, very heavily that you mentioned that this, okay.

So I wanted to ask you because from my point of view as in applicator a company, I noticed that there are different kinds of acrylic gels. There are the ones that have a better, let's say the adhesion to the concrete and there are ones that have that are better in something that we call the, you know, swelling, fitted feeling. And so in contact with water, they, they make the volume bigger and that that is their way of stopping the water. What situation is better and how, if you can elaborate for us a little bit on this.

Dennis Wagner:

I would say a proper mix of it. It's important. So what I would recommend, especially for the, for the movement joint is an acrylic material reinforced on the B side where we take like a latex component instead of the water or so, et cetera, different different names on the market because the improved polymath markets here allows also a better adhesion flexibility and also the location.

So, and it's still an active system and we have the swelling on top of that. And that's a, it's a good mix, especially for movement. If you ask me

Mateusz Furs:

I know that this latex other polymers used in the component, we also prevent this create gel from drying. So there is like the time when there is no water in the ground and the acrylic gel tends to dry and it's not, it gets rigid. So it's not a water tight material anymore. So if we use the component B that it's, as you mentioned, reinforced with latex it makes this material really better solution.

Dennis Wagner:

Absolutely. No, absolutely. I think certain also the, the acrylates are reversible. They have a reversible swelling effect. Yeah. And that's why they are an active system. And that's also important to mention that again, if you ask me.

And that's why I would choose that, that kind of what you would like to.

Mateusz Furs:

So like my idea and my solution for injecting the injection infrastructure and interaction between the structure is 100%, always a reinforced component B with latex. I can use this component. B with tap water for the injection after the structure. When I know that the ground will be always with big amount of water so the material will stay you know flexible and working for me meaning water tight in this whole structure.

Dennis Wagner:

Yeah, permanent seating. That's also important to mention.

That's what you want to achieve.

Mateusz Furs:

Okay. Dennis, I think we have covered all the, all this, you know, punch way we agreed to discuss. Do you find anything else to add at this point?

Dennis Wagner:

No, I would say it's okay with people should should be of course, feel free to contact us if they have any questions because again, we just had a general discussion discussion on this and people may ask, they have this problem, they have this problem and then they can ask us also to get the proper, let's say solution for their problems.

Mateusz Furs:

no two the same situation, job site situations. So the, there will be definitely you know a problem we haven't discussed because we didn't, we didn't face it and then that's the great time to, to collect all the information. We have to choose another to find another solution for another job site situation.

Dennis Wagner:

Absolutely.

Mateusz Furs:

And that is why I love injection.

Dennis Wagner:

That's say for me, it's always satisfying when, when you can stop the water. But I think what we need to highlight in the end maybe is, and what's necessary for the pupil is that, is that information collecting before, before they start anything, you know, I agree. I agree. You know, it's Mateusz, and that's how we started our conversation. That's really important. And there's much information talking with the people on the side also because the people that were there during the construction process, they sometimes know more and they can share the information. And then on top of that with that information, we can go for the, for the right method or application itself and then combine it with the right equipment and material and then we are pretty sure to, to solve problems.

Mateusz Furs:

Great. Exactly. Where our listeners can find you. How, how can they reach you to, you know, to ask some questions?

Dennis Wagner:

Easily off course drop a message by WhatsApp or just calling me on my cell phone. The, the phone number is zero zero four nine 1707789320. We'll put me under that link here on on LinkedIn because I'm on LinkedIn as well and

Mateusz Furs:

I definitely think will be available in this episode's notes.

Dennis Wagner:

Super, super. So my email address Dennis dot Wagner at NORMET dot com So they should feel free to, to contact of course.

Mateusz Furs:

Okay. I will also pull your company's webpage and I noticed that you have the great sub page, you know, telling about some injections. So I will also prepare this link for the sub page of injection and because this is the most important and most like, you know, I love this part of this of this construction business, many injections. So I will, I will also put this link. Okay. Thank you. Yeah, I think that's it!

And of course we are waiting for comments, questions, and yeah, feel free, to just leave a comment on the podcast webpage. Yep. We will answer all of this comments, right?

Dennis Wagner:

Absolutely!

Mateusz Furs:

Thanks for this conversation. Thanks for finding the time. I know you are a busy manager working for a huge company, so it wasn't easy to find the time to have this conversation. Many thanks and talk to you soon. Bye. Bye. Thanks a lot.

Dennis Wagner:

Mateusz, it was my pleasure and I'm always need to contact me when you, when you want to discuss something. I think it's a great opportunity and a great idea you had with that podcast to exchange ideas.

Mateusz Furs

Thanks again. Great to hear. Great to hear this from your side. All the best. Bye bye.

Dennis Wagner:

Thanks. Bye. Bye.

Mateusz Furs

This interview is super. There is a huge amount of explained issues.

Especially this part where Dennis says about what info you need to collect to be able to seal an expansion joint.

And this one where he explains why to use open packers. it's So important.

Actually I prepared an education email for all my subscribers covering exactly this topic.

Now! it's up to us designers, applicators, and suppliers, to take the best possible solution suited to the job site conditions.

Thanks for listening, remember to subscribe. And I hope you tune in next time!