

-- Speaker 0 00:00:04 Make It Right. The manufacturing podcast.

Speaker 1 00:00:10 Did you know that it is likely that the first disposable diaper was invented during the second world war because cotton was a strategic material. So in 1942, a Swedish company created an absorbent square of crepes cellulose tissue that was placed in a baby's rubber pant. Then in 1948, Johnson and Johnson created the first mass market disposable diaper in the U S and in 1961, Proctor and gamble followed by launching Pampers. Then 20 years later in 1981, the introduction of the super absorbent polymers reduced the diaper size by 50%. And since that time, the advancements have continued welcome to the, Make It Right podcast. I'm Janet Eastman. And this week on the show, we're looking at the disposable diaper industry with two people who have worked in it for the last few decades. I'm pleased to have diaper industry consultant, Carlos, Richer, on the show, again, as well as manufacturing leader, ship consultant, Kevin Snook. So gentlemen, welcome to the, make it right podcast.

Speaker 2 00:01:11 Thank you, Janet. Thank you, Donna. Thank you.

Speaker 1 00:01:15 Good to see you both again, Carlos, it's been a while, so, uh, I see that you're surviving COVID

Speaker 2 00:01:22 Yeah, I'm trying to get my belts.

Speaker 1 00:01:26 I love talking to you about the diaper industry because I always learn so much about something that to me is just always been there. So this industry has constantly been changing. Tell me some of the real key highlights that you have seen over your career, which spans some 30 plus years.

Speaker 2 00:01:44 Well, yeah. Uh, well, I've seen a lot in the last 36 years, so I started in 1984. Um, you did mention a few of them, which were actually the critical ones, like, uh, during the eighties, the, uh, use of the super absorbent, uh, then we have led co-ops, which were helping to avoid leakage to the legs. Uh, this is a waste for elastic, uh, the selection of plants fourth also during the nineties. Uh, then I don't know if you remember, we have any of the super high compress diapers that were impossible to get out from the pack, destroyed the bags, and then they were replaced with the screener, less compressed, uh, uh, the change on the, your member of the, the, the Plains Greenville over of the bulk of the, the bag. I mean, so many things happening. Okay. They, now we see minimalistic bags with only having the name of the brand and nothing else. There was no claim. So, uh, yeah, a lot of things have happened. Uh, the various,

Speaker 1 00:02:50 So, you know, like I was talking that there was a Johnson and Johnson had their first disposable diaper, then along came Pampers, how many diaper makers are there now in this industry,

Speaker 3 00:03:05 Hundreds, hundreds, if you go into China, uh, you may have 400 diaper manufacturer. I mean, some of them really small it's great a lot. And at the same time we're having now other places where you see consolidation.

Speaker 1 00:03:24 So how, when we talk about all these changes to the actual diaper and the packaging and whatever, how has that whole manufacturing process changed to make these things?

Speaker 3 00:03:36 Well, they have evolved a lot. Okay. Uh, the, um, we, we have to keep up with, uh, the, uh, the mass of consumers and in order to do that, we have to adapt, uh, technology, uh, the machinery. Uh, so it used to be simple to manage the diaper factory. Okay. We have now, uh, the, um, machine we, that shop with some bullies, uh, now, uh, we have a chance with several varieties, with a lot of complexity. So the, the, um, the leader has to be also aware, uh, about, uh, the requirements or the people in charge of this. So we have now, uh, the need for experts in every field. Well, in the, in marketing with the new tools to understand what are the people really need, uh, how to deliver products will be accepted by the market.

Speaker 1 00:04:48 So Kevin, you work with, uh, manufacturing leaders in the diaper industry. You've seen some of these challenges over your career. I may not. How have those, those challenges elevated your job to be even more difficult?

Speaker 3 00:05:02 I think the main thing for me is that, um, the frontline workers have had to change their skill sets. So if you think back 30, even 20 years ago, as Carlos said, most of the production lines were mechan --

-- ical driven. And so you had a main drive shot a little bit like a cop from that main drive shop. You had these pulleys and belts and, um, and then you would have the, the basic diaper and you'd have the gluing system. So each of the different materials was glued together and it was, you needed really good mechanical people. And then over the past 20 years, I changed almost entirely now to electronic systems and ultrasonic, welding, and things like that. And an all of that is electronics driven. And so what we've, what we've seen is that the technicians that are running the production

Speaker 2 00:05:59 Continuously changed and the raw materials have changed, but the skill set that's required to run those lines change as well.

Speaker 1 00:06:13 Carlos you're, you're back there, nodding and smiling, as you think back, I think to your past and how it has evolved, what, what kind of a leader do we have now? Is he, is he somebody who knows electronics? Like who is the leader of a typical manufacturing plant now?

Speaker 2 00:06:32 Well, uh, I, I guess, I mean, it is not a requirement that, you know, the electronic, but it's a requirement that, you know, everything that you needed to go in, other people with all of these new skills. Okay. And, uh, so it's just not an issue of, of being a slaver, but also to be able to, uh, to bring into the operation, uh, the best people with the best know-how to be able to handle all those things. And, uh, uh, uh, it is, it is, uh, interesting also, uh, how, uh, these, uh, the way of either to pass also changed, uh, especially from the point of view of the need for being updated, uh, updated to what's happening, and then just keep doing, even if you are doing it at the best, uh, optimal efficiency, you may not survive because you know, in this industry is evolving so quickly, uh, with different raw materials, with different technologies that you have to incorporate into your processes with different tools.

Speaker 2 00:07:42 Okay. We used to have, uh, maybe a few sensors in the machine that will have hundreds, if not thousands of them that needs to be bold and you need to have, uh, the environment. So these people, uh, are, are very, uh, demanding in terms of something. They buy a bag of diapers. They expect all of them to work here or there. So, uh, you, you need them in tiny piece where you are, uh, working in an environment with two of you and you cannot do it by wheel. You have to do it with a tool I'm talking about hardware and software that will be able to do that in real time at the amazing piece of the material wrong. Now it's over a thousand diaper for a minute, so much even faster. So it's, uh, it's amazing. You cannot rely on your eyes anymore. It's impossible to see <inaudible>.

Speaker 1 00:08:45 This is a highly competitive industry, too, right? And you're talking about having the ability to attract the people that you need in order to run your operation properly. Carlos talked to me about, you know, how hard it is to find the right people on a team so that your factory can work properly.

Speaker 2 00:09:06 Well, uh, we have some tools, but we didn't have before, before we just do rely on the arm, but let's say moving from experts that will be able to find these spiteful profiles, specific profiles for the people. Now we have LinkedIn with LinkedIn, we'd have hops where there are thousands of diaper people, uh, you know, gathered together where you can, uh, you know, place an ad or peer. We have a backend seat with this need with these job requirements. So it's a, it's getting probably easier than before we find these fields that are needed for, for the diaper line. So, yeah, I think, uh, they, they, they need to use these tools whenever available. And also, I guess, uh, they are also another possibility, which is having the expertise of a much higher level. Okay. What I'm saying about, uh, through expertise that that can be, uh, I heard temporarily, not necessarily, full-time like the kind of jobs that getting his leave or myself when we are offering load services for consultants. And, uh, and we also have another, uh, uh, capabilities, uh, comparing, uh, with other places in the world. And we give you a benchmark of best practices. So, you know, where you stand against older, uh, factories all over the world, and maybe for where are your weaknesses,

Speaker 1 00:10:48 Are you finding that people are willing to bring --

-- in that third party person, Carlos?

Speaker 2 00:10:54 Yes. Some of them the most successful factories are the ones that are being more often. There is a strange thing happening here. Also in this industry, there's still a group of people that believe that their machines are so unique. So, uh, that there's a need to protect them. So they don't allow anyone to get into the factory, like the full walls. Okay, I'm gonna say, this is what makes me successful. And in fact, closing yourself out is what makes you high? Because the industry is really evolving weekly and, uh, having an open mind and bringing the best find out there is really the best alternative. I, unless you are a huge factory with. So, you know, a thousand solver people, uh, like, uh, the big multinational company that maybe have all of the diversity they need to do in their own structure or, um, medium size companies that do not have the level-one sources, the best practice is to be open-minded. And I'm finding that these skills you need from outside and then incorporate them in insights. I'm not saying about creating dependencies, but learning from the best, and then applying that learning internally. So you're going to really need to have this type of dependency.

Speaker 4 00:12:21 Kevin, I think that you probably have some comments that you'd like to add in there. Yeah, well, yeah, Carlos is right on the money. It's, um, there are very few secrets and, and whilst we're both very careful with people's confidential information, because that is critical. You know, there's certain things that are confidential or that your IP that you need to be managing carefully. But, um, at the moment, uh, a high-speed diaper line is a high-speed diaper line. And, and whichever, one of the big manufacturers you buy that diaper line from they've all got very similar servo drives. They've all got very similar operating systems. And so, you know, basically the, the, the, the line is a production line. The people that are really succeeding are the ones who are saying, how do I find out the best practices around the world? How do I learn how to run this in the most skilled way and get it right first time? Uh, and, and how do we get consistency coming out of here? Because it's really consistency that your quality department wants that your finance department wants that, you know, that certainly your shipping logistics teams and your sales team one. So it's about understanding this, uh, generic, if you like equipment, how do I run that in the most efficient way so that I can be a better supplier to my customers?

Speaker 2 00:13:39 I like to point out I totally agree. And this, the thing about consistency, it's interesting because when, when you look at the Bible diapers, if you buy a bag with four devices, uh, the consumer per section regarding the quality of the bag of diapers is always based on the worst diaper inside of the box. Whenever you have a good day presented, it works, it's supposed to work, you're supposed to be fine, but when you encounter a Viper that working is supposed to then immediately just have the impression of, wow, this is really about quality. Even if 39 out of the 40 diapers, where else would this be? Okay. People don't forget. They say so. So it means that the on list is that the stable, uh, quality in terms of the book, we also also define based on the format of where do you want to make? What, what we're saying is if you have a grade from only 90% of the time, 10% is bad. You have a, of every everywhere. So the, the it's always like that. It'd be the qualification for, uh, from the point of view of consumers is based on the worst diaper you made inside that five. So that means the worst diaper in of the bag has to be a drain site. And for that you need stability. You need to be absolutely certain that there's no defects, but you are not sending these expenses. Wow.

Speaker 4 00:15:04 Um, and, um, when Carlos was mentioning around the diapers, coming off the production lines at a thousand a minute, it's hard to understand how fast that is, but it's incredibly fast. And so we have vision systems, you know, that, that have cameras that are automatically looking at every diaper and then showing it up on an automatic controls of whether these parts are put in the right place, whether there's any defects. And, but that, those systems only work as well as the people that setting up the system. And so that's where you have to --

-- really be skilling up your teams to be able to run that equipment in the most effective way. And, uh, you know, I, I was in a, in a different industry. I was running on a business where, um, a piece of equipment had been bought from Japan and brought into China and into Thailand and was running.

Speaker 4 00:15:52 And I went out onto the production floor and I was asking people, what does this button do? And they were like, well, we don't know. I was like, well, what is this part do? They're like, no, we don't know. I went back and I talked to the CEO and I said, what's going on here? And he said, well, we had a Japanese operating team bring in the Japanese equipment, translate to the Thai people through English. And it was just all very hard. So basically they dumped the equipment and they went back to Japan and the Thai people operated it the way they ran the old piece of equipment. So even though you've got this new equipment with fantastic control systems, people were not using it. And I see that in so many different factories where, um, the equipment is upgraded with the skills and the mindset of the people haven't been upgraded well enough to fully utilize that fantastic equipment.

Speaker 2 00:16:47 I can see you nodding. Well, I think, you know, one of the other problems that I see today has to do exactly with the lost in translation. You know, Chinese doctors have been very successful upselling diaper equipment, especially the last 10 years. I mean, I just laugh about, you know, the, the kindness <inaudible>, I mean, we went through the trolls and they will not have the machine running in front of the people that chose Geneva. That was long time ago today. They have pretty good technology. But one of the complaints that I have is a big goal and start up a factory in another country. And, and then there's a lack of communication. They don't speak good English, and then you have to hire a translator. The translator speaks broken, uh, language between the two languages. So it's, it is a big, big challenge, but, uh, yeah, mixed will be done. So on all this people understand, remember they're operating, it's very likely they're going to the States. They don't know exactly how

Speaker 4 00:17:56 And my feeling is that when you put a new production piece of production equipment in and you get it qualified and it starts to run from then on the equipment should continually get better. And the skills of the people should be able to continually get it better. But what we see too many places in the world is that the team that is installing the equipment, gets it running, gets it nicely set up, and then they disappear. And then the operators are left to kind of fight this equipment over the next months and gradually the results, you know, deteriorate. And it's typically when they've gone a long way down that, you know, the experts get called in and say, you know, what the hell do we do now? And so the key is really right at that beginning point to make sure that transfer of technology and capabilities continues to get better results after the equipment has been installed. And the leadership team has, has moved away.

Speaker 2 00:18:50 I'm this also an issue with the culture, the local culture, in some places they're still believe that they have to, uh, reward the best operator. I mean, they said, you'd have a machine with 14, and then this, this guy is making more diapers per hour. Okay. So they stopped Alliance. And what happens is you are promoting actually the lack of stability on the machines. Then people started keeping their own secrets on how to really put the machine. So they have more production. So the people come here and the owner of the company comes and gives me a reward, a monetary reward instead of really learning how he's doing it. So he's more stable and getting more production and then making sure that everyone else is running like that. It's just a lot to do also with the, in the middle East, on the Latin American culture that we like to have the Brightstar and really the guide that is of this power, the hero. And I've seen places where they stopped the whole factory. Uh, and then, um, the, you know, these guy operator, or he stopped walking like in the clouds, like, how are you going to get a stable under those conditions?

Speaker 4 00:20:07 Yeah, it's rewarding the firefighter, isn't it. And so, you know, the guy who comes in and puts the fires out, you're re --

-- warding him rather than the person that's preventing the fires. And we've, we've found out that, you know, from, from great statistics, that the way you get the very best results is by getting consistency. And so, uh, rather than these ups and downs, and then a very long run and then ups and downs in a hurry long run, you've got to have consistent runs. And that's when your quality, your safety, your output are all protected. So how do you guys change the mindset of the leadership

Speaker 2 00:20:45 Team in those that are rewarding?

Speaker 1 00:20:48 That one guy who's getting the big hand clap that he's doing so great. How do you, how do you change that leader's mindset to say you can't reward just the one guy you got to reward the team so that everybody is pushing in the same direction and getting that result.

Speaker 3 00:21:06 One is a great tool to show them how it can improve the economics of the factory, improve your margin, or reduce the complaints like the local plan. Exactly. The way for us is always you start off with a pilot project. So it's difficult to say, well, look, you're going to go in and fix your whole factory, because that takes a huge leap of faith. But if you can say, well, look, let's, let's take one line to start with, and let's show you how running it in a different way with a different operating strategy and having your frontline employees, using the data in a different way. All of a sudden you can show that even after a couple of months, you're starting to get significantly better results that builds up the capability of that first lead team. And then that allows them to have the confidence and the results behind it to say, okay, yeah, let's roll this out for the rest of the factory step by step.

Speaker 3 00:22:02 I need to blend between the skills and the people training and also the technology, because I see things that you cannot see from your makeup, even with the outside, but if you cannot see what happens when you cannot see it. So there are tools that you can implement. For example, you want to know, well, blended, well, there's a treatment that can come look what's happening inside of the diaper and making sure that there is a good blending and avoiding these kind of defects that are impossible, even with cameras and with the tools, and then use the information from the tools that improve your process with better practice.

Speaker 1 00:23:06 Well, you mentioned that, sorry, Kevin, I interrupted you. Did you want to add something there?

Speaker 3 00:23:11 I was just going to ask us for his perspective on types of factories and business, because you, you, you mentioned the multinationals before, and then we have kind of the regional players, and then we have some that have big family type companies. Um, do you see a difference in the behaviors or the management techniques of people from, let's say the regional companies to the more family owned businesses? I, yes. I see a little, uh, well, some differences between the way, how they behave way, how the, uh,

Speaker 2 00:23:46 The local culture, uh, and, uh, there's a very successful small company. Let's not think that only the most international, in fact, I've seen the most creative solutions made by these smaller, uh, you know, by professors, even those that are family. Um, they are the ones that are taking sometimes the risks and implementing things. And you'll see today that some of these, uh, the products made by thesis, motor companies are making such a noise that the bigger multinational competence starting to follow them, or could own them, especially in, in very specific market niches, not, not all of them, but on some of them, yes, they are taking, uh, the next step in some regards, maybe with, uh, um, more sustainable solutions or using different types of raw materials, which are not being used by the multinationals or that you're starting to use them, but not at the scale where some of these other, uh, this motor factory side.

Speaker 2 00:24:55 Uh, but yes, the other thing has to do also with, uh, uh, the way how they handle the pockets or, or the way how they perceive their own themselves. I think this is one of the biggest problems with, uh, with these smaller companies, especially those that are closing themselves. They are never aware of how will there we are all live. They, they are comparing with the outside world. Um, and I've seen some factories, uh --

-- , not long ago. I was dealing with one in the middle East, they were running, uh, an efficiency so low that, uh, when you compare the wrong time efficiency people <inaudible> together multiplying the three week, we get probably called the global efficiency. I mean, the real live representative level efficient, they were running list of 40%. I dunno, how you going to survive other than hopes that maybe in the future, it doesn't last long.

Speaker 4 00:25:58 It's the agility of those smaller companies, right? That they're more willing to take some risks, try some new things. And, and whereas the global companies, I think they're always having to be a little bit more careful and make sure that they've got a solution that can roll out from, for every country. What issues do you both see that are really challenging leadership right now? I mean, we have the COVID situation. Um, but beyond that, or maybe even including that, what are some of the really big leadership challenges that people in the diaper industry are, are facing? Right.

Speaker 2 00:26:33 Well, one of them we are looking at right rhino is with the baby librarians update, um, on this you're willing find other markets, I think, has been to be salt. Uh, we did find <inaudible>, uh, people have been losing their jobs, or they are more concerned about the future. Um, especially these younger cell phones with millennials are the setting up the baby. So we're going to be looking at lowest birth rates in the history of humankind to make it seem more, uh, more urgently or more critical in that sense, it means that 20, 20 and 2021 are going to be really very bad years or, or baby diaper. Uh, we've been also very lucky because of the inverted pyramid on population growth, as in some other places, uh, <inaudible> will be savior in the sense that, uh, you're going to require a lot of growth with baby diapers, uh, with, uh, sorry with the adult diapers, to pumping space, the result channel sales, just because of the size of them.

Speaker 2 00:27:43 Okay. And, uh, so in terms of the public consumption of rural materials, uh, one of all diaper, maybe he's saying like three, or hopefully on a half baby diapers. Okay. So, uh, but we have to be aware that's when it could be a great challenge because you do were throwing right now or last year, uh, and you are not aware of what's going to happen with the help, and I'm not talking just about the pump, but basically everywhere where you have a conflict with a what's wrong with one or foods or census growth, uh, for a year. And I was going to pull down maybe half a point or 1% point left. And those countries that were actually breaking them, they're going to be, it was negative growth and VCs because of this and then directly. So, uh, until we wait for a vaccine or find a solution, we have to be dealing with a new market and that's a big challenge.

Speaker 1 00:28:36 And how are they addressing that challenge? Carlos, do they even see it? They see it coming.

Speaker 2 00:28:42 I, I think they're, they see it coming. They have to be preparing themselves quite nicely leads to, you know, your spouse, the wave until we have a better, a better one. Let's let this a it out. This will be that way. And maybe focusing more into developing or RNB projects I'm taking apart that maybe you have some extra capacity, for example, uh, now I'm not running up the 95% capacity. Now I'm running 80% capacity. This is the science that really, uh, propose the next generation of Vipers. That will be my choice. Another one is, okay. You know, that the other side of the business, the adult business is growing well, maybe you can do something about that and improve your sales team.

Speaker 1 00:29:33 Kevin, are you seeing the companies that you're working with, thinking about that moving into adult diapers and, and considering the declining birth rate?

Speaker 3 00:29:44 Yeah. There's two sites that I'm seeing. One is that there is still an untapped market on the very low end. Um, that is, there's not, you know, there's a lot of people that are not, can't afford still to use baby diapers. And so there is some kind of innovation that's required to be able to have a lower cost product in the market for baby diapers. But, um, I would say a large number of the companies that I've worked with that are making sanitary napkins and baby diapers, and now looking at the adult incontinence market. And the good th --

-- ing about that is that the awareness around adulting is growing. Um, it's a lot less of a taboo subject than it was before. And as people feel more comfortable talking about it, um, companies are feeling more comfortable that they can market to that. Um, and there's a lot more people being looked after because of it, because there's a huge need for this product, but it's always been a little bit of a taboo or a difficult subject to talk about. The more we get that out in the open, I think the more there is an opportunity to help a lot of people.

Speaker 1 00:30:48 <inaudible>, I'm just keeping an eye on the clock here, but, uh, I wanted to ask you a couple of final questions and Carlos, I'd really like some key takeaways from you at this point in time. We're, we're living in a kind of a different situation. You've sort of laid out some of the challenges that are out there. What are some key takeaways that you have for a diaper industry leaders right now?

Speaker 3 00:31:10 Well, uh, if you look at what's happening with the environment, because we have a, uh, more cleaner air, we have less pollution, and I think people are going to be demanding that for the future. So I think the, um, current at these for, uh, uh, the controlling of the diapers after this is very important to deal with it. And either we'll go in the direction of like the recycling program down with, and, or for industrial composting, which will be, I think we've talked about that in a previous test and that now I am proposing, I think we'll probably be better, which is a hybrid recycling for some components for another. So we have a Robbie composting for the <inaudible>, where we can incorporate the whole paper. And then in another completely different process, we have the plasticity where, where we are dealing with recycling them material, but we need to do something fast that weekly or consumers are going to demand it, or we don't provide a solution. They may have ended up going through the old way, and we don't want to go into terrible from the point of view for the user. It only takes one who were to realize how bad they are.

Speaker 1 00:33:03 Okay. Kevin, uh, just a quick, final key thought from you.

Speaker 3 00:33:07 Yeah, for me, you know, I always go back to the frontline employees. And so I think the more we can upskill our frontline employees to, to make the diapers in the most effective way with the lowest scrap levels, um, that that's critical from an efficiency of a manufacturing point of view. And as we get the manufacturing more, more efficient, there's less waste anyway. Um, so for me, it's how do we make sure that our leaders understand the complexity of running these diaper operations and spend the right amount of time building the capability of the people? Okay.

Speaker 1 00:33:44 Uh, that's all the time we have right now, Carlos, always a pleasure to talk to you and you always bring some great insights and it was great to have Kevin on the call too. So we could really get some, both sides of the industry and have a really good chat about it. So thank you so much for your time.

Speaker 3 00:33:58 Thank you for the invitation.

Speaker 1 00:34:01 Carlos Richer is a diaper industry consultant. He's also the founder of the disposable diaper network. And Kevin Snook is a manufacturing leadership consultant, and he's the author of the bestselling book, Make It Right. Five steps to align your manufacturing business from the front line to the bottom line. You can find it on Amazon and that's our show this week, please check out our Twitter and LinkedIn feeds. You can find them on our podcast page, and you can also share and subscribe to the podcast through iTunes, Google play, Stitcher, Spotify, and we're on YouTube where you'll be able to see this video that is to make it right podcast. I'm Janet <inaudible>. Thanks for joining us.

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