WEBVTT

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00:00:02.940 --> 00:00:11.989

Rae Barton: Welcome everybody to this week's Red List Weekly Webinar. We are so thrilled to be joined here today by Tyler Beckett

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00:00:12.360 --> 00:00:20.599

Rae Barton: Tyler Beckett is the Vice President of consulting solutions at Newton industrial solutions. They do a lot.

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00:00:20.690 --> 00:00:33.310

Rae Barton: They're an amazing company. I know that, Tyler, you do a lot of trainings. You do a lot of working with companies to get their their lubrication management systems, you know.

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00:00:33.690 --> 00:00:41.159

Rae Barton: up to scratch. So could you tell us a little bit more about Newton and what you guys do, and why people should come talk to you.

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00:00:41.580 --> 00:00:47.618

Tyler Beckett: Yes, thank you. Ray. Yes, I'm very, very delighted to be here and thank you for the Us. Opportunity.

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00:00:48.360 --> 00:00:49.170

Tyler Beckett: So

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00:00:50.050 --> 00:01:12.999

Tyler Beckett: we provide really any lubrication services your plant may need, whether, if it's just looking at your Pm's to make sure they're accurate and effective for the failures they're trying to prevent. Or if you need a site lubrication survey, or if you need oil samples done in your site, and then the analysis provided along with actionable recommendations.

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00:01:13.475 --> 00:01:16.719

Tyler Beckett: We can also do lubricant selection. Let's say

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00:01:16.820 --> 00:01:40.559

Tyler Beckett: you've got a certain bearing you're like, well, we're not sure that what lubricant that we need to put in the bearing, and how often do we need to lubricate it? And how much do we need to lubricate it each time? So we'll help you go through that. We also help the back end of Red List, getting all of the master data ready for implementation and upload into the system.

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00:01:40.900 --> 00:01:52.219

Tyler Beckett: And then we'll come onto your site and walk with you over all your machines that you want monitored and taken care of, and making sure the Pm's are accurate and correct before they get uploaded in the system.

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00:01:52.340 --> 00:01:59.509

Tyler Beckett: We also do compressed gas leak surveys so those can save a whole bunch of money in a site. If you haven't done one of those.

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00:01:59.570 --> 00:02:14.479

Tyler Beckett: take a look into it. They're very, very easy to quickly show a large return on investment with a little bit of upfront cost, and then we also do steam trap surveys. So in a nutshell, really, any lubrication

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00:02:15.720 --> 00:02:22.059

Tyler Beckett: function that needs to be done in your plant, whether it's vacuum, dehydration or or unit flushing, or any of that.

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00:02:22.100 --> 00:02:24.576

Tyler Beckett: we'll do all those things, and then

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00:02:25.460 --> 00:02:27.650

Tyler Beckett: yeah, and then we do site service as well.

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00:02:28.363 --> 00:02:33.176

Tyler Beckett: But thank you for the introduction ray. A little bit about me is

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00:02:33.750 --> 00:02:39.180

Tyler Beckett: I have several levels of certification in oil analysis.

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00:02:39.950 --> 00:03:07.740

Tyler Beckett: and then I, we also this part of our business. We also teach the Icml certification classes. So really, any of them that are offered, we can we have an online solution for [it@atlubricant.training.](mailto:it@atlubricant.training) So we have online certification prep courses that you can purchase. And then we also will come on. Come to your site and provide the training on site to your folks.

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00:03:08.020 --> 00:03:19.650

Tyler Beckett: and that's for all the Icml. The mlt one the Ml. Mlt 2 and the Mla. Track the mle, and then there's a la laboratory lubricant analyst track as well.

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00:03:21.290 --> 00:03:26.957

Tyler Beckett: So personal life. Live in the upstate of South Carolina.

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00:03:27.460 --> 00:03:32.479

Tyler Beckett: things I like to do outside or ice climbing rock climbing hiking.

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00:03:32.856 --> 00:03:35.789

Tyler Beckett: I've just gotten into hunting this year. So yeah.

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00:03:35.920 --> 00:03:38.270

Tyler Beckett: really love to do outdoors things. But

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00:03:38.310 --> 00:03:41.149

Tyler Beckett: yeah, above all, I'm really excited to

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00:03:42.146 --> 00:03:45.689

Tyler Beckett: provide you guys. A high level

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00:03:47.510 --> 00:03:57.159

Tyler Beckett: a high level demonstration of exactly how we find root cause but anything you want to add right now, Ray, before we get into it.

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00:03:57.460 --> 00:04:03.809

Rae Barton: No, I think I'm just excited to to see you do your thing. And I appreciate being here so

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00:04:03.940 --> 00:04:04.510

Rae Barton: awesome.

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00:04:04.510 --> 00:04:05.130

Tyler Beckett: Right.

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00:04:07.260 --> 00:04:10.210

Tyler Beckett: Let's go to the 1st slide. There we go.

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00:04:11.210 --> 00:04:17.839

Tyler Beckett: All right. So today's topic is from breakdown to breakthrough root cause analysis essentials.

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00:04:18.130 --> 00:04:23.069

Tyler Beckett: So when machines fail, it's really expensive.

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00:04:23.450 --> 00:04:31.809

Tyler Beckett: So, and based on several studies that have been done, it's about 3 to 5 times more expensive

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00:04:32.060 --> 00:04:38.960

Tyler Beckett: for breakdown maintenance than planned maintenance and anticipating the failure.

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00:04:39.070 --> 00:04:40.410

Tyler Beckett: Well.

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00:04:40.610 --> 00:04:49.440

Tyler Beckett: even if we have planned maintenance and that planned maintenance is due to a failure, it still behooves us to figure out why that machine failed

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00:04:50.140 --> 00:04:53.670

Tyler Beckett: so that we don't keep repeating

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00:04:53.890 --> 00:04:56.969

Tyler Beckett: the failure in charging the money. Because

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00:04:57.360 --> 00:05:00.089

Tyler Beckett: let's be honest. When our machines fail.

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00:05:00.820 --> 00:05:10.770

Tyler Beckett: we they still carry costs with them. But we're not. Those machines aren't operating to offset their costs with revenue.

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00:05:10.870 --> 00:05:18.609

Tyler Beckett: So it's it's basically like the worst especially for constrained work centers. It's basically the worst

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00:05:18.660 --> 00:05:20.740

Tyler Beckett: situation you could find yourself in.

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00:05:21.220 --> 00:05:34.550

Tyler Beckett: because you've got 100% cost and 0% revenue to offset the the cost of running the machine and electricity and the parts and everything like that. So we want to make sure that

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00:05:34.620 --> 00:05:43.210

Tyler Beckett: we optimize the uptime and one of the ways we do. This is figuring out root causes to failures.

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00:05:43.370 --> 00:05:50.888

Tyler Beckett: So today, we're gonna talk. And just on a high level, on basically, the process of how you do root cause analysis.

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00:05:51.310 --> 00:05:54.779

Tyler Beckett: So obviously, we have to identify the root problem.

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00:05:54.930 --> 00:05:59.860

Tyler Beckett: So first, st we have to define the problem, is it a functional failure?

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00:06:00.040 --> 00:06:02.399

Tyler Beckett: Is it a process failure?

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00:06:02.510 --> 00:06:08.609

Tyler Beckett: Is it a operations failure, or is it a raw materials failure? What kind is it

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00:06:08.820 --> 00:06:11.740

Tyler Beckett: so? Because that will help us

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00:06:12.240 --> 00:06:29.219

Tyler Beckett: determine exactly where to look. This I mean, obviously, if it's a personnel or a a training failure, we're not going to look into the machine very far. To try to look at. Maybe it was the electric motor that made the machine stop. Well, actually.

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00:06:29.906 --> 00:06:36.690

Tyler Beckett: we're highly suspected of it being a personal issue, not knowing how to operate the machine correctly. So

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00:06:37.265 --> 00:06:46.330

Tyler Beckett: we have to understand the impact or the the dollar risk or dollar the monetary

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00:06:46.740 --> 00:06:55.559

Tyler Beckett: fallout from the problem that will determine how much resources and how how important is this to get it fixed?

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00:06:56.080 --> 00:07:00.180

Tyler Beckett: And then we want to capture the failure modes. So

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00:07:00.430 --> 00:07:08.690

Tyler Beckett: what was, what? What are the parameters that were surrounding the machinery? Failure? What? Usually we start at the

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00:07:09.080 --> 00:07:17.490

Tyler Beckett: point of failure and work our way backwards and try to detail out as many facts and situations and

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00:07:18.794 --> 00:07:27.299

Tyler Beckett: numbers from any of the measurement devices, everything that we can that could have and did lead up to that failure.

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00:07:29.180 --> 00:07:30.500

Tyler Beckett: Excuse me.

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00:07:31.350 --> 00:07:41.980

Tyler Beckett: So then, we create an action plan. We're gonna identify stakeholders at minimum. We should have a cross functional team usually depending on

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00:07:42.120 --> 00:07:46.500

Tyler Beckett: how severe the failure was.

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00:07:46.952 --> 00:07:50.680

Tyler Beckett: They can be anywhere, from the plant manager to the

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00:07:51.302 --> 00:07:58.310

Tyler Beckett: regional director all the way to. Sometimes the CEO, depending how large their company is, or how

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00:07:58.450 --> 00:08:01.060

Tyler Beckett: impactful the failure was.

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00:08:01.270 --> 00:08:07.749

Tyler Beckett: though we'll on the group level, we'll also want to allocate resources. How much money and time

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00:08:07.800 --> 00:08:10.990

Tyler Beckett: are we going to allocate for this?

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00:08:11.410 --> 00:08:19.290

Tyler Beckett: How big of a failure is it? Is it across multiple? Does it affect multiple plants? Is it just on one machine and one line in our plant

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00:08:19.972 --> 00:08:24.219

Tyler Beckett: and then we want to define roles and responsibilities.

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00:08:24.270 --> 00:08:46.376

Tyler Beckett: This is so important to do early, because the last thing we want is at the final they're close to the final report out like, Well, wait, we have this undone action item, and everybody says, Well, no, I thought so, and so is taking take care of it. And then the other person says, no, I thought so, and so is, gonna take care of it. That doesn't usually bode well and doesn't work well for

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00:08:46.840 --> 00:08:48.400

Tyler Beckett: being able to.

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00:08:49.030 --> 00:08:57.340

Tyler Beckett: Yeah, that usually doesn't bode well and work well for being able to have an effective effective role.

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00:08:58.930 --> 00:09:01.680

Tyler Beckett: Alright. So then, taking corrective action. 73

00:09:01.910 --> 00:09:05.909

Tyler Beckett: So we wanna like, I mentioned a little bit earlier.

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00:09:06.535 --> 00:09:09.780

Tyler Beckett: we wanna take create a timeline of events.

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00:09:11.052 --> 00:09:14.249

Tyler Beckett: And we want to start backwards

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00:09:14.270 --> 00:09:19.369

Tyler Beckett: from the point of occurrence, or when the failure actually

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00:09:19.500 --> 00:09:23.640

Tyler Beckett: occurred, and then we work backwards as far as we need to

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00:09:24.030 --> 00:09:30.110

Tyler Beckett: to make a detailed timeline so that we can in order we can determine

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00:09:30.880 --> 00:09:38.350

Tyler Beckett: all the factors that may up to it. We also identify the causal factors like I talked about earlier in the webinar

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00:09:39.585 --> 00:09:45.611

Tyler Beckett: about personnel or raw materials or operations or machinery.

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00:09:46.670 --> 00:10:03.059

Tyler Beckett: and then we work to pinpoint root cause and part of pinpointing. The root cause is we've got several tools, and I'll introduce a few of those that help us find the point of the occurrence or the actual root cause of the problem, because the goal here

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00:10:03.630 --> 00:10:08.229

Tyler Beckett: is to fix the root cause. Let me give you an example.

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00:10:09.050 --> 00:10:15.210

Tyler Beckett: So we had a scrubber pump in a plant one time that

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00:10:18.430 --> 00:10:19.870

Tyler Beckett: that maintain the

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00:10:20.710 --> 00:10:31.250

Tyler Beckett: the air scrubbing for 6 mixers, and this scrubber pump had a coupling between the motor and the pump

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00:10:31.510 --> 00:10:55.839

Tyler Beckett: that would go out about every 2 weeks, and it would cost about 4Â h of downtime for them to replace it. Well, I was tasked with figuring out, why is this coupling failing? So we got a team together and we started looking at it. And we applied root, cause, analysis, tools, things like that. Well, long story short, what we ended up finding was the coupling

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00:10:55.870 --> 00:10:57.859

Tyler Beckett: that they were using

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00:10:58.610 --> 00:11:07.859

Tyler Beckett: was made for high torque applications. Now, since this is a water pump, it's not initially it has torque, but usually when it's running

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00:11:07.920 --> 00:11:17.089

Tyler Beckett: it doesn't have high torque. It almost like sits there, and it idles, if you will, because it doesn't, it doesn't have a really high load on it. It's just moving the water.

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00:11:17.610 --> 00:11:23.900

Tyler Beckett: And so what happened is because they were using the coupling made for high torque applications.

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00:11:24.010 --> 00:11:27.920

Tyler Beckett: It would rattle back and forth, but that would create friction.

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00:11:28.240 --> 00:11:45.010

Tyler Beckett: and the polymer that they was using had some. I don't want to say they're abrasive materials, but it would basically act like sandpaper and wear itself down to the point where it spit orange dust all over the inside of the

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00:11:45.030 --> 00:11:52.829

Tyler Beckett: guard, and then it would rattle so much that it would make it look like the machine was misaligned

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00:11:53.470 --> 00:11:57.620

Tyler Beckett: so, and what we did is we went back to

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00:11:57.630 --> 00:12:01.770

Tyler Beckett: the manufacturer said, Hey, this is our problem.

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00:12:01.950 --> 00:12:07.539

Tyler Beckett: Which one should we be using? And I said, well use this epdm one. So not only we're able to

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00:12:07.620 --> 00:12:25.520

Tyler Beckett: fix the problem with the right coupling, but it was a 3rd the price of the expensive one, the orange one we were using. We went back with the Epdm rubber that was used for low torque applications, and then it was lasted for 6

months. And then I moved on to something else. So

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00:12:26.412 --> 00:12:27.829

Tyler Beckett: yeah, it's it.

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00:12:28.300 --> 00:12:35.613

Tyler Beckett: We so things like that. If you apply this the methodology correctly, you can find some huge savings.

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00:12:37.230 --> 00:12:45.839

Tyler Beckett: Alright. So the 1st thing and this more gorge goes towards prevention. But this is an Fmea

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00:12:46.050 --> 00:12:51.800

Tyler Beckett: matrix. This is just an example. But basically what it does is it plots the frequency

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00:12:52.030 --> 00:12:56.710

Tyler Beckett: against the severity or the risk to the business.

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00:12:56.770 --> 00:13:01.250

Tyler Beckett: and the the frequency of failure against the risk to the business.

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00:13:01.800 --> 00:13:02.415

Tyler Beckett: So

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00:13:03.451 --> 00:13:11.469

Tyler Beckett: and then we. So what we do is we look at a machine, and then we come up with all of

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00:13:11.540 --> 00:13:15.910

Tyler Beckett: the possible failures that could happen to that machine.

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00:13:16.230 --> 00:13:26.840

Tyler Beckett: And then we apply a score based on how likely and how catastrophic it is. So. The point out. It could be a moderate severity. Maybe

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00:13:27.160 --> 00:13:32.689

Tyler Beckett: 5Â h of downtime would be moderate to a plant, but then, if it happens once a week.

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00:13:32.760 --> 00:13:36.270

Tyler Beckett: that would still be a very high critical.

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00:13:38.100 --> 00:13:47.860

Tyler Beckett: that'd be a high critical failure that we want to look at right right away. Conversely, if it's really really

expensive, but it's very, very remote.

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00:13:48.310 --> 00:13:54.400

Tyler Beckett: then it may, it may or may not require action. So

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00:13:55.740 --> 00:14:00.709

Tyler Beckett: then we have this is a fault tree analysis.

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00:14:00.910 --> 00:14:06.569

Tyler Beckett: So the way this works is at the top. We have our actual functional failure. What

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00:14:06.650 --> 00:14:14.519

Tyler Beckett: what caught like the actual failure of the process or machine that prohibits the

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00:14:14.900 --> 00:14:22.029

Tyler Beckett: system from doing exactly what it was designed and intended to do. And then we have

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00:14:22.090 --> 00:14:29.970

Tyler Beckett: our different potential sources of failure. So in a machine example, we'd have our raw materials.

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00:14:30.450 --> 00:14:32.740

Tyler Beckett: and then we'd have our process.

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00:14:32.970 --> 00:14:46.600

Tyler Beckett: And then maybe perhaps, we'd have our personnel, and then you could even add machinery. And below each one what we do is we break we use and or methodology.

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00:14:48.270 --> 00:15:08.780

Tyler Beckett: and so we could say so. If this was a machinery failure, we could say it could have been the chain sprocket it could have been, or the gearbox, or it could have been the the motor itself. And then what we we base the failure modes of each one of the the

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00:15:10.310 --> 00:15:20.409

Tyler Beckett: potential causal factors that we've got, and then we chop out the ones that aren't realistic. So let's say

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00:15:20.460 --> 00:15:23.889

Tyler Beckett: the motor locked up and tripped out well.

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00:15:24.130 --> 00:15:39.309

Tyler Beckett: and if the and then we run a test on the motor and we find out, well, okay, the motor is still working just fine. It's something else on the line. Then you can chop the motor out of your fault tree. So this way it helps us

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00:15:39.860 --> 00:15:48.181

Tyler Beckett: take out the possible causes, so we can better narrow down and pinpoint exactly what the root cause was.

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00:15:49.300 --> 00:15:55.120

Tyler Beckett: Oops. So this is a Ishikawa diagram or a fishbone diagram,

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00:15:56.220 --> 00:15:59.749

Tyler Beckett: generically known as a cause and effect diagram. So this

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00:16:00.250 --> 00:16:10.250

Tyler Beckett: here we list out. All of the areas that could have contributed to the failure. And then we list

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00:16:10.570 --> 00:16:15.716

Tyler Beckett: the possible failures on that pertain to each

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00:16:16.370 --> 00:16:25.100

Tyler Beckett: each category. So in this case, we've got personnel methods, measurement environment, machines and materials. So this will look a little bit different.

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00:16:25.330 --> 00:16:29.899

Tyler Beckett: depending on exactly what the nature and type of failure is.

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00:16:32.420 --> 00:16:34.880

Tyler Beckett: But generally this

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00:16:35.150 --> 00:16:44.260

Tyler Beckett: provides a good map of all the possible failures, and especially what you're looking for when you do something like this. If you're looking for, repeat.

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00:16:46.020 --> 00:16:50.469

Tyler Beckett: You're looking for repeat causes. So let's say.

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00:16:50.910 --> 00:16:59.844

Tyler Beckett: under personnel, we find lack of training and under methods. We find out that lack of

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00:17:00.600 --> 00:17:14.179

Tyler Beckett: we find a lack of instructions for operating this person, this particular machine. So it's not necessarily those 2 together would say, Well, maybe we've got a training issue here. And even if it's not the true cause.

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00:17:14.520 --> 00:17:23.369

Tyler Beckett: it could be part of the root cause. Sometimes, sometimes especially for more complex processes. There

may be several root causes that all

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00:17:23.500 --> 00:17:26.149

Tyler Beckett: come together to cause the failure.

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00:17:28.260 --> 00:17:33.520

Tyler Beckett: So this one's simple and and somewhat and somewhat

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00:17:34.790 --> 00:17:41.889

Tyler Beckett: fun to use. It's it's quite simple. It's just called 5 wise. But we ask, why

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00:17:42.480 --> 00:17:50.660

Tyler Beckett: did the problem happen as many times as we need to? It's not limited to 5, but they usually just. Usually you should be able to get to the

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00:17:51.600 --> 00:17:54.839

Tyler Beckett: problem in 5 questions of why.

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00:17:55.830 --> 00:18:00.729

Tyler Beckett: But basically, we keep asking why? Until we

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00:18:00.810 --> 00:18:12.989

Tyler Beckett: come to until you can't ask why anymore. So in this particular example, you've got a water pipe, water, leakage in pipe a well. Why did we have the leakage? Well, it can't support the water pressure. Well, why not?

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00:18:13.030 --> 00:18:25.129

Tyler Beckett: Because the pipe isn't adequate to support the water pressure. Well, why isn't it adequate? It was changed 2 weeks ago, and wasn't checked to see if it could support the pressure in the area. Okay? So they didn't follow up with a

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00:18:25.290 --> 00:18:35.699

Tyler Beckett: an acceptance. Testing after repair was made. And then, well, why didn't they do that? The standard check for the correct function of the pipe wasn't completed? Okay, why didn't they do the acceptance testing?

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00:18:35.720 --> 00:18:44.870

Tyler Beckett: Because the person in charge wasn't familiar with the standard set for the pipe. So it's not actually the pipe's fault in this case, or or maybe it is. But

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00:18:45.100 --> 00:18:52.120

Tyler Beckett: the true root cause is not because they use the wrong pipe. It's because they weren't told which pipe to use or they didn't.

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00:18:52.579 --> 00:18:57.070

Tyler Beckett: They weren't familiar with the standard of which pipe should be used in this application.

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00:18:57.350 --> 00:19:00.249

Tyler Beckett: So this is something else I want to point out.

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00:19:00.560 --> 00:19:07.780

Tyler Beckett: It's good to find the root causes, and it's good to to change things.

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00:19:08.678 --> 00:19:17.880

Tyler Beckett: If it is a functional failure. Yes, if it's a process change that we're making, especially, we want to make sure that

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00:19:18.200 --> 00:19:25.340

Tyler Beckett: we properly do management of change, so that the solution that we put in to eliminate the

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00:19:25.370 --> 00:19:32.300

Tyler Beckett: failure doesn't cause other problems down the line. We don't want to. I mean, we could.

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00:19:32.830 --> 00:19:39.510

Tyler Beckett: We could possibly fix our immediate problem, but double

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00:19:39.740 --> 00:19:53.790

Tyler Beckett: an issue for someone else, down or somewhere else in the plant down the line, and that's what we don't want to do, because then our savings goes out the window. It looks like we ourselves in our sphere save some money. But in the overall picture we made things more difficult and worse.

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00:19:53.910 --> 00:19:54.850

Tyler Beckett: So

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00:19:55.610 --> 00:20:07.800

Tyler Beckett: just be aware of that. Ask yourself, okay, what possible effects. Can this change have elsewhere in the process plant or methods that we do things

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00:20:09.720 --> 00:20:22.069

Tyler Beckett: all right? So once we have found the root cause, then we want to prevent the reoccurrence if we go through this whole process, and then don't actually take steps to prevent

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00:20:22.390 --> 00:20:25.250

Tyler Beckett: the root cause. We have wasted our time.

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00:20:26.070 --> 00:20:31.229

Tyler Beckett: And so one thing is that's important to get as many

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00:20:31.410 --> 00:20:38.979

Tyler Beckett: people as you can involved with it, especially the floor operators. Have them help guide and direct them

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00:20:38.990 --> 00:20:45.940

Tyler Beckett: to take charge and ownership. It'll give them a good sense of pride. It'll give them purpose beyond just

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00:20:46.070 --> 00:20:55.150

Tyler Beckett: running the lines and taking care of the machines, it gives them a sense of importance, and being a valuable contributor.

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00:20:56.340 --> 00:21:11.040

Tyler Beckett: adopt a culture of relentless defect, elimination, just like we do a safety. And we say, 0 injury workplace, why can't we do 0 problem reoccurrence work in the workplace or 0 failure reoccurrence?

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00:21:12.257 --> 00:21:16.582

Tyler Beckett: It's yeah. If we really want to.

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00:21:17.210 --> 00:21:22.100

Tyler Beckett: if we really want to enact change, we've got to start with the people

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00:21:25.990 --> 00:21:33.080

Tyler Beckett: alright, so that in a nutshell is the at a high level

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00:21:33.439 --> 00:21:38.190

Tyler Beckett: the process for finding the root cause. But do you guys have any questions.

168

00:21:38.650 --> 00:21:41.580

Rae Barton: I actually do have a few questions here for you, Ty.

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00:21:41.820 --> 00:21:49.069

Rae Barton: So the 1st one is, how would you get started with this? How do you implement a program to to do root cause analysis.

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00:21:49.980 --> 00:22:00.319

Tyler Beckett: That's a good question. So the best way, if you have many people that need to be trained on it is to find a resource.

171

00:22:00.689 --> 00:22:03.249

Tyler Beckett: Let's say you really want to make a 172

00:22:03.300 --> 00:22:17.280

Tyler Beckett: root cause analysis team. So there's several different methodologies out there. One of them is a 3 but if your company doesn't already have some root, Ca, like a root cause department.

173

00:22:17.750 --> 00:22:40.890

Tyler Beckett: reach out to your manager and ask if you can find get someone to come in and train your site. I have several resources that know a lot more about this than I do, and they do this for a career. I can come. I can help provide those resources to you. Another thing, if you you're like. Well, we have all these failures. We don't know where to start. We'll look into your Cmms system

174

00:22:40.930 --> 00:22:52.840

Tyler Beckett: and then say, try and come up with a list of the top 5 bad actors, the ones that fail the most, or the ones that cause the most downtime, or the ones that cause the most money.

175

00:22:53.408 --> 00:23:03.559

Tyler Beckett: If you pick a combination, or even one of those things you're you're bound to find one that has a lot of value extraction potential from fixing the failure.

176

00:23:04.310 --> 00:23:16.409

Tyler Beckett: But yeah, start with the people 1st get trained. Understand? The methodology, get it down on paper, and then go after it. Start finding defects and get the whole team involved.

177

00:23:17.590 --> 00:23:19.460

Rae Barton: Okay, perfect.

178

00:23:20.090 --> 00:23:39.360

Rae Barton: Some of these, you know, issues are so complex. Some pieces of equipment are so complex. I imagine it's probably difficult to find the technical expertise that you might need to get to solve a really complex problem. So how would people actually go about finding the technical expert expertise that they needed to

179

00:23:39.590 --> 00:23:42.550

Rae Barton: to do a root cause analysis. If it's a really complex one.

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00:23:43.120 --> 00:23:48.690

Tyler Beckett: So that's a good question. I know this is something I have personally struggled with when I was in plant roles

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00:23:48.870 --> 00:23:49.880

Tyler Beckett: is

182

00:23:50.600 --> 00:24:16.579

Tyler Beckett: sometimes the manufacturers know their stuff, and unfortunately, other times they don't. Really. I'm sure you guys have seen. If if you've worked in plants before you've you've had a salesman out that you is a rep for a certain brand or product, and you start asking him pointed questions about it, and he's not really able to answer it. I'm not

saying that I expect salesmen to be engineers.

183

00:24:17.000 --> 00:24:24.810

Tyler Beckett: but sometimes it's necessary to call someone outside of the

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00:24:26.048 --> 00:24:38.579

Tyler Beckett: outside of the sales team to help it help you fix it. So a good example of this was, I was working in a plant. We had a major issues with our condensate return system for the

185

00:24:38.590 --> 00:24:40.600

Tyler Beckett: for the boiler system.

186

00:24:40.920 --> 00:24:48.160

Tyler Beckett: And I would ask the. And we went through, I think, 3 different steam

187

00:24:48.845 --> 00:25:05.099

Tyler Beckett: steam vendors that sell boiler products and steam traps and valves, and all of that, and each of them had a different answer, and I was kind of like, oh, I. This is not helpful. And so I actually called in a steam expert, and he

188

00:25:05.290 --> 00:25:11.279

Tyler Beckett: came in, and for 3 days he gave us an analysis or a survey on our entire system.

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00:25:11.300 --> 00:25:16.759

Tyler Beckett: and gave us a recommendation on exactly what we needed to do to fix this particular problem that we had.

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00:25:16.910 --> 00:25:21.474

Tyler Beckett: and it was much more in depth, and it was

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00:25:21.840 --> 00:25:39.619

Tyler Beckett: much more all encompassing than what we are being provided from the steam companies themselves. And that's that is one example. Other times I've had the what I call skf and forbearing issues and stuff like that. They're very, very helpful. So

192

00:25:40.200 --> 00:25:45.549

Tyler Beckett: I'm not saying you should always rely on the manufacturer. I'm also not saying you should

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00:25:45.620 --> 00:25:52.910

Tyler Beckett: always not rely on them. You have to go to where you're getting good answers, and

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00:25:53.080 --> 00:25:56.069

Tyler Beckett: one way that I've found.

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00:25:56.588 --> 00:26:07.980

Tyler Beckett: One rule of measurement I found that works well is, remember that there is no such thing as a free lunch, especially with these complicated problems.

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00:26:08.070 --> 00:26:17.670

Tyler Beckett: It's not going to be an easy and simple solution. Sometimes it looks easy and simple, but implementing it and making the change. That's the difficult part.

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00:26:18.570 --> 00:26:20.160

Tyler Beckett: Does that make sense.

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00:26:21.150 --> 00:26:23.661

Rae Barton: It does. It does last. Question.

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00:26:24.470 --> 00:26:34.520

Rae Barton: how does how does a you know customer start documenting a process for this? What's the best way for them to get like a solid standardized documentation going.

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00:26:34.980 --> 00:26:50.616

Tyler Beckett: So again, reaching out to those experts many times that they all have an already documented you can. There's they have documented methodologies for purchase. If you want to make one yourself 1st go and get trained, learn the entire process.

201

00:26:51.000 --> 00:27:01.349

Tyler Beckett: and then you'd have to start 1 1 piece at a time and making an entire model out for it. But make sure you get the backing of

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00:27:01.400 --> 00:27:05.690

Tyler Beckett: your plant manager, and, if necessary, your

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00:27:06.181 --> 00:27:32.319

Tyler Beckett: area director, or even the one of the senior Vice Presidents. Things like that depending on how large your company is, but if you document it, then that makes it so that it will perpetuate whether you remain in the role or not, and then you can use it and expand it. It can be a living document. And as you find problems, it's easy to make as you find problems with the process or things that needed to be added or removed.

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00:27:32.863 --> 00:27:45.446

Tyler Beckett: Then it's easy to make those changes. Really, it's it's not a complicated process to make the documentation, but what is complicated and sometimes difficult is setting aside the time, because.

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00:27:46.820 --> 00:27:50.270

Tyler Beckett: oh, it's 7 habits for highly effective people. You have

206

00:27:50.640 --> 00:28:13.490

Tyler Beckett: urgent but not important. You have important and urgent things. You have not important, not urgent, and you have important but not urgent things, and so usually the documenting, the process falls under the important but not urgent. And so many times we, as people, seem to think that the urgent ones are the most important when

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00:28:13.490 --> 00:28:21.860

Tyler Beckett: many times, as we want to be in the important but not urgent quadrant, because that sets us up for future success.

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00:28:22.520 --> 00:28:24.240

Rae Barton: That's great. Thank you, Tyler.

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00:28:27.560 --> 00:28:31.690

Rae Barton: I think that's all the questions that we have. I do know that we have some

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00:28:32.070 --> 00:28:37.200

Rae Barton: some things that our attendees can take away to go and do.

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00:28:37.330 --> 00:28:56.810

Tyler Beckett: Good. I hope so. And then if any of you need help with lubrication in your plant, or you're curious about something, or you need training. Please reach out to us. Either through red list or you can find [us@newtoninds.com,](mailto:us@newtoninds.com) [or@lubricant.training](mailto:or@lubricant.training)

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00:28:57.070 --> 00:29:00.360

Tyler Beckett: reach out to us. Find us on Linkedin.

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00:29:00.775 --> 00:29:05.110

Tyler Beckett: under Newton industrial solutions, and then we'll see what we can do to help you guys out.

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00:29:06.400 --> 00:29:11.799

Rae Barton: And I think if you go to the next slide, Tyler, there is.

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00:29:11.800 --> 00:29:13.050

Tyler Beckett: Yes! Oh yes.

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00:29:13.050 --> 00:29:24.619

Rae Barton: Looking at those top. 5 bad actors. To make sure to do that. What do you think is the best way for people to identify those top bad actors? Is it normally pretty obvious.

217

00:29:25.456 --> 00:29:38.780

Tyler Beckett: You look in your Cmms systems. So if you have a good Cmms, and if you don't, please reach out to Red

list and either, myself. Red list and we'll get. We'll help get you guys set up with a good

218

00:29:39.100 --> 00:29:51.890

Tyler Beckett: data tracking system so that we can track the failures and figure out what our bad actors are, and figure out where that waste is going, because it's the Pareto principle. 80% of your failures and

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00:29:52.100 --> 00:29:59.749

Tyler Beckett: cost is being caused by 20% of your machines. So yes, look into your Cmms system and

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00:29:59.800 --> 00:30:03.490

Tyler Beckett: look at the most frequent failures. Look at the

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00:30:03.550 --> 00:30:06.320

Tyler Beckett: highest cost out of your maintenance program.

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00:30:06.790 --> 00:30:14.600

Tyler Beckett: Look at the the cost of downtime. If you guys track Oee, look at the top causes of downtime

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00:30:14.680 --> 00:30:18.539

Tyler Beckett: things like that, and that'll help you come up with your top. 5 bad actors.

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00:30:19.130 --> 00:30:19.770

Rae Barton: Perfect.

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00:30:21.430 --> 00:30:27.879

Rae Barton: Okay? And then we've got they can reach out to you. Tyler. Tyler's email is [tyler@newtonins.com.](mailto:tyler@newtonins.com)

226

00:30:28.530 --> 00:30:32.970

Rae Barton: And then I think you also talked about getting the gap analysis right? Tyler.

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00:30:33.566 --> 00:30:46.349

Tyler Beckett: Yeah, yeah. Gap analysis. Really, if you want to start on a lubrication journey or a maintenance journey, it's really important to figure out exactly where you are. It's like starting an exercise program.

228

00:30:46.540 --> 00:30:58.050

Tyler Beckett: Let's say you have a goal to reach a 5Â min mile. Well, currently, you're a 7Â min mile runner. Well, if you don't do it, let's say that. But you don't know

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00:30:58.180 --> 00:31:09.039

Tyler Beckett: how fast you can currently run a mile. Your goal is to get to 5. But you don't know where you're at right now. So you do a test initially to figure out, okay, hey? I'm a 7Â min mile runner.

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00:31:09.120 --> 00:31:12.899

Tyler Beckett: Well, then, that means you don't need to do the type of exercises that

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00:31:13.220 --> 00:31:20.789

Tyler Beckett: are built for a 10 or a 9Â min mile runner. You can start with the ones built for someone who can run a 7Â min mile

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00:31:21.210 --> 00:31:26.236

Tyler Beckett: and just like that. It's the same way for a

233

00:31:27.000 --> 00:31:31.940

Tyler Beckett: a plant improvement program. If you don't know exactly where you're at, you don't want to

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00:31:32.170 --> 00:31:36.430

Tyler Beckett: accidentally start too far down the road because you're gonna be lost. And

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00:31:36.450 --> 00:31:40.890

Tyler Beckett: there's gonna be major gaps left over. But you also don't want to start

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00:31:41.310 --> 00:31:49.699

Tyler Beckett: too low on the progress chain, because you're going to be redoing work that is already present, and already been done.

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00:31:51.360 --> 00:31:51.970

Rae Barton: Thanks.

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00:31:52.360 --> 00:32:11.839

Rae Barton: Well, I appreciate you so much for coming and sharing in your your knowledge, and taking the time to make this presentation for us, Tyler. Thank you so much, and thank you to anyone that joined, and also anyone who is watching with this on demand. We look forward to seeing you at next week's weekly webinar. And

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00:32:12.260 --> 00:32:15.020

Rae Barton: thank you so much, Tyler, and thank you to everyone.

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00:32:15.270 --> 00:32:18.740

Tyler Beckett: Yes, thank you so much, Ray. Thank you very much. To Red List as well.

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00:32:19.120 --> 00:32:22.150

Tyler Beckett: We will. We will catch you guys later.

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00:32:22.570 --> 00:32:23.509

Rae Barton: See you soon.