

CONCRETE PAVING WITH A VOLUMETRIC MIXER



McQuay Construction: At A Glance

MARKET AREA: Oklahoma

STARTED IN BUSINESS: 1977

SERVICES: Concrete Contractor

EQUIPMENT: Cemen Tech C Series





PROJECT OVERVIEW

Zach McQuay:

This project is about 700 acres and there's roughly 265 home sites. There will be around eight miles of concrete roads. We have built all the roads and all the utilities. I've built most of the home pads so far. So we'll do the water line, electric line, the road paving, tree removal, and then obviously the paving.

What makes the paving unique with a volumetric mixer?

Zach McQuay:

So it was two options, it was asphalt and concrete. But we were able to get our numbers down on the concrete, so it was really close to comparable with asphalt numbers. Asphalt here is tough, because there's not an asphalt plant very close to us. With our volumetric trucks, we were able to make a mobile yard here, essentially, so we can do a high production right here on the grounds. Where with asphalt, they're just not able to do that efficiently here. We're efficiently running roughly 350 yards a day on our paving, so we shoot for a thousand yards, two days a week.

How many mixers are you using?

Zach McQuay:

We're just using three mixers on this job. Four would be too many. We want one backing in, we want one at the paver at all times and one backing in, ready, so when he gets out, the other one will get in and go. Our goal is to never have the paver to stop.

Is there anything unique about working with the paver?

Zach McQuay:

Just that, for us, with GOMACO, they had never used a volumetric before. Most guys use ready mix or dump trucks, so we didn't know whether it would work or not. We talked about setting up, trying to pour into a dump truck, just because simple volume to feed the paver. But we were able to play on this road here, essentially, and get it figured out where it would work. So just one truck's dumping, we just run a relay with the trucks, and so far, it's worked out really, really well. We've done about 3000 feet of road in here so far, but we've had bad weather the last few weeks, so it's kind of slowed us down some.



What are the benefits of using a volumetric mixer over the barrel then, for here?

Zach McQuay:

Because the paver never stops. Our mud is very, very consistent. You're able to stockpile 30, 40 feet in front of him, so the paver never has to stop. We were visiting with a guy running the paver there, he paves in Tulsa a lot too, with ready mix trucks. And so they're a little bit faster dumping out, but then they have to stop, so then you have stop and start joints in your paving. So when he started right here this morning, that paver has not stopped since 9:30, not stopped at all. So the benefit is, you get a better quality of paving when never having to stop.

And you always have good concrete?

Zach McQuay:

We have good concrete and our concrete is consistent. We're just running a standard 3500 mix with fiber. We get up there, you can see the fiber coming down on the rock. You can actually see it in the paving up there. But the paving guys really, really love it. The consistency of the mud, it creams up nice. We get nice smooth edges. My finishers love it. You can see there's one guy finishing the concrete.



Was the company who owned the paver surprised at how it works with a volumetric mixer?

Zach McQuay:

Yes, they had never used a volumetric. So the quality of it is better when you can stay consistent. Your mud's consistent and the machine keeps going. If you have to stop, then you run into issues and then you just don't like it as a paver.

So this is something that any volumetric operator or owner could do?

Zach McQuay:

Yeah, essentially it is. You need a way to load your powder here and a way to load your sand and your rock and your water, obviously. But other than that, it's really simple. So there's going to be one guy that loads a powder, there's one guy running a loader, and then a guy that helps manage the water. So there's three guys over there. You do the same thing when it's in your yard, at our home base. So we just take those guys and bring them here and make this, essentially anywhere, our home base.



Do you use ACCU-POUR™ to keep track of your materials?

Zach McQuay:

We do. It's easy to keep up with your yields, to make sure your yield's right. So we actually built the roads ourself, so I know how many yards 1000 foot's supposed to be. And so with ACCU-POUR, you can go in there and monitor your sand, your rock, your water, your powder, to make sure your mix design is staying where it needs to be. Without ACCU-POUR, I don't know how you would do that. So you're able to see on a readout screen of what it is.

Is there anything else that you can think we should know about using the volumetric mixer with the paver, or setup or about fiber and consistency?

Zach McQuay:

Yeah. So we're not running rebar in the road, we're running fiber. And so we run just over a pound of a fiber per yard, so each roll of fiber will get you roughly 40 yards. So we have fiber up there, so when the guys are loading, if the fiber feeders out, it takes me just a few minutes to reload the fiber. But with a paving machine, you really can't put rebar in very efficiently, because the trucks have to back on it. So with fiber and good quality concrete, you're able to do it with fiber and the structure is still good.

