

SHIFT HAPPENS!

By Bryan Thompson



It was spring time in Phoenix, Ronald Reagan was our President. I genuinely figured then I was on my way, really going places!

I knew I was no longer just a journeyman plasterer working for a buck; I really was now part of a bigger thing, "A Bona-Fide Big-Time Plaster Contractor" a real plaster-pumping, money making, contractor. Certainly, I had dreamed of this for a long time. I had financed my first Spray Force plaster pump, just picked it up from the dealer. I had always known ownership of a pump would come and now it was a reality.

I headed to my yard for its first trial run. Using only water, I needed to be sure that I was personally familiar with all of it's' operations. The *water test run* went well. I had taken it through all of the operations' and built the basic confidence

I needed to use this machine! I finished by carefully going through all of my hoses (checking fittings and electrical lines) and prepared my tool boxes and truck for the following day. This was it! I was ready for the pumps' first day of a "*real money making,*" *job experience.*



The first day went well, and thankfully, without a hitch. My plaster crew and I had

successfully scratched a large custom home and the pump and crew would return on the morrow for the brown coat. I've got to say it was fun and very satisfying to have that day go as good as it did, our confidence was up, it was exhilarating for me personally. I very much looked forward to tomorrow in returning and completing the brown coat.



The next day started just like the day before, smooth sailing and my crew was running on all cylinders! We were just about done browning and the last full batch of mud was dumped and now it was in the hose. I was coming to the end of a wall (and in trying to be efficient) I had just sent back my drag guy (Darby-man) along with my hose puller to help the others float and trim the walls that were setting behind us. I knew that I could pull the hose the last 10' of wall and then knock down the sprayed work by myself. It was then that it happened. The nozzle stopped spraying and in that instant, packed! I hit the switch and NOTHING! The switch would not turn off the machine! I admit it I panicked a little; I was not in view of the machine operator (the pump was just around the corner from me). I dropped the nozzle and began to run. As I was running toward the pump and the hody to turn it off my

head was down for just a moment. Then from out of nowhere I was clothes-lined. I had run head first into a plank landing me flat on my back and biting the end of my tongue almost completely off. Dazed and now motionless and in that instant, I heard the hose blow up thudding the adjoining block fence with great force and throwing mud everywhere!

My mouth was now quickly filling with blood and thus dazed; my head was spinning in fast circles. My crew had turned off the pump and was now gathering around me. Questions and great concern about my condition and as to what had just happened came from several of them. Still disorientated and lying there, and now starting to choke and gag on the blood coming from my tongue. A couple of the guys slowly helped me to my feet. Fortunately, it only took me a few minutes to get all my senses back. We then set out on to a discovery as to why my pump packed and to why I could not shut off the pump from the switch on my nozzle.

We had a huge mess on our hands and acutely knew the amount of work involved in the clean-up (if not done at that moment). To make matters worse, we now had plaster setting everywhere. Without doubt I wasn't feeling "the love" or even myself at that moment. At this point, I will save many of the specific details of our work and large amount of time it took to complete our work that day. It would be sufficient to say it wasn't easy and sure wasn't fun. Today, all that remains of that unpleasant incident is a small scar, the war storey, and the lesson in and of the world of plaster pumps.



While the next twenty years of contracting clicked away, and with the fortunate blessing of adding five new plaster pumps to my operations. There would be many more similar, diverse and sundry things that took place while pumping cement products, not only to me but unfortunately to many other of my fellow Contractors and even my own crew members. This prime example and very poignant personal experience is not uncommon in fact, it is rather something of an unfortunate "Paradigm" (this is the pattern or standard) among most if not all of us Plastering Contractors.

You see the Ball and Seat Piston Plaster-Pumps have been around a long time and the modern day versions are almost exclusively powered by diesel power-plants. If you were to experience an unfortunate pack, under this circumstance, you will have little to no warning as to the hose blowing. However, the advantage of modern diesel power-plants is that they are very fuel efficient compared to the old "Wisconsin gas powered Plaster-Pumps which have a lot less torque".

In order to solve the diesel torque problem, many of us have found a little

trick; we run the belt a little loose on the pulley, so that it will slip instead of the motor trying to drive through packs. I have found this to exacerbate manifold packing problems further (if you run the steel balls as opposed to the lighter hard rubber balls). The loose belt promotes a squeezing effect inside. Most of us choose the steel balls because, they last considerably longer but are very heavy and it takes a good deal more pressure to lift them off of the seats of the manifold. Thus creating a precarious situation.

I know with out a doubt that plaster pumps are game changers, in the fact, that they are light years faster, more efficient and overall just more productive then applying any cementitious materials by hand. Today, I am happy to say the varied pump and hose pack related issues are not among the most fulfilling highlights of my many enjoyable and profitable contracting years. I maintained a belief that in the future we would see "A Paradigm Shift" (a significant change) where pumping all fireproofing and plaster products would be safer and even more productive.



Late in 2002, I received notice of Doug Burchfield's (an original and very early pump industry pioneer.. *the founder of Spray Force Mfg. Inc.*) passing. In reverence to his passing I attended his services. What happened next came as something of a surprise. I received a guest (his daughter Ms. Nancy Burchfield) at my office a couple weeks later. In short, I was invited into and accepted a partnership with an Industry Leading World-Wide Plaster-Pump Manufacturer.

Confucius may have said it best 1500 years ago,
"To Know What Is Right And To Not Do It Is The Most Cowardice."

I immediately engaged in and developing a safer controllable pump that allows Smooth delivery of torque and horsepower to the Plaster-Pump running gear without exposing the user-operator to a harrowing and very dangerous experience (related to hose and or

Excalibur Hydra) can now spray finish for the first time ever.



Of course less the uncontrollable torque related problems i.e. the gear box, clutch and pulleys!

Ten Basic Reasons You Should Start Using Hydra Power

1. There is Infinite Control....and no complicated systems of gears, clutches and pulleys.
2. Motion can be transmitted without slack.
3. Fluids used are not subject to breakage and the mechanisms are not subjected to great wear.
4. Fluid can be conveniently located at widely separated points.
5. Hydraulic forces can be conveyed up and down or around corners without loss in efficiency or any complicated mechanisms.
6. Very large forces are controlled by much smaller ones and can even be transmitted through small efficient and well organized lines.
7. Provides smooth, flexible, uniform action without vibration.
8. In case of a pressure overload, (i.e. material hose / manifold packing) an automatic release (by-pass) of pressure happens so that the whole system is protected against mechanical breakdown or strains and catastrophic manpower misfortune.
9. The need for control by hand is minimized or eliminated.
10. Hydraulic power systems are much more economical to operate.

In closing, like history, bent push rods, catastrophic damage and dangerous hose packs are a thing of the past and in our rear view mirror, also I am reminded of an old Chinese Proverb.....

“The best time to plant a tree was twenty years ago...

The Second Best Time Is Now!”

Today, I have become an important part of the plaster pump industry. I enjoy my work here and appreciate the many lessons learned past and present. I choose to believe that there will always be better things that lay ahead then anything that we will leave behind.

