Featured story:

SWITCHES

Written by Max Neil Maximchuk

Working in heavy industry provided me with the means (money) to get a higher education. It also taught me as much as university did. This story is taken from a time after I finished my studies, returning to pay off the last of my university debt and to save for an extended journey I was planning.

In the Reverb Furnace the first job on the rung was slag launderman. In some ways, it was my favourite job on the Reverb. But it was not a job to hold onto for a long time. If you were permanently placed on the Reverb or the Fuming Plant crew, you had to go up the hierarchy. In my father's time there wasn't much movement and you could hold one position for many years. When I was there, things moved much faster. This was good in some ways. You got ahead more quickly, and that meant higher wages as well as leaving behind a job faster that maybe didn't appeal to you so much. It also meant you had less time to learn each job, and there were some occasions when it was important to have more than just superficial knowledge and experience.

There were always 3 shifts a day. The dayshift was 7:30 - 3:30, afternoons 3:30 - 11:30 and graveyard 11:30 - 7:30. We changed the shift every two weeks, just about when you are starting to get used to it. If somebody left or transferred to another department, all the people below that position would move up, filling in the gaps created along the way. That meant I might be moved to the next job up on the ladder but perhaps with the crew on another shift. For me it was a good way to get to know everyone. It's easy to complain about the last shift leaving the worst things for you to deal with when you come on, but sometimes you're on the other end of things, and you might find they aren't exactly what they seem. Especially when you work a double shift on occasion.

Actually I worked a lot of those. It paid time and a half and was like a week's wages for 'only' two full days' work. I was young and had no obligations like taking care of a family so it was a good way to save up for extra money needed during the winter at university or for saving up for my BIG TRIP later on. I once worked 24 hours, two successive overtime shifts, but not as slag launderman. It was as a bricklayer's helper. They were short of men and needed to get one of the furnaces operational fast, so I agreed. The bricklayer knew what to do and I helped him prepare the mortar, break off edges of bricks, handed them over to him, and even sometimes laid a few layers myself. We had to rebuild part of the inside of that furnace and it was pretty warm inside there, not being all that long since the last time it was being used. When it was physically possible to enter and begin restoring that troublesome area, we did.

I only did it once, and that was enough. I had done much harder physical labour before, but 24 hours inside an oven can take a lot out of you, even with an occasional break.

I went through the ranks, soon becoming a 'switcher', or did they call it '3rd operator'? Either way it was still quite low as far as prestige and responsibility went. Besides helping the esteemed tappers prepare the mud and a lot of menial chores around the furnaces, my primary job was to accompany those tappers whenever there was a 'tap'.

When informed by the first operator, usually through a loud incessant buzzer accompanied by a rotating red alarm light, the tapping crew would immediately head for the furnace. Down one level below, the slag trains would already be in place. The idea was to 'tap' the furnace, opening up a hole to drain its molten contents down a launder and into one of the pots connected to a train. When one pot was filled to the desired level, the switch would be thrown and a different pot on a different train would begin to fill. Meanwhile that first train would move to line up the next of 4 pots.

The tapper would get his lance ready, maybe some three or four meters long, and thrust the heavy iron bar with a sharpened edge directly into a small plugged-up hole. It would take a number of hard thrusts and with any luck, the

bar would break through. If not, then a long series of options laid before us, like one person holding the bar in place and another swinging a sledge hammer hard onto the bar's head. If that didn't work, jackhammering was the next step, and a bigger crowd started gathering round until a solution was found.

Eventually, hopefully sooner more than later, there would be a hole into the furnace, and from its own pressure, many tons of hot fiery liquid metal would start shooting through that small fist-sized hole.

The launder guided its journey down into the waiting pot below. The switcher had to have an idea of what was in the furnace but more importantly, he based his decisions on what he saw happening in the pot. There were a couple of little porthole windows enabling him to see what was going into the pot and its reactions. He could see the velocity and the volume building up. You didn't have a computer or calculator. You had to work out how high to fill that pot before switching over to the other train. If you switched too frequently you got everyone angry, including the train drivers who had to keep lining up all the time. If you waited too long, you had a nasty spill on your hands and if you did that more than once, your reputation would get even nastier. No-one wanted to work on the same shift as a bad switcher. It meant many extra hard back-breaking hours jackhammering the external crusts of the magma, trying to clean the track below.

You were trained. A little. Somebody would be with you the first shift or so, and the tappers would look over from time to time, maybe giving you some tips, but they often had their hands full. So you looked and you thought and you tried to apply everything you thought you remembered and understood. When you were still green, it's an anxious time. You watch the force of that molten rock spewing forth. You look at the colours. They tell you a lot about the temperature and the composition. You see where and how and when the crust forms around the edges inside that pot. You get an idea of the density of that liquid. And you see the line around the inside of that pot rising, rising, rising. When? Now? No, give it a little more. It seems to be fine. Remember the fourth pot on the train needs a little more time to later line up the first again. Okay, now.

So you walk over, not running, to the hydraulic switch on the tall column between the two launders leading from that one hole in the furnace. With confidence you push the lever to direct the flow into the new pot and you hear and you feel the hydraulic pressure being released in the process.

You walk over to the dome-like cover on the floor, high above the new pot filling up and peer into the portholes. Yes, it seems to be good. You go back to check to see if the first train has lined up its new pot. Yes, it's there. Not like that one time you forgot to check and.... Well, some things are best not remembered.

Sometimes you get a warning from the first operator, informing you that the next tap will be a bad one. Maybe the mix is not good, perhaps too much sand, maybe the rock had too much of something undesirable. Be prepared. That means lots of mud. Run to the mudhouse, dig deep. No, it's too hard. Need something that contains a little more water, but nothing mushy. Then it won't go beyond the surface when you throw it in. You fill the pots up slowly, and watch the level rise long after the slag stops being poured in. You open a side door next to the porthole and toss in a few big lumps of mud, hoping to bring it down a little with the chemical reaction it causes. Some twenty minutes and many pots later you think you're going to make it and begin to relax a little.

After I had been switcher for many months and proved that I could handle myself well, including in a few tight situations, I had a bit of a run-in with one of my bosses. There is a shift boss for your crew and a foreman for that general area, responsible for all the shiftbosses and the smooth operation of that current shift. When the regular shiftboss is on days off, the first operator takes over on those two days.

This fellow was an older man, due for retirement, if not that year, then probably the next. He was friendly enough, most were, even if some got a little stand-offish when they moved up too high in the ranks. I never had problems with him before, nor he from me. But that one day he got it into his head that he wanted to show us who was boss.

I was peering through one of the portholes and he was doing the same on the other side. "Switch," he called out. "Switch now." I looked at the flow, straight and fast and smooth. Very thin. Bright yellow. Crusts barely forming. I thought if I switched this soon the trainmen will have a lot of unnecessary moving to do. "Switch," he insisted more strongly.

I shrugged and walked over to the column and switched. I went over to the other dome, checking the flow into the new pot. He wasn't too far behind. He was a short and stout man and didn't move fast. He had barely got there and soon yelled out, "Switch." I had been looking carefully. Maybe he saw or knew something I wasn't aware of. Somewhat bewildered, I threw the switch.

This went on for a little while and I started to get frustrated. I showed it by making him repeat himself before I started to move. A few times later I just stood at the switch, refusing to walk over to the porthole.

"What are you doing?" he screamed. "Get over to the window, now."

"What for?" I replied. "You're always telling me when to switch so I'll stay here and switch when you want." This infuriated him and we were soon at a standoff.

Some words were exchanged, particularly around the theme of him being the boss, even if for only two days a week and I had to do what he said. And I said that was what I was doing. Switching when he wanted. Because it was obvious he had no faith in my abilities to competently fulfill my duties.

Not long later, the tap was completed and there were no spills or major incidents. Had I been working in an office I probably would have been severely reprimanded or even fired, but there in the industrial world in those times, we settled our differences in a different way.

He threw off his gloves and told me I was to fight him. This was completely unexpected, even if we both had our tempers flaring somewhat. He was almost triple my age and obviously not in the fittest condition. I looked at him with his fists up, ready to go for it. Then I did something, something I'm not particularly proud of, but it came out, almost like a reflex.

I threw my head back and laughed. It was a full laugh and its spontaneous message was clearly communicated to anyone standing nearby.

He didn't wait for me to finish. He picked up his gloves and retired to the office.

I don't remember what happened next. It's possible I went to the office and apologized but I doubt it. I thought he shouldn't have been throwing around his weight in the first place nor thrown off his gloves, challenging me to fight. In the arrogance of my youth I thought I was in the right and that probably was enough to keep any further thought from entering my perception.

To give him his due, I think he let it go. He could have easily borne a grudge, but I think both of us, plus all the guys working within hearing distance wrote it off to just one of those things that happen. And we got along fine after that. You'd think that there wasn't much alternative, but I've worked in too many offices to realize that other developments could have very easily followed.

The work was hard and difficult in many ways, but I think experiences such as these help keep it in a more romantic form of nostalgia. It often was the case that somebody stepped out of line. It didn't really matter who it was that particular time. It happened to all of us. And before you know it, it was forgotten and we all moved on. Perhaps with those of us more directly involved we'd run the scenario over in our minds several more times and maybe once in a blue moon somebody would break the silence in the lunchroom coming up with, "Remember when...", but basically that was it. And that was one of the main reasons we more or less got along with each other.

AFTERWORD:

Some people went to war to become a man. Fortunately that wasn't an option presented in my youth. One of the roads that helped me was working in the smelter. There were many hard lessons being taught, but if you learned them, you found yourself in good company. Interestingly, it is rare to find such a supportive environment, in the world of cleaner clothes which I now occupy.