

INSTALLATION LESSONS LEARNED



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Article Takeaways:

1. Establish a chain of command
2. Keep suppliers from being caught in the middle
3. Ensure the foundry is on board



What do I want, as a supplier, when it comes to an installation? In short, to walk away from a completed installation leaving a satisfied customer and with that little warm feeling inside knowing that it's a job well done.

All installations obviously have to be completed so can be deemed successful to some degree but there are good and bad installations. With the good ones, you get cooperation between everybody, it all goes as planned and, if you're lucky, the chance for a beer to clear your throat after a long and successful day on site. The bad ones give you something to talk about over several beers many years later.

There are a number of points that I'd humbly suggest can help make the installation process less painful to both the foundry and the supplier.

I'd say that the key to a successful installation is good communication with all the involved parties starting at the beginning when the project exists as a design concept and following all the way through to the final installation stage.

To borrow a military term, a chain of command needs to be established with the foundry placing itself at the head of that chain and, if necessary, creating a temporary team to act as project engineers. Even if the project is of such a size that an external foundry consultancy group is brought in to manage the project, it is my experience that the project will go smoother if the foundry keeps overall control of the project especially when it comes to the installation stage. I've worked closely, and successfully, with other suppliers on many installations and we all want the same result but sometimes the

requirements of suppliers can clash, especially when different installation teams are working in the same area, all needing access to restricted resources such as lifting equipment or even power points. If such a situation arises then the foundry needs to be the ultimate arbitrator.

Further to this that surprising as it may seem, I've found that not all projects always have the 100% support of everybody at the foundry. Some foundries, dare I say it, can have an internal politics issue which we, as an outsider, can be unwittingly be drawn into. It doesn't often happen but when it does it can make the job much harder than it needs to be.

One major molten metal handling installation at a leading foundry, in the late 1990's developed into a nightmare when we found ourselves caught up in an ongoing power struggle between two of the foundry's directors. One of the directors had been the major driving force for improving the molten metal handling but the other clearly didn't want it, preferring to stay with the system they already had. A situation that should have been resolved back at the consultation stage and not left to fester up to the point of installation. The handling system was designed to improve several existing issues the foundry had covering metal treatment, transfer and pouring. However, it did require a significant change to the way that the foundry had been working up to that point. We thought that everybody was on board with the project, having discussed the proposed changes extensively with the foundry at the initial design stage, but when we got on site soon found out otherwise. The foundry management was split into factions and cooperation very much depended on which camp

we were talking to. The installation was only completed by putting in some very long hours and we were glad to leave.

Both directors have long since moved on and we are still a supplier to the foundry and we get along much better with the current management team.

I also accept that we can't always count on having the foundry's workforce on our side. Replacing an obsolete system will improve efficiency and working conditions but this sometimes doesn't go over well with the people who have to use the equipment. At best they may have to learn to do things in a different way and at worst somebody might lose their job.

For example; we installed an overhead monorail system into a foundry where they had been transporting and pouring metal using hand carried crucibles. It was hard physical work and, due to the effort involved the foundry had previously used three teams who were rotated. The new monorail allowed larger amounts of metal to be both transported and poured much more safely and with much

less effort. So much less effort that the foundry then only needed one team to do the work that had required three teams. This didn't make us popular with everybody.

There is also the need for the foundry to allocate realistic time for the installation.

I've overseen several installations at new "greenfield" sites where each supplier can be brought in as and when required but I understand a new greenfield installation usually has the luxury of an extended timescale that a working foundry simply cannot afford.

So we accept that most foundry installations have to fit within limited shutdown periods such as holidays. This can lead to several different projects being scheduled for installation at same time, and often in overlapping areas. With goodwill on all sides and good communications any potential problems can be minimized but the foundry has to be realistic about what can be achieved in the time allocated. It's probably not a good idea for a foundry to decide to wreck out and reline furnaces or to reroute the dust extraction ducting if other installation teams have to work in the same area.

The bottom line is that we all want to get the job done to everyone's satisfaction. The majority of installations go well in no small part to the foundry's own workforce. So I'd like to finish by saying thanks to all those foundry maintenance departments that have played an important part in all our successes.



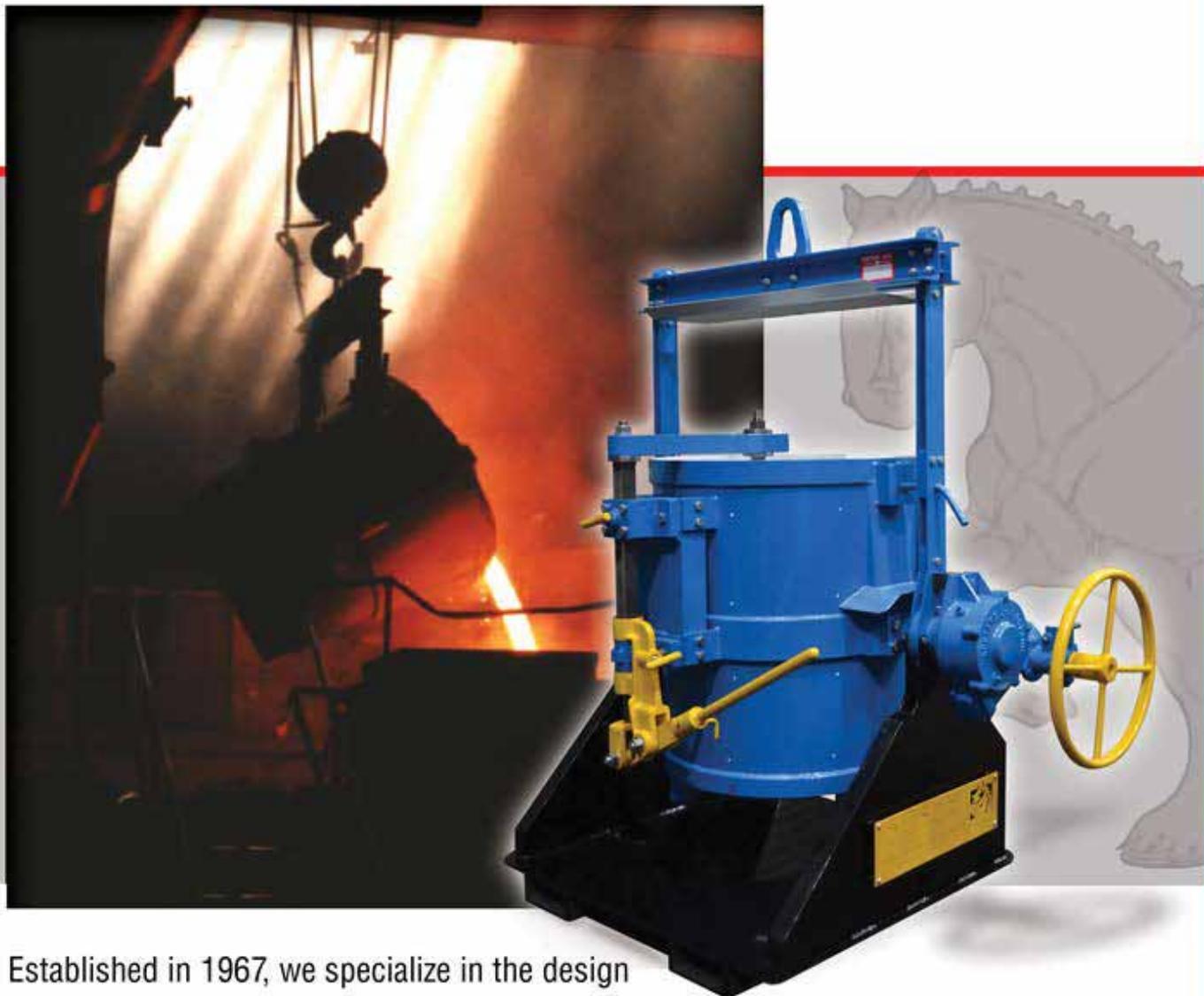
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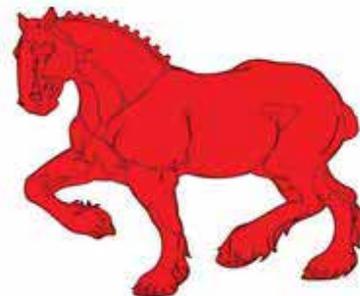
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