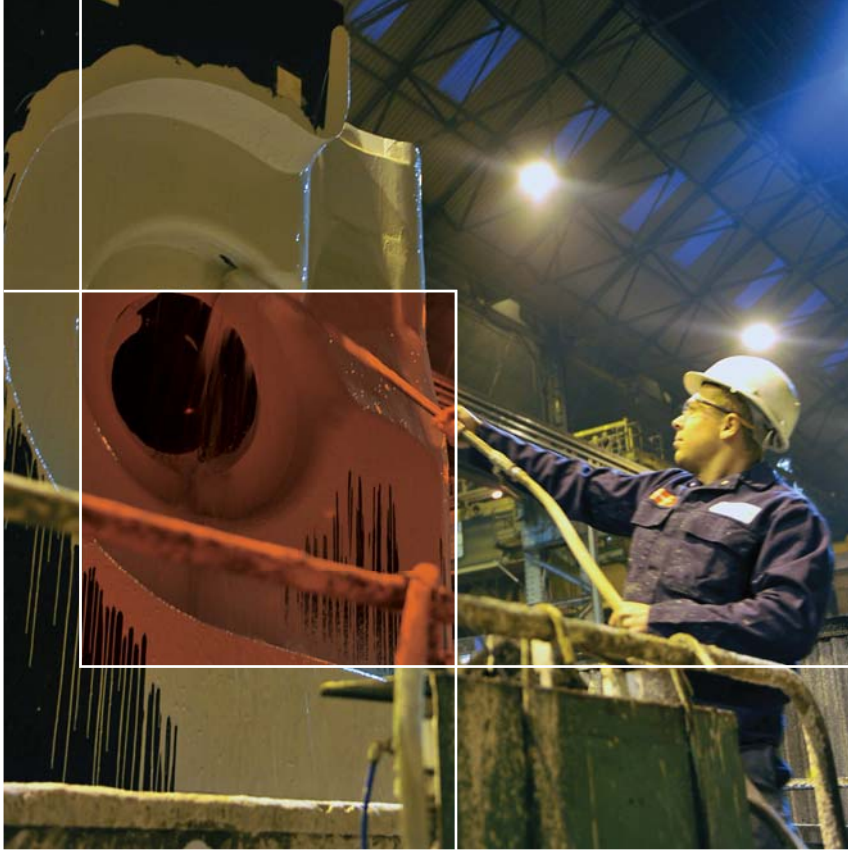


APPRENTICE PROFILE

Guy Pedley – Moulder



Guy's work starts when he gets a wooden pattern from the pattern shop which gives the shape of the casting he'll be making. "We have to set it up in a pit which means laying a bed of sand first. We then have to find out where the runners will go – these are like pipes that the steel travels down into the sand where the casting will take place. The pattern is then placed on top of the bed of sand and rammed with chromite and silica sand. That process can take between 30 minutes and four hours and we try not to stop once we've started," Guy explains.

"We have to add extra things on the mould like test blocks – little square blocks that are cut off to be tested when it's cast; lifting points on to the mould so that we can move the cast when it has cooled down; and chills. These are blocks of steel that we place in the sand to help with solidification. When that's done we remove the pattern, clean it up, sand it down, smooth it, paint it, put tops on and clamp it down to make sure it's secure and can't move. The last thing is to get it ready for casting when we pour hot steel into the job. For that we use a 100T ladle and it can take up to six of these." The casting is left for about two weeks to cool down before Guy takes it out and it moves through other processes elsewhere before coming back to the foundry to be tested.

Moulding is a responsible job that requires skill and knowledge. "You have to be good at reading drawings to make sure you understand where everything goes on the castings so you do it right." Accuracy, good time keeping and working to deadlines are also important.

"I like the fact that it's a manual job. You're not sat down at a computer or writing – you're always up and about, thinking about what's next, always planning ahead. You have to make sure things are timed right."

Guy Pedley joined Sheffield Forgemasters International Ltd as an Advanced Apprentice after GCSEs and is training to be a methods engineer. For this he needs to gain experience as a moulder. Guy works in the foundry which manufactures large steel castings – each weighing up to 600 tonnes – for the power generation, defence and civil nuclear industries. Moulding is an important early part of the production process.

To work as a moulder you need to be physically strong too because there are patterns and heavy steel bars to move. That's one of the attractions of the job for Guy. "I like the fact that it's a manual job. You're not sat down at a computer or writing – you're always up and about, thinking about what's next, always planning ahead. You have to make sure things are timed right: we deal with jobs worth hundreds of thousands and even millions of pounds so everything has to be made right first time."

Guy works mostly as part of a team and reports to a foreman. He enjoys working shifts: afternoons 2.00 – 10.00pm Tuesdays and Wednesdays, 1.00 – 8.00pm Mondays, Thursdays and Fridays; mornings 6.00am – 2.00pm Tuesdays and Wednesdays, 6.00am – 1.00pm Mondays, Thursdays and Fridays. "I like the afternoon shifts as I get to have a lie-in in the morning," he says. "For the morning shift I have to get up at 5.00 which is a bit tiring!"

Guy learnt partly on the job and partly by doing a BTEC in metallurgy through distance learning. "Instead of going to college, I was sent assignments and test papers. The company set aside time each week for me to do the course work which I did in the computer room," Guy says. "I did a lot of research on the internet and found out by asking other people." He is now doing a Higher Apprenticeship, which includes a Level 4 NVQ, an HNC and a Foundation degree, and studies part-time at Staffordshire University. After that he's been offered the chance to do a Masters degree. "There's good training and development and plenty of opportunity to move up the ladder at Sheffield Forgemasters," Guy sums up.

