

which is clearly testament to the work ethic found within the company.

Flexibility and accuracy is integral to generating high-quality results - and this is no easy task. Dyehouse operatives are required to follow precise recipes to tight deadlines - failing this can cause major technical problems.

The process begins with instructions from the yarn or carpet company providing Harrison Gardner with the exact colour and quantity of yarn that it requires. Often dye sample yarns will be produced to ensure the exact shade is replicated. As colour can vary under different lights, Harrison Gardner addresses the issue of inconsistency by implementing a Datacolour International Colour Computer. Once the shade has been approved by its customers, the samples are then scaled into full dyehouse production requirements.

"Knowing how to dye at a large scale is a critical part of the process, and requires a high level of expertise," claims Daniel Harrison. "We can dye from 5 kilo samples to 2000 kilos of the same colour in one process.

Each of the yarns that are dyed follow a specific process, which although similar will differ from yarn to yarn dependent on the type of yarn mix, usage of yarn, finishing process and colour fastness requirements.

Harrison Gardner specialises in two types of dyeing - hank dyeing and space dyeing.

Hank dyeing involves immersing yarns in a large vat of coloured water known as dye-liquor that includes dyestuffs, plus a range of chemicals to

assist in the dyeing process.

The water temperature is then raised to 100°C and is maintained for at least one hour. The incremental warming of the water ensures that the dyestuff exhausts gradually from the dye liquor and binds onto the fibres, dyeing the yarn to the correct shade.

Once the yarn has been dyed, it is usually rinsed with clean water and given hydro extraction to remove any excess water. Finally the yarn is dried on a Neu hank dryer, where the yarn turns on holders so the hank is dried evenly throughout and given a lofty appearance. A bulky appearance is very important to some yarns, in particular those used in carpets.

Space dyeing, on the other hand, refers to the dyeing of yarns purely for the hand-knitting market and involves random dyeing of up to 10 different colours through Harrison Gardner's Texinox equipment.

Sourced from some of the leading dyestuff and chemical companies, Harrison Gardner uses four different dye classes, each depending on the type of yarn. Pre-metallised dyes give the highest fastness and are Harrison Gardner's preferred choice. Level dyeing acid dyes are often required for lighter depth shades to ensure light fastness and maintain level colour.

Acid milling dyes are used for some wool dyeing as they have a strong affinity for wool fibres and are more resistant to washing. However, reactive dyes also have a strong affinity for wool fibres as they bind themselves to the fibre molecules meaning they are ideal for use in yarns requiring



bright colours.

With shade accuracy a major concern for special commissions, Harrison Gardner prides itself on a right-first-time policy encouraging an established network of loyal and satisfied customers.

Customer Hammer Carpets' spokesperson comments: "Harrison Gardner are skilled in all aspects of yarn dyeing and working with them means that we can produce accurate samples for our clients prior to a large order being placed. Very often we need special colours created and we can depend on them to do this."

Another leading company, Carpets of Kidderminster, asserts: "We work directly with Daniel and Jonathan, who have a wealth of dyeing and production expertise and who also keep us up to date with all the jobs they undertake.

"They are always diligent, don't over promise and are honest about what can be achieved. We have been extremely happy with the level of service they have provided which is why we have had such a long-standing relationship with them.'

Supporting the industry is seen as a requisite addition to the already-comprehensive service provided by the company. Last year, Harrison Gardner was actively involved in the nation's campaign for wool, and in November was paid a visit by HRH The Prince of Wales. Jonathan comments: "Promoting wool is key to our industry and the combined efforts of leading wool organisations, industry associations and the textile industry can only help the longevity and success of our business.

Looking to the future, Harrison Gardner endeavours to continue providing an unparalleled service whilst looking to expand into the European market. Daniel Harrison, says: "We proactively look to improve and modify our business. Our flexible approach means we consider all options and avenues in order to increase sales. Your problems are our challenges and you never stop learning in the dyeing game.

"We have begun to focus on marketing ourselves more in order to raise our profile, increase sales and expand more into the European market. We are actively looking to increase our customer base and form new partnerships and relationships which we feel is essential in the challenging market we are currently facing.

Adapting to ensure survival in the midst of a changing market has been integral to the performance of Harrison Gardner. Passion and knowledge work in synergy and continue to position Harrison Gardner amongst the leading dyeing experts in the country. With customer satisfaction at the forefront of its operations, retaining its reputation for high quality yarns supported by a dedicated team of professionals – will inevitably see this business reach many more milestones in the future. W harrison-gardner.co.uk

