

**Anna Ray**  
**Artist in Residence at Forbo Flooring Systems**  
**Art in Manufacturing Season 3**  
**The National Festival of Making**  
**2019**



Portrait by Danny Allison

I have created a series of new works called **offcut** for Art in Manufacturing, inspired by my visits to the Forbo Flooring carpet tile factory in Bamber Bridge. After spending time on the shop floor and familiarising myself with the machinery and processes on both factory sites, I developed a set of proposals relating to the experience. On showing these to the team at Forbo, I was struck that they each, in turn, favoured different concepts. In part, this has led me to work on a series rather than a singular artwork. I enjoy the visual and dynamic contrasts between the pieces that I have created; whether structurally delicate or flamboyant, or having subdued colouration or flashes of vivid colour, set against dark yarn. Within the works there are references to the materials, forms and machinery that I discovered in my time at the factory: Squares of carpet top cloth have been made into beads and threaded onto groupings of yarn in **offcut-tuft**. The hand cut felt rounds that are central to gathered elements in **offcut-cord** are made from Softbac® material used by Forbo in the creation of carpet tiles. Stainless steel washers weigh down the suspended threads in **offcut-ends**, referencing the metal of the tufting machines.

On the factory floor of Forbo's Unit 241, I watched the incredible tufting machines in action, and delighted in the comparison to my sewing machine in the studio, which suddenly seemed very small. Each of the industrial tufting machines at Forbo have hundreds of sewing needles lined up in a row, punching threads into the cloth at an incredible rate and with absolute precision, like a marching army, in unison. When finished, the front of the cloth is covered in loops of thread, in the same or varying sizes, dependent on the instruction sent to the machine. On the back of the cloth the stitched yarn is arranged in parallel rows of running stitches.

The yarn that is threaded into the needles of the tufting machines are gathered from hundreds of cones - held on a creel - onto large metal beams, which are subsequently fitted to the tufting machine. The threads are passed up from the beam, fired manually through plastic tubes that reach above head height and then down to the row of needles. Throughout the factory, threads dance and wriggle free as they unfurl from their cones in preparation for tufting. Once the top cloth has been tufted, it then goes to the next site where the loops are fixed and sealed on the underside with liquid latex which is heated to dry. Probac modified bitumen is then poured over to create a stable backing.

After my introductory tour of Forbo Factory Unit 92, I remarked that the experience was rather like being in a fun house at a fairground. As I walked around the factory I saw one process after another in an ambitious sequence. Grey liquid latex is poured and smoothed over rolls of tufted top cloth like thick paint. There are raised walkways and viewing positions where I could peer in and watch the heating of the latex. The backing cloth is drawn up over high pulleys into a concertina of rounded pleats, to create even tension. A layer of glossy, black Probac modified bitumen is then added to provide a strong base for the tiles.

### **Offcut-tuft**

During my first visit to Forbo, I picked up a pile of tangled, pale grey, voluminous threads from the shop floor, which were the last offcuts of the tufting process. They had been knotted by hand at one end by an operator, in bundles of about one hundred lengths. From the discovery of these threads, I have developed a series of artworks using the same yarn. The Aquafil synthetic crimp yarn changes from a fine, silky appearance when just off the cone, becoming bulky and fluffy after being steamed. In one area of the factory, the mezzanine, there is a library of left-over yarn and three smaller tufting machines. Here I found a container piled high with tufted carpet top cloth in an array of different colours. These were samples created by one of the operators at the factory, which were no longer needed and had been set aside for recycling. I have incorporated these top cloths in the first artwork from this new series, entitled **offcut-tuft**.

### **Offcut-cord**

The designers at Forbo have created a new carpet tile range called Tessera Chroma, which uses a palette of uplifting hues that can be installed in different combinations. The yarn is larger than life and becomes bulky when steamed. My ancestors were Huguenot, silk weavers and fancy trimmings manufacturers in Spitalfields in the 1700s. This new body of work at Forbo is a series of elaborate yarns inspired by traditional Passementerie and the machinery, processes and materials at the factory. **Offcut-cord** resembles the embellishments created for furnishing and clothing from antiquity to the present, from all over the world: From the tents of nomadic tribes to the grand interiors of stately homes. It is a vibrant, celebratory work, fitting for a festival.

### **Offcut-ends**

Changeover is when the threads are heat sealed together to tuft continuously from one colour to the next to produce different coloured top cloth. It is a lovely process to witness as the arrangement of lined up threads, one colour next to another, create hanging, curved forms. Once the threads are bonded, a fine fringing is left at the end, ready to be cut off and discarded. As the different coloured yarns transition, the offcut cloths that are generated have triangular or stepped patterns within the tufted surface. The systematic, linear arrangement of threads in the changeover and tufting process has inspired the third piece in the series, **offcut-ends**. This artwork also refers to a different textile process, the set up of a weaving loom, where a new thread can be tied on by hand if an end happens to snap from strain.

### **Offcut-Sample**

The final work in this series is made from top cloth created for me by one of the operators at Forbo. Ian specialises in making up samples for new carpet tile ranges. He works on a vintage Sample Tuft machine, often tufting two different colours of yarn at once, side by side. The Sample Tuft machine is an atmospheric object - an antique - it has evidently been working well for decades. It has a plaque on one side of it, showing that it was made in Blackburn. As part of the creation of the cloth beads for **offcut-tuft**, I asked Ian if he could create some samples for me using some of the very brightly coloured yarn that was left over in the library. This small wall piece **offcut-sample** is made from what was left of the length that Ian produced for me. The cloth is supported underneath by cardboard yarn cones. The changeover from one colour to the next is visible in the staggered lines as each colour meets.