

JOHNSTON PRAMS

Innovation Voucher Case Study

Introduction

Johnston Prams & Buggies is a family-owned business with over 85 years of experience selling prams and nursery equipment. In 1996 the company began operating as an import and wholesale distribution business, and in recent years it has expanded to include direct online sales as customer shopping trends have started to move away from the traditional high street retailers.

Challenge

The business was working on a strategy for growth which includes new product development. The owners have identified a need for a carry cot / crib mattress which has a breathable fabric to help reduce the risk of sudden infant death syndrome (SIDS), otherwise known as cot death. They came to the college to seek help on designing the new product, including research into SIDS and CO2 rebreathing and suitable mesh liners.

Solution

The College supported Johnston Prams via an InvestNI Innovation Voucher. This support concentrated on two main areas assisting with research and design. The college supported Johnston by researching into SIDS and CO2 rebreathing. Using the direction provided by the research, further research covered suitable mattress materials and mesh lines, insight into sleep cycles and the required safety standards for bedding suitable for babies. The College also helped with the concept development, transforming the sketches provided into a full 3D CAD model, complete with 2D technical drawings required for manufacture, and part and assembly drawings of each component and sub assembly.

Result

The college helped collaborate with Johnston prams proposing that rather than designing a full breathable mattress, it would be more advantageous to design a breathable mesh wedge that lines the perimeter of the cot. Johnston Prams have since engaged with suppliers and InvestNI to determine the most appropriate next steps to get a prototype manufactured.

