

High performance table rubbers,
maintaining the perfect rebound every time



NR Northern
BY HAINSWORTH Rubber

ALL ABOUT NORTHERN RUBBER

Our history dates back to the original vulcanisation and curing process, which has been developed over 150 years. Our cushions use only the best hand-tapped Malaysian rubber, from a natural and refined formula specifically designed for it's rebound ability.

We work with experts, based in Malaysia, to test, produce and develop our products, and make use of their extensive expertise in this area. We have a fully equipped rubber testing laboratory checking each batch.

Our process also sets us apart - our sets are vulcanised/cured separately to the extrusion process, meaning each set of rubber is put into its own mould for curing. This controlled method ensures the shape and density of the rubber, maintaining a perfect rebound every time with no air pockets.

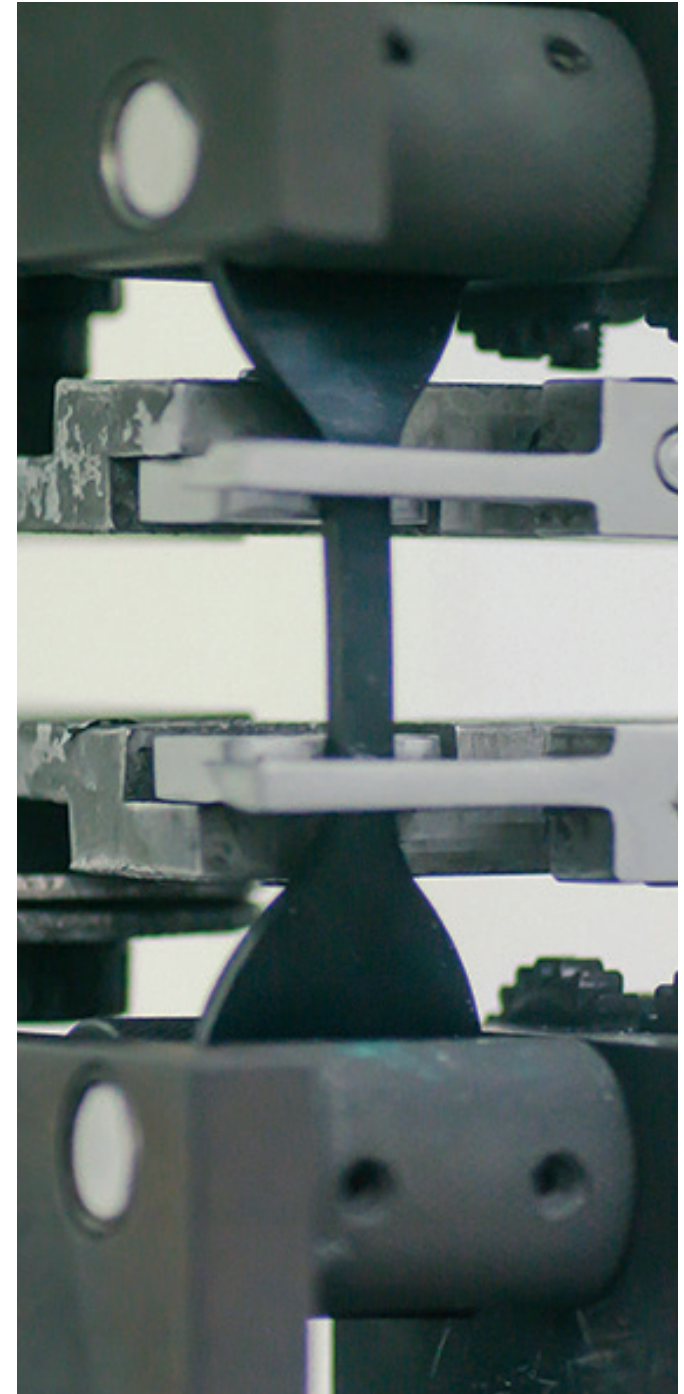
We are so confident in the quality and durability of our product that we offer a 25 year guarantee.

MANUFACTURING IN MALAYSIA

We took the decision to move our manufacture of Northern Rubber to Malaysia to improve the quality of our product, and increase the capacity of our production to meet the growing demand in this market.

Malaysia is responsible for nearly half of all rubber production in the world, it is an excellent location for rubber technology, expertise and manufacturing capability.

Our partners are leading experts in making rubber, and use cutting edge technology to remain leaders in their field.



TECHNICAL EXPERTISE TO IMPROVE YOUR PLAYING EXPERIENCE

Our focus is on quality, authenticity and making a technically excellent product, all to improve your playing experience. The rubber of the cushion can impact the speed and accuracy of the game, so an investment in the best possible cushion strips is an investment in the quality of play.

To guarantee that we meet our high quality standards, our rubbers are subjected to a rigorous testing regime, both to quality check batches and to benchmark us against the competition. We test for 4 main things; Visual Appearance, Tensile Strength, Dimension, and Rebound Resilience.

This testing is all completed at a state of the art rubber test facility, located at our rubber manufacturing partner in Malaysia. Malaysia is one of the world's leading rubber producers, and our team there are leading experts in this field.

VISUAL APPEARANCE

Smart, sharp lines and smooth, clean edges are an important feature of our rubber, and our cushion strips are checked at every batch. We ensure there are no air traps, cracks, foreign bodies or inconsistencies in texture.

Any issues with visual appearance can suggest the cushion isn't made from natural rubber, which could be lower quality and less durable.



TENSILE STRENGTH

A high tensile strength does not directly indicate the performance of a cushion, instead it is the combination of tensile strength and rebound resilience that makes our cushions suitable for end use.

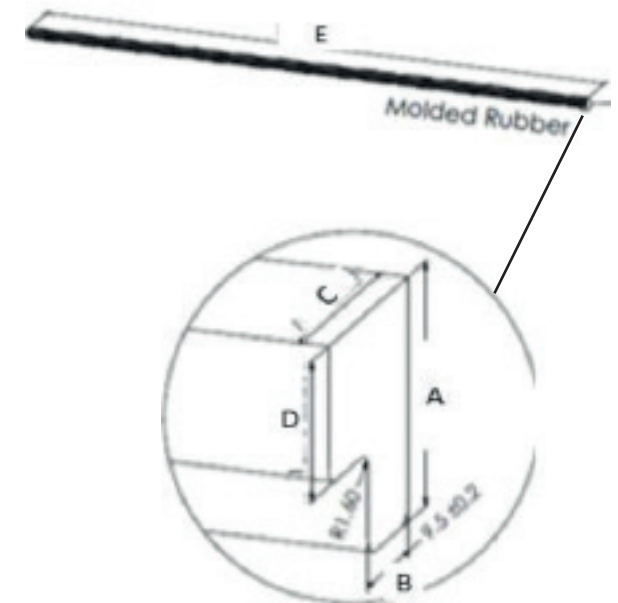
Increasing tensile strength could have a negative impact on rebound resilience and thermal ageing, so our experts find the perfect level to maximise each quality.

We use a combination of international standards (ASTM D412 and D2240) and non-standard test methods to measure these qualities.



DIMENSION

We check the dimensions of the cushion strips at 5 different points, measured in millimetres, to ensure consistency from batch to batch and game to game.



REBOUND RESILIENCE

We check the rebound resilience of our rubber under 3 different conditions. The rebound can change the way you play, impacting how the ball moves around the table. We use a combination of international standards (ASTM D2632 and D573) and non-standard test methods to measure these qualities.

WHEN NEW

At the end of the production process, we check for two things to measure rebound resistance:

- A rebound higher than 70%
- Consistency between batches

This can be impacted by the recipe, the chemicals used and the process of manufacture, so the aim is to control the variables as much as possible.

Our rubbers consistently reach a rebound above 70%, and the difference between this value is 1 percentage point or less between batches.

WHEN AGED

We also put our cushion strips in an oven at 100°C for 72 hours, to replicate the ageing process. This allows us to verify that our rubbers are made to last.

We measure the thickness of the rubber before and after ageing, as well as the rebound resilience percentage, and the change is always minimal - between 1.33-1.35% - which is significantly lower than competitor rubber.

WHEN HEATED

All cushion samples undergo rebound resilience on a heated plate to imitate how some tables are heated in games. We test at 24°C, 30°C, 40°C, 50°C and 70°C.

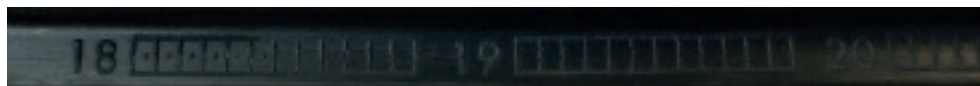
We are looking for a linear increase here, the rubber increases in rebound resilience the higher temperature it is exposed to, which is what our results confirm. If a rubber peaks then drops, it suggests it will degrade quicker when exposed to heat.

THE IMPORTANCE OF AUTHENTICITY

This is a market with many counterfeit products, so we have included some marks of authenticity so you can guarantee you have bought Northern Rubber:

The Yellow Button: Because Northern Rubber is vulcanised, the yellow button sits within the product and cannot wear or peel off. The yellow button signifies authenticity.

The Batch Number: Each rubber carries a unique batch number, for traceability back to the exact production batch.



WHY HAINSWORTH TOPTABLE?

Northern Rubber is part of Hainsworth TopTable, a well respected name in the world of Snooker and Pool. It's our combination of fine wools, research, innovation and dedication to the game that result in superb cloth construction that produces fast, durable, high quality cloths with impeccable accuracy, raw speed and playability.

We have been making leisure cloth since 1960, and have continued to develop and refine our process to ensure the ultimate game for our players.

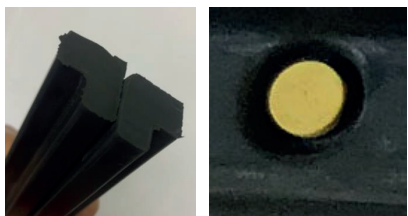
All our cloth is manufactured at our mill in West Yorkshire, and our history spans 240 years. Hainsworth fabric has clothed royalty and the military for full-dress ceremonial occasions and has embellished the furnishings of palaces across the world.

Hainsworth TopTable cloth is not only the players choice, it is the recognised and respected brand all the way through the supply chain. From skilled fitters and tradesmen to the major names and brands, Hainsworth is the undisputed leader for innovative cloth with exceptional customer service.

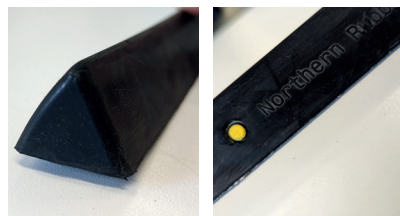
THE RANGE

Depending on the table, we have two types of Northern Rubber cushions you can choose from:

Snooker and Pool Rubber Set



K55 American Pool Rubber Set



For more information or to make a purchase, please contact Jill Heald
jillheald@awhainsworth.co.uk | +44 (0)113 395 5622

