

Turf products supplier wins with supply chain partnership

A Case Study at Rigby Taylor Limited

This Case Study demonstrates the cost savings and environmental benefits that can be achieved by participating in a supply chain partnership with key customers and suppliers. Attendance at Envirowise workshops and a *FastTrack* visit from an Envirowise advisor helped Rigby Taylor Limited, a supplier to turf sports and amenity facilities, to save money while improving its environmental performance. Working with its customers and suppliers, the company has made significant progress in reducing waste and making more efficient use of transport and resources. The benefits to Rigby Taylor of participating in the supply chain initiative include:

- ✓ Total cost savings of over £47 800 in 2004
- ✓ Reduced waste, material and distribution costs
- ✓ Development of innovative products with less environmental impact
- ✓ Greater awareness of the benefits of resource efficiency



Background

Rigby Taylor was one of the first companies to sign up when Manchester United PLC invited 20 of its suppliers to join an Envirowise Retail Supply Chain Partnership Forum¹ in 2003. Rigby Taylor soon discovered the benefits of attending the free training workshops and receiving a free FastTrack visit from an Envirowise advisor. These helped to stimulate ideas and actions in all areas of the company, which have now been cascaded out to companies in its own supply chain. In 2005, Rigby Taylor received a regional Envirowise Award for waste minimisation and an Envirowise Award for Excellence.

Back Door Waste

One of Rigby Taylor's initial actions was to review the back door wastes at its Horwich warehouse. Following discussions with its waste management contractors, uplift frequency was halved through a combination of improved control and manual compaction of waste packaging. These measures, together with improved contract conditions, saved £2 284/year.

Pallet Handling and Control

Rigby Taylor uses a large number of wooden pallets to transport goods to its customers, but tends to 'lose' some when they are left with customers for re-use on-site or to arrange disposal.

The Warehousing and Distribution Manager reviewed pallet use within the warehouse and with suppliers, with the aim of increasing the use of returnable pallets and ensuring pallets were returned by drivers. Involving staff in the development of improved pallet handling procedures proved crucial. To encourage the collection of pallets on back-haul operations, drivers are offered a cash bounty of 50 pence for each pallet returned. To receive payment, drivers have to ask customers to uplift pallets, record all collections and get the number verified on their return to the warehouse.

In the first year of operation, over 1 000 pallets were returned for re-use and around £11 410 was saved with no capital outlay.

¹ See EN442 Retail Therapy 2003: reducing waste through supply chain partnerships.

Transport and Distribution

Most product lines were traditionally routed via the company's warehouses. Aware that reducing waste would improve business efficiency, Rigby Taylor combined a scheduled review of service level indicators (SLIs) to customers with an initiative to eliminate waste in its transport and distribution operations. The results were staggering, with many of the ideas originating in discussions with companies in the supply chain.

A pilot study featured a bagged top dressing, of which 65% of sales and delivery occur during a two-month period. At least 60% of the product was dispatched from the warehouse, with the rest delivered directly by the supplier. Increasing direct deliveries from the supplier to customers eliminated the need for additional routing and handling by Rigby Taylor staff. Within weeks, new procedures and a greater awareness of the potential for efficiency improvements had reduced primary transport by 56%, saving about £13 750/year. Combined with optimised delivery rates and the co-ordination of aggregated deliveries in different areas of the UK, total savings from this initiative were around £34 150/year.

Innovative White Lining Paint

Though a necessary activity for groundsmen, line marking can sometimes be time-consuming, cumbersome and costly. A simple discussion and fledgling idea initiated during an Envirowise workshop attended by Rigby Taylor's paint manufacturer and supplier led to it setting up a research programme to develop an innovative line marking system. The new system, which was launched by Rigby Taylor in May 2005, combines ready-to-use white marking paint and a multi-purpose spray marking machine.

It takes approximately one 10-litre carton of the new paint to mark out three football pitches, compared with approximately nine 25-kg bags of line marking powder. The concentrated paint does not need pre-mixing by groundsmen, leading to significant water savings. A football pitch is typically lined 30 times in a season and thus uses about 300 litres/year of water with traditional marking paint. A local authority responsible for 100 pitches could thus save around 30 000 litres/year of water with the new paint. Users also benefit from less manual handling and downtime due to no mixing, rapid drying time and ergonomic packaging.

One local authority estimates that it takes around half the time to mark its football pitches with the new



product, freeing up staff for other tasks. In addition, overmarking is less frequent and a smaller vehicle can be allocated to the job because there is no need to carry water tanks and the applicator is more compact.

The new packaging is made from 55% recycled material. The outer case of the 'bag-in-the-box' design can be segregated and recycled. Inside, the carton is a strong plastic bag with a retractable spout. Almost every drop can be transferred from the bag, which can be disposed of as general waste. Improved storage is also an advantage. For example, one pallet holds 72 10-litre cartons - enough to mark around 240 standard-size football pitches. The same job would require about 16 pallet loads of traditional powder paint.

It is estimated that a local authority operating 100 football pitches could typically reduce its line marking costs by 25 - 50% using Rigby Taylor's new line marking system compared with traditional line marking practices.

More Environmentally Friendly Products

Improved product development also led to the launch in June 2005 of a new fungicide whose active ingredient and novel formulation mean that much less needs to be applied. For example, treatment of the greens on an 18-hole golf course requires 8 litres of the new fungicide, compared with 20 - 30 litres of a traditional product.

Grass Growing, Mowing and Composting

Groundsmen and green-keepers face the challenge of rising waste disposal costs and labour costs associated with frequent mowing and maintenance. Rigby Taylor is collaborating on research into the growth profiles of different grass varieties used in sports facilities. This research will examine the potential and cost-effectiveness of optimising grounds management to reduce the frequency of mowing and the volume of grass clippings sent to landfill. Another possibility under consideration is the collection of grass clippings for composting at a central facility.

Cost Benefits

The success of the supply chain partnership is demonstrated by the cost savings made by Rigby Taylor, which totalled £47 844 in 2004 (see Table 1). These savings required no capital investment - just staff commitment, management support and supplier involvement.

Environmental Benefits

The various initiatives offer improved environmental performance through:

- reduced waste, eg 1 000 pallets or 32 tonnes of wood in 2004;



- reduced energy consumption, eg optimised transport and distribution of one product reduced haulage distances by 17 700 km, avoiding 16.8 tonnes of carbon dioxide emissions;
- reduced water use when applying Rigby Taylor's new line marking paint.

Future Plans

Many of the initiatives implemented since 2003 are on-going and will continue to reap cost and environmental benefits for Rigby Taylor for many years. The company is committed to building on its relationships with suppliers and has already identified the following areas for action:

- extension of the direct supplier-to-customer delivery concept via other products, suppliers and transport companies;
- regular reviews to identify further sources of waste and to reduce these where possible;
- continued evaluation of the packaging of white lining products to minimise distribution and disposal costs.

Table 1 Cost savings

Item	Cost savings (£/year)
Re-use of pallets	11 410
Rationalisation of waste management contract at Horwich depot	2 284
Optimised distribution:	
Direct deliveries from supplier to customer	34 150
Co-ordination of aggregated deliveries	
Total	47 844

Rigby Taylor Limited

Rigby Taylor Limited provides a one-stop-shop for grounds maintenance and weed control products for the sports turf, landscaping and amenity market including grass seed, fertilisers, pesticides, white lining materials, top dressings, growing media, and speciality plant and soil conditioners. Customers include professional green-keepers, groundsmen and landscape managers. The company supplies all current Premiership football clubs and many leading Scottish football clubs. It has 100 employees and an annual turnover of around £17 million.



Comments from Rigby Taylor Limited

Rigby Taylor is a company built on partnerships. Our job with our customers and suppliers is to find solutions to problems. Envirowise and the Supply Chain Partnership Project have given us the confidence to be open with our suppliers. Together, our level of service has improved and we have proved that our customers have benefited from our learning experience. Envirowise has been a real eye-opener. We were doing things, but not in a systematic way and not for maximum benefit to the business or the environment. Rigby Taylor has invested in commitment, our transport contractor has invested in hardware and our supplier has invested in our future partnership.



“ Envirowise and the Supply Chain Partnership Project have given us the confidence to be open with our suppliers. ”

Mr A Robinson,
Managing Director

Andrew Robinson of Rigby Taylor and Clive Snell of Manchester United PLC presented with an Envirowise Award for Excellence by television presenter Adrian Chiles.

Host Company:

Rigby Taylor Limited
Rigby Taylor House,
Crown Lane,
Horwich,
Bolton BL6 5HP



Useful publications from Envirowise

(EN284) - *FastTrack visits from Envirowise*

(GG362) - *Practical tools to help retailers manage a supply chain partnership*

(EN442) - *Retail Therapy 2003: reducing waste through supply chain partnerships*



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Envirowise - Practical Environmental Advice for Business - is a Government programme that offers free, independent and practical advice to UK businesses to reduce waste at source and increase profits. It is managed by Momena, an operating division of AEA Technology plc, and Technology Transfer and Innovation Ltd. Envirowise is funded across the UK by the DTI and Defra and the Business Resource Efficiency and Waste (BREW) Programme in England, the Scottish Executive in Scotland and the Materials Action Programme (MAP) in Wales. This publication was prepared with assistance from Enviromentor Ltd.



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