

results of which became available from the mid decade. Platt Brothers (Sales) Limited was then able to offer for cotton two entirely new designs of Ringframe, a new model of Comber and enhanced features in most of the other machines comprising the cotton spinning range. For the woollen system it was able to offer two new models of Ringframe, higher performance Feeders for the Cards and an improved model of card Condenser. Tweedales & Smalley had developed an entirely new line of Blowroom Machinery and a novel system for spinning cotton yarns direct from the Drawframe sliver. Prince-Smith & Stells had accomplished a general up-grading of the specifications for its worsted machines and had perfected the revolutionary Raper Autoleveller and Ambler Superdraft systems which were the foundation of the new Bradford System of worsted preparation and spinning. Taylor Wordsworth had introduced new models of machines, with an extended range of uses, for the earlier phases of the worsted process.

In those cases where the development of new machines would have proved too expensive and too prolonged the alternative step was taken to acquire, either outright or under licence to manufacture, models more advanced than those the group possessed. This policy led to the purchase of the Josephy Company of Linz, in Austria, which company's woollen Cards were enjoying a healthy market success. The manufacture of the entire range of Josephy products, along with key members of its technical staff, were transplanted in Oldham. An Agreement was concluded with the Lummus Machine Company, in the USA, to manufacture its range of saw ginning machinery. The Platt Saw Gin had fallen well behind the current specification for these machines because for some years the Platt market for ginning machines had been in those parts of the world where the Roller Gin was needed. However, in some of those parts American type cottons were now being grown and the market there had altered to one for Saw Gins and the, recently developed, allied pre-cleaning machinery which had followed on the advent of the mechanical harvesting of the cotton pods in the USA. The latest Lummus Bale Press was also manufactured under the Agreement. Every opportunity was taken to conclude agreements with inventors, based outside the group, for member companies of the group to manufacture any worthwhile machine or device arising from their inventions and, even, advance the development of such if this became necessary. A pertinent example of this type of agreement was the one concerning a Twister/Cabler machine which condensed the sequential processes of two machines into that of one machine. The policy of acquisition was, moreover, extended to avail the group of an even wider range of product machines. A new company – Parks Cramer (Great Britain) Limited – in which TMM had the controlling interest was formed at Oldham, to

manufacture, to the designs of the (American) Parks Cramer Company, mobile automatic cleaning devices for spinning machines and when the (Swiss held) patents for the pneumatic underclearer for spinning machines expired, Parks Cramer (GB) undertook the manufacture of this device too. In due course, that company added to its range of products a system for controlling the atmosphere of the mills' spinning rooms. Entry into the field of textile dyeing and bleaching machinery was obtained through Platt Brothers (Holdings) purchase of the controlling interest in The Longclose Engineering Company Limited, at Leeds, which soon after acquisition moved into a brand new factory. Yet another company was formed – Textile Mouldings Limited – in conjunction with J & P Coats Limited, Eadie Brothers & Company Limited and Cook & Company to exploit the J & P Coats patents on nylon travellers. The manufacturing plant was housed on the premises of Howard & Bullough at Accrington. (The 'traveller', also made in steel and brass, is the device which rotates on the spinning or doubling ring to aid the twisting of the yarn and its winding on the bobbins). It has already been noted that the traffic in licensing agreements was not all one way. In addition to the grant of licences for other concerns to make complete machines of the group companies' designs, royalty bearing licences were granted to direct competitors to make and use features of the machines protected by patents held by the companies of the group. Especially rewarding returns accrued from licences issued on a new form of spinning ring which was the product of a very fundamental course of research conducted at TMM(R).

Thus, during the nineteen-fifties a very satisfactory upgrading and extension of the product lines of the Platt Brothers (Holdings) group of textile machinery making companies had been achieved. But the rate of technological discovery and understanding of the textile processes, which had become so rapid – due to the work of TMM(R) and the like institutions operated by the competitors – coupled with the ever growing plethora of materials, equipment and techniques issuing from the domains of mechanical and electrical engineering, meant the need to develop the next generation of product machines had become unrelenting. Exhibitions were still an effective way to measure a company's standing in the market place (though Grand Prix, medals and diplomas were no longer awarded) and these were now mounted on a fixed cycle which imposed a strict timetable. The exhibitions organised by the ITMA body (Internationale Textilmaschinen – Ausstellung), occurring every four years, were, by far, the most important and acted as the prime pace setter for the development programmes. Notwithstanding the soundness of its textile machinery making business Platt Brothers (Holdings) deemed it prudent to extend its interest in the manufacture