

3 1952-1960 ZULU COUNTRY

THE NAME TUGELA is Zulu for 'frightening' or 'startling one.' At most times the Tugela River is relatively placid, but with little warning floods can transform it into the fastest-flowing watercourse in South Africa, a fierce torrent strong enough to destroy buildings and wash livestock all the way to the sea. The river's history has a ferocity to match. In 1838 a settler commando led by Robert Biggar crossed the Tugela to avenge the murder of Biggar's brother and was destroyed by a Zulu impi. One of the few survivors was Dick King, whose later exploits earned him the title 'Saviour of Natal.'

In 1856 the armies of Cetshwayo and Mbulazi, ambitious sons of the Zulu king Mpande, met in battle on the Tugela's banks to decide who should be the king's heir. Mbulazi was defeated and he and thousands of his men were slaughtered. Ever since, a local stream has been known as Mathambo, the river of bones. Cetshwayo became king of the Zulu in 1873 and fought to defend his land against Boers to the north and British to the south. In December 1878 he was summoned to a drift on the Tugela to be informed of the findings of a British boundary commission, and was given a 30-day ultimatum to accept them.

Cetshwayo refused, and in January 1879 British forces invaded Zululand by way of the same drift, only to be annihilated at Isandhlwana. A second invasion followed, and in the next year the king was defeated at Ulundi, but there were troubles for another seven years before Zululand was annexed to Natal and the Tugela River was fixed as its southern boundary. After the South African War whites were allowed to take up farms in Zululand, only to fall foul of the Bambatha Rebellion of 1906. Again there was fierce fighting, and once more the Tugela's stream ran red with blood.

The Tugela River, historic boundary between Zululand and the rest of Natal.

Since the Bambatha uprising the Zulu have been at peace, but when S A Pulp moved into the area there was still a frontier feeling about the Tugela, even though the surrounding countryside was being farmed with sugar cane and cattle. Zululand's links with the south were a dirt road that crossed the river by a narrow bridge, and near it a rail bridge carrying the main (and only) line to Durban. The bridges were 15 kilometres from the Tugela's mouth but less than six from the drift where the Zulu War had begun, and they adjoined the farms bought for S A Pulp's new mill. The nearest towns were Eshowe to the north and Stanger to the south, neither of them far as crows flew but both difficult to reach because of atrocious roads.

Opposite the mill site on the Tugela's south bank was a small Indian settlement with several stores and a wayside hotel, the only accommodation for visitors in the whole district apart from the two farmhouses on S A Pulp's properties, Sisalana and Lot 25. Sisalana had been given its name soon after the Bambatha Rebellion, when a settler had been granted the land on special terms provided he used it to pioneer sisal cultivation. The farmhouse was occupied by the Tugela project's first employee, Ivan Pepper, and his wife Ione. Pepper had earlier managed a Zululand sawmill and was to double as caretaker and the company's link with local farmers.

The Peppers had moved in during May 1951 and were soon followed by the first construction men, who camped at the farmhouse on Lot 25. The first task was to level sites for single quarters overlooking the Tugela and for the mill itself, two kilometres away and on the inside of a river bend. When work began it seemed that the whole district was there to watch. Many were seeing bulldozers for the first time. The contractors' work was not made easier by the presence of hundreds of snakes which thrived in the hot, humid climate. The snakes included several poisonous species so the contractors took no chances and killed all they found — earning protests from local sugar farmers who relied on snakes to keep down cane rats.

The Walmsleys paper machine was already in storage near the mill site, still in its packing cases. Pulping digesters, filters, beaters, calenders and all the other machines needed for the project had been ordered and were being manufactured, many of them by South African companies. In 1952 a railway spur was constructed to link the mill site with the main line at Mandeni (*sic*) Halt, close to a Tugela tributary named Mandini in honour of the mundi trees which lined its banks. The weather was hot and wet, so contractors' men normally dressed in shorts and gumboots but nothing else except perhaps a wide-brimmed hat.

Another early project was a water pumping station built above the gorge crossed by the rail bridge. In that position it looked rather like a ship, complete with a deck rail edging an observation platform, so



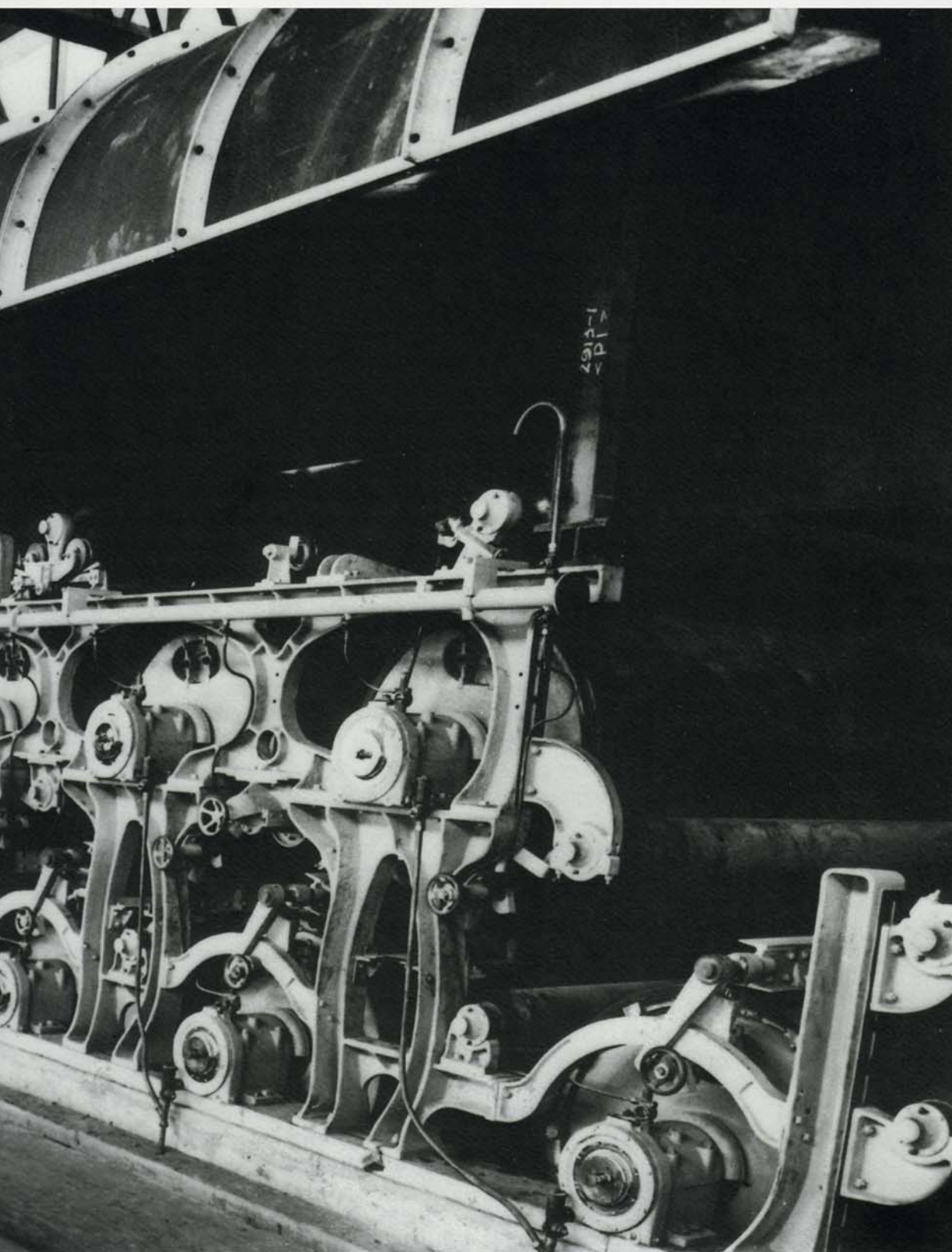
Tugela mill under construction, photographed in 1952.

The drying section of Tugela's No 1 machine (overleaf).

was soon nicknamed 'The Queen Mary.' Water was to be pumped from the river to a settling tank and then to a reservoir feeding the mill, well above the river's level. At the same time, contractors were building houses for S A Pulp employees, scattering them over three hillsides which were blandly labelled Hills 1, 2 and 3. Accommodation at the site was so scarce that as soon as a house was roofed, contractors' men moved in, even when there was no flooring and water had not been connected.

Most of the whites working for the contractors were young bachelors from the Durban area, but with them came many continental immigrants, some of whom spoke no English. All had been attracted by high wages. There were also large numbers of blacks, nearly half of them Shangaan from Mozambique who had worked at local sugar mills or on Witwatersrand gold mines, so were used to working with artisans. Zulu¹ were the next largest group, and there were also Pondo and Swazi. Most Indians² on the project had earlier worked at the sawmill once managed by Ivan Pepper. According to Tugela





tradition, an Indian recruit introduced to 'Mr Pepper' wondered if he would also have the pleasure of meeting 'Mr Pulp.'

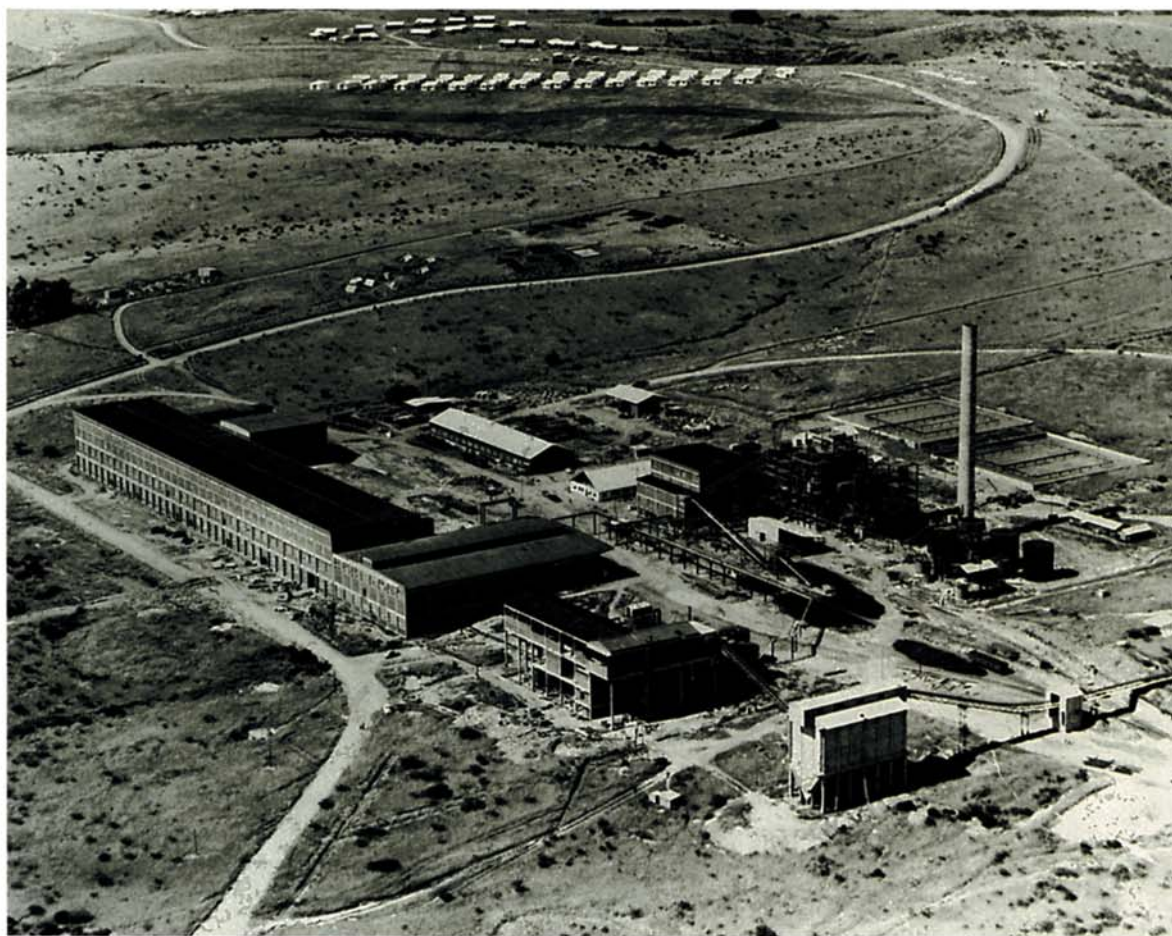
Work continued twelve hours a day, seven days a week, but men still made time to visit the little Indian hotel across the river, reached by a row-boat ferry for a charge of one penny or for a 'tickie' if the river was in flood. The ferry had been laid on by Indian shopkeepers to attract customers and raise funds for a mosque. It was run by a black boatman named Pono who wore a money satchel round his neck and stopped work at sunset. Anyone wanting to return from the hotel after dark faced an eight kilometre walk by way of the road bridge or otherwise had to wade or swim. Many chose the direct route, even though it was known that there were crocodiles, and one man was washed away and never seen again.

The hotel became an institution, and was especially popular on Thursdays when the contractors' men were paid. One Thursday evening an electrician named Gordon Sheriff arrived at the hotel wearing a borrowed Scout hat and a home-made brass star and announced he was Sheriff of Red Dog County. From then on everyone knew the hotel as the Red Dog, while a trip over the Tugela was described as 'going across the Jordan.' At times the Red Dog became a little too exciting and fights were frequent, but the only other watering hole was a shebeen in the single quarters.

The contractors toiled for a year, and step by step the mill took shape. There were interruptions — early one morning a black labourer was found hanged from scaffolding, and on another day a tower crane collapsed — but the construction teams kept to their schedules. As mill machinery arrived, S A Pulp men were sent from Enstra to supervise installation. Among the first were Johnny Holmes, previously Enstra's works secretary, who was appointed Tugela's mill manager, Chris Myburgh who was to be production manager, Don Kilgour as mill engineer, and Wally Lake as assistant engineer.³ All found that they had to work as hard as the contractors. One of Johnny Holmes's chief duties was to entertain visiting VIPs.

The visitors included various S A Pulp directors, especially Tommy Stratten, John Henderson and Whitmore Richards, who was no stranger to Zululand as he had farmed there before joining Union Corporation. On two occasions P M Anderson travelled to the mill though he was a dying man, a result of miner's phthisis. Then Johnny Holmes was told to prepare for Lord Bracken, formerly minister of information in Winston Churchill's war cabinet (as Brendan Bracken). Since 1945 Bracken had been chairman of Union Corporation, based in London, and liked to visit South Africa every year.

An elaborate lunch was laid on at the mess attached to the single quarters, though to Whitmore Richards's embarrassment the caterers decorated the table with a bunch of spring onions arranged in a



Tugela mill at the time of commissioning, 1954.

beermug. Also on the table was an unlabelled gin bottle which normally held iced water; so when Bracken asked Holmes to add water to his gin and tonic, Holmes reached for the bottle and topped up his glass. On this occasion the bottle contained neat gin. When Bracken took a sip he nearly choked and his hosts were horrified, but he soon recovered and for two hours related tales of the war.

More Enstra men were arriving, and with them their families. The little mill village was now known as Mandini after the stream that ran between its hills. Children were bussed to school and housewives shopped at a local general dealers' or made monthly expeditions to Eshowe or Stanger. The Red Dog apart, social life centred on a Saturday-night film show at the mess, almost the only occasion when Mandini's women could dress up. There were rare dances and a Christmas party for the children, and the women formed their own club and started a lending library.

At the mill, assembly teams were erecting the paper machine, pulp digesters and all the rest of the equipment. The digesters had been the bulkiest items delivered to the mill, each one transported by rail.

Already the railways were bringing in supplies of pine and eucalyptus, the pine from government plantations in Zululand and northern Natal and the eucalyptus from private growers. Elsewhere in the world kraft mills relied exclusively on softwoods except in Australia where they pulped eucalyptus. Tugela was to be the first mill where the two were used together — a concept suggested by Oury Hisey.

During 1953 John Henderson had visited Australia to learn something about eucalyptus kraft. The two leading companies, APM (Australian Paper Makers) and APPM (Australian Pulp and Paper Mills) offered all the help they could — on an informal basis — and several more Sappi men visited Australia during the next year. Among them was Bob Burns, one of the Scots papermakers who had arrived at Enstra in 1938 and was now to run the Tugela machine. S A Pulp's chemists experimented with various mixes of pine and eucalyptus and suggested that they should be used in a ratio of seven parts softwood to three parts hard.

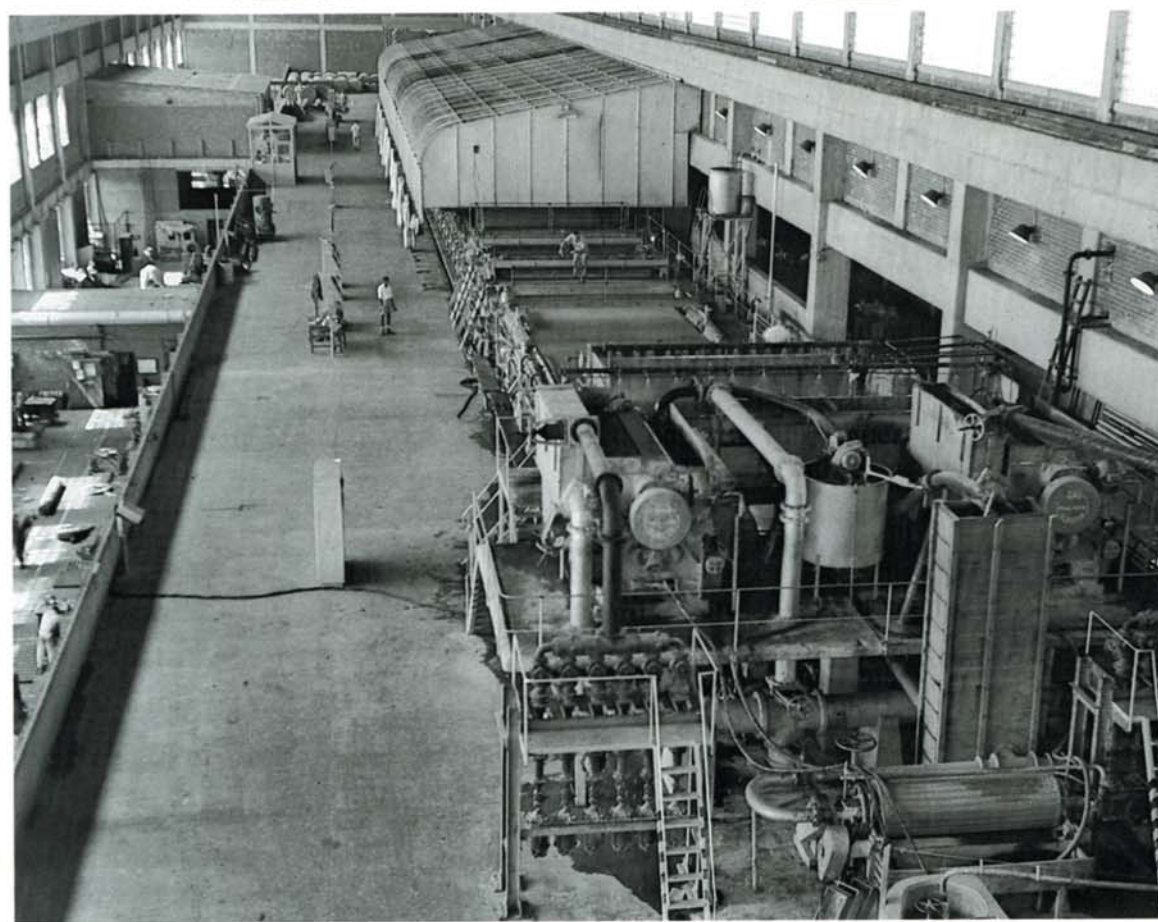
Tugela's first pulp was produced in May 1954, and on June 16 the paper machine was commissioned and made its first kraft fluting. Commercial production was to start in August and it was expected that the Tugela operation would eventually produce 100 tons of paper per day — the same as the combined output of the four machines at Enstra. The mill's staff celebrated with a raucous party in the machine house, built twice as big as needed to allow room for expansion; and to make sure they were not left out, the Mandini women organised a tea party. It was exactly three years since the contractors' bulldozers had begun clearing the site.

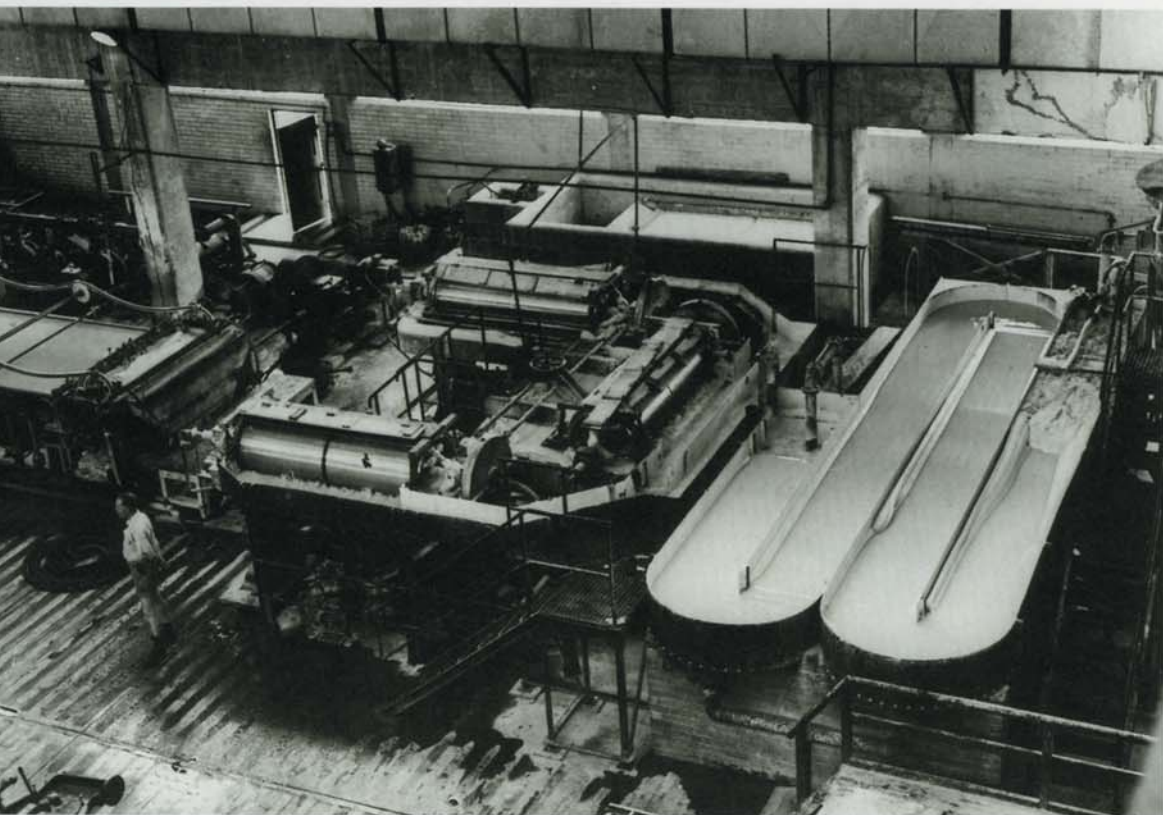
The Open Market

P M ANDERSON died during November 1954 and Tommy Stratten succeeded him, both as Union Corporation's managing director and as chairman of Sappi. At the same time Whitmore Richards was appointed Sappi's deputy chairman. The two men were still together, nearly twenty years after working hard to bring the company into being. Other members of Sappi's board included Major Colin Frye, who had been a director since 1936, J D White of Union Corporation who had joined in 1945, two representatives of Wiggins Teape and one of the Howard Smith company, and finally John Henderson who remained general manager and had been appointed a director earlier in the year.

Tommy Stratten (left) and P M Anderson.

Tugela's No 1 machine producing kraft packaging papers.





Anderson's death left a vacancy on the board and this was filled by Moore O'Hara, who had joined S A Pulp as commercial manager during 1953.⁴ Before that O'Hara had spent 26 years in Union Corporation's secretarial department and had been in touch with S A Pulp from its inception. Indeed, he had frequently attended board meetings as alternate to one or other of the directors. Tommy Stratton had asked him to join S A Pulp to shake up the sales department ready for the lifting of price controls, which would be welcome, and the easing of import restrictions, which would be less so.

O'Hara moved into S A Pulp's head office and quickly asserted his authority over the sales department, which was in another building. Sales records were written up in ledgers which made it difficult to keep track of developments. O'Hara insisted that the whole system should be transferred to a card index, and kept the sales staff working until midnight for two weeks. He also brought in new staff, notably Bob Garden who had spent several years with him at Union Corporation. On O'Hara's urging, Garden had studied for the international CIS (Chartered Institute of Secretaries) and CWA (Cost and Works Accountants) qualifications and had come first in the world in both.

The sales department had been dealing with the paper supply houses for years and also with many of the larger printers. Now they were in contact with packaging converters as well, trying to interest them in buying kraft from Tugela. In the past, most selling had been done over the telephone, but O'Hara said it was better to deal with customers face to face. Setting an example, both he and John Henderson made a number of calls. They wanted to hear what customers wanted and what complaints they had about S A Pulp's products and service. Once that information was collected, O'Hara passed it on to the mills and put pressure on those in charge to improve matters.

Not long before, the company had opened a sales office in Durban to help find new customers for paper produced at Enstra. Under O'Hara, similar offices were opened in Cape Town and Port Elizabeth. For years S A Pulp's customers had been allowed only a limited proportion of its output, but the increased capacity at Enstra meant that much more was available. To attract fresh interest Enstra experimented with new types of paper, but response from customers was disappointing. To use the mill's capacity the company accepted orders for low-grade papers that would normally have been omitted from its range. Even then there were complaints.

Much of the trouble lay in Enstra's finishing department, which

The wet end of Enstra's No 4 machine.

On the super-calender at Enstra.

was responsible for checking quality. The sorting house now employed 160 women who checked paper prior to despatch and labelled it ready for customers. In normal circumstances mistakes were rare, but for a considerable period quantities of paper were mislabelled in such a way that expensive products went out disguised as cheap ones. The mistakes looked deliberate but the culprit was never discovered. Of the paper, the cheaper grades were returned by aggrieved customers and caused havoc in the mill's bookkeeping system, but the expensive grades were never seen again so were probably resold.

In spite of these lapses, morale at Enstra had never been higher. The mill was well managed, and all knew what was expected of them. The pulp and chemical sections were settling down and their new equipment was effective. In the paper section, No 3 machine was busy making duplicating paper — suddenly an important product — and No 4 machine was again turning out cheque paper with watermarks and a chemical ingredient that showed up attempts to tamper with it. All other grades of paper were produced on Nos 1 and 2 machines. The mood at the mill was caught in a duplicated house magazine titled *Huisorrel*, edited by Grant Robertson of the accounts staff. *Huisorrel* means 'house organ' and Robertson ran a competition to find a more elegant name, but none was forthcoming.

All told, S A Pulp now employed more than 4 000 people, two-thirds of them at Enstra. In earlier days the mill's black workers had been recruited from local townships, but after the expansion the company had to recruit extra labour from Transkei and Swaziland. By arrangement with East Geduld mine these men were housed in a section of the mine's No 1 hostel. At Tugela, most black workers were accommodated in a hostel adjoining the mill, though some had families and lived in married quarters. Many had arrived at Tugela during the construction period to work with contractors and had liked the mill so much that they had agreed to stay on.

Before going ahead with the Tugela project S A Pulp had asked the government for an assurance that price control would soon be lifted. This had been done in 1954, and for the first time in ten years the company could charge what the market would bear. At the same time, import restrictions were relaxed, and supply houses and others took advantage by buying in quantities of bargain paper that hurt S A Pulp sales. Profits slumped, and there was a danger that cheap imports might run the company out of business. S A Pulp's directors had no desire to take chances so after careful deliberation and with much regret announced that they were unable to declare a final dividend for 1954.

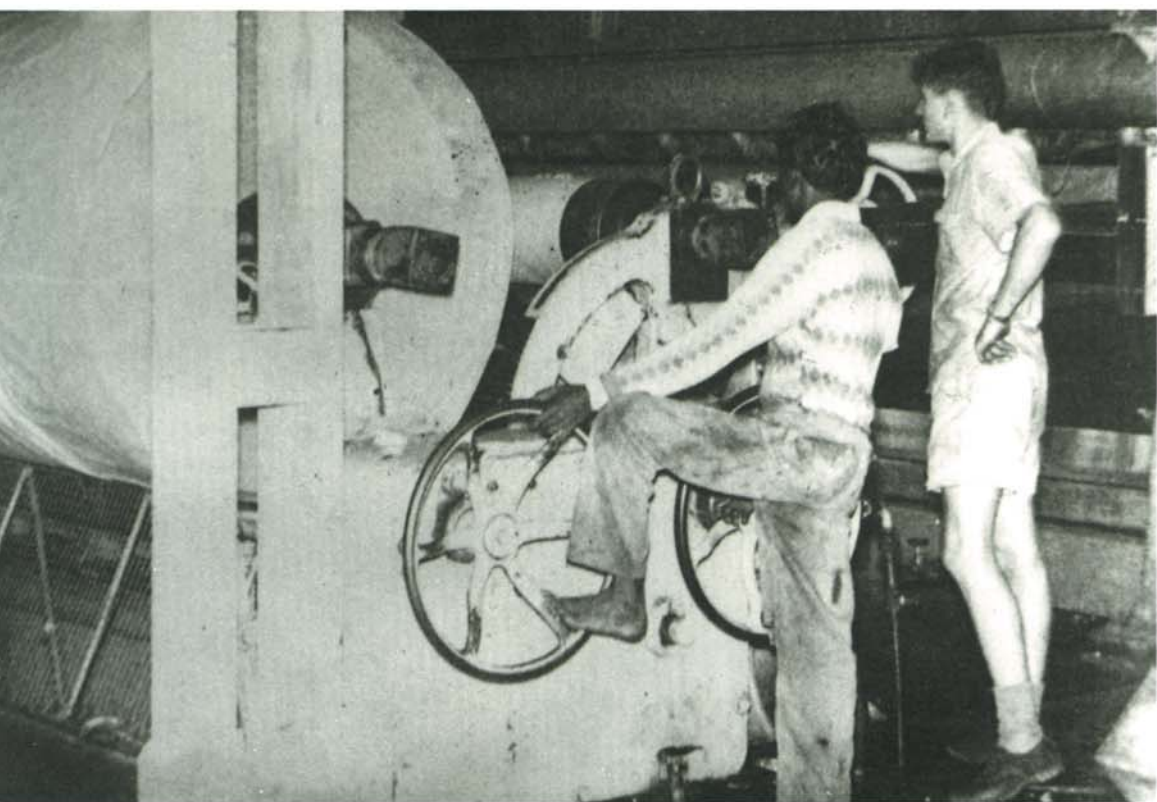
The decision was a shock, for it was the first time the company had passed a dividend. Tommy Stratten explained that the move was being made in the light of unsettled trading conditions and because so

much capital expenditure was being financed out of profits. He wanted the government's Board of Trade and Industries to protect the local paper industry by imposing tariffs on imports, which was common practice around the world. If that was done, he was confident that S A Pulp had a bright future. All its systems were working well, and South Africa's consumption of paper was rising in leaps and bounds.

The Board of Trade and Industries duly investigated the situation, and in February 1956 the government gazetted a protective tariff on certain grades of papers. Even then, Stratten was not satisfied. The duty imposed on white papers like Enstra's was less than he had hoped for, and most kraft papers of the sort made at Tugela were not covered at all. Both mills were faced with competition from overseas

Checking fine papers in Enstra's finishing house.





companies that had unfair advantages in that they served much larger markets and were able to export surplus production at a discount. If South Africa wanted to retain and expand its paper industry, then the government would have to take further action.

Coming of Age

STOCKBROKERS, financial journalists and old-school board members knew the company as S A Pulp, the nickname it had acquired in its early days. Everyone working for the company talked of it as 'Sappi' though in written form it was usually spelt in capitals. Customers followed the example, and the sales staff began using the abbreviation to describe the company's products — for instance SAPPI Cream Laid or SAPPI Tinted Board. That way, everyone knew where the paper came from, and nobody would confuse it with imports.

December 1957 marked Sappi's 21st anniversary, and the company threw staff parties at both mills. At Enstra the celebrations were held at East Geduld club and were staggered over two weekends so that all shift workers could attend. Many staff members went twice. To mark the birthday the company published an elaborate brochure-cum-catalogue entitled *Graphic Art* to show the diversity of its products. Twenty different types of paper and board were represented in the brochure, and four different methods of printing — photo litho offset, letterpress, rotogravure and silk screen.

The brochure was ring-bound and every page was a self-contained sample illustrating how a particular grade of paper could be used. A sheet of SAPPI Offset Cartridge was silk-screened as a travel leaflet in five colours; SAPPI Unicorn Bond was lithographed as if for letterheads; and a sheet of SAPPI Azure Bond illustrated a typist's frustration on tearing a non-Sappi sheet as she pulled it from her typewriter. Several super-calendered papers were included, and so was a sheet of brown wrapping paper from Tugela, silk-screened as the cover of a lipstick shade card.

The reverse of each page was used to show how Sappi's paper was made, from log to finished reel. There were telling photographs of each stage of the manufacturing process, nearly all of them taken by

*Tugela papermakers: (from left) Albert Hannekom,
Arthur Burns and Ken Gray.*

*Raymond Naidoo (left) and Doug Makkink on
Tugela's No 1 machine.*

Cluttered conditions in Enstra's woodyard (overleaf).





PROCESSES IN

A further example of silk screen printing with a white ink background in the black ink.



THE NEW METHOD FOR THE PAPER INDUSTRY
 All sheets coming from the rollers pass through the normal
 departments, which is necessary for the fabric.
 Every sheet is examined by hand for imperfections. The normal
 work is checked by electronic and highly sensitive film records of the
 sheets. Counting is now being done by the latest electronic method
 instead of by hand. Very accurate control can be achieved with a
 suitable series of tapes.
 Modern high speed precision printing machines require sheets cut
 to exact dimensions, with clean cut edges. After printing and counting
 the results can be printed on a guarantee on each edge in the dimen-
 sions required in an optional extra service and charge.

The year 19 is shown in the shade of Blue Dye. These
 are printed by lithography on the reverse of a leaf. A small
 white paper is attached to the top of the leaf, which is used
 to hold the paper in position. The reverse of the leaf is
 printed in the same shade as the front. The reverse of the
 leaf is printed in the same shade as the front.

19 SAPPi XL Three Green Cover 154 pins

FOR ZEDEKIAH HOREB
 PROFESSOR OF RELIGIOUS HISTORY

THE
 DAWN
 OF
 TRUTH
 LECTURES ON THE TORAH



PUBLISHING COMPANY LIMITED
 JERUSALEM

SOUTH AFRICAN PULP AND PAPER INDUSTRIES
 presents
 on
 SOUTH AFRICAN MADE PAPERS AND BOARDS
 SAPPi

Gordon Douglas of Union Corporation, who though technically an amateur was earning himself a worldwide reputation. Each photograph was printed in black and white to show off another aspect of the paper's performance. The production was one of the most ambitious printing projects ever attempted in South Africa, and was a credit to the two Cape Town printing firms which had undertaken it.

Publication of the brochure marked a watershed in Sappi's career, or more particularly in Enstra's. Whatever customers said, Enstra's paper was improving, and it provided value for money when compared with imports. The change had come about through the hard work of Leonard Job, who as Enstra's manager had done all he could to upgrade the mill and encourage those who worked there. Job was a strong and persuasive man who liked people to do things his way but was always ready to listen to new ideas. Since Oury Hisey's departure, Job had set a personal stamp on Enstra which has never been erased.

If Leonard Job had a failing, it was a fondness for meetings. On his way to making a decision he liked to canvass as many opinions as possible, and detained his senior men for hours at a stretch. Some supposed that he needed the meetings to help him think. If so, it worked, because his conclusions could seldom be faulted. When out of meetings he spent much of his time inspecting the mill and insisted on neatness, explaining that only a clean mill could offer clean production. Brass was polished daily, and the unpainted ironwork of the two Bertrams machines was brightened with oil and paraffin.

That had been Job's life until October 1954, when he decided to step aside as mill manager to become technical manager for the whole company. He remained at Enstra and was the senior man at the mill, but day-to-day administration was taken over by Harry Hirsch. Job himself moved into a new office with a secretary — Lillian Harrison, whom he later married — and two filing cabinets, one for Enstra and one for Tugela. He had realised that the company needed to move rapidly if it was to keep up with developments in the printing and converting industries, which were investing in new machinery that was more efficient but at the same time more sensitive than what it replaced.

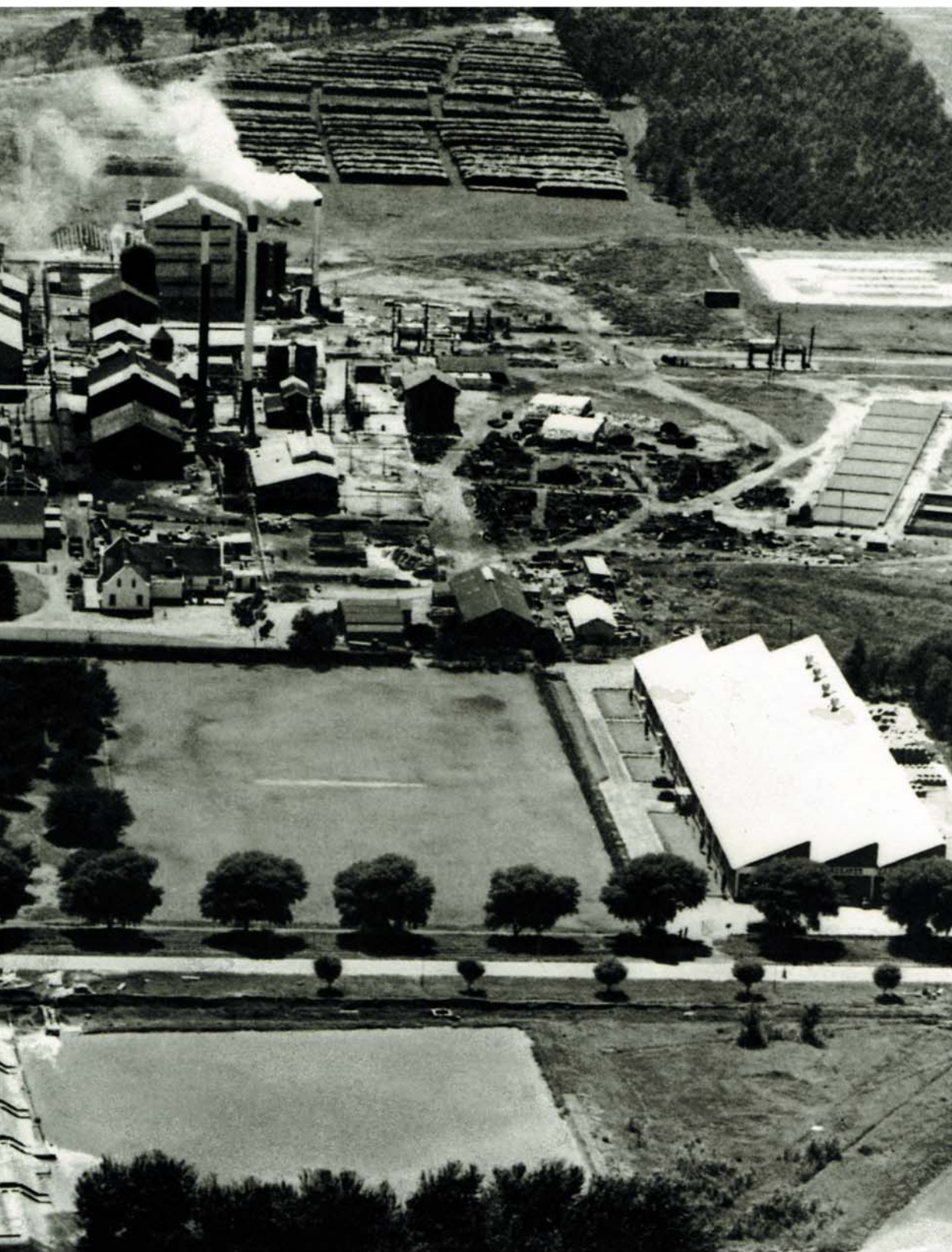
As technical manager Job had a roving brief to make contributions wherever necessary, and power to make important decisions on his own initiative. Job's degrees were in chemistry but for years he had

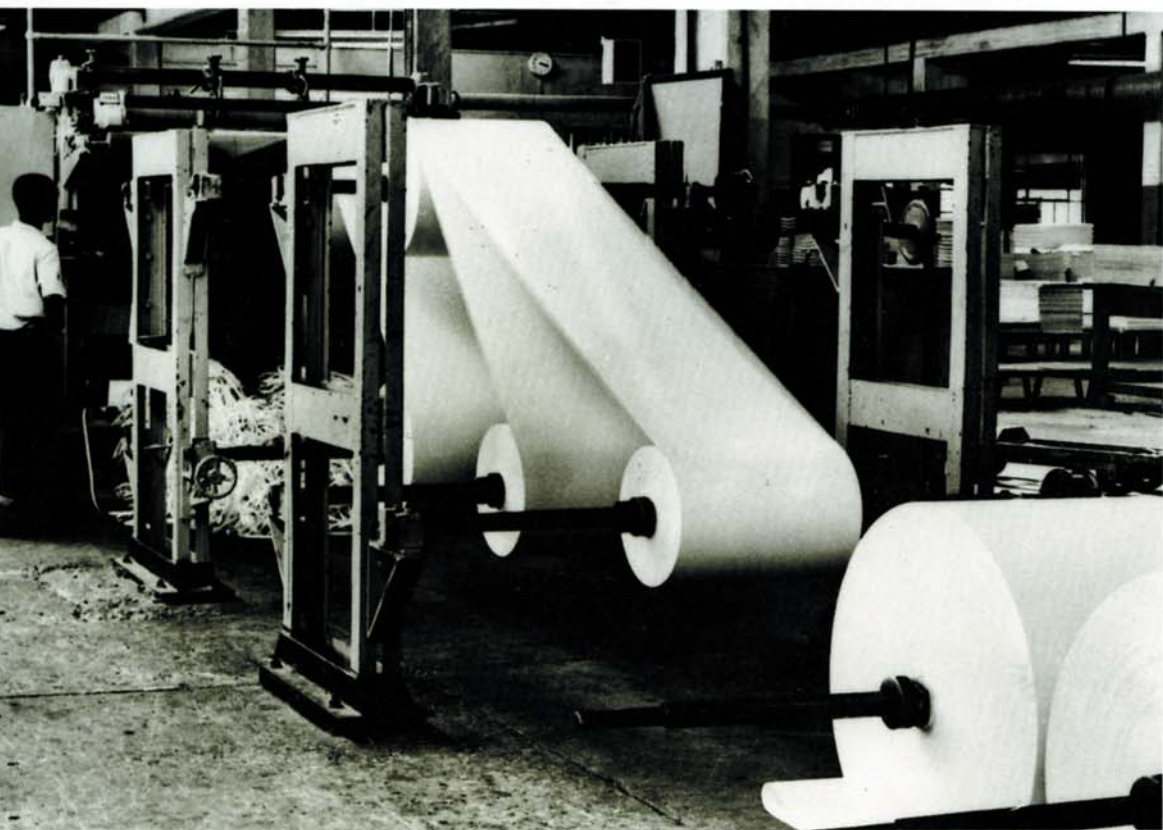
Commemorative brochure 'Graphic Art', published in 1957 to mark Sappi's 21st birthday.

Enstra in the mid-1950s, with the Union Corugated Cases factory in the right foreground (overleaf).



S.A. PULP & PAPER INDUSTRIES, LTD.





Feeding paper to the cutter in Enstra's finishing house.

seen himself as a chemical engineer, so was more interested in the engineering side of S A Pulp's operations than in what went on in the laboratories. As a result he allowed Enstra's chemists to organise their own programme under the direction of the chief chemist, Henry Myburgh, whose degree was in chemical engineering. Much of Job's time was spent at Union Corporation's engineering department which for years had drawn up plans for Sappi's new projects.

For two years Job appeared to be working alone, though in fact he was in close touch with technical men at both mills. Then in 1957 he was joined by Lou le Roux, a quality control specialist recruited by John Henderson from the South African Bureau of Standards (SABS) in Pretoria. Le Roux had spent four years drawing up SABS specifications for toilet tissue, corrugated containers and other paper products, and had learnt a great deal about what customers required. He was expected to keep an eye on the quality control laboratory at Enstra and hoped to convince the whole company that only the best was good enough.

Le Roux's work at the Bureau of Standards had taught him the importance of raw materials. No matter what manufacturing techniques were introduced, Sappi could not hope to make acceptable products if its wood was inferior or wrongly pulped or if mistakes were made

with chemicals or additives. All raw materials for the two mills were arranged through an estates and supplies department headed by Johnny Holmes, formerly mill manager at Tugela. It was reported that each year the mills consumed 275 000 tons of wood, 120 000 tons of coal and 27 000 tons of lime, and in addition Enstra's chemical section needed 12 000 tons of salt.

All these commodities reached the mills by rail. As in the war years, salt came from the Orange River Salt Works and lime from the Western Transvaal or Northern Cape. Enstra's coal was mined in the Witbank area and Tugela's in Natal. Enstra's wood was 55 per cent wattle, 20 per cent eucalyptus and 25 per cent pine, while Tugela's was 70 per cent pine and 30 per cent eucalyptus. The timber came from government plantations and private growers, and in many cases the harvesting was done by Sappi, especially in Zululand (under Ivan Pepper) and the Eastern Transvaal (under Fred Snyman).

Since buying the Ixopo farm in 1952 Sappi had steadily increased its land holdings and was planting trees. Several foresters had been added to the staff⁵ and in the first year the company had bought pine seedlings from the government for planting at Ixopo. Once in the ground, the seedlings were attacked by rats and died. In the second year the foresters tried again, and this time put down rat poison. They also encouraged small boys to make traps baited with mealies. Rats walked up a plank to reach the mealies and were tipped into a four-gallon can filled with water. The boys were rewarded for every drowned rat they turned in.

In the third year, snakes arrived to feed on the rats, and secretary birds followed the snakes. Seedlings grew rapidly and buck appeared. The pattern was repeated in several more plantations that the foresters started, two near Bulwer and one near Howick. Rats remained a problem so the chief forester, Archie McKellar, began breeding hawks to go after them. Tall poles were set up in the plantations to serve as perches. By the beginning of 1958 the company owned and leased roughly 10 000 hectares of land earmarked for timber cultivation, of which roughly 7 500 were already under trees.

Even by South African standards Sappi's timber holdings were minute when compared with those of the government or large private growers like SAFI (South African Forest Investments) of the Eastern Transvaal, which was controlled by the financier Charles Engelhard. SAFI had surplus timber, so much so that there had been talk of opening a new pulp mill in the Eastern Transvaal. John Henderson suggested that SAFI should instead rail the timber to Enstra to make newsprint, and SAFI agreed.

Sappi's management had wanted to make newsprint ever since running pilot plant experiments in 1952. Now that timber was guaranteed, the only obstacle was the attitude of the Newspaper Press

Union, an industry co-operative which bought newsprint on behalf of all its members. As things stood, South Africa imported 70 000 tons of newsprint each year, nearly all of it from North America and Scandinavia. The union agreed that it would be helpful to have a local source of newsprint, but doubted whether it could ever match imports — exactly the objection raised with every other type of paper that Sappi had introduced. Before committing itself, the union wanted to be sure that there was no chance of a fiasco.

Early in 1958 John Henderson asked Leonard Job to make a fresh investigation. At almost the same time J D White died and Job took his place on the board. Shortly afterwards Job set off on a world tour to learn more about newsprint production and in particular about groundwood pulping and the characteristics of wood. With him went Chris Myburgh from Tugela and Lon Wayburne, a mechanical engineer who had joined Sappi in 1950. He, Job and Myburgh were the nucleus of a technical department. The three were away for six months and made stops in Australia, New Zealand, Hawaii, Fiji, Canada, the United States, Finland, Sweden, West Germany and Britain.

Everywhere the Sappi men came upon new ideas, and returned home confident that they could produce quality newsprint. In November 1958 John Henderson and Moore O'Hara won an undertaking from the Newspaper Press Union that it would guarantee to buy 22 000 tons per year — only a small portion of its requirements, but a valuable beginning all the same. SAFI promised supplies of timber, and in addition bought 150 000 Sappi shares. It was agreed that Fritz Fuerst, SAFI's deputy chairman and managing director, should join Sappi's board. On Leonard Job's recommendation a 209-inch (5,31m) newsprint machine was ordered from the Beloit International company of Wisconsin in the United States.

A New Horizon

THE RAIL LINE linking Zululand with the rest of Natal crossed the Tugela River by way of a seven-span steel bridge erected in 1932 and mounted on a row of concrete towers close to Sappi's pumphouse. In September 1957 the river was in flood when a goods train loaded with sugar cane began crossing the bridge from the northern bank. The locomotive was still on the bridge when a truck was derailed and knocked the end of a span off its tower. The truck and three others fell into the river, three more were derailed, and the men in the guard's van only just missed plunging into the torrent.

At the front of the train the locomotive and five trucks were not affected, as a coupling had broken. The accident had happened on a



Sappi men on tour: Leonard Job (left), Lon Wayburne (Back seat, right) and Chris Myburgh (standing) in West Germany's Black Forest with their host and driver, Herbert Schmidt of Er-We-Pa.

Mandini township in 1960, with Tugela mill in the background (overleaf).

Sunday afternoon, and as word spread, Mandini families converged on the bridge. It was realised that the loss of the bridge was a disaster for the whole of Zululand, for the rail line carried all the region's coal and other essential supplies. The bridge had to be repaired without delay. It was raining heavily, but railway repair crews arrived from the south and laid on road transport to provide a shuttle service over the road bridge, and link the rail halts north and south of the river.

Tugela's management offered to help in whatever ways possible. A power line was rigged up at the pumphouse to provide floodlighting so that the railway crews could work through the night. The mill had a large reserve of coal on hand and much of this was commandeered to supply communities further north. Gradually the flood subsided and mill workers helped the railway crews to reinforce the damaged





support and jack up the fallen span. The job was done in three days and normal rail service was restored, but remains of the lost trucks can still be seen in the river.

The mill's help was much appreciated by the railways administration, for without it repairs would have taken much longer. In a similar way the mill had earned the gratitude of local farmers when mill workers turned out to fight fires in their cane fields. At first, farmers had been less than enthusiastic about Sappi because they had assumed the mill would pay higher wages than they could afford, so they would be stripped of their labour. It turned out that few local Zulu wanted to work at the mill, so there was no problem. Ivan Pepper had known many of the farmers since serving with them in the war, and did much to put their minds at rest.

Sappi had farms of its own — not only Sisalana and Lot 25, but also Rocky Ridge, acquired in 1957 for effluent disposal. Large portions of these farms were still producing sugar cane and sisal. The mill had a dairy herd as well, and in the earliest days Mandini housewives had collected milk from a milking shed on what later became a golf course. Then milk was delivered by donkey-cart. At least one local farmer brought fresh vegetables to Mandini and sold them from his truck. Then a vegetable garden was developed near the milking shed, and a tree nursery near the confluence of the Tugela and Mandini rivers. When the trees were large enough they were transplanted to beautify the township.

There were still scores of bachelors in Mandini and the Red Dog was doing a roaring trade, but at the same time the community was becoming more civilised. A primary school had been started in one of the mill houses in 1954. A doctor, Allan Curson, had arrived and had set up two surgeries, one at his house and one at the mill. It became a tradition that when a new family moved in, the manager's wife visited the lady of the house with a cooked meal and made sure she met her neighbours. The company built a small recreation hall which was used for dances, and those attending took their own food and drink in a hamper.

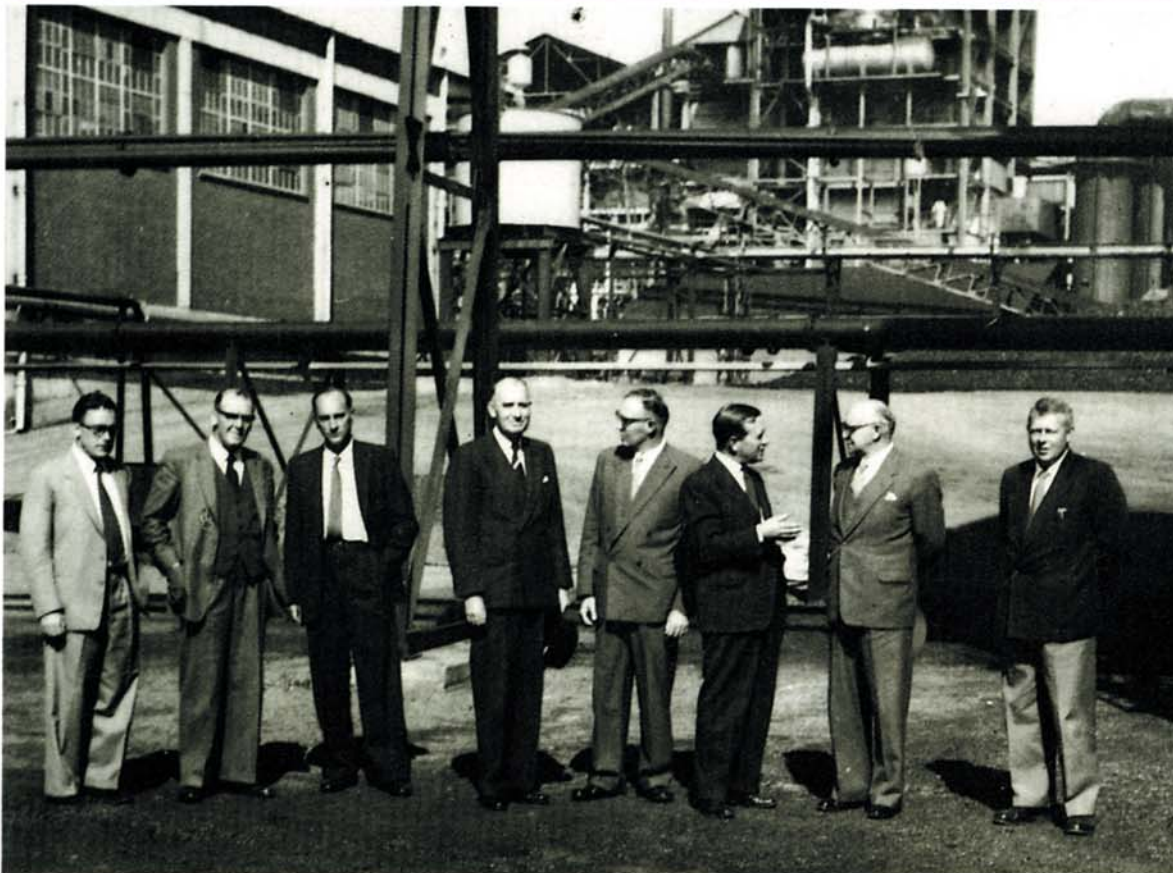
Children were free to roam wherever they wanted with no chance of coming to harm, providing they kept well clear of the river. Several new sports clubs had been founded — bowls and rugby in 1956 and tennis in 1957, with a concrete court laid down near the single quarters. A three-hole golf course was begun in 1956 and later extended to six holes and then nine. A deep gully running across three fairways had to be filled with rubble and ash, and hazards included a channel for black liquor effluent, monkeys that stole balls, and the district's ever-present snakes.

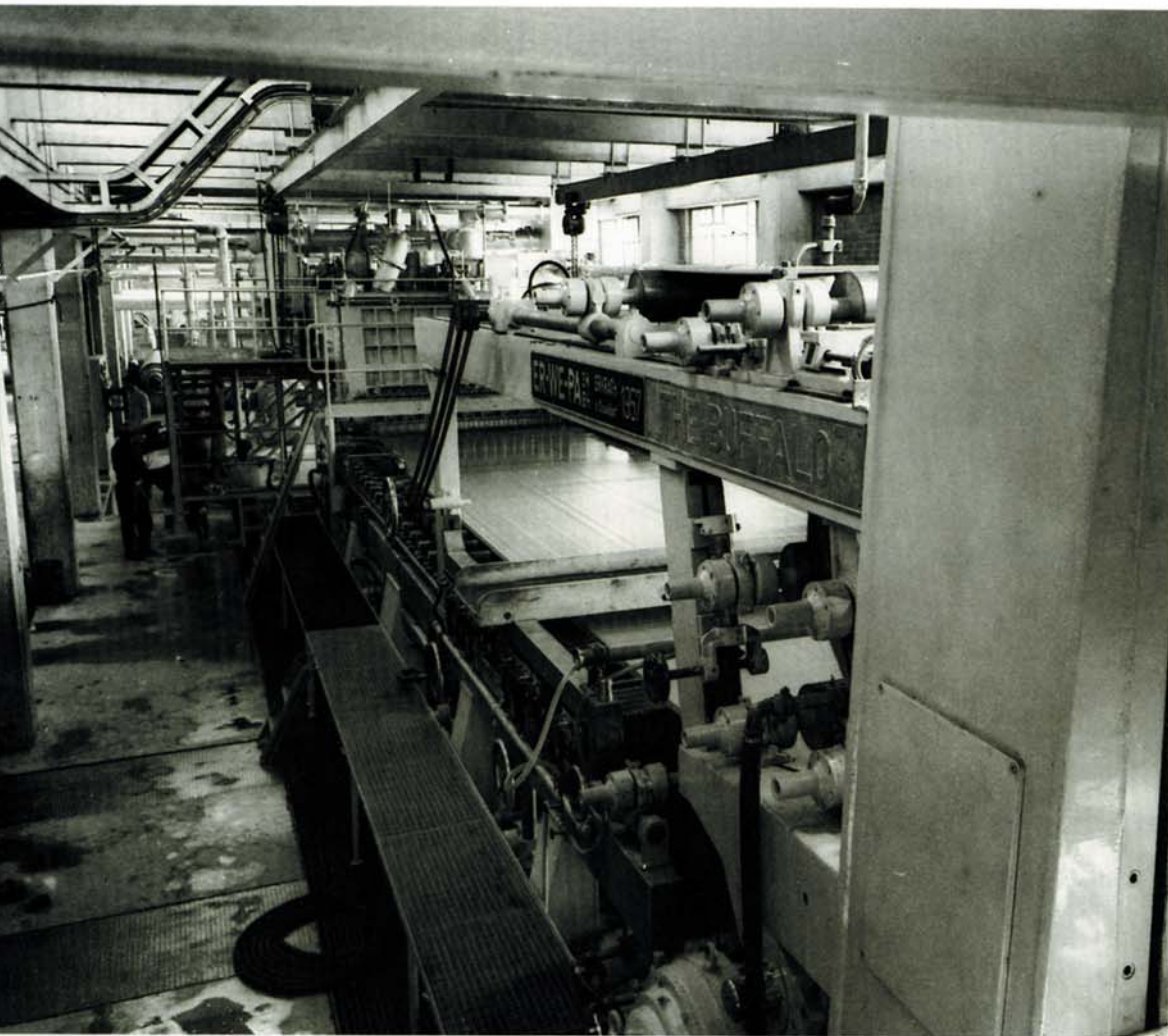
Tugela's black workers had their own soccer club, Sappi Home Stars, which had been founded by two Transkeian enthusiasts, Abner

Gcaleka and Colonel Nozigqwaha, in 1952. Training had begun in earnest in 1955 and a year later the club's first team was too strong for Zululand and was admitted to the Durban league. In 1958 the club won the league championship. Black soccer was booming, and few whites at Mandini realised that the Home Stars were becoming famous throughout Natal. When a challenge match was arranged between the Durban league and its Johannesburg equivalent, four Sappi men were included in the Durban team and played in front of 15 000 spectators.⁶

The Sappi players' home ground was at the hostel beside the mill, where both pulp and paper production were going well. Roughly 80 per cent of the paper was linerboard, but the mill also had to make fluting, bag paper, sack kraft for multiwall paper sacks and conventional wrapping papers, and operators found it awkward to chop and

Nico Diederichs, minister of economic affairs, visits Tugela in 1959: (from left) L Visser, H R P A Kotzenberg, Wally Lake, Tommy Stratten, Lappies Labuschagne, John Henderson, Nico Diederichs and F Marais.





The Tugela No 3 machine, designed to produce glazed packaging paper.

change. There had been thoughts of bringing in a second Fourdrinier machine but it was doubtful whether the pulp plant could support it. As a stopgap, Leonard Job suggested installing a smaller, multipurpose MG (for 'machine glazed') machine able to make MG wrapping paper — the sort with a shine on one side — and other products.

An MG machine differs from a Fourdrinier in that its dry end consists of a single large steam-heated Yankee cylinder in place of a series of dryers. In 1956 an order was placed with the Er-We-Pa company of Düsseldorf in West Germany, and Piet Fourie of Tugela's papermaking section set off for Canada to learn how it should be operated. Fourie was away for three months and spent much of the time at a Howard Smith mill in Ontario. Crates containing the machine reached Tugela during 1957 and a German assembly team arrived to put it together. To leave space for a No 2

Fourdrinier the MG machine — No 3 — went into the machine house basement with its paper roll-up on the first floor.

The new machine was to be used on relatively short runs of bag kraft and other products, leaving No 1 to concentrate on linerboard. In 1959 the Board of Trade and Industries agreed to impose protective tariffs on imported kraft and Tugela's future looked rosy. Sappi's management wanted to expand the mill immediately and as a first step ordered a 209-inch (5,31m) kraft Fourdrinier from Beloit International, far larger and faster than the original Tugela machine, and in many respects the twin of the large newsprint machine that Beloit was building for Enstra. With the machines twinned, parts would be interchangeable and it would be enough to hold only one set of spares.

For Enstra the board ordered a No 5 machine, this one a semi-automatic board plant designed and produced by Er-We-Pa and intended to replace the aged cardboard equipment that had been at Enstra since the days of straw. Because the machine was relatively small, no assembly crew was sent out, and Enstra's engineers had to erect it themselves. Unfortunately nobody could make head or tail of the symbols on the crates, so the engineers had to improvise. Their guesses were correct, the machine was commissioned, and it still works well today.

During 1956 Sappi had acquired further shares in Union Corrugated Cases, which still had its factory at Enstra and now bought linerboard from Tugela. This gave Sappi a majority holding. A year later, John Henderson heard that there was a chance to buy into Cellulose Products of Johannesburg, South Africa's only manufacturer of tissue wadding which was the paper used to make toilet rolls and related products. Henderson had long wanted to invest in tissue but Sappi's money had been needed elsewhere. Now the board bought one-fifth of Cellulose Products from a minority shareholder and decided to bid for complete control.

The tissue company had been founded in 1948 and had a small mill in Johannesburg's Mayfair. Its first papermakers had been Hans Loebecke and 'Young' Harry Smith, formerly of Enstra, and it had two rather antiquated wadding machines and an associated converting company named General Products Manufacturing, which shared the same premises. In 1954 its managing director had been killed in an air crash and majority control had been sold to a Swedish company, Aktiebolaget Billingsförs-Langed. Sappi's Moore O'Hara travelled to Stockholm to see the Swedes and a price was agreed, but then they received a better offer.

Among Cellulose Products' customers was the South African agency of the Kimberly-Clark Corporation of the United States, the world's leading tissue manufacturers. Like Beloit International, Kim-

berly-Clark was based in Wisconsin and was best known for making soft facial tissues and paper towels made from wet-strength wadding designed not to fall apart — quite different from the wadding used to make toilet paper, which was expected to disintegrate in water. The South African agency imported wet-strength wadding from the United States but bought toilet wadding from Cellulose Products. When the agency reported that Cellulose Products might be for sale, Kimberly-Clark wanted to buy.

The upshot of the negotiations was that Sappi and Kimberly-Clark agreed to make a joint offer for Cellulose Products and also General Products Manufacturing. In January 1960 the Swedes accepted, and it was arranged that of the tissue company's 100 000 shares, 49 000 should go to Sappi, 30 000 to Kimberly-Clark and 21 000 to Union Corporation. At the same time Sappi and Union Corporation bought into Kimberly-Clark of South Africa. The 100 000 shares were divided between Kimberly-Clark Corporation (51 000), Sappi (16 800) and Union Corporation (7 200), with the last 25 000 going to Arthur Murray, the converter who had been running the agency. Cellulose Products was to give KCSA first call on its output, and as far as possible Kimberly-Clark was to buy its wadding from Cellulose Products.

Inspecting Enstra's No 5 machine, commissioned in 1960.

The No 1 machine at Cellulose Products, Mayfair.

