

# 7 1978–1982 THE BOTTOM LINE

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THE SAPPI INTERREGNUM continued until September 1978, by which time Eugene van As had been appointed chief executive. Indeed, he had been invited to take the job at the time Ron Day had resigned, but had been told to keep it quiet as Ted Pavitt felt that the dust should be allowed to settle. That gave Van As a chance to work out strategy for the future. A number of senior men were approaching retirement age, so it was a good time to bring in fresh blood. The first appointment was made in October 1978 when Bob Garden retired. His successor as managing director of Sappi Fine Papers was Ken Lechmere-Oertel, whom Van As had known since university days and who had a degree in chemical engineering.

To run Sappi Kraft, Eugene van As appointed Mike Struwig, who came to Sappi with a degree in chemistry. Peter Stratten remained managing director of Sappi Forests. When Lon Wayburne retired in May 1979, the technical department was taken over by Alex Rodger. As senior financial man Van As brought in John McManus, formerly the Reed group's finance director and a central figure in the talks covering Reed Nampak and the mill at Stanger. McManus had been born and educated in Britain and had emigrated to Rhodesia before moving to South Africa.

Eugene van As, John McManus, Ken Lechmere-Oertel, Mike Struwig, Peter Stratten and Alex Rodger — that was Sappi's new management team, working in liaison with Basil Landau who represented the major shareholder. Sappi's head office was still in Unicorn House, part of the Union Corporation complex in central Johannesburg, but it had been agreed that the group would have greater financial and managerial independence than in the past. Van As had been given a detailed letter of authority to that effect, and it was the reason why he had brought in John McManus. Taking things

still further, each operating subsidiary was made responsible for its own results.

At the time the team came together, Sappi's prospects looked less than bright. South Africa's economy was still in recession and orders for kraft — always an accurate barometer of how other industries were faring — were well down, amounting to less than 60 per cent of Tugela's capacity. Rather than cut back production, Sappi Kraft had begun exporting. It was encouraging to find that Tugela kraft was more than holding its own in international markets, even though the prices obtained were low and the exports contributed little to group profits.

At Tugela, both the pulp and the papermaking sections were performing efficiently and the Zululand Construction team busy implementing the expansion project was meeting all its deadlines. At Enstra, the situation was less promising. It seemed as if there had been an unending series of setbacks ever since the middle of 1978, when the old pulping process had been shut down to make way for the new. Sappi's management had hoped that once the new system was operating, the mill would produce 200 tons of pulp per day — twice as much as before. Instead, Enstra was lucky to produce 40. It was not possible to restart the old pulping system, so Sappi's options were soda pulping or nothing.

At first the setbacks had been merely irritating. Careless welding had damaged the insulation of instrument lines, which shorted out every time current was turned on. Then again, even before the plant was completely ready there had been pressure to have it operating before the end of 1977, to qualify for tax benefits. Shortly afterwards the plant had been shut down again, but in some cases instruments had become corroded so had to be replaced. Several items bought second-hand to save money needed repairs that more than doubled their cost, and there were three gas-related explosions in the chlorine dioxide plant.

In theory, all units chosen for the expansion should have worked well as they had been tried and tested in other situations. In practice, they had never been used in combination, and at times seemed allergic to one another. The most problematic unit was also one of the most important: the American-supplied fluid bed reactor used to recover chemicals from the black liquor produced in the cooking process and in oxygen bleaching. The reactor was basically a heated, vertical, cylindrical tank with air blown in from underneath through thousands of pipes in the floor. Black liquor was sprayed in from the top and its organic content was burnt off, leaving the inorganic

*Work on Enstra's fluid bed reactor (behind storage chest, to right), the key to the mill's expansion.*





content to form into tiny balls or pellets of sodium carbonate which made up a fluid bed kept in suspension by the jets of air.

The fluid bed reactor ordered for Enstra was considerably larger than the one already operating at Tugela, and even during installation Sappi's engineers had been concerned about it. The inventor had been called in for consultations and a brick lining had been inserted in the bottom part of the reactor to reduce its diameter from ten metres to eight. The reactor was commissioned and at first worked well; but periodically things went wrong, and on such occasions the fluid bed solidified as a rock-hard, metre-deep white cake. When that happened, the reactor had to be shut down and allowed to cool to the point where men could enter it through a small manhole in the wall and break up the white cake with jackhammers.

The problem recurred with depressing frequency, and each time the reactor took six days to cool. To save time, jackhammer crews donned asbestos suits which allowed them to begin work after 48 hours. Various modifications were attempted, but nothing worked, so it was decided to send two Sappi men to North America to visit mills where similar reactors were in use. One of the two was Manie van Niekerk, Enstra's manager of pulp production. In Canada, the men visited a mill which had earlier formed part of the Howard Smith group and which had a reactor similar to Enstra's, acquired second-hand and modified with a brick lining to reduce its diameter. Unlike Enstra's, the Canadian reactor was proving very efficient.

Looking for differences between the two, Van Niekerk realised that the lining in the Canadian mill's reactor was built higher than Enstra's, which prevented the fluid bed from spilling over the lip. It occurred to him that at Enstra any spill immediately solidified, and that lumps forming on the fluid bed's periphery would tend to break free and disrupt the whole system. On returning to South Africa he suggested that the reactor should be rebuilt all over again; and when this was done, it worked much better. There were occasional 'freezes' resulting from operator error, but as expertise improved, the reactor became as efficient as Tugela's.

Problems with the reactor and other units had seriously affected Enstra's flow of pulp and had implications for the whole group, to the point where the head office team was becoming anxious. To keep Enstra's machines running, bleached pulp was being imported, and still more pulp was being brought in to supply Adamas and Carlton which relied on Enstra for major portions of their requirements. Sappi Fine Papers' earnings for 1978 were down by 78 per cent. At this point Eugene van As entered the picture. His first step was to send the whole project team on leave. Then he and Andre Vlok took a deep breath and prepared to start again.

The key men in the Enstra team were Vlok himself, Manie van



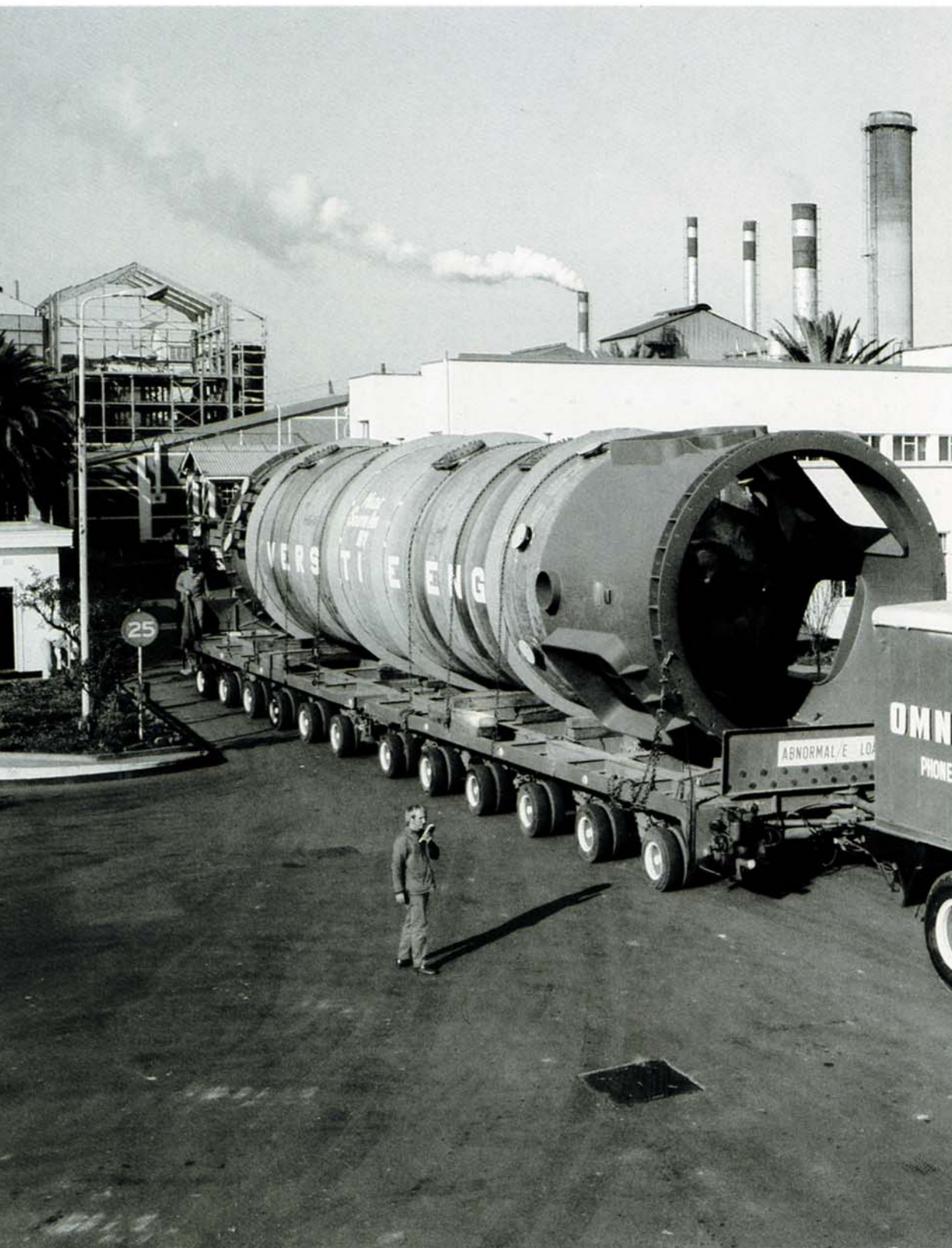


*Stanger pulp and paper mill.*

*Enstra's second Sapoxal reactor arrives at the mill as part of the major expansion (overleaf).*

Niekerk, Leon Smith of Enstra's technical division, Colin Kerr who had been seconded from Tugela as project engineer and Barry Melrose who had recently been transferred to Enstra to strengthen the engineering team. During the leave period Vlok had drawn up a list of the items of equipment which worked properly and those which did not, and he and Van As revised their strategy accordingly. To encourage them, the modified fluid bed reactor continued to work much better.

That was not the only good news for Sappi Fine Papers, for it looked as if there might be another chance to acquire the mill at Stanger, now 100 per cent owned by Reed. There were rumours that Reed planned to sell Stanger to the Hulett's group which already had mills at Felixton and Piet Retief; but before anything was arranged, Sappi jumped in ahead. The Reed group offered Sappi a three-week option, and this time Ted Pavitt and Union Corporation agreed that the deal should go through, in part because there would be valuable tax benefits.







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On the Sappi side the chief negotiator was Eugene van As. John McManus, who had inside knowledge and who could have been an enormous help, had undertaken not to become involved. Van As dealt directly with Reed's new chief executive, Bas Kardol, and this time everything went smoothly. A new price was negotiated and the deal was concluded with a handshake. The change of ownership took effect in June 1979 and was made as smooth as possible. Those working at Stanger included several former Sappi employees who were no doubt anxious about their future; others were Reed men recruited from Britain who had learnt to regard Sappi as the opposition.

As things turned out, very few of the Stanger employees wanted to leave; and their absorption by Sappi Fine Papers seemed painless. To introduce them to the rest of the group, an issue of *Sappi News* included a Stanger supplement with pen-portraits of the mill management. The following issue devoted its front page to the newly-introduced Printer of the Season national competition masterminded by Bruce MacIntosh, earlier Stanger's sales director and now sales manager of its coated papers and tissue operations. The competition was to be held quarterly, with printers invited to enter books printed on Stanger paper. The first round of the competition attracted 86 entries, an indication of the papers' growing popularity.

Stanger was only 40 kilometres south of Tugela, but there was little contact between the two mills. Not only was Tugela far larger than Stanger — it remained the largest pulp and paper complex in Africa — but it was administered as part of Sappi Kraft. The mill was becoming still bigger as equipment was added or modified. Both the No 2 and No 4 paper machines had undergone partial rebuilds to increase their capacity. Further innovations included a drum debarker, the first of its kind in South Africa, a rotating horizontal cylinder in which bark was scraped off as logs tumbled over one another. The bark escaped through slits in the drum and was collected as fuel for the mill's boilers.

The key to Tugela's expansion was the new continuous digester, which was commissioned during June 1979 and reached its targeted capacity in record time. The new unit replaced the batch digesters, which were closed down and mothballed. At first the continuous digester was to produce only 450 tons of pulp per day — even that was 100 tons more than had come from the batch digesters — and as papermaking capacity increased, the digester's output would be in-

*Tugela pioneers celebrate the 25th anniversary of the day  
the mill first made paper.*

*The Sappi group's first drum debarker being erected at Tugela.*

creased towards its 750-ton maximum. In view of what had happened at Enstra, Eugene van As cautioned those concerned that if there were problems, they could not be baled out. All pulp produced at Ngodwana was earmarked for Enstra.

Tugela's mood was bright, in part because the expansion was going well and orders were flowing in. Besides, Quintin Stubbings who had been Tugela's general manager since 1975 insisted on putting people first, much as Harry Hirsch had done. All sections of the community were benefiting, and imagined barriers between white, black and Indian were breaking down. One symptom of the trend was the apprentice school, originally set up for whites but since widened in scope until it was now fully multiracial — the first such school in Natal and one of the first in the country. Almost every day there were visitors from other companies wanting to see the school and find out how it worked.

In the training school whites, blacks, Indians and coloureds worked on an equal footing. Some of the white apprentices had formed a recreation club and wanted to buy a television set, so decided to enter the Tugela raft race which offered a first prize of R400. A special streamlined raft was designed and built, a crew of six paddlers was selected, and the 'Sappi appies' went into strict training. During the six weeks before the race the apprentices covered the course on five occasions, and on race day itself their raft was joined by more than 200 others. Their training paid off as they quickly showed the rest of the fleet a clean pair of heels, eventually reaching Oliver's Rocks in the record time of one hour and 28 minutes.

## Back on Track

ITALIANS WHO HAD worked at the Port Elizabeth mill since the early days were sometimes known as Wawas because they liked to recall what had happened 'when Adamas was Adamas.' Wawas were much in evidence when two huge, round stones were found on a Port Elizabeth dump and local people wondered where they had come from. There were letters to the papers, and one learned authority suggested that early settlers had used the stones to mill grain. Then a Wawa explained that the stones were from Adamas's old kollergangs, the units used to mash waste paper to pulp, which had been thrown out some years before. Indeed, a kollergang stone had been set up at the mill entrance as a Wawa memorial.

There was consternation among Wawas in December 1979 when Adamas's black workers went on strike for more pay. Such a thing had never happened before. The grievance had arisen in the varnishing shop over what had been seen as unfair job ratings and had soon





*Long-serving Adamas personnel at the mill's koller gang stone: (from left) Charlie Zucollo, Aldo Giuliani, Stephen Manendzo, Anacleto Sabbadin, Giulia Butlion, Bruno Toffali and Giacomo Fabrello.*

*Tugela's pulp plant at dusk (overleaf).*

been fanned by agitators. On a Friday morning the incoming shift had refused to work until the issue was cleared up, and persuaded workers from the night shift to join them. The mill manager, Clive Malkin, said that he could not negotiate with them unless they returned to work, and when they refused, that was that. For the rest of the morning the strikers idled at the mill entrance; and when the afternoon shift arrived, they rushed out to stop the men coming in and then dispersed to their homes.

At the time Adamas employed 700-odd workers of whom 300 were among the strikers. Those involved were warned that they would be dismissed if they failed to report for their next shift. None turned up, so the mill management began recruiting replacements. A worrying feature of the strike was that the organisers had deliberately circumvented the liaison committee, dismissing its members as 'stooges.' Still worse, employees who had shown themselves out of sympathy with the strikers had had boxes of matches rattled in their faces, as if to imply that their homes would be burnt down if they rebelled.



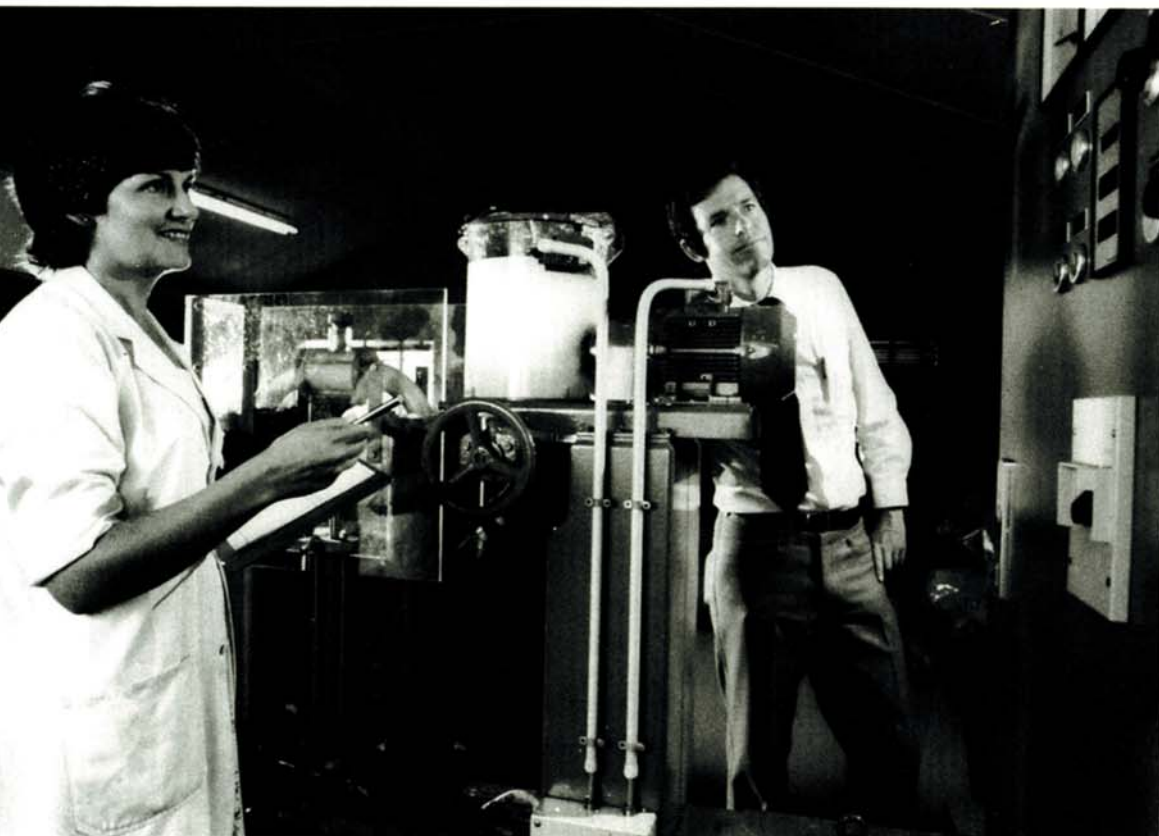




Only a few months before the strike, Adamas had installed an extra board machine, this one acquired second-hand from a Boksburg company named Trans Africa Paper Products, or TAPP. Sappi had bought TAPP lock, stock and barrel and had sold off most of its equipment, but the board machine had been quite new so had seemed just right for Adamas. The mill now produced 30 000 tons of paper and board per year — 15 000 tons of fine papers made from bleached pulp, and 15 000 tons of board made from waste paper. In comparison, Stanger produced roughly 30 000 tons of fine papers and 16 000 tons of tissue wadding; but even that seemed puny when compared with the 250 000 tons of kraft produced at Tugela and the 120 000 tons of fine paper and newsprint available from Enstra, provided that the new installations were all working.

Over the course of a few months, Enstra had been transformed. The Copeland reactor worked adequately well, in spite of occasional operator errors which caused its pellets to freeze. When that happened, Enstra men almost cheerfully took out their asbestos suits to

*Research in progress at Enstra,  
a key factor in the group's development.*





begin drilling into the white cake, for everyone felt that the mill's problems were over. True, the soda pulping system fell short of producing 200 tons of bleached pulp per day — but that was because its designers had made inadequate allowance for down time.

In looking over Enstra in its darkest days, Eugene van As and Andre Vlok had noticed the debris of years. It appeared that every time a new plant had been commissioned, engineers had simply shut down the old one and left it to rust. Vlok took photographs of the mill's squalid nooks and crannies and Van As showed them to his fellow directors, suggesting that a facelift was in order. At the same time Vlok and Ken Lechmere-Oertel set out to revive a sense of pride in Enstra. Soon smiles reappeared on men's faces; and when Sappi's management team threw a party for the 130 men who had been involved in the expansion project, their wives were invited as well to thank them for making sacrifices while their husbands saved the mill.

The Enstra project had been one of the costliest in Sappi's history. Quite apart from overrunning its budget — counting lost production, the eventual bill had come close to R60 million rather than the R25 million expected — it had taken a heavy toll of group profits. Even so, the eventual result was a triumph after all: the group was once more self-sufficient in pulp and could afford to upgrade its papermaking capacity. Already Enstra's No 3 machine was being modified to increase its output. Besides, without the switch to soda Enstra's pulping section might have been forced to close down, and that would have caused still greater problems and even costlier solutions.

A large part of the responsibility for the expansion had been borne by Sappi's technical division, and by the research and development team at Enstra which formed part of it. During the early 1970s research and development had been something of a backwater, but in 1976 a new manager, Sigi Eggers, had set out to give the team fresh motivation. Eggers was an organic chemist who had come to Sappi by way of the CSIR, and he realised that the team needed streamlining and involvement in new disciplines. Three new sections were set up to look into corrosion, energy engineering and chemical engineering, and the team's services became better known not only at Enstra but throughout the group.

Research and development had not been affected by Sappi's reorganisation but the technical division as a whole had undergone a change. Only a small cadre had remained at head office, and the rest of the technical staff had been split between Sappi Fine Papers and Sappi Kraft, each of which now had its own technical department. Sappi Kraft's men had been looking into a new project planned for the Western Cape, a waste-based kraft mill originally conceived as a co-operative venture between Sappi and the major corrugators. Now the project was to be Sappi's alone, but both Nampak and Kohler



*The Sappi Board is entertained at Tugela mill, 1979: (front row) from left) Paul Hoogendyk, Mike Struwig, Eugene van As, Jan Kitshoff, John Henderson, Ted Pavitt, Basil Landau and Alex Rodger; (back row, from left) Tjaard van der Walt, Alan Tubb, Ray Berrard, Bruno Bruniquel, Ken Lechmere-Oertel, John McManus, Tom Liversage, John Pile, Bernard Chamberlain, Stephanus van Niekerk and Phil Mijburgh.*

Brothers were to install 96-inch (2,44m) corrugating machines which would complement the paper machine that Sappi intended to order.

The decision to build at the Cape had been long in coming. Sappi had bought a mill site in Epping as long ago as 1956, though it had subsequently been sold; and when interest had revived in the early 1970s, the company had bought an industrial site in Milnerton — only to shelve all plans soon afterwards, chiefly because of the economic downturn. From 1977 onwards a number of schemes had been con-





sidered, until in 1979 Sappi's management opted for a relatively modest waste-based paper machine, initially capable of producing 28 000 tons of kraft per year though it could later be upgraded to make 7 000 tons more.

Once Sappi's board had given its approval, a paper machine was ordered and the lion's share of the work was entrusted to Zululand Construction, which had proved so useful during the expansion project at Mandini. The first members of the team to reach Cape

Town were Tom Liversage, the construction manager, and Alan Povall, the electrical superintendent, and they visited the Milnerton site in January 1980. The area was flat but sandy, without so much as a water tap in sight, let alone sanitation or electricity. A neighbouring company allowed the Sappi men to borrow an office and a telephone for an hour a day, and its receptionist took messages.

The construction team soon erected a prefab store and set about building an access road and prefab offices and erecting a security fence. Before the fence was up, thieves burgled the offices and broke into a locked fridge but missed a safe containing R27 000. Electricity, water and a telephone service were connected, but the office staff were treated to some odd reactions. One Cape Town caller who heard he was talking to Zululand Construction said, 'Oh, God,' and hung up. Another was asked to make a delivery to the site and said, 'Zululand's a bit far for us.'

A further task for the construction crew was to lay a large area of concrete to be used as a storage yard for waste paper. Through Adamas Sappi had had many years' experience of buying waste and

*The real Zululand: a trophy-winning dance team consisting of Zulu working at Tugela.*





already had a collection company, Saveall Paper of Port Elizabeth, taken over in 1970. In the Cape Sappi could expect a 'waste war' as there were other consumers — notably two paper mills, one a tissue operation controlled by Premier Paper, and the other the Cape mill operated by South African Board Mills, a company now closely aligned with Mondi.

To enter the marketplace Sappi bought a small Cape-based waste collection company, Herby Taylor, which had been founded by a former Springbok cricketer in 1940. Soon afterwards the group took over a second company, Western Province Paper Salvage. By then a price war with S A Board Mills was under way as the rival company set out to woo suppliers by offering higher prices. The acquisitions were made at a time when the group was celebrating encouraging results from the previous year, notably a 59 per cent increase in profits. The board approved a dividend of 36 cents for the year, 14 cents more than in 1978.

The results were a triumph for the whole group but especially for Eugene van As, who had taken over as chief executive at a time when Sappi had seemed headed for catastrophe. Now Sappi was capable of standing on its own feet, and Ted Pavitt was sympathetic when Van As outlined plans to cut the apron strings that bound the group to Union Corporation. It was announced that Sappi's head office was moving away from Unicorn House and into Rennie House in Braamfontein, already the home of Sappi Kraft. Both Sappi Fine Papers and Sappi Forests were moving there too, and for the first time all Sappi's divisions would be together under one roof.

## Forest Products

THE SAPPI CALENDAR was to have a new look. The series on lesser-known historic sites had ended and the focus shifted to pockets of indigenous woodland in Sappi's forests. Such pockets were deliberately left undisturbed, some of them protecting watercourses and some on ground which was too uneven for planting but which provided a beautiful setting. The wildlife photographer Peter Johnson was commissioned to gather material for a series of calendars, each one devoted to a theme such as Sappi's birds, flora, animals or water. Far from being an enemy of the environment, Sappi was doing a great deal to protect and improve it.

The indigenous forests on Sappi's land had been the subject of an article in *Sappi News*, contributed by Keith Cooper of the Wildlife Society of Southern Africa. Near Ngodwana, for interest, Sappi had three such pockets — Houtboshhoek, Elandshoogte D and Mashonimi, and in the Natal Midlands the group had the Liff Forest near

Rietvlei and the Clairmont Forest at Bulwer. Each pocket was more than 50 hectares in size so was viable from a conservation standpoint, containing a wealth of bird life, insects and animals and also plants that ranged from lowly mosses and ferns on the forest floor to trees in the canopy which were up to 25 metres high.

For Cooper, the most interesting of Sappi's indigenous pockets was the Liff Forest, which held fine specimens of all three species of yellowwood, together with good examples of red pear, sneezewood, white stinkwood, myrtle, quince and many other species. The forest was also rich in bird and mammal fauna, and held a greater variety of endangered species than the other areas on Sappi's land. All the Sappi pockets had been exploited in the past — in the Liff Forest harvesting had continued from 1870 to 1940 — yet the indigenous vegetation had more than held its own and was recolonising even the largest open patches where trees had been felled and exotic flora had flooded in.

Of course, Sappi's indigenous forests occupied only a tiny proportion of the group's land holdings; even nationally, indigenous forest was to be found on only 0,25 per cent of the surface area. At the beginning of 1980 Sappi had owned 87 000 hectares of land, of which 59 000 hectares were under trees, 28 per cent to eucalyptus and wattle. Every year, more land was bought — wherever possible through agents, so that landowners would not inflate their prices — and fresh areas were planted. In the Eastern Transvaal all seedlings were supplied from the nursery at Grootgeluk, and in Natal, seedlings came from a new nursery established at Mtubatuba in the Zululand division.

Sappi Forests' chief purpose in establishing the Zululand division had been to make sure that Tugela would have enough pulpwood in decades still to come. Already there were signs of increasing competition for the available resources, and unless the foresters made their plans early, the Zululand mill might be left high and dry. That was why the Zululand division was to concentrate on silviculture — the planting and protection of trees — while all harvesting for Tugela was being organised through the Natal office in Pietermaritzburg. The first manager of the Zululand division was Peter Stoker, a former tobacco farmer from Rhodesia who had joined Sappi with little knowledge of trees, but was confident he could apply techniques he had used on his tobacco estates.

The Zululand division was responsible for all Sappi silviculture north of the Tugela, so when the group bought land in the Melmoth and Piet Retief areas, Zululand teams arrived to plant seedlings. Sappi Forests had acquired several tractor-drawn, semi-automatic planting machines which used a claw to deposit seedlings in a prepared furrow, then compacted soil around their roots through the



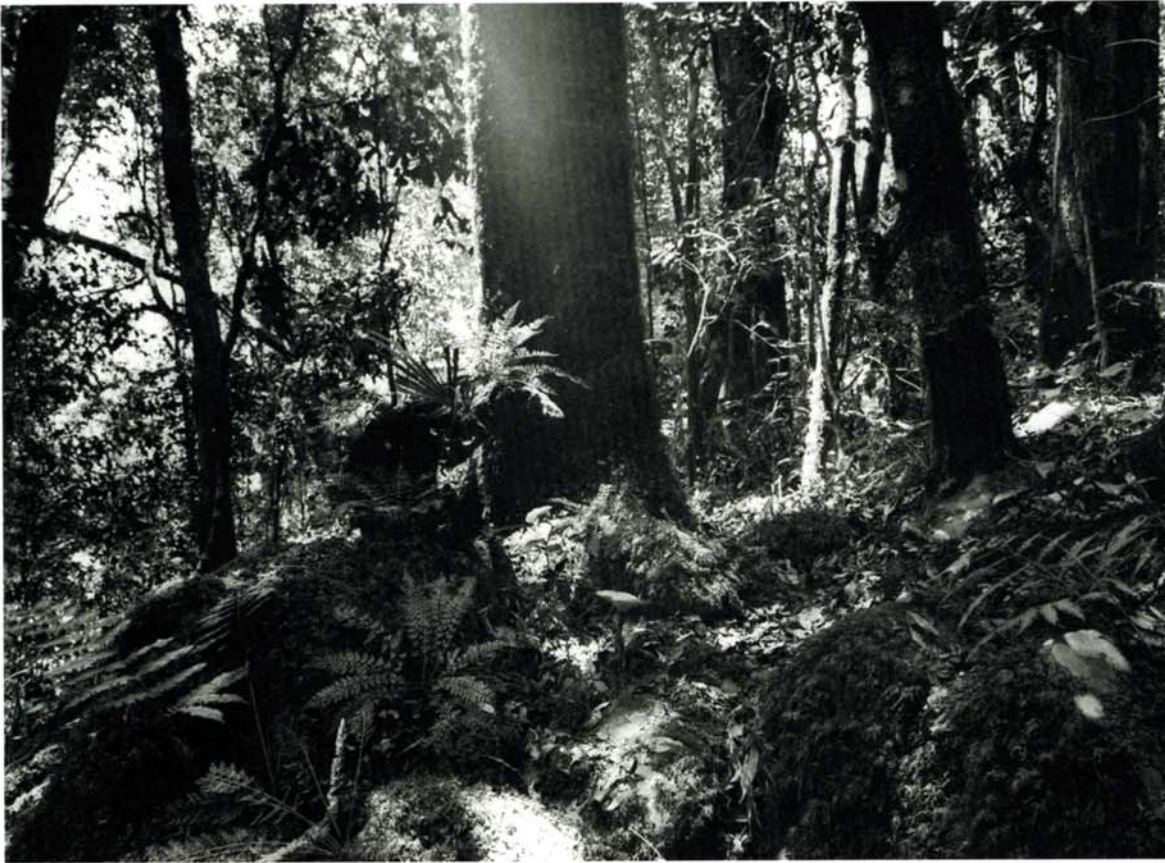
action of two rubber wheels; but such aids were still experimental, and most of the work was done by men lined up 30 or 40 abreast, carrying satchels full of seedlings wrapped in wet sacks to keep their roots moist.

Machines were proving their worth in harvesting operations as well. Some were imported at great expense — for instance, a transportable ‘high lead’ aerial cableway designed to winch logs over uneven terrain. Others were home-made, notably a timber loader devised by Peter Stoker and his colleagues at Mtubatuba. The Zululand men had attached a grab to the front of an old sugarcane loader made by the I A Bell company of Empangeni in Zululand, and had found it ideal for picking up bundles of logs and transporting them to the nearest roadside. The Bell company took the hint and began making loaders designed for the forestry industry.

In Zululand, the Bell loader/stackers were initially used in conjunc-

*The Sappi nursery at Grootgeluk (overleaf).*

*A pocket of indigenous forest on Sappi land in Natal.*















tion with teams of individual cutters trained in Nordfor harvesting. The system worked so well that it was soon introduced to the Eastern Transvaal, where the team which pioneered it was presented with one of the six national productivity awards for 1979. On Sappi's own plantations, most harvesting took the form of thinning — in the case of *Pinus patula*, a first thinning at ten years and a second at 18, with the trees reaching maturity at 25. Very few of Sappi's trees had been in the ground long enough to reach full growth, but the time was not far off when the harvesting of mature trees would begin in earnest.

For years, Peter Stratten of Sappi Forests had been urging the group's senior management to use more imagination in disposing of the group's wood. Much of it was of excellent quality and would be ideal sawlog material for the construction and furniture industries. Besides, if used in that way it would earn far more money. Instead, only a small proportion of Sappi's forest output went to sawmills or to mines for use as mining timber. The rest was pulped, even though the long-running recession had left the market flooded with low-grade pulpwood which could be obtained very cheaply.

Stratten's views were well known to the rest of Sappi's management, but before 1979 they had been given low priority. Then Sappi Forests received a number of inquiries from companies in Europe and elsewhere, asking whether the group was prepared to export sawlogs, wood chips and other forest products. At the time there was a wood surplus, and in 1980 a trial shipment of Natal pulpwood was shipped to Finland. A German customer proposed co-operating with Sappi in setting up sawmills in South Africa to cut wood for boxes and pallets. At that point Stratten and Eugene van As visited Europe to investigate the opportunities for themselves.

Peter Stratten subsequently visited forest products companies in North America, and he and Van As became convinced that it was time for Sappi to become much more than a pulp and paper producer. Elsewhere in the world, similar companies set out to utilise 'the whole log,' extracting sawn timber from its middle, pulpwood from its sides, particleboard wood chips from its branches and boiler fuel from its bark. It remained to convince the rest of Sappi's management, but just then came news that the Department of Forestry wanted to dispose of various sawmills attached to its plantations, among them Elandshoek which was only a few kilometres east of Ngodwana.

The chance to obtain Elandshoek could not have come at a better time, and Sappi's management immediately approached the Depart-

*Semi-automatic planting in the Eastern Transvaal.*

*A Bell stacker/loader in action in Zululand.*

ment of Forestry for permission to take it over. Talks began at the end of 1979, but the department was in no hurry, and it seemed that it might be months before firm proposals could be drawn up. The board now backed the plan to begin sawmilling, the more so as Sappi was over-committed to outside pulpwood contractors and was obliged to accept their wood. A small bush sawmill was set up on the Epsom plantation near Bulwer and long-term contracts were arranged covering timber supplies to a single customer.

In October 1980 the Department of Forestry agreed to dispose of Elandshoek to Sappi. The group was to take over the sawmill in January 1981 and a new division, Sappi Timber Products, was formed in readiness. Elandshoek had started operations in 1936 so was as old as Sappi, and its equipment included an old log cableway in the hills behind the sawmills. Streams named Poverty Creek and Starvation Creek were reminders of the Eastern Transvaal gold rush of a century before. The sawmill had given rise to a small community served by its own station, shop, post office and primary school with Ngodwana's children among the pupils.

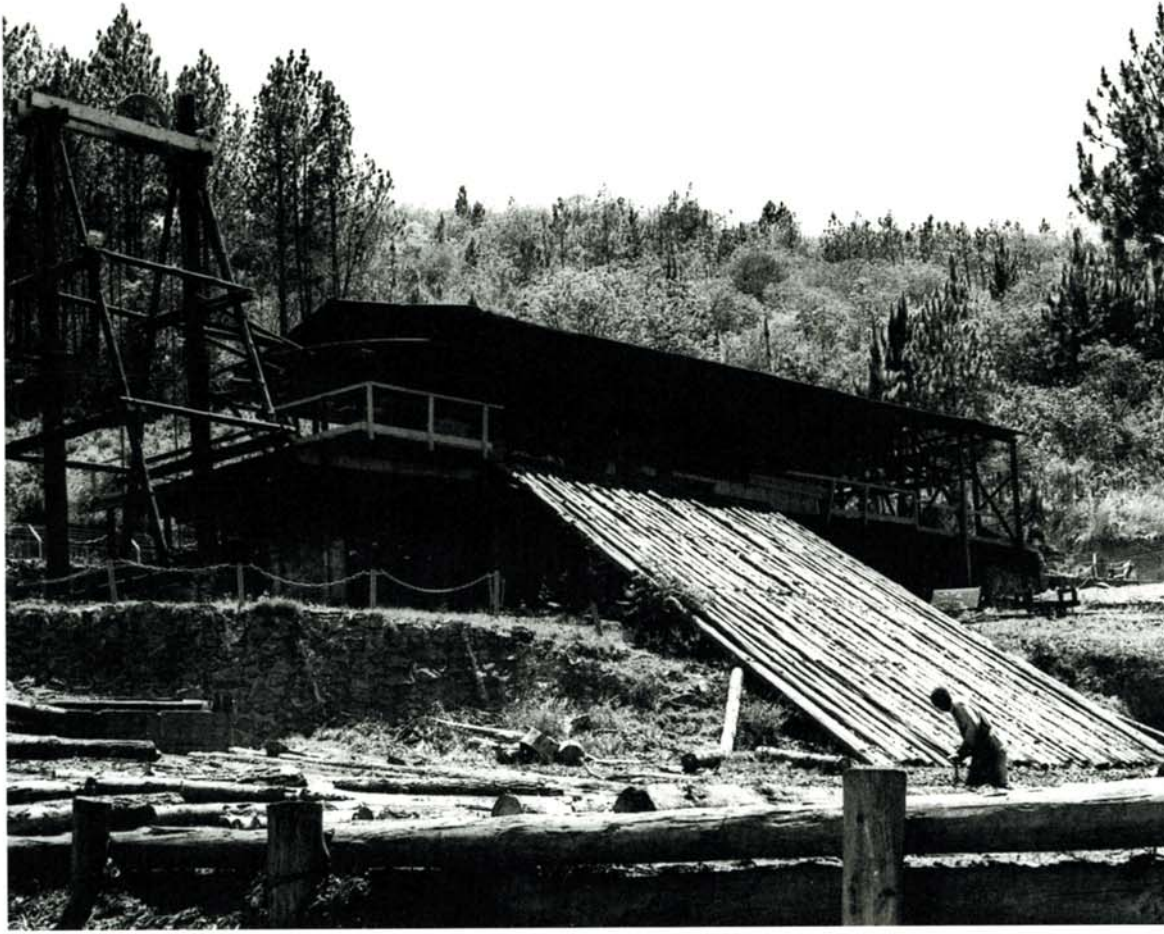
## Cape Kraft

EVEN BEFORE General Mining had acquired half of Union Corporation, the two had been near neighbours in Johannesburg and their head offices were no more than a stone's throw apart. Still, the two had separate traditions so for some time remained independent of one another, with their own management and their own ways of doing things. Then it was pointed out that both would benefit from sharing common services, so it was decided to bring them together. In August 1980 the two mining houses merged as General Mining Union Corporation, Gencor for short, and Ted Pavitt was appointed vice-chairman.

It was clear to Pavitt that his new job would keep him busy on Gencor affairs and that there would be less time to devote to other interests, among them Sappi. In September 1980 he announced that he was stepping down as chairman and that Basil Landau was succeeding him. Landau had now served on Sappi's board for four years and had taken a keen interest in all developments. Besides heading Sappi he was chairman of several other industrial subsidiaries of Gencor; and on top of that he was a member of the President's Council.

One of Basil Landau's first tasks as chairman was to report on Sappi's results for 1980. Like many other concerns, the group had profited from a more favourable economic climate; yet even allowing for that, the figures were encouraging. Production of paper, board



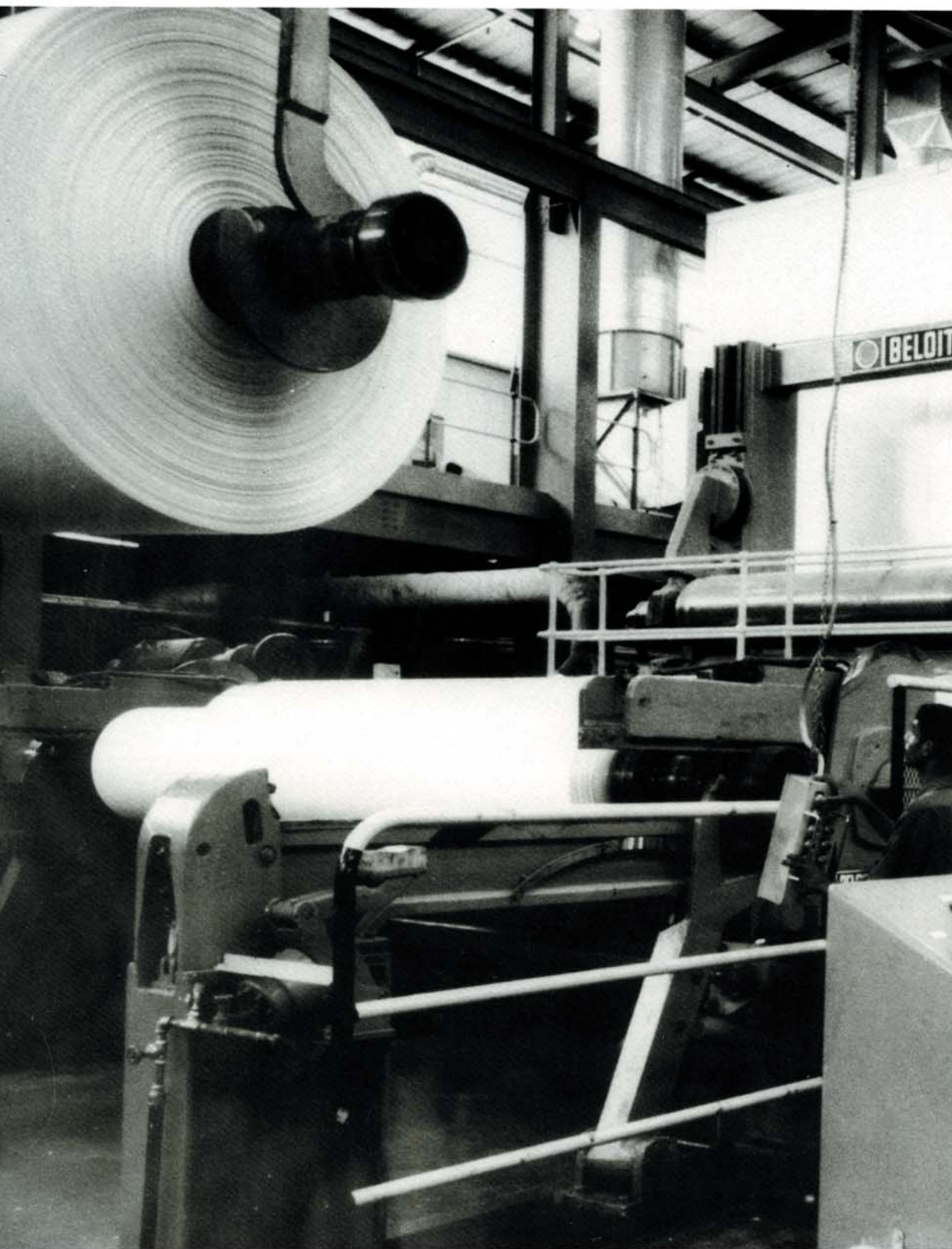


*The terminus of the old log cableway at Elandshoek.*

*Making paper on the Beloit-Walmsley machine at Stanger (overleaf).*

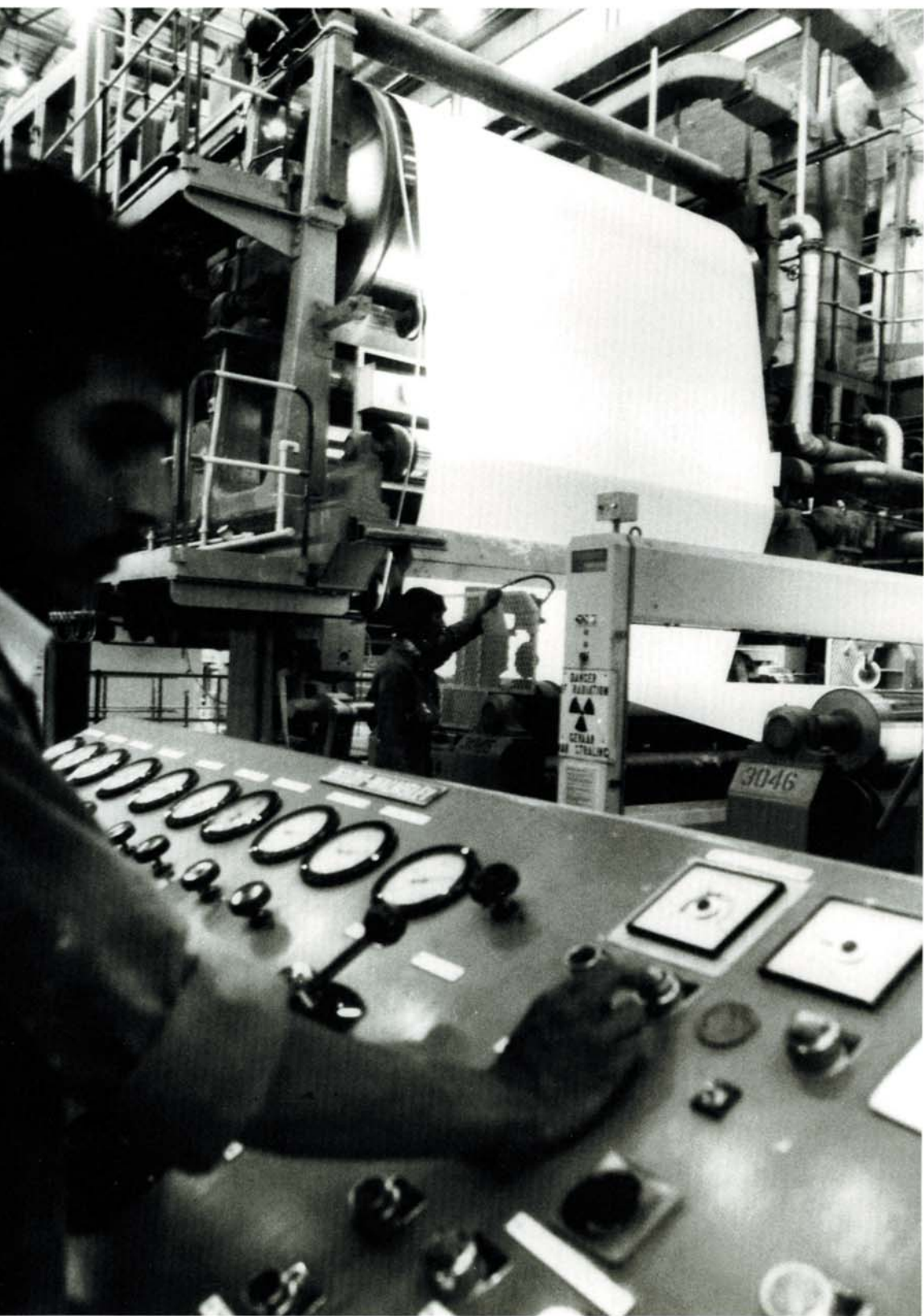
and tissue had risen by 70 000 tons, to a total of 550 000 — which suggested that the expansions were paying off. Turnover was up by 33 per cent, to R347 million. Taxed profits had gone up to R50,8 million, 78 per cent higher than in 1979 and nearly three times higher than in 1978; and the board was paying dividends of 57 cents per share, up from 36 cents the year before.

The only source of worry was a serious drought which was slowing the growth of trees in the Transvaal and Natal and affecting the sugar crop which provided much of Stanger's raw material. Both quality and quantity had been affected, and during the 1980 season the Gledhow sugar mill had processed only half as much cane as usual. There was also a water shortage, meaning that Stanger's management had to act rapidly to assure a supply should the Umvoti River dry up. To keep the paper machines running, bleached pulp was imported from Canada.











Even in spite of the drought, Stanger had produced an operating profit, and the group as a whole was in a mood for expansion. One new project was already under way — construction of the new ‘Cape Kraft’ mill at Milnerton. The various buildings were in place and Zululand Construction was installing equipment, notably a plant which converted waste paper into pulp noodles ready for repulping as required, and the 96-inch (2,44m) paper machine built by the Voith-Dorries company of West Germany, the first that had been made especially for Sappi since the newsprint machines of the 1960s.

The Cape Kraft paper machine was 85 metres long and though it had similarities to a Fourdrinier, it worked quite differently. Pulp was pumped to five vats positioned under a travelling felt. As the felt moved over the top of the vats it picked up a layer of pulp from each and the separate layers combined as a sheet of paper. Pulp in the vats could be varied, so it was possible to use low-grade pulp for the inside of the paper ‘sandwich’ and bleached pulp on the outsides to give it a white finish. As water drained away the thin layers bonded together.

Trial runs of the paper machine began at the beginning of August 1981, and in November the mill was formally opened by the minister of finance, Dr Owen Horwood. By then, the waste paper recovery operation needed to supply the mill with its raw material was in full swing. Nor was paper the only commodity being recovered. To reduce effluent Cape Kraft had been planned as a ‘closed mill’ in that its water was endlessly recycled, meaning that it used only one-tenth as much as Sappi’s other mills.

Cape Kraft was expected to use 30 000 tons of waste paper per year, and elsewhere in the group roughly 16 000 tons were used at Adamas and 15 000 at Tugela as a low-cost supplement to wood pulp. It could be expected that in time waste would be used in the Transvaal as well. Accordingly Sappi’s management set out to build a national waste collection network. In Durban, the group bought Natal Waste; in Johannesburg, Reef Waste; and these companies and Herby Taylor of Cape Town were renamed ‘Saveall Paper’ like the Port Elizabeth waste collection company that Sappi had acquired in 1970.

Cape Kraft was to produce linerboard and fluting for the various corrugating converters in the Cape, and for geographic reasons alone would have an advantage over competitors. Elsewhere in the country

*Coating fine papers at Stanger.*

*Sappi’s Cape Kraft in Milnerton, opened in 1981 (overleaf).*







the situation was less clear-cut, and Sappi's sales staff had to keep on their toes to retain customers' good will. For Sappi Kraft, there was competition from the Hulett's mills, which had been taken over by Mondi, and from the Raimondo mill near Pretoria, now closely aligned with Nampak. Sappi Fine Papers' competition came from Mondi, at least in regard to uncoated papers, and from imports in the case of coated papers.

South African kraft and most kinds of uncoated fine papers were partly protected by import controls; but Stanger's coated papers were not, and needed special promotion. The 'Printer of the Season' competition originated at Stanger had been a great success, so in 1981 Sappi Fine Papers broadened its scope by adding extra categories, bringing in outside judges and honouring the overall winner as 'Printer of the Year.' The categories included 'books,' 'promotional materials' such as annual reports and brochures, 'magazines' and 'calendars and advertising materials.' All entries had to be printed on Sappi paper.

Stanger, Cape Kraft and the expansions at Enstra and Tugela had all increased Sappi's capacity, and there had been talk of building a new linerboard machine at Tugela; yet it was clear that demand for paper of all kinds was increasing so fast that Sappi could not keep pace. South Africa's paper consumption had risen to 40 kilograms per head — far higher than the average for Africa, yet seven to eight times less than in the United States. It could be expected that increasing education and rising living standards would gradually narrow the gap.

That being the case, something had to be done. One option was to continue tinkering with Enstra and Tugela, but that was only a short-term solution. Analysis of the group's strengths and weaknesses showed that Sappi needed a great leap forward, a bold initiative that would make it strong for decades to come. Years earlier a Sappi team had drawn up plans for an expansion at Ngodwana, and that idea was now revived and embellished. No other site offered so much — virtually unlimited timber potential, plenty of water, coalfields within easy range and an excellent transport infrastructure.

To survive, the group had to be able to turn out more of virtually everything it produced, but there were priorities. A team led by Andre Vlok assessed possible approaches. It seemed best to tackle the expansion in several distinct stages — first, to install a 140 000 tons-per-year newsprint machine at Ngodwana and to rebuild Enstra's No 6 machine to equip it for production of fine papers; second, to erect a major new pulping and bleaching plant at Ngodwana, with a capacity of 260 000 tons per year; and third, to add a 150 000 tons-per-year kraft linerboard machine at Ngodwana to lessen pressure on Tugela.





*Sappi's 'Printer of the Year' competition: Dennis Nick (front row, second from left) of Creda Press, Cape Town, receiving an award from Sappi's Eugene van As (left) and Bruce MacIntosh (third from left).*

Such an expansion would increase Sappi's pulp and paper capacity by 50 per cent, and would equip the group to keep pace with South African demand for years to come. Indeed, there would be a large surplus for export. Obviously the scheme would cost a fortune, much more than Sappi had spent on capital development in its entire history. One early estimate was a construction cost of R925 million, not counting finance charges, though that was later reduced to R880 million. John McManus was confident that money could be raised, partly through equity, partly from long-term debt and partly from short-term debt. In January 1981 the management team's proposals were placed before the board.

Ted Pavitt, Basil Landau and other Union Corporation men among Sappi's directors were aware of the group's needs and were keen to proceed with Phases One and Two, on condition that Federale Mynbou agreed. The Federale Mynbou directors were doubtful. What Sappi proposed would amount to the largest private sector initiative ever seen in South Africa, the equivalent of floating three major gold mines. Then overseas consultants confirmed that the project was viable, particularly if long-term export prospects were





confirmed. That done, Phases One and Two were approved, and John McManus was authorised to start raising funds.

While negotiations continued, Sappi's management confirmed several key appointments. One was that of Charles T Main, a firm of consulting engineers based in Boston, Massachusetts, which had recently completed work on a major pulp and paper plant in the United States. The second appointment was of an Australian, Peter Dixon, as project director. The third was of a British firm, Davy McKee of Stockton-on-Tees, which had been involved in South Africa before and was put in charge of project management. By August 1981, initial land clearance at Ngodwana was already under way.

The decision to go ahead with the expansion had implications for the whole group, not forgetting the foresters who would have to provide the new pulping plant with wood. Already there were plans to develop a huge new nursery at Grootgeluk to serve all Sappi's land holdings; and in addition the foresters aimed to step up their silvicultural activities and plant 12 million seedlings per year. Sappi Forests was firmly on its feet, and Peter Stratten felt he could safely leave the company to go into private consultancy. His place as managing director of Sappi Forests was taken by Andre Vlok.

The mood of expansion was reaching even the smallest of the group's divisions, Sappi Timber Products. Early in 1981 Sappi had taken over a Gencor subsidiary, Venus Timbers, which had been set up by Union Corporation in the 1950s to develop eucalyptus plantations and produce prop-poles and other roof supports used in mines. The company had plantations in the Eastern Transvaal and Zululand with a combined area of 6 000 hectares, one of them equipped with a matpack sawmill. The plantations were to be managed by Sappi Forests, but the sawmill became part of Sappi Timber Products.

Waste wood from sawmills was normally sent for pulping or was otherwise turned into chipboard (the European term) or particleboard (as Americans knew it) for the furniture and construction industries. The South African chipboard market was dominated by two companies, one of them Novobord which was based in Port Elizabeth and was owned by a French concern and three Port Elizabeth families. Sappi's management intended to produce chipboard as a means of making the group still more versatile; so when Eugene van As was told that Novobord was for sale, he moved quickly.

Novobord had an interesting history. It was descended from a company named Boxes & Shooks, founded in Port Elizabeth in 1927 to make wooden boxes by recycling packing cases used to ship car components to local motor assembly plants. By 1952 Boxes & Shooks was making wooden pallets as well but had surplus raw materials, so

looked for ways to use them. One of the company's directors obtained rights to a Swiss process for making particleboard, not only for South Africa but for most of the British Commonwealth, and the Novobord plant was set up in Port Elizabeth.

When supplies of packing cases dried up, Boxes & Shooks moved to the Transvaal to be close to sources of timber, and Novobord itself processed raw logs. In 1977 Novobord's owners sold a half share in the business to Ets G Leroy of France, which had chipboard plants in Europe. The French connection brought many new ideas to South Africa, and an early consequence was a new plant at Wadeville near Johannesburg where particleboard was laminated with hard-wearing melamine for use in kitchen furniture. Another was a decision to build a high-technology mill at White River in the Transvaal.

The Novobord group became part of Sappi on New Year's Day 1982 and for a time continued operating as before. The White River plant went into operation during March 1983 and was to concentrate on plain particleboard without a special finish, whereas the Port Elizabeth plant added a range of wood veneers and laminates designed for use in furniture. Later in the year, Boxes & Shooks and a Novobord sawmill in the Transvaal were made part of Sappi's Timber Products division, and the three particleboard plants were reorganised as Sappi Novobord which became a division on its own.

*Chipboard being made at Novobord.*

*The Novobord plant at White River, Eastern Transvaal.*



