

- the dredging of 46 million cubic metres of soil;
- the building of jetties offshore;
- the construction of industrial sites and storages areas.

CBD commenced dredging at Sepetiba in 1976 and expect to complete the operation in 1983. The work can be roughly divided into the following phases (see drawing):

1. The dredging of some 1,200,000 m<sup>3</sup> of soft clay to create a dumping site. This is being done with the trailing-suction hopper dredger "Macapá", which was built for CBD by IHC Holland in 1976. The principal particulars of this vessel are given elsewhere in this article.
2. The dredging, by the cutter suction method, of about 1,800,000 m<sup>3</sup> of soft clay around the coast of the Ilha de Madeira. The material is discharged into the abovementioned pit, from whence it is taken out to sea by the "Macapá" and dumped.
3. The creation by hydraulic fill of sites along the coast, using sand dredged by the "Macapá" or her sister ship, the "Boa Vista", in the approach channel. The sand is dumped in area 1, reclaimed by cutter suction dredgers and pumped to the sites 2 and 3. These sites lie some 4 m above the water level and are surrounded by a rock dam about 3,000 metres in length.
4. The dredging of an approach channel, berths and a turning basin, all with a water depth of 15 m. This will be increased to 18 m at a later date.
5. The building of a 1,000 m long jetty. This is being done by ECEX with the aid of a self-elevating platform built in Brazil to an IHC design.

Principal particulars of the "Macapá" and "Boa Vista":

type .....	trailing-suction hopper dredger
year of construction .....	1976/1977
length .....	106.60 m
beam .....	18.30 m
hopper capacity .....	5000 m <sup>3</sup>
max. dredging depth .....	32.00 m
suction pipe diam. ....	900 mm
dredgepump drive power ...	2 x 1442 kW (1960 hp)
propulsive power .....	2 x 2165 kW (2940 hp)
spearing speed .....	13 knots
accommodation .....	35 persons
total machinery output .....	8830 kW (12,000 hp)

The construction of the new port at Sepetiba is of immense economic importance to Brazil. Besides dredging, other infrastructural works must be carried out, including railways, roads and bridges. When the port complex becomes operational in 1985, it will have an annual transshipment capacity of 180 million tons of ore and 8.6 million tons of coal, to which tens of thousands of tons of other goods will undoubtedly be added.

The terminal will be able to accept vessels of up to 90,000 dwt. The installations are initially designed to simultaneously service one 90,00-ton vessel and three of 45,000 tons. But provision has been made to extend the terminal pier by 350 m, which will enable ships of up to 130,000 dwt to use the port.

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**SCHEEPSWERF EN  
MACHINEFABRIEK**

**AMELS B.V.**

postbus 1  
8754 ZN MAKKUM (Fr.)  
Afd. Pers. zaken

Ons bedrijf is een middelgrote scheepswerf en machinefabriek in Friesland aan het IJsselmeer. Er werken totaal ca. 310 personen, waarvan 15 man op de tekenkamer.

Wij zouden gaarne in contact komen met belangstellenden voor de onderstaande functies:

**A. KONSTRUKTEUR WERKTUIGBOUW**

Taak: het zelfstandig en/of in overleg maken van schema's, ontwerp-, constructie- en installatietekeningen, met het daarbij behorend constructief rekenwerk en met toepassing van de classificatie-eisen.

Vereisten: H.T.S. werktuigbouw of overeenkomstige opleiding. Voldoende praktische tekenkamerervaring op een scheepswerf of scheepsbouw bureau.

**B. TEKENAAR KONSTRUKTEUR SCHEEPSBOUW**

Taak: In overleg met de groepsleider zelfstandig maken van scheepsconstructie- en detailtekeningen aan de hand van ontwerp- en detailtekeningen, bestek of anderszins en tevens het uitvoeren van technisch rekenwerk, met toepassing van classificatie-eisen.

Vereisten: minimum m.t.s. scheepsbouw of overeenkomstige opleiding. Minstens 3 jaar praktische tekenkamerervaring op een scheepswerf of scheepsbouw bureau.

Schriftelijke sollicitaties zullen wij gaarne ontvangen op bovenstaand adres.

#### IHI delivers 3rd dredger to Indonesia

IHI has delivered the "Timor", a 2,000 m<sup>3</sup> self-propelled side-trailing suction hopper dredger, to the Directorate-General of Sea Communication, Department of Transport, Communications and Tourism of the Republic of Indonesia.

The dredger was constructed at the Ishikawajima Shipbuilding and Chemical Plants Co., Ltd., an IHI subsidiary.

The vessel will be used to dredge Indonesia's sea routes.

The "Timor" is the third dredger built by IHI for the above Indonesian client. It delivered the first 750-m<sup>3</sup> hopper suction dredger and the second 1,000-m<sup>3</sup> hopper dredger to the same customer in 1973 and 1978, respectively.

Main particulars of the "Timor" are as follows:

length .....	89.0 m
breadth .....	18.4 m
depth .....	7.0 m
draft .....	5.0 m
main engine .....	diesel engine 2,100 ps x 2 units
service speed .....	approx. 12.0 knots
dredging pump capacity ...	5,000 m <sup>3</sup> /h x 2 units
engine for pumps .....	diesel engine 550 hp x 2 units
dredging depth .....	max. 20 m

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#### Ten jetty contract for Ballast-Nedam

Ballast-Nedam has been awarded a contract by the Royal Commission for Jubail and Yanbu in Saudi Arabia for the construction of ten jetties which will handle the roll-on/roll-off transport of container ships as well as general cargo and bulk freight in the two ports. The value of the contract is \$ 100 million and construction time is 36

months. Consultants are Saudi Arabia Persons Ltd.

Meanwhile testing and pile driving equipment has been loaded on two ocean-going pontoons "Scouwen" and "Matijn" at Rotterdam.

After loading, the pontoons left Rotterdam for Yanbu in the Red Sea. The transport of the equipment is carried out by Muller from Terneuzen.

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#### Royal Volker Stevin in 1980

Royal Volker Stevin N.V. achieved a turnover in 1980 based on production of Dfl. 2,809 million (in 1979: Dfl. 2,481 million). The turnover based on delivered work decreased from Dfl. 2,807 million in 1979 to Dfl. 2,601 million in 1980.

The value of the orderbook remained practically the same Dfl. 3,110 million compared with Dfl. 3,133 on 31st December 1980 and 1979 respectively.

Employment rose from 18,125 persons in 1979 to 18,904 persons in 1980.

In 1980 Royal Volker Stevin experienced serious setbacks on two bridge projects in England and the United States, a port expansion and two pipeline projects in the Middle East and a road construction project in the Far East.

These setbacks resulted in a loss of Dfl. 279.6 million in 1980 compared with a profit of Dfl. 80.5 million in 1979. In the same year a new Board of Directors was appointed which consists of the following members:

- Mr. Ir. J.K.J. Kokje chairman
- Ir. F. Roelofs
- Drs. A.B.A. de Smit

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