



Tamil Nadu PM 2.

Voith Paper in India

The Voith tradition in India goes back more than eighty years. It was in 1924 when Voith Germany gained a foothold here by selling its first paper machine to Meenakshi Paper Mills in Delhi. And according to the Escher Wyss records, a paper machine was already sold in 1905 to James Stuart in Chittagong, belonging at that time to India.

In those days India was known as the exotic land of maharajas, tigers and diamonds. It was still a British colony, the famous Gateway of India in Bombay (now known as Mumbai) had just been inaugurated, and in 1924 E. M. Forster published his final masterpiece "A Passage to India". Hardly anyone would have guessed then that this mysterious faraway country where the Ganges flows would develop

eighty years later into one of the world's most promising markets.

Thanks to that early start, Voith Paper is now extremely well positioned in the Indian market.

Already in December 1950 Voith signed an agreement with Larsen & Toubro Limited (L&T) Bombay, India's leading construction and technology group. In 1960 this was converted into a license agreement enabling L&T to manufacture plant and machinery in India according to Voith designs, whereby critical key components were still imported from Germany.

Over the years Voith L&T supplied a good number of new machines, rebuilds, extensions and recycling lines for nearly all of India's large paper

mills. This includes the fastest paper machine in India so far (at Bilt Graphics, formerly Sinar Mas Pulp and Paper), commissioned in 1996. Almost two decades earlier in 1978, Voith had already delivered India's widest paper machine so far, to Hindustan Newsprint in Kerala. And in 1995 Voith supplied Tamil Nadu Newsprint and Papers Limited with the world's fastest and largest paper machine for paper from crushed sugar cane.

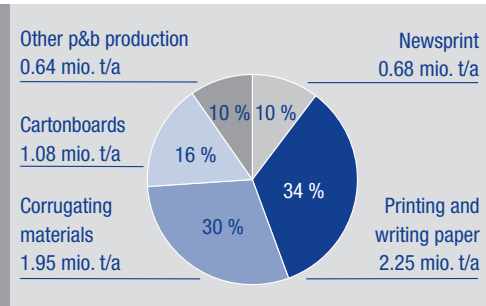
In April 2000 L&T and Voith founded a joint venture with equal participation, and changed the company name to Voith Paper Technology Ltd with registered offices in Kolkata. Voith Paper Fabrics, a Group company with registered offices in Faridabad near Delhi, is moreover market leader in India for paper machine fabrics.

	India	China
Population (mio.)	1,080	1,300
Population growth (%/year)	1.5	0.7
GDP (US\$ billion in 2004)	675.0	1,677.0
GDP per capita (US\$)	620.0	1,290.0
GDP growth	8.8	6.0
P & B 2005 demand (mio. ton)	7.0	59.0
P & B per capita (kg)	6.5	45.4
Forests (mio. ha)	0.7	1.7

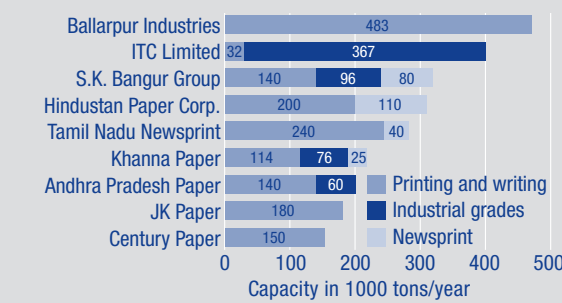
Comparative figures for India and China; Status 2005.

	India	World
Average mill size (tons/year)	14,000	42,000
Average paper machine speed (m/min)	200-250	600-700
Specific raw material consumption (t/d)	2.0-2.4	1.8-2.2
Specific energy consumption (MWh/t)	6.4-10.3	5.0-6.1

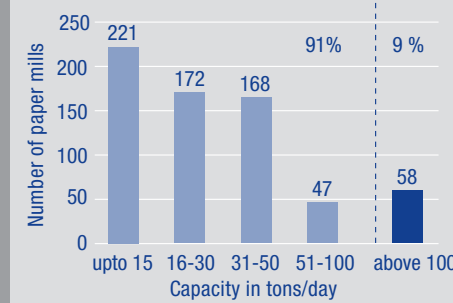
India's paper industry by global comparison.



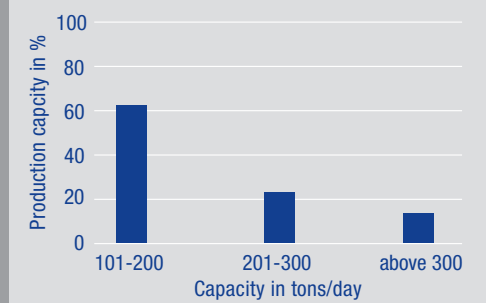
Paper and board production in India.



India's biggest papermaking companies.



Number of paper mills in India (Total 666).



Production capacity distribution of India's 58 largest paper mills.

Under these circumstances, recovered paper will become an increasingly important raw material – and the demand for appropriate plant and machinery will increase. Even now, recovered paper comprises 32 percent of papermaking furnish, with only 40 percent timber. Another 20 percent comprises agricultural by-products such as straw.

There is still great expansion potential for waste paper recycling in India. Currently only about 20 percent of India's waste paper is recovered, as against more than 50 percent in Germany. But India is now making greater efforts to increase the systematic collection of waste paper. This opens up new business opportunities for the paper machine industry in gen-


eral, and in particular for Voith as the pioneer in modern paper recycling technology and as the leading supplier of appropriate technological systems.

In summary, India's paper machinery market is not growing as rapidly as in China, but it offers great potential in the medium and long term.


Apart from enormous business opportunities, India also offers industrial investors several advantages:

- A plentiful supply of well-trained scientists, engineers and technicians;
- English is widely spoken;
- A politically stable democracy;
- A dependable legal system.

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