Concrete paving equipment demand has also been spurred on by the numerous canal and waterway projects that are in the pipeline. The market for concrete paving machines is estimated to be growing at a healthy rate of about 15% -20% according to industry analysts and expected to more than double by the end of the 12th Five Year Plan period in 2017.

The renewed focus on road projects, after the hiccups experienced a few years ago, comes as good news for kerbing machinery suppliers. The road network is fast expanding, with the government initiating a time bound action plan to build National Highways at a pace of 20 km per day i.e., 7300 km per year, bring the entire single / intermediate lane National Highways to the minimum two lane level, and take up a programme of 1000 km expressways. Criticism of the slow pace of road projects has contributed...
40 road construction projects around the country. Several state governments have also shown keen interest in ultra-thin white topping, another factor that is leading to the surge in sales of concrete paving machines.

Spike in Demand

The spurt in the number of airport projects around the country has been driving the demand for concrete paving equipment to a large extent. The Airports Authority of India had taken up modernization and up gradation of work in 35 airports across the country. The projects are being carried out with a budget provision of ₹ 12,000 crore. Notably, the modernization of 24 out of the 35 airports is being carried out under the public-private partnership (PPP) mode. The Government had announced an exclusive policy for development of Greenfield airports in April 2008, keeping in view the enormous growth in passenger and cargo traffic in order to infuse greater investment in the sector. Mechanization of the construction process has become imperative in these projects, given the tight deadlines under which the private developers are operating.

As the demand is expected to rise exponential, the construction equipment industry too is geared up with all the supply. Wirtgen India, for instance, offers a wide array of slip-form pavers for laying concrete roads, airport runways, and offset applications, ranging from a width of 1.8 meters to 18 meters. Giving an insight into the company’s path breaking work in the field, Mr. B.B. Charmanna, Senior Product Manager - Paving Products during an interaction with The Masterbuilder, had mentioned, “Wirtgen are pioneers of concrete paving in India and started our campaign in India way back in 1998 at the prestigious Mumbai-Pune expressway. Since then, Wirtgen slipform pavers have been used in several projects, for e.g., Golden Quadrilateral, Noida bypass, Delhi-Agra expressway, just to name a few”.

Tim Andrews
CEO, Arrow Machinery

Airfield pavement application is pushing demand for concrete pavers
Quadrilateral connecting all four metro cities, Indore Bypass, Dewas Bypass to name a few. At present Wirtgen Slipform pavers are deployed in the ongoing North-South, East-West Corridor NHDP projects. Above all the Wirtgen slipform pavers are presently being used on the prestigious Yamuna Expressway project connecting Noida and Agra with the paving width of 15.70 m in a single pass, the first of its kind in India.

Other key players in the field such as Conmat, BRDC, Unisteel, Mekaster, and Gomaco are also offering a wide range of concrete paving equipment, featuring latest technologies, to meet the growing demands of the market.

The rapid increase in the number of canal projects has also been pushing up the demand off late.

Versatile Machines

Kerbing machines have been matching the growth rate of concrete pavers in the Indian market. With the government embarking on an ambitious road building spree, it doesn’t come as a surprise that kerbing machines are among the most sought after equipment these days. Speaking about the size of the market for kerbing machinery, Mr.V.S.Hardikar, Director, Aquarius Technologies Pvt Ltd, which is a leading player in the field, had in an interaction with The Masterbuilder remarked, “Highway construction is growing steadily. The market for kerb laying machines and road marking machines, however, is large in numbers but quite small in value. This phenomenon is mainly the result of use of mostly inferior technology machines, with only cosmetic effects in its end products.” However, there has been a distinct change in customer behavior patterns that have been observed recently, which have been dictated by increased emphasis on quality and adherence to strict project deadlines.

While cheaper machines featuring inferior technology used to rule the roost in the early part of the decade, rising awareness levels, apart from the factors mentioned above has meant that contractors today are no longer averse to using kerbing machines featuring latest technologies, since they enable them to complete projects
on time, which in turns translates into cost savings.

The rising demand has meant that a slew of global players have already entered the market, while several others are expected to soon. Reflecting on the tremendous growth potential of the Indian market, Mr. Tim Andrews, CEO of Arrow Machinery, a globally well known name in kerbing machines, said, “Arrow machines can be found on all NHAI road projects, Pune expressway, Golden Quadrilateral, Noida bypass, Delhi-Agra expressway, just to name a few.” The company has made a mark in the Indian market by introducing a series of equipment like Arrow 770 and Arrow 750-XL.

“Wirtgen are pioneers of concrete paving in India and started our campaign in India way back in 1998 at the prestigious Mumbai-Pune expressway. Since then, Wirtgen slipform pavers have been used in several projects, for e.g., Golden Quadrilateral connecting all four metro cities, Indore Bypass, Dewas Bypass to name a few. At present Wirtgen Slipform pavers are deployed in the ongoing North-South, East-West Corridor NHDP projects. Above all the Wirtgen slipform pavers are presently being used on the prestigious Yamuna Expressway project connecting Noida and Agra with the paving width of 15.70 m in a single pass, the first of its kind in India”

Manufacturers are focusing their R & D efforts towards coming out with products that are ideally suited to taking on the tough working conditions those they are sometimes subjected to in India. Going into details about the Arrow 770 Kerbmaker, Mr. Andrews said, that the machine has revolutionized the kerbing industry, wherever it was introduced. The Arrow 770 model has been embraced by contractors all over the world for its simplicity and ruggedness, according to Mr. Andrews, factors which are crucial in a market like India, where construction machinery is typically put through more number of work cycles, as compared to the western world.

Multi-utility features are in demand in the Indian market. A good example of it can be found in the paving equipment from Wirtgen India. Dwelling on the company’s range of machines, Mr. Charmanna observed, “Wirtgen slipform paver range sets new standards as a multi-purpose machine for offset concrete paving in monolithic profile viz: curb, curb & gutter, sidewalks, crash barriers with or without reinforcement, retaining walls etc. The machines are capable of producing profiles of most diverse geometries, to comply with various national standards or can be customized to create nearly any given shape.” Manufacturers have understood that versatility is the name of the game. Intense competition has meant that suppliers have been forced to offer value additions and promote their products as value for money propositions.

Concrete Growth Story

World-over a lot of research is being undertaken on various alternatives that can be used in paving projects, including pre-stressed, fiber-reinforced, and roller-compact concrete. Manufacturers are focusing their R&D efforts on incorporating the research findings in their product offerings. The demand for concrete paving machines is likely to be driven by three key factors. While water supply projects that involve development of canals are one of them, the keenness shown by various state governments in building concrete roads is another. This apart, the fact that the government has given its go-ahead for massive infrastructure projects has meant that the sustained pace of growth in demand of concrete paving equipment is expected to continue in the next few years. All the leading suppliers are expected to showcase the latest models of concrete paving and kerbing machinery during Excon 2011, which would give an overview of the trends in machinery to come in the near future, in terms of capacities, sizes, and specific technology.