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## GRADERS FOR THE FUTURE

Motor graders are having their moments under the sun. Infrastructure projects are pushing up demand for these machines...22



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# "MOTOR GRADERS ARE NOW MANDATORY FOR CONSTRUCTION OF HIGHWAYS"

**"T**he grader has a strong role in the pre-compaction stage and sub-base preparation with fine grading, spreading and levelling the ground. It uses a hydraulic blade to push large amounts of soil and can be adjusted with a simple lever by the operator. We can roughly divide the graders into three categories –small, medium and large," said **Vivek Hajela, VicePresident and Head – Construction Equipment Business, Larsen & Toubro**, during an interaction with **Equipment India**. Excerpts from the interview...

## How do you look at the current scenario of motor graders in India?

The demand for motor graders is directly proportional to the construction of roads and highways. Both Central and State Governments have been giving impetus to roads and highways since early 2000s, when Golden Quadrilateral and North-South/East-West corridors construction was underway. Since then, the demand for motor graders has expanded. The construction of roads and highways has further expanded to Bharatmala, expressways, economic corridors, coastal roads, strategic roads at the border, etc., and now the announcement of National Infrastructure Pipeline (NIP) encompasses all of them.

For the next FY22, the Central Government has allocated 1.18 lakh crore for roads and highways. The Ministry of Road Transport and Highways (MoRTH) is targeting to increase the pace of highway construction to about 40 km per day from 30 km per day. All these investments bid well for the motor grader demand particularly and for CE



**Vivek Hajela,**  
Vice-President and Head –  
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industry in general, which had seen a healthy CAGR 12 per cent in the last six years and brought substantial benefits to both the manufacturers and the equipment users. However, Covid-19 impacted the activities and gave us anxious moments and uncertain times.

But from September 2020 onwards, many construction projects have restarted and machines being re-activated. The stimulus package announced by the government has spurred the momentum. The CE demand has rebounded quite strongly including motor graders, though overall during FY2020-21, it may contract by 20 per cent as compared to FY2019-20. FY22 looks very promising with demand likely to grow upwards of 25 per cent for various CE segments.

## What is the current market size of motor graders in India?

Motor graders are a highly-evolved technology product and now mandatory for the construction of highways. The grader has a strong role in the pre-compaction stage and sub-base preparation with fine grading,

spreading and levelling the ground. It uses a hydraulic blade to push large amounts of soil and can be adjusted with a simple lever by the operator. We can roughly divide the graders into three categories –small, medium and large. Put together, the market size of graders in India is 1,600 numbers annually. Komatsu graders viz., GD535 and GD555 are popular models in the premium segment and have a pan-India presence with deployment in highways and expressways. The large-size Komatsu Grader models like GD705 and GD825 have been deployed for maintenance of haul roads in coal and mining projects.

## Roads and highways is one infra sector that was back in action faster, after the Covid-19 pandemic impacting the overall industry and economy. How optimistic are you in the sector in terms of project execution and growth?

As explained here, post-pandemic, the revival in demand for construction equipment will depend primarily on the pace of execution of infra projects – roads, railways, ports, etc. In particular, MoRTH is giving thrust on highway construction and NHAI is







looking at awarding more than 10,000 km highway construction contracts during FY2020-21. While the stimulus package was largely focussed on easing credit flow, quick contract awards is strongly aiding the revival of demand for CE. The site activities have gained pace considerably aiding the deployment of more machinery. The spread of Covid-19 had impacted the first half of the FY 2020-21, but since then revival too has been swift and strong. The key to CE demand growth is the actual implementation of Infra projects announced by Government of India, especially NIP.

### How do you assess the growth potential for motor graders in India?

With the National Highway Development Programme (NHDP) gaining traction across India and the MoRTH keen on executing the NHS network with a view to develop the road connectivity to Border areas, development of coastal roads, improvement in the efficiency of national corridors, economic corridors and feeder routes under Bharatmala Pariyojana, there is an enlarged scope and high growth potential for the motor graders. The Bharatmala Pariyojana is a highly ambitious programme and will fuel multipoint growth across the country by enhancing logistics efficiency and free freight movement. Looking at this, we see a growth potential of CAGR about 15 to

20 per cent in the coming years for the motor graders, which is extremely encouraging for the equipment manufacturers.

### What are the upcoming digital technologies in motor graders? How interested are contractors towards these technologies?

Komatsu motor grader model GD535 is digitally compliant and incorporate the KOMTRAX technology for tracking location and health parameters. This latest technology enables the users to get the best out of the machine in terms of performance and productivity. The contractors take advantage of this digitalisation and work towards stepping up machine output and operator efficiency. In the graders, jobs like turning, steering, maintaining blade height, angle and managing power is a specialised task for the operators. Contractors face shortage of skilled operators and look for alternate ways to speed up the work, without operator fatigue and improve the accuracy.

Further, maintaining the height of both the leading and trailing edge of the blade is most challenging during the operation. It is necessary to include slope control system as standard/ optional fitment. Such digital technologies are available to make smart purchase decisions by the contractors. L&T also has a robust infrastructure for training operators and building their efficiency.

### What are the latest offerings in your product range?

L&T offers Komatsu motor grader models in the 150 hp-280 HP range for the Indian market. For roads and highways, our latest generation model Komatsu GD535-5 incorporates advanced technology of dual mode transmission with lock-up converter, hydraulic blade tip control, KOMTRAX technology and emissionised engine compliant with current norms. This has enabled the contractors to introduce the state-of-the-art product for the construction of Indian roads which has ushered new benchmarks in grader performance.

### What are the challenges faced by the motor graders market?

Grading is a highly skilled job and needs an experienced operator. One of the key challenges faced by the industry is the dearth of such highly skilled operators capable of using the motor grader functionalities and achieving the exact contours of the road levelling. L&T has been at the forefront of CE industry and preparing the operators through intensive coaching and certifying them. Further, as the demand is highly dependent on the Government spending on road infrastructure, it is impacted by policy decisions of both the State and Central Governments. One of the immediate challenges is to meet BSIV emission norms, which will come into effect soon.

### How do you look at the future of motor graders in India?

As explained earlier, the Government is focused on Infrastructure development. It has rolled out its ambitious vision in the form of Rs 111 lakh crore NIP, of which 34 per cent is for transportation Infra. MoRTH is pushing to increase the pace of highway construction to 40 km per day. Hence, we are highly optimistic of the demand for motor graders remaining robust for the next 5 to 10 years.

