

PROPEL

ISSUE 18 | JULY 2019



Capacity expansion in line with our Business Development



Rane Group crosses
the **Rs. 5000 crore**
revenue milestone
in FY 2019.



Deep focus on customer success



Relentless focus on TQM

THE WORLD OF RANE



Rane Holdings Limited (RHL)

Rane Brake Lining Limited (RBL)

Rane Engine Valve Limited (REVL)

Rane (Madras) Limited (RML)

- *Steering & Linkages Division (SLD)*

- *Diecasting Division (DCD)*

- *Rane Auto Parts (RAP)*

- *Rane Precision Die Casting Inc. (RPDC)*

Rane NSK Steering Systems Private Limited (RNSS)

Rane TRW Steering Systems Private Limited (RTSS)

- *Occupant Safety Division (OSD)*

- *Steering Gear Division (SGD)*

Rane Holdings America Inc. (RHA)

Rane Holdings Europe GmbH (RHEG)

Rane t4u Private Limited



Please send in your feedback to
propel@ranegroup.com

Copyright 2019 Rane Holdings Limited

All Rights Reserved

Content Partner:

The Smart CEO Media Labs, the content marketing and custom content arm of The Smart CEO Magazine.

For queries:

Please mail:

prem@growthmechanics.in

INSIDE THIS EDITION



We're excited to present to you the July 2019 edition of Rane Propel. In our *Cover Story* this edition, we present to you a short write up on Rane Group crossing the Rs. 5,000 crore revenue milestone. It is certainly a very important milestone for the entire group and in this feature, we share some of the key drivers that helped us achieve this target.

In this edition, our Chairman, Mr. L. Ganesh, shares key highlights from FY 2019 and also a brief overview of our plans for the current fiscal. In his note, he also emphasizes on two messages to the entire group: focus on cost management to navigate the slowdown, while also balancing this with a deep focus on business development and customer focus.

In *Future of Mobility*, we have captured technology trends in the Occupant Safety Systems which is manufactured by Rane TRW.

For *Outside In*, we interviewed Mr. S. Sandilya, Chairman, Eicher Motors, and Independent Non-Executive Director of Rane Brake Lining Limited since 2008. He spoke about various topics including going global and the right approach to R&D.

We also created a few new sections for Rane Propel. In *Functional Showcase*, we speak about the work done by the Health & Safety Steering Committee. For this, we requested Aditya Ganesh, Vice President, Marketing & Sales, Rane Madras (RML), who is also at the forefront of the group's efforts on health and safety to share more details about the work done in this area.

We also established separate sections titled *Employee Showcase* – to share memorable experiences by people at Rane, *Rane for Good* – to showcase progress made on CSR Projects and *Photo Story* – to showcase the manufacturing process at a plant through a series of pictures.

As always, in *News @ Rane* we share key awards and other announcements, and this time the focus has been on various customer awards we won, in addition to thanking two of our board members who retired from our group companies.

Hope you enjoy reading this edition of Rane Propel.

CONTENTS

RANE PROPEL



6

CHAIRMAN'S DESK

A message from
Mr. L. Ganesh, Chairman,
Rane Group

8

COVER STORY

Rane Group crosses
Rs. 5,000 crore revenue
milestone

10

FUTURE OF MOBILITY

A look at technology trends in
Occupant Safety Systems
which is manufactured by
Rane TRW

12

OUTSIDE IN

In conversation with
Mr. S. Sandilya, Chairman,
Eicher Motors, and
Independent Non-Executive
Director at RBL



14

FUNCTIONAL SHOWCASE: HEALTH & SAFETY

In conversation with Aditya
Ganesh, Vice President,
Marketing & Sales,
RML and a key member
of the Health & Safety
Steering Committee



16

EMPLOYEE SPOTLIGHT

In conversation with three
employees who share
memorable experiences
from their professional
lives at Rane Group

18

RANE FOR GOOD

Updates from key events
at both Rane Polytechnic
and Rane Vidyalaya



20

PHOTO STORY

The journey of
manufacturing a brake
lining, in pictures



22

NEWS @ RANE

Highlights of customer awards won by various
group companies





Mr. PS Kumar retired from RBL on May 22, 2019

Mr. Parvathaneni Santosh Kumar joined the RBL board as Independent Director on Jan 20, 2017 and he was also a member of the Audit Committee and Nomination and Remuneration Committee. He retired from the board on account of reaching 75 years, as per the retirement rules of the company. Mr. Kumar has served on the boards of RML and REVL in the past. He was also a Partner at Brahmayya & Co, a Chartered Accountancy firm that served as statutory auditors of REVL for over four decades till May 2017.

Mr. Anjanikumar R. Choudhari retired from Rane Holdings Limited on May 27, 2019

Mr. Choudhari was a key member of the RHL Board, having served as an Independent Director since Oct 27, 2010. He has served as a member in the Audit Committee, Nomination and Remuneration Committee and in the CSR Committee.

Mr. Choudhari was an important member of the RHL board, having advised us on various strategic matters, thanks to the years of experience he has had in the automobile industry, having been the President of Farm Equipment Division at Mahindra & Mahindra and Chairman of Mahindra, USA.



We place on record our sincere appreciation for the valuable guidance and contribution of both our board members.



Driven by Determination, Progressing with Optimism

We look back at FY 2018-19 with certain pride and satisfaction. At group level aggregate revenue, we crossed the Rs. 5,000-crore milestone and this has been possible thanks to strengthening our market position in India, in addition to expanding our international business. We achieved 12 percent growth in 2018-19 from the previous year and 15.5% CAGR for the past 10 years.

Another important achievement was the inauguration of the OSD plant in February 2019, which was covered in detail in the last edition of Propel. The plant was readied in record time and the entire process was very well managed. The team from ZF that attended the inauguration felt it was one of the best plants in their group, and we're excited to begin the journey at this new plant.

I am also very happy to note that Rane group companies won several awards from customers such as VECV, AL, TAFE, and so on. Having been in the TQM journey, we have received awards such as Deming, which are extremely prestigious and important. But customer awards are always very special and inspires us to continue our approach of delivering customer delight.

Key Updates

Our numbers in 2018-19 was to some extent a result of our cost initiatives which helped mitigate inflationary trend on material and employee cost.

Here, I must also mention that when the demand was high in the first quarter of last fiscal, the plants managed it very well with existing capacities and outsourcing when needed.

“ As we look back at 2018-19, it was challenging environment, however, we strengthened our resolve of getting our plans back on track and renewed our focus on robust execution. We continued to win customer accolades, remained their partner of choice, aggressively pursued new businesses, expanded our footprint and won awards for excellence. ”

Overall, while we started seeing a slowdown in the Indian market, our international business grew by 18 percent last year. The growth in international business primarily came from occupant safety products and the steering business of RML.

Additionally, the turnaround of REVL is progressing well. RML-DCD is operationally stable though low volume/capacity utilisation is still hurting. RPDC has won new orders, which will ensure topline growth for next three years and we are working on improving operational performance.

Outlook

At the start of FY20, the domestic consumption and consumer confidence remain subdued resulting in drop in automotive sales across segments. Though the first half of FY20 looks challenging, anticipated pre-buy on account of transition to BS VI, favourable monsoon and macro-economic policy direction are likely to stimulate some consumption in the second half.

But overall, it does look like a slowdown cycle, at least in the domestic market. From an international standpoint, we do not know how the trade war between the US and China will affect the global economy. The world has become so interconnected that differences between any two countries can no longer be viewed in isolation. In fact, we cannot even predict how it will affect the US economy itself.

For 2019-20, we have a Capex plan of Rs. 250 crore. However, we will utilize the capex based on demand scenario. There will be a continued focus on operational improvements and cost savings, to navigate the volatile environment.

We remain optimistic about the opportunities in the

“ We remain optimistic about the opportunities in the industry over the long term. We will continue to work closely with customers to develop innovative solutions and embrace the technological changes in the industry. ”

industry over the long term. We will continue to work closely with customers to develop innovative solutions and embrace the technological changes in the industry.

Message to Team Rane

While we were focused on capacity improvement last year, this year the focus will be on cost management.

Having said that, a downturn is not new to us at Rane. This is a cyclical industry and we've navigated through such times in the past. A downturn is also a good time to deepen our customer relationships and continue our focus on new business development. So, I would request the entire team to carefully balance both cost management, while also focussing on delivering to our customers and constantly engage in new business development.

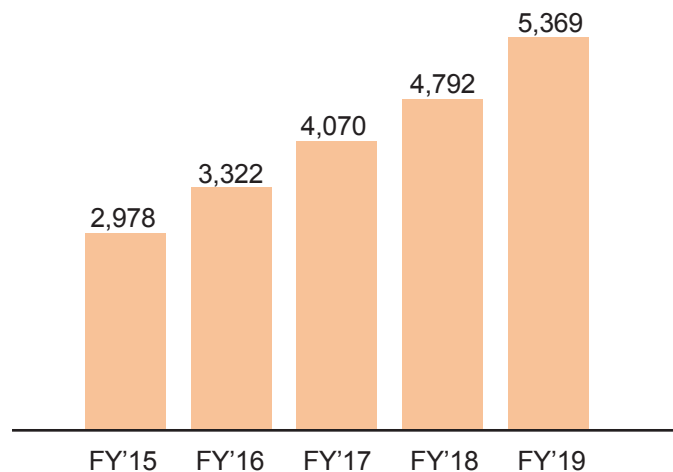
RANE GROUP CROSSES THE Rs. 5,000 CRORE REVENUE MILESTONE

In line with our long-term goal of accelerated, profitable growth, we crossed an important milestone in FY 2018-19. Rane Group Aggregate Total Income reached Rs. 5,369 crore. In this edition of Propel, we'd like to acknowledge this key milestone while continuing to lay emphasis on customer success and business excellence, focus on the long-term, and deep focus on innovation and readying the group for the future.

Rane Group has been reinventing itself over the decades of its existence. From being a distribution company to becoming a manufacturer, Deming award winner and now, targeting business excellence as its next milestone, the company has kept itself relevant by understanding constantly evolving market trends and the needs of its customers, while also improving operational excellence.

In the last decade, the group had set for itself a vision of Accelerated Profitable Growth. To achieve this, it had identified innovation, quality and customer centricity as three key areas of focus. In FY 2018-19, Rane Group aggregate Total Income reached Rs. 5,369 crore representing growth of 12% in FY 19. The group delivered 15.5% CAGR on sales over past 10 years.

Total Income (Rs. Crore)



“

Broadly, there have been three key drivers that helped us reach the Rs. 5000 crore mark. One, deep focus on customer success that helped us strengthen and scale up our market share in India. Two, our business development efforts in US and European markets. Three, our focus on TQM to increase efficiency of our operations and pave the path to the next phase of Business Excellence. ”

— L. Ganesh, Chairman, Rane Group

“ In FY 19, the group spent Rs. 300 crore on capex, the highest in the company's history. We're extremely focused on our long-term vision of delivering sustainable growth, while also keeping in mind short-term challenges in a constantly evolving market. ”

— Mr. Harish Lakshman, Vice Chairman, Rane Group

The Key Drivers

Overall, the key drivers of growth for Rane was its continued focus on customer success by strengthening its focus on the Indian market, while also scaling up business development efforts in North American and European Markets. Innovative solutions, delivering on time and as per the requirements along with keen focus on costs and localisation have been some of the key factors that played a role. Specifically, the following six factors played an important role:

New Products: Rane group introduced new products to its portfolio, including air bags and hydraulic products while also continuing to innovate on existing products. The air bags business has progressed extremely well, and is yet another example of listening to customers and staying closely in touch with their needs.

Global Manufacturing Footprint: The group established manufacturing footprint in Kentucky, USA, by acquiring Rane Precision Die Casting in 2016, an important milestone, in line with the group's vision of going global.

Emerging technology and foray into connected/mobility solutions: To be present in the connected mobility solutions market, the group acquired 70 per cent equity stake Rane T4u Private Ltd. in 2017.

Capacity expansion in line with order book pipeline: In FY 19, the group spent Rs. 300 crore on capex, the highest in the company's history. A new manufacturing facility for Occupant Safety products was inaugurated in Trichy by RNSS. It also expanded capacity for steering products, opening an electric power steering plant in Ahmedabad.

R&D: There was continued investment in research and development across the group; For example, RBL's R&D expenses stood at 5.3 per cent of sales in FY19. Validation capabilities were also strengthened.

Operational Excellence & TQM: RNSS become the fifth company at Rane to win the Deming Prize, a major recognition for our focus on TQM, and therefore on establishing operational excellence across the group.

A Big Thank You



On behalf of the leadership team at Rane Group, we'd also like to extend a big thank you to all our key stakeholders including

- Customers
- Employees
- Partners
- Vendors
- Bankers
- Government
- Shareholders

FUTURE OF AIRBAGS & SEATBELTS

A look at technology trends in Occupant Safety Product which is manufactured by Rane TRW.

The auto sector in India, set to be the world's third-largest market, is getting more and more safety conscious, especially since India has the highest number of accident-related fatalities in the world.

Almost 100 percent of drivers in most European countries such as Germany and Sweden buckle up the moment they get into the car. In India, only 25 percent do. The World Health Organization (WHO) determined this figure in 2015; and a study by Maruti Suzuki India Limited last year confirmed it. This is one factor responsible for the exceptionally high number of fatalities on the road: more than 150,000 in 2016! The government has recognized the problem and set a target of halving accident numbers by 2020.

The government has regulated the safety norms in the vehicles being launched after Oct 2017. As a result, we are witnessing higher application of Passive Safety technologies such as frontal, frontal offset and lateral protection for passengers inside the vehicles.

The industry focus is also moving away from post-crash passive safety to pre-crash accident avoidance and collision mitigation to achieve next major improvements in road safety.

Vehicles have driver airbag (standard), passenger airbag and seatbelt pretensioners with higher application rates.

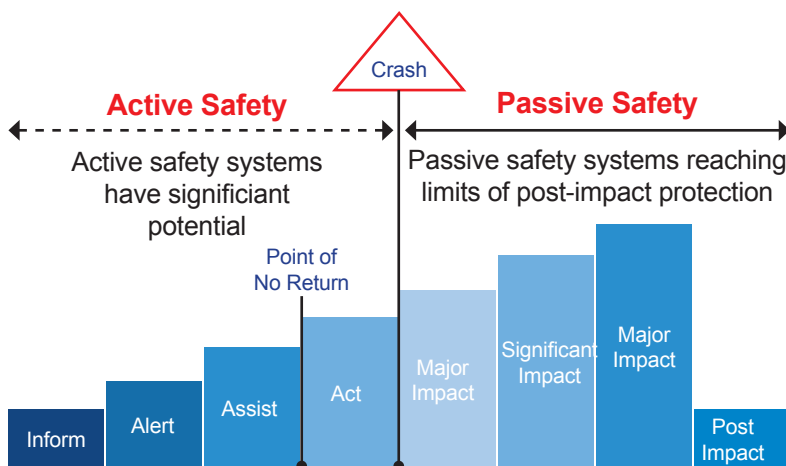
For lateral protection, India will see application of side and curtain airbags becoming a standard feature in all the vehicles henceforth. RTSS is already working on projects involving these technologies.

New Technologies – Seatbelts :

We may see applications of dual/triple pretensioning (anchor or buckle) in the vehicles similar to what the developed nations witnessed a decade ago.

With legal and Bharat NCAP changes, there is an ongoing trend towards higher fitment rate of pretensioners and additional load limiting functions.

More futuristic technologies that provide safety and comfort are active buckle lifter (buckle lifts up, encouraging the occupant to buckle up, after which it retracts to its original position), and the Active Control Retractor (ACR) which can help provide driver alerts using vibration of the belt if the car wanders out of its lane or gets too close to another vehicle.



Of course, these belts also offer significant safety benefits. The seatbelt tightens in response to autonomous emergency braking, before the brakes are applied - to protect the occupant in a potential crash situation. Once the crash is avoided, the technology returns to normal belt function.

New Technologies - Airbags

We are seeing higher application rates for airbags and an increased number of airbags in the vehicles. Some of the new airbag technologies include:

Knee Airbags:

Knee airbags are available only in the premium segment currently as a differentiator. RTSS is currently working on one project involving knee airbags, to be launched soon.

From April 2019, all cars should have mandatory driver airbags and seatbelt reminders in the vehicles.

Most of the OEMs have already implemented frontal protection well before the regulations came into force.



Far Side Airbags

Far Side Airbags:

Far-side collisions are responsible for thirty three percent of all serious injuries and deaths. Modern cars in many countries now come equipped with driver and passenger airbags as well as side and curtain airbags as a standard. The latest results from crash tests demonstrate that passengers involved in a collision on the side of the vehicle opposite to the passenger, referred to as the far side in professional circles, can still be vulnerable.

In certain crash events, the test dummies show that the passenger's torso could bend over the center console while the seatbelt holds the pelvis back in the seat. As a result, the thoracic spine twists and the cervical spine can be overstretched. The dummy data readings indicate that serious injury could be caused.

The considerably larger far-side airbag is integrated in the driver's seat similar to a side airbag. During a side-on collision, the airbag control unit can trigger the far-side airbag shortly after the standard side airbag. To stabilize the far-side airbag, it is either fixed in place on the seat frame with a strap or supported by the center console. It can also be triggered when a collision takes place on the driver's side. This will protect the people sitting in the front seats of both the cars as lateral acceleration can cause the two car occupants to collide with one another.

External Side Airbags:

Side impact collisions are among the most dangerous type of road traffic accidents. Our Partner ZF gave a live demonstration recently of the prototype for the world's first pre-crash occupant safety system with an external side airbag. This airbag can deploy milliseconds before a collision. It can provide an additional lateral crumple zone, saving lives and reducing occupant injury severity by up to 40 percent.

The biggest challenge in the development of this system

was reliably recognizing an unavoidable collision and deploying the external side airbag before the collision takes place. The system has approximately 150 milliseconds to make the decision to deploy the airbag and fill it – roughly the amount of time it takes a person to blink.

Integrated Safety for Autonomous Vehicles

The autonomous vehicles are built with the premise of zero accidents and incorporate active safety technologies. As there will be vehicles driven by human beings as well on the roads, autonomous vehicles will be vulnerable to accidents. So there will be a requirement for protection of passengers in the autonomous vehicles as well.

In autonomous vehicles, passengers keep their hands off the wheel and they'll want to work on the move, relax, chat or enjoy the onboard entertainment. New interiors, seating positions and crash scenarios will lead to new seatbelt solutions with tighter integration of restraint and comfort components (seat integration and relaxed seating etc.). The classic upright and fixed seating positions would make this tricky.

The race to introduce automated and autonomous driving opens up the possibility of new seat positions in driverless robo-taxis as well as conventional passenger cars. However, this mandates a high level of occupant safety. ZF is researching and developing integrated safety features to make this future feasible.

Seats That Can Save Lives

Ultimately, a conventional steering wheel airbag may be less effective if the driver has turned the seat by 90 degrees, where the steering wheel folds away in auto mode or where there is no steering wheel. Then there's the seat belt: being anchored in the car body, it's not designed to restrain a passenger in an unconventional position.

So, a possible solution is integrating the seatbelt and airbags with the seat itself, creating a safety cell in the car that can rotate with the passengers. Other areas can be covered by airbags that are deployed from the dashboard, headliner, between the seats, and so on.

car that can rotate with the passengers. Other areas can be covered by airbags that are deployed from the dashboard, headliner, between the seats, and so on.

INNOVATION AND AGILITY: NEED OF THE HOUR



Mr. S. Sandilya, Chairman, Eicher Motors, and Independent Non-Executive Director of Rane Brake Lining Limited since 2008, shares the influence of technology and mobility on the auto industry and how a group like Rane can continue to adapt as the automobile industry goes through its many shifts. Mr. Sandilya's career spans 50 years and he has held various leadership roles at Eicher Group including Managing Director of Eicher Motors Limited. He was appointed Group Chairman and CEO in April 2000, before becoming Non-Executive Chairman from 2006.

According to you, what will be the key drivers of India's manufacturing sector in the future?

As an economy, ours is a demand-led economy and not export-led. Therefore, given the overall growth in population, younger generation and increase in per capita income, we must expect the consumer demand to be on the increase. The overall economic growth will depend on GDP growth, which will in turn be driven by the government's intention to invest in infrastructure, which in turn will improve the manufacturing capacity creation and utilisation. In addition, with the global economy going through a spin and the current trade wars, with imports from China being resisted, India has a great opportunity to grow in the export market as well, which will have an impact on the manufacturing sector. We can be optimistic about growth in the sector.

From a regulatory perspective, what recommendations do you have for the government to boost manufacturing in the country?

The introduction of GST was a very good initiative that has unified the marketplace in the country. However,

the rates are high for some sectors, and rationalisation of rates as much as possible is important. Secondly, petroleum products should also be brought under the GST regime as it will improve cost competitiveness since they are an important component of the cost in several industries.

Taking auto industry into consideration, another important thing would be fleet modernisation including incentivisation and regulations around that as well as announcement of scrappage policy. Labour law reform is also the need of the hour. Some small tinkering is happening but we need major reforms.

Finally, we need rationalisation of regulations. Right now, it is very reactive, and knee jerk response to frauds. We need a process to repeal existing laws and simplify them so that they are easy to understand, implement and have no loopholes. It will significantly improve ease of doing business.

And, of course, that brings us to the enforcement of laws which is weak and slow, be it insolvency related regulations or NCLT etc. That needs to be speeded up.

In order to become a truly global company, what are the key factors one must deliver on? It'd be great if you could answer this with anecdotes from your own experiences at Eicher Motors.

Be it domestic or global market, a business needs to have extreme focus on customer centricity. I always say, "In customers' success lies our success". In Eicher, for example, we were in the commercial vehicles segment, and we focused on making the products more fuel efficient than any other vehicle in the market.

Second important aspect is innovation. Mitsubishi had given us just one product which was 6 ton GVW, but we developed the entire range subsequently from 5 ton to 40 ton GVW vehicles through our own product development efforts. From innovation perspective, we were the first company among the Japanese collaborated companies in the LCV segment to achieve 100% localisation which helped us turn profitable much faster.

We were frugal in every aspect of the business as we were very small which has helped us in the long run. This also helped us in getting into a Joint Venture with Volvo of Sweden

as they were impressed with our capability to develop products in a cost efficient manner and also run our operations efficiently. The JV has further boosted our capability; not just in the product range but manufacturing capability as well.

The third important area is constant upgradation of skills. With fast technology developments, we must keep up with the times.

How should one approach a greater focus on R & D – both strategically and operationally?

First is that the company should be capable of adapting to changes and have a positive attitude towards changes. They must keep abreast of the developments. No one can afford to rest on past glory. Investments should be made in a modular manner so that we can change much faster. It should be scalable as well. People also need to be upskilled. As robotics and machine learning take over many of the jobs, the people can remain employable only if they offer value by learning new skills.

Wherever possible constant innovation is important. Or, if it cannot be done internally, then partnerships should be forged appropriately. Participating in global seminars is important to keep abreast of developments current and future. Partnering with educational institutions to encourage R&D is also critical. While the companies can continue with product innovation, the R&D can be outsourced to institutions with some kind of a grant to the extent possible.

According to you, what role will technology play in the auto segment? How should companies like Rane stay prepared?

Not only in auto segment, but technology has an impact everywhere. In fact the gap between information technology and manufacturing technology is narrowing. In the auto manufacturing industry, automation and robotics are gaining importance on the one hand, but on the other, the products themselves are increasingly moving towards electronics. Component manufacturers such as Rane should be in synchronisation with these developments. They must be a step ahead, offering OEMs plug-and-play solutions, improving their cost effectiveness. For example, if an OEM company is focusing on fuel efficiency improvement, their component suppliers should provide solutions that enhance fuel efficiency. Help the OEM go a step ahead with your innovative solutions.

Please share your views on next-generation mobility: electric vehicles, autonomous vehicles and connected vehicles.

Electric vehicles will happen in India, but hard to say when as the infrastructure is not ready. It requires a heavy investment. We need innovative solutions that will be game changers. Who knows, technological innovations are happening so fast that one day suddenly everything may change overnight.

As for autonomous vehicles, given the lack of discipline while driving, it seems unlikely that we will have totally autonomous vehicles in India. But elements of automation to improve the ease of driving may increase. But if it is adopted in global markets, then component manufacturers should be prepared to meet the global market needs.

Connected vehicles are here to stay. Commercial vehicles, especially

fleet operators, have been using this effectively to improve their operations. One fleet operator has introduced a relay driver system that requires a high level of coordination for smooth taking over by drivers enroute. This needs tremendous dependence on communication technologies to be able to manage the change of drivers at every stage while keeping focus on safety and security of the vehicle. The customers would need constant information on expected date and time of delivery of consignment to work with minimum working capital. Connected vehicles as a concept is inevitable in the industry

According to you what are some of the key skills of the future in terms of talent in the automotive segment.

Electronics and digitalisation will be key skills. Though it is happening in some way, it is not enough. People should also be able to switch skills when needed. That requires a high ability to learn. The employers need to provide the platform to facilitate the learning.

Data is future money, and data analytics will play an important role. How and how fast we can crack the data will be important, hence suitable training on a continuous basis will be a must.

All this will also increase the demand for higher productivity and create the related stress among employees. Being able to cope with it will be important, thereby creating a need for soft skills training. Training therefore has to be comprehensive.

PUTTING SAFETY FIRST

Aditya Ganesh is the Vice President, Marketing & Sales, Rane Madras (RML) and takes care of marketing and strategy. He is also in the forefront of implementing health and safety across Rane Group, drawing from his earlier experience in Cummins Inc., US, where he worked as an HSE professional. Here he shares the importance of and the policies Rane has implemented to ensure health and safety of its employees



What is the underlying philosophy governing Rane's approach to health and safety across all Group companies?

Our approach to health and safety (H&S) at Rane Group stays true to our culture of continuous improvement. The pursuit of world class safety is a journey of many steps, and our philosophy is that there is no finish line. At the end of every cycle of improvement is the start line of the next cycle of improvement.

In November 2017, the Group H&S Steering committee established a framework consisting of seven elements.

1. Legal & Compliance
2. Emergency Preparedness & Response
3. Policies & Procedures
4. Risk Reduction
5. Training
6. Organizational Structure and Communication
7. Audit Structure

Since the inception of the committee, we have been working on specific initiatives within risk reduction, training and audit structure. Adherence to legal and compliance obligations have

already been in place for several years, so our committee is able to focus on the proactive aspects of H&S improvement such as hazard identification and reduction in order to give our employees a safe and secure work environment. Again, this is a step-by-step process. For the year 2018-19 the focus areas were Fire and Machinery Safety.

What are some of the standards followed and how is it implemented across various companies? Any specific case studies or specific ideas implemented till date?

We are working through the framework with a focus on risk reduction, which is the foundation of a strong H&S program.

We started by first developing a comprehensive awareness training module. This was rolled out to every employee in the group starting with the Chairman, Vice Chairman and Business Heads.

The first successful initiative was the fire safety audits, which have now been completed at all Rane facilities. While the initial drive came from one of our key customer, we used the opportunity to ensure all our plants, regardless of whether they supply to that customer, go through the audit and identify system level gaps in order to quickly address them.

A more recent initiative is the comprehensive machinery safety checklist developed referencing the latest ANSI and ISO standards (for e.g. ANSI B11 for machine safety). This checklist has been deployed to each plant and the goal is to have every single machine mapped against this checklist. Once the mapping is complete, each plant will prioritize and address the gaps.

What is the role of the steering committee?

The steering committee, consisting of operations and HR professionals, anchors the whole process. The Business Heads have been very supportive by nominating a group of strong leaders with management and implementation experience, who are passionate about safety far beyond just compliance.

Each of the companies in the Group brings in experience and expertise in different areas. For example, RNSS has a very advanced fire safety program relative to the rest of the Group companies. Through the steering committee, we share this expertise and transfer this knowledge in a systematic way for sustainable implementation. We have a roadmap, and in the monthly meetings, the team checks its own progress against it. Other companies bring in either systems that can be horizontally deployed or domain expertise that we try and systemize before deploying.

What have been some of the challenges the organization faces in implementing the requirements?

One of the biggest challenges has been resource availability, in terms of feet on the ground to execute the initiatives. We want each plant to have one and in some cases two full time professionals engaged in risk reduction. Due to paucity of resources, our progress has been slower than intended.

Another challenge for the steering committee in particular has been technical expertise in certain areas, particularly in nuanced implementation areas such as health and wellness and cultural transformation through behavior based initiatives. In a sense, the steering committee is currently working on 'the low hanging fruit', the physical and infrastructural engineering changes, required to make our factories safer. The larger challenge is to transform our collective mindsets and build a culture of safety within the Rane Group.

Please share the review, training and retraining process for ensuring health and safety across the organization.

At the group level, the HSE Steering Committee meets every month to discuss implementation challenges in the key initiative areas. We have also developed a company level dashboard covering certain key metrics at a glance.

RML's monthly safety review meeting has been adopted at the company level review and deployed across the Group. This meeting is typically chaired by the Business Head or a designate. The participants include the respective plant heads, plant HRs and the HSE designate of the location.

The meeting starts, like any other management review, with a follow up on the minutes of the meeting from the previous session. Other topics of review would include incident reviews where, like we do in quality forums, we go through the five-why analyses followed by short and long term corrective actions.

Training has been viewed at both the corporate and the site levels. The corporate awareness was developed with an external vendor and deployed at the same time across all locations. At manufacturing locations, the focus has been on developing Training Dojos. We have identified a safety training kiosk in which we can pre-load specific training material, digitize the testing process and provide immediate feedback to the trainer and the trainee. This was piloted in RBL, and based on its success, is now being deployed across the group. As we continue our journey, we will provide technical guidance through the HSE Steering Committee and allow companies/sites to customize the relevant portions of the training based on the hazards mapped in that specific site. For example, in a subject like Lock-Out-Tag-Out (LOTO), the steering committee will develop the overall training material covering the topic and the site would customize a portion of this material to focus on the machines and energy sources specific to that site.

Can you share any anecdotes to highlight the importance of implementing health and safety standards?

In India, we get everyday reminders on the importance and criticality of implementing Health and Safety standards – be it our roads, schools, malls or factories.

For instance, recently a tuition center in Surat, Gujarat, had a fire accident caused by the failure

of several systems. Like many buildings in India, it did not conform to the national building code and was underprepared to handle the volume of people and the fire itself. There is systemic gap in the awareness and preparedness when it comes to an emergency situation and the appropriate response.

In our plants, we provide and undergo training for first aid, firefighting etc. but often we fall into the psychological trap of underestimating the need for preparedness.

Fixing the physical environment, we work and live in, and upgrading ourselves to Indian or superior standards is the easier part of the problem. The larger issue is to bring about a change in our mentality to focus on personal safety and wellness.

Are there any specific companies or programs on the outside that Rane has studied closely and taken inspiration from?

Our steering committee brings in external perspectives and benchmarking. National conferences on H&S through OSH India and CII give us a glimpse of the kind of work that is being carried out in various industry sectors such as construction, process, chemical industry and, of course, assembly and manufacturing. We have also started building a network of reliable and quality technical experts to help us with specific challenges.

In terms of benchmarking, our team has studied various companies like Cummins, Toyota, NSK and Allison Transmission. Our benchmarking efforts have been both at a structural level to execute our initiatives and at a specific level where we benchmark a certain program or risk reduction project.

THREE EMPLOYEES LEADING PLANT OPERATIONS SHARED THEIR EXPERIENCES AT RANE GROUP

The content team at Rane Propel wanted to introduce a new section to the magazine, one that would showcase employee experience. The idea behind this section was simple: Ask three people from various Rane Group companies to share their most memorable experiences, learnings and Rane's role in their development.

This edition we spoke to S. Kannan of RTSS - SGD, K. M. Lakshamanan of RML – SLD and S. Ramanathan of RBL. While the specific experiences shared by all of them are obviously different, there was one aspect that stood out from this article for Team Rane Propel: Rane is “a great place to work, learn and grow professionally”. Read on:



Kannan of RTSS – SGD

Kannan leads plant operation of RTSS – SGD, Guduvanchery plant

Most Memorable Experiences

I would say my most memorable moments revolve around recognition RTSS SGD received and it is always very satisfying to receive recognition for the effort and team work that was demonstrated.

I was overwhelmed to receive an award from the Chairman with the QCC team on winning the Chairman Excellence award in the 12th Annual Rane group QCC convention held in Feb 2019 for the first time. Along with the team, I received the Dr. Washio Quality Trophy from Dr. Washio.

Best Learnings

At Rane, I've had the privilege of a role change every four years and this has helped me gain a broader perspective of various functions. It has also helped me get out of my comfort zone and tackle diverse

challenges. The second important trait I've picked up is: perseverance; Not giving up and learning from failure has made me stronger and sharper as a professional.

Key Contribution to the Company

- Started QCC activities in 2004 in Plant 1 which significantly enhanced the Total Employee Involvement
- Established the project management function in 2008 in Plant 1 to handle NPD activities and reduced project cost and lead time
- Handled materials function , managed a huge team and handled suppliers across diverse locations to achieve Rs. 7.2 cr reduction in 2 years

Rane's role in development journey

- Job rotation in a phased manner helped me gain insight in every crucial department and groomed me for higher position. Training programs such as RAMP (Rane Advanced Management Program), HPLD (High Potential Leadership Development) aided in developing leadership skills, communication skills, decision making, emotional intelligence, which is crucial for occupying a Leadership position. Rane believes in complete empowerment, which creates a great environment for learning and assisted my self-development to a great extent
- Shadowing senior leaders and mentoring by them helped me in the transition to lead operations role

One word to describe your experiences at Rane

Glorious



KM Lakshamanan of RML

Lakshamanan leads plant operation of RML – SLD, Varanavasi plant

Most Memorable Experiences

One of my most memorable experiences is going through the Deming Grand Prize Audit in 2012. The preparatory experience helped me to improve upon the PLE processes. Of course, eventually winning the Deming was surreal.

Best Learning

When problems are approached based on facts and not on biases of people involved, there is greater openness to get them resolved. Apart from this it is important to develop the ability to create your own systems and processes and get people buy-in to drive new initiatives

Key Contribution to the Company

- Flawless product transfer from Velachery to Varanavasi
- Transformation of Varanavasi Plant by establishing new lines and performing layout changes
- Developing benchmark designs in Assembly Shops, Building (Canteen), Utility setups
- Developing Shop Floor Management System (SFMS) to help the shop floor team get support instantly with transparent communication on line stop and line start
- Key member in Health and Safety Steering Committee spearheading Safety Initiatives across the group

Rane's role in development journey

Rane helped in my development journey through HPLD intervention, which gave me insights that helped to build my self-awareness and drive the culture of excellence to address the challenges effectively in my new role as Plant Head.

One word to describe your experiences at Rane

Blissful



Ramanathan of RBL

Ramanathan leads plant operation of RBL – Trichy plant

Most Memorable Experiences

- Being part of RBL's DGP audit in 2013 helped to learn TQM practices from the Japanese Sensei
- Preparations for Rane Business Excellence (RBEM) audit
- Handling the implementation of 2 MW solar project

Best Learnings

As a member of the Rane Group level Lean Task Force I learned new techniques and concepts on Lean Production Systems. Further, I established the solar power project and fulfilled my long-term aspiration of leading a Green Field project.

Key Contribution to the Company

I have undertaken several machine improvements at RBL, Chennai plant, that helped reduce machine breakdown related rejections from 2100ppm to 400ppm. I prepared the plan for manufacturing asbestos-free products with limited investment. I improved the capacity and productivity of disc pad manufacturing at the Chennai plant through machine improvements and LPS techniques.

Rane's role in development journey

I was provided challenging assignments to learn and demonstrate my capabilities as well as improve my interpersonal relationships across functions. I was involved in all strategic discussion forums which helped me to broaden my perspectives. The HPLD experience supported me in developing my customer focus and develop my strategic thinking capabilities. Various development tools like 360 degree feedback, psychometric instruments which were part of the development centre helped me to take initiatives for self-development.

One word to describe your experiences at Rane

Great Place to Work

In this section, we showcase the CSR projects of Rane Group. Here, we cover events at Rane Polytechnic and Rane Vidyalaya.

KEY EVENTS AT RANE POLYTECHNIC

Rane Polytechnic stepped into its ninth academic year and welcomed a new batch of students on June 17, 2019. It has made significant strides over the years to gear up and serve the industry and student development needs in the best manner.

Rane Polytechnic greeted the New Lateral Entrants to the campus along with their parents on June 6, 2019.

Rane Polytechnic celebrated its sixth Annual Day celebrations on May 11, 2019 on campus. Mr. N. Saravanan, Factory Manager-ITC Ltd, Foods Division, Viralimalai was the chief guest and Senthil Nathan S, CFO of Rane TRW Steering Systems Pvt. Ltd, Occupant Safety Division was the Special Guest.



RANE VIDYALAYA GEARS UP FOR ITS SECOND ACADEMIC YEAR

Rane Vidyalaya was inaugurated in 2018-19 with 66 students from LKG to 2nd standard with 5 academic staff. For the academic year 2019-20, the school extended classes till 5th standard and augmented academic staff to 12. It was a colourful start to academic year 2019-20 with the LKG children starting school on June 13, 2019. Overall, there are 250 students in the second academic year. The teachers welcomed the kids with a photo frame to capture moments from day one and created a memorabilia and an "akshara abyasa" ritual on grains.



THE JOURNEY OF MANUFACTURING A BRAKE LINING, IN PICTURES

We conceptualized this new section for Rane Propel wherein we depict a manufacturing process end-to-end with the help of a few pictures.

Of course, while it's often repeated how a picture can speak a thousand words, in this case, it only gives you a bird's eye view of a single manufacturing process at one of the oldest plants in the Rane Group – the RBL plant in Ambattur – which manufactures friction material products.

Friction material products such as Brake Linings, Disc Pads are safety critical components. These components involve high technology to device varied formulations to meet customer requirements on noise, vibration and harness and also environment norms. Needless to add, these components have to be manufactured in state-of-the-art facilities with a robust production process to ensure high levels of performance.

Below, we showcase the “process flow” for Commercial Vehicle Brake Lining.



1. Mixing:

The Mixing process is the systematic aggregation of at least two materials of different kinds being converted into a preferably homogeneous mix.



4. Baking:

The product is baked under a specified temperature, for a specific time duration to further consolidate the physical and chemical reaction inside the oven.



2. Preforming:

An object that has been subjected to preliminary, usually incomplete shaping or molding before undergoing complete or final processing. It is done to bring approximate preliminary shape and size.



5. Width Cutting:

Gang saw Cutting is to be performed in order to convert Cured blocks into brake lining pieces.



3. Curing:

Curing is the process of hardening or toughening of polymer materials through cross linking of the polymer chain, using heat. In other words: Curing is a process, where pressure will be applied on a preform cake with temperature modified to achieve required physical properties including size and shape.



6. Inner/Outer Diameter Grinding:

Grinding is to be done on the inner/ outer periphery of the cured brake lining in order to reduce thickness variation & achieve proper center gap.



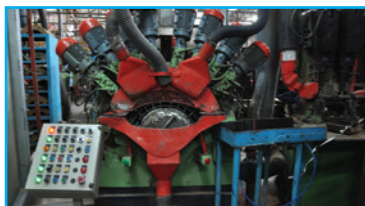
7. Chamfering:

Chamfering is to be done on the periphery of the cured brake lining in order to achieve necessary coefficient of friction.



8. MSDM:

MSDM Drilling is a process of making a Drill & Counter bore holes in a Brake lining.



9. Wear Marking:

Wear marking is a process of producing notch type wear indication on the brake lining through drilling.



10. Printing:

Printing is a process of providing required details on the brake lining



11. Packing:

Process of covering the lining to protect goods in transit.



R&D AT RBL

Our state-of-the-art R&D centre is approved by the Department of Science & Technology, Government of India, where we conduct comprehensive laboratory testing for the validation of performance characteristics and benchmark results. We stimulate field conditions on dynamometer for product development. The sophisticated test equipments include full scale inertia dynamometers attached with environment chamber, static Mu measurement and noise study





VECV Recognizes RML and REVL

Rane (Madras) Ltd. received an award for outstanding contribution in "New Product Development" & Rane Engine Valve Ltd received an award for outstanding contribution in "Quality & Delivery excellence" from VE Commercial Vehicles at the Annual Supplier conference held on April 25, 2019 in Indore.



Eicher Engines, now part of TAFE, recognizes REVL

Rane Engine Valve Ltd. has received the "Commitment to Quality" award from Eicher Engines (A unit of TAFE Motors and Tractors Ltd.) at the Annual Supplier conference held on April 27, 2019 in Gurugram.





Ashok Leyland recognizes RTSS

Rane TRW Steering Systems Pvt Ltd. has received the “Best Performance in Business Alignment-Gold” Award by Ashok Leyland for LCV Business at the Supplier Summit 2019 held on April 29, 2019 in Chennai.

REVL recognized by Groupe Renault

Rane Engine Valve Ltd. has received “Quality & Customer Satisfaction” award for FY 2018-19 from Groupe Renault at the Annual Supplier conference held on June 4, 2019 in France.



RBL recognized by Brakes India

Rane Brake Lining Ltd. has received “Best Supplier 2019 - Friction” award from Brakes India Private Limited at the Annual Supplier conference held on May 28, 2019 in Chennai.



Rane Corporate Centre

"Maithri" 132, Cathedral Road, Chennai - 600 086. India. Phone : +91-44-28112472 / 73 | Fax : +91-44-28112449