

# **Fi**RE**Si**DE

The House Magazine of the Thermax Group Volume 50 No. 1 January - March 2020





## **About the Cover**

*Stillness may not be the end of the road but the beginning of a new curve. It gives you an opportunity to step back, reflect, introspect, and prepare for traversing the course that lies ahead. Just like these boats that await a fresh morning after a long day of ferrying tourists in the Phewa lake of Nepal, let's take a moment to review our priorities before we set sailing again.*

*Photo by Jaimin Dhamanaskar (TBWES)*

## **BACK COVER**

**A working day  
in the 'new'  
normal life**

## *Comment*

“The nearer the dawn  
the darker the night.”

– Henry Wadsworth Longfellow

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# What's New?

Longest operation of any  
CFBC boiler, globally!

## 600+ days of continuous operation

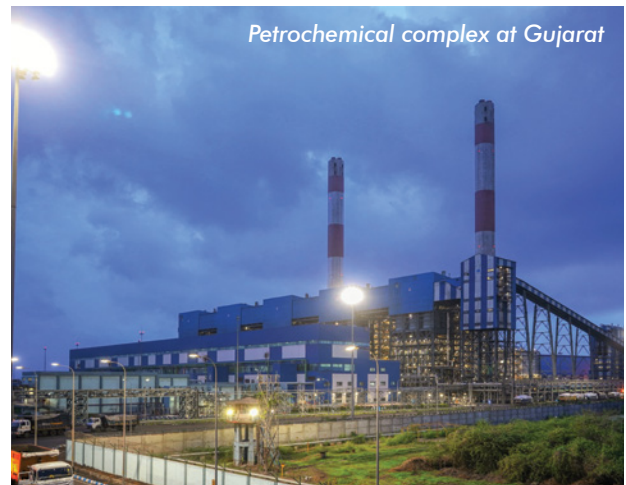
One of the major challenges faced by industries is the availability of skilled and competent service providers for boiler upkeep and maintenance. One such prestigious customer is the largest petrochemical complex in Gujarat, where the Thermax Babcock and Wilcox Energy Solutions (TBWES) O&M team has been providing services to a total of 5 units of 500 TPH, 121 bar(g), 535°C, IR-CFBC boilers and Electrostatic Precipitators (ESP) since 2016.

We are proud to share that one of the Thermax CFBC boilers, and associated ESP at the complex recorded 674 days of continuous, uninterrupted operation, starting 1<sup>st</sup> June 2018. This is perhaps the longest operation of any CFBC boiler, globally! The boiler had to be stopped on April 6 on account of the national lockdown announced in India to prevent COVID-19 spread.

We also supported the customer to consume various coals (Indonesian, South African, Australian and Russian) and enhance the performance of the units. To ease the operational challenges of such a large steam generation complex, all the units were put on automatic control.

This milestone also reinforces the faith reposed by many of

our customers in the Thermax IR-CFBC boilers, incorporating the unique 'U' beam particle separation technology. These offer reliability, low maintenance costs, high combustion efficiency, reduced erosion and have a compact design.



*Petrochemical complex at Gujarat*



*Celebration at the customer site*



*TBWES team comes together for cake cutting at the Thermax Energy House (Pune)*

# Recovering energy to fuel savings

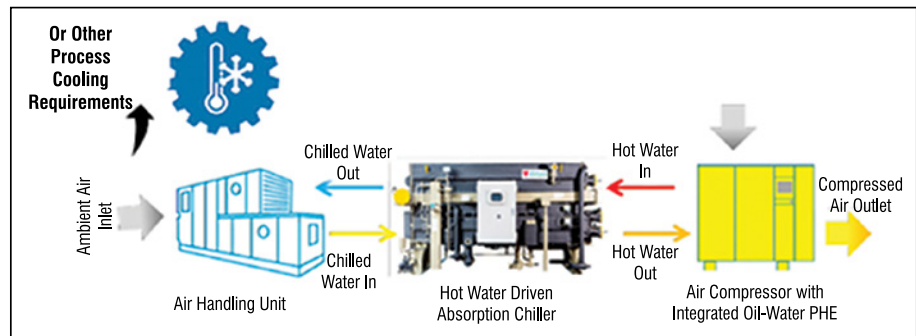
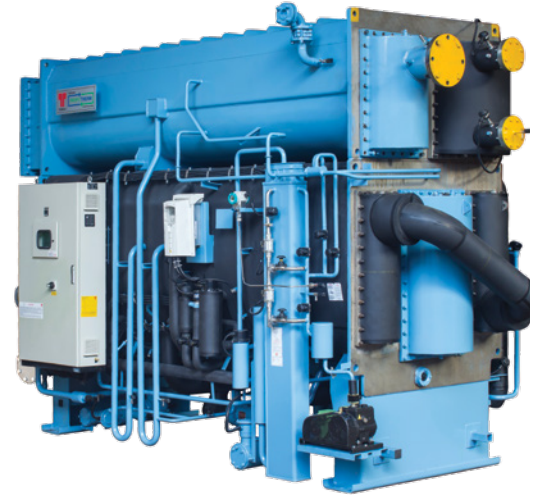
To sustain their dominance in the tyre industry and cater to the demands of the automobile sector, a leading Indian tyre manufacturer expanded its facility in Pondicherry, adding to the radial tyre manufacturing capacity in India. To optimise its energy usage and reduce costs, the customer opted for Thermax's hot water driven vapour absorption chiller to recover heat from the air-cooled the compressor and utilise it for Air Handling Unit cooling in the plant.

The lubricant oil used in the compressor gets heated up to 100°C during the process and passes through the oil-separator. The Plate Heat Exchanger captures the heat in the oil and harnesses this recoverable heat carefully in the form of hot water. This hot water serves as the heat source for Thermax chiller and provides electricity-free cooling. Chilled water of 7°C for air conditioning requirements at the plant is met with the help of this chiller.

Thermax's vapour absorption technology replaced the electric chillers, thus achieving waste

heat recovery upto 76% of the total input energy and 92% reduction in energy requirement for cooling. The

customer also achieved a significant carbon emission reduction of 646 tons/annum equivalent to taking 129 cars off the road or planting 64,593 trees.



A schematic diagram depicting the integration of chiller in the process

## More power through solar

Riding on the fast-growing adoption of solar technology by industries, the Thermax solar business has established credible references in both rooftop and ground mounted installations. A recent milestone in this journey was achieved when Thermax commissioned a 3.96 MWp captive ground mounted PV plant for a leading cement manufacturer at Karnataka. The

project was commissioned within the stipulated time frame of five months including all statutory approvals.

State-of-the-art mono PERC modules were used along with a seasonal tilt-type structure for high efficiency and optimum performance. The plant grid was successfully synchronised on 31<sup>st</sup> December 2019 with an 11kW power evacuation system. The execution of this project was completed under challenging circumstances as the installation had to be done on an uneven rocky terrain. This project is slated to help the customer achieve its sustainability goals by offsetting 4,800 tons of CO<sub>2</sub> emission, besides meeting its renewable power obligation.



3.96 MWp solar PV plant on a tough terrain

# BOILERINDIA 2020



Panoramic view of the 225 sq. mt. booth



Dhawal Antapurkar (Right) along with Shekhar Kashalikar, Senior VP, TBWES at the Thermax stall



Inauguration by M.S. Unnikrishnan, MD & CEO, Thermax and B C Rajesh, Head, TBWES Services



A display of steam accessories and valves



Boiler India 2020 core team

## Thermax grabs the limelight in India's first-of-a-kind boiler show

To commemorate the 150<sup>th</sup> year of boiler inspections in India, Indian Boiler Regulations (IBR) with support from the Directorate of Steam Boilers, Maharashtra organised Boiler India 2020, a global conference for boilers and ancillary manufacturers. The event took place at the CIDCO Exhibition Centre, Vashi, Navi Mumbai from February 21 to 23, 2020.

Almost all renowned boiler and allied manufacturers came under one roof at the event, where Thermax was a prominent exhibitor. Leveraging our potential as 'One Thermax', all the divisions

came together to showcase comprehensive range of utility solutions right from energy generation to dissipation. The businesses focused on their latest technologies in automation and sustainable offerings.

After the booth inauguration by M.S. Unnikrishnan and B C Rajesh, we had the chief guests of the event, Shri. Dhawal Antapurkar, Director of Steam Boilers, Maharashtra and Shri. Dilip Walse-Patil, Maharashtra Cabinet Minister, witnessing our exhibits. Mr. Antapurkar complimented Thermax for the impressive aesthetics of its booth and the boiler display.

"I am delighted with Thermax's participation to showcase our capability, not only in boilers but allied areas and up to power plant engineering. It is important for the world to see us as the best company in sustainable energy and environment solutions," said Unny.

Highlights of the display comprised Shellmax Global boiler - a smart and compact boiler with international standards; IoT and automation; biomass-based heating solutions; in-place sewage treatment and other water treatment solutions; efficient steam accessories and a range of chemicals for special applications.

Poster displaying actual chemical samples and technical information



▲ Thermax team engaging with customers at the booth  
▼ customers at the booth



Thermax Onsite Energy Solutions Limited (TOESL) won the second prize in the 'Best Boiler User 2020' competition at the conclave.

TOESL bagged this prize for its site at Century Enka Limited in Bhosari, Pune and was nominated under the category of textile/processing/edible oil/paper/ordnance/distilleries industries.

As seen in the picture, Vinod Thaokar (Head, O&M), Rahul Bhosale (Facility Manager), Mangesh Yeul (Facility Manager) and Roshan Shirbhate (Safety Officer) received the award on behalf of TOESL.

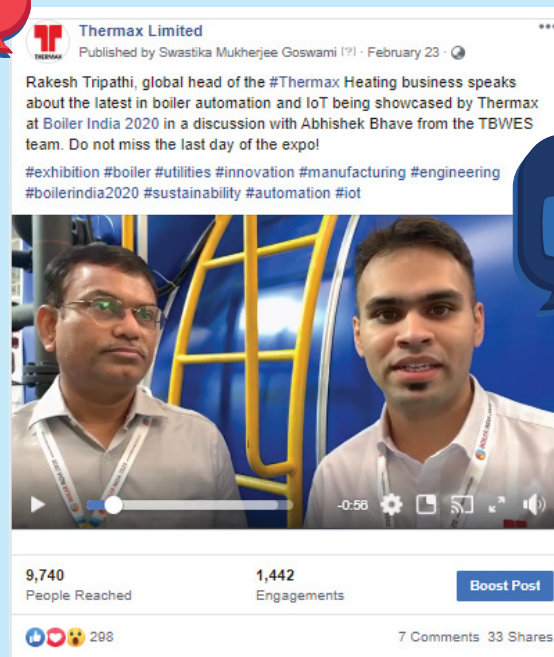


Apart from physical exhibits, a series of captivating visual displays were showcased, such as a video on the execution of modularised boilers by TBWES for the largest refinery in Africa; customer story of a pharma major as a part of the 'One Thermax – Many Solutions' value proposition; IoT solutions for boilers and chillers as a game-changer, and simulated working of high technology products.

Our product experts also presented papers and participated at various panel discussions held

alongside the expo on all the days.

This first-of-a-kind summit for boilers provided a good opportunity for our business leaders, technical experts, sales and marketing teams to interact with customers, suppliers, media and other stakeholders and position Thermax as a 'one stop destination for all utility needs'.



In a social media interview with Abhishek Bhawe (TBWES), Rakesh Tripathi, Head, Heating sharing about IoT enabled packaged boilers

## Largest O&M order of 90 MW

**T**he Power O&M business bagged its largest contract by demonstrating versatility in catering to any make of power plant equipment and an indomitable commitment to meet customer expectations.

Utkal Alumina Refinery in Rayagada district of Orissa is a marquee project of the Hindalco group comprising a 1.5 MTPA alumina refinery, bauxite mines (Baphlimali) with reserves lasting for over 25 years, and captive co-generation power plant of 90 MW. It deploys the world's best technology, producing high quality bauxite. Thermax has created a benchmark by taking over the plant within a short time of 15 days which included deploying and onboarding almost 350 personnel and staff, ensuring continuity and smooth operation of the plant.



For a seamless takeover, the Power O&M team started the project by deploying 18 engineers from its other sites. The power plant team, HR, IR and unit head worked cohesively to onboard the entire workforce of engineers, skilled and unskilled workers within this aggressive time frame. This contract encompasses operation and maintenance of the power plant, including non-Thermax make equipment.

With this project, Thermax has several firsts – a breakthrough with the Hindalco group, the first project in the state of Odisha and the largest capacity of 90 MW. We are now running in the seventh month of the contract with seamless functioning and a happy customer.

## New Beginnings



A group picture after the ceremonial ground-breaking 'puja' at KTPS

Contract signing between Tata Power and Thermax on 17<sup>th</sup> February 2020



**T**he two largest FGD orders bagged by Thermax in the previous two quarters progressed into the next phase of execution. The Air Pollution Control (APC) division along with senior officials from Koderma Thermal Power Station (KTPS) celebrated the traditional ground-breaking ceremony on 20<sup>th</sup> March 2020 at Jharkhand. This event marks the first official day of commencement of the project comprising installation of two units of Flue Gas Desulphurisation systems for 2 x 500 MW capacity power plant, on turnkey basis as a part of the Rs. 471 crore order.

On the other hand, APC concluded the signing ceremony of the Rs. 431 crore FGD order with Tata Power. Thermax will install two units of FGD systems for 2 x 525 MW capacity power plant in Maithon in the state of Jharkhand, to limit SO<sub>x</sub> emissions as per the revised environmental regulations. The signing took place at Tata Power's headquarters in Mumbai, attended by senior officials from both the companies.

# One Thermax – Many Solutions

To highlight the capabilities of Thermax as a one stop solution provider in the utility space, we have initiated a series of customer stories with the theme, 'One Thermax – Many Solutions'.

We are pleased to share the first video in the series which is on Serum Institute, Pune, the world's largest manufacturer of vaccines. The video captures feedback from the customer on how Thermax has proved to be an able partner in helping them meet their process needs, adapt the shift towards sustainability and support their expansion plans. It highlights our host of offerings viz. boilers, chemicals, air pollution control equipment and water and wastewater treatment solutions that can address the stringent requirements of the pharma industry. We thank the Serum team for their support and testimonial on their experience with Thermax solutions and working with our team.

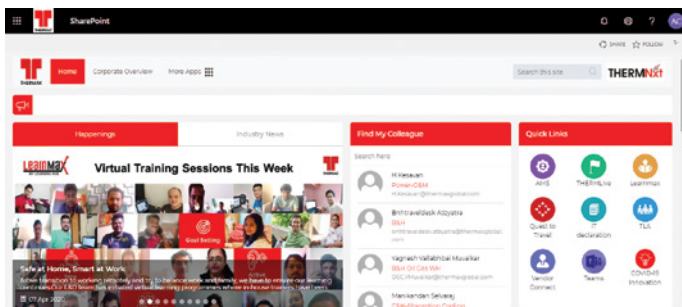


Click on the play button to watch the video



Another milestone in the journey of 'Smart' Thermax was the transformation of our Thermnet, into a contemporary intranet with a host of features to enable Thermaxians Connect, Converse and Collaborate with each other. Built on the Microsoft SharePoint platform, THERMNxt is a new age intranet that integrates the functions of Office 365 to give all users a personalised experience, for example, access to frequently used documents and notifications from the calendar, email and Teams.

Further, the intranet has a layer of customised User Interface that gives it a vibrant look with ease of manoeuvrability. Some exciting features include links to all essential applications at one place, communication resources like videos, corporate presentation etc., events and initiatives such as wellness, live feed to Thermax social media and updates on latest happenings. We are continually adding new features to make THERMNxt more engaging and interesting. Stay tuned!

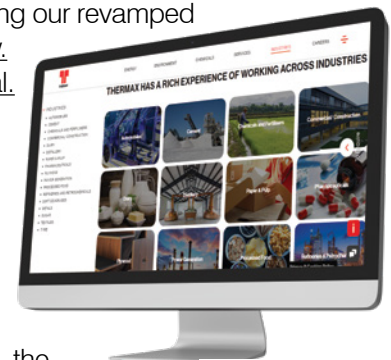


## Thermaxglobal.com gets a makeover

Here's presenting our revamped website, [www.thermaxglobal.com](http://www.thermaxglobal.com),

built to give our customers a comprehensive yet customised experience of the company. Steered by the Corporate Communications team, the project was initiated a year ago, engaging all businesses and enabling functions, to ensure that all the stakeholders' needs are incorporated. Some enhancements that visitors can look forward to – 'Industries' section showcasing specific applications industry-wise, intelligent search for quick retrieval of information, live news feed and Thermax social media platforms, ease of navigation through a matrixed structure and a focus on services and employer branding. We will soon be launching customised pages for key geographies where we operate.

We hope you enjoy the new experience, do write to us with suggestions and feedback on [corporate.communications@thermaxglobal.com](mailto:corporate.communications@thermaxglobal.com).



# Expressions



This situation has certainly evoked minimalism in all of us, which could possibly create a structural change in consumption.

**A**s I connect with you through this issue of Fireside, I do hope all of you and your families are safe and well. We are amid an unprecedented crisis that defies the outer limits of a volatile and complex world. A lot has been spoken about the impact of the Covid-19 pandemic on lives, nations, economies and the globe.

While this crisis has disrupted the 'normal' or 'status quo', it has also taught important life lessons and invoked a deep sense of gratitude for the privileged life we are blessed with – often taken for granted. As I juggled between work, family and daily chores without some of our domestic help, I became acutely aware of how much they do for us – how hard they work to make a living. How often have I appreciated them to the extent they deserve? I realised how fortunate we are to be able to stay in the comfort of our homes and family, while there are millions of people out there struggling for survival. Have also realised how little I really need – have been wearing the same five pairs of clothes and am very comfortable. I've also discovered the beauty of nature – the colours of spring - every leaf and flower alive with a certain freshness; the air around feels a lot cleaner. We owe our wellbeing to all the doctors, essential service providers and police officers, who are working selflessly and risking their lives for our safety.

Coming to Thermax, we have proved our resilience in every crisis, a testimony being our sustenance and growth over 50 years, weathering internal and external turbulence. In this crisis, we feel it is extremely important to ensure that all of us are together and stand strong for each other – the key being continuous communication. For the first time, we conducted the Open Forum on a virtual platform and I am delighted to witness the same levels of enthusiasm and participation, evident from the pertinent questions posed by many of you. Moderated by Unny, am glad the questions were answered not just by him and me, but by Phero, our new Joint MD, Ashish Bhandari and the entire EC. They shared a number of insights, including coping with the 'new' normal. I particularly remember Dr. Sonde's interesting take on extracting 'more from less' - something Dr. Mashelkar taught us. This situation has certainly evoked minimalism in all of us, which could possibly create a structural change in consumption. Hence companies need to prepare themselves to raise their benchmarks in delivering customer solutions. This also means not just leveraging our respective business competencies, but collaborating our efforts as 'One Thermax'.

I would like to spend a minute on the questions asked in the dipstick survey. Of the five

questions, it was heartening to see that our employees strongly agree to the decisions being taken by us to mitigate this crisis, as also the confidence in Thermax leadership. However, we would like to deep dive into the questions which received a moderate or not a 'strongly agree' response – with regard to frequency of communication and actions in your respective work areas. As also mentioned in the Forum, Sharad and his team have put together an exhaustive rejoining guideline (SOP) to identify and arrest all possible chances of contamination, encompassing our offices, manufacturing locations and project sites. Having said that, the situation is ever evolving and so is the need to keep improving our safety measures.

We would request your inputs on how we can refine our actions in all the above areas, by sending your suggestions to [corporate.communications@thermaxglobal.com](mailto:corporate.communications@thermaxglobal.com).

It was great to have Ashish participate wholeheartedly in the Open Forum and interact with all our employees. Ashish joined us on April 7 and since then has been remotely interacting with many from our management team, the Board, Pheroze and me. Reflecting on his first month, he feels lucky to lead such passionate and motivated employees; the warmth he has received makes him feel like he has known Thermax forever. In his first message, he

asked all of us a question – “What does it mean to be Thermax?” And was flooded with more than 200 responses where he could sense the pride and strong value system that runs in the DNA of the company across all age groups, gender and rank. Thank you all for the warm welcome extended to him; a special thanks to Unny for his mentorship and support to Ashish over the past month.

Thank you to many of you who have contributed to the 'Innovate' portal. There are some ideas we have already implemented and some that could be extremely helpful as we come out of the crisis. People have thought of a 'productivity tool' to be developed so that many can continue working from home, without a drop in efficiency. Another was whether we could start some short inspirational TED talk like modules with people within the organisation. As mentioned during our Open Forum, Prosenjit will head the taskforce along with Tushar Mendiratta – they will track every suggestion and take it to its logical conclusion. Hence may I please request you to continue sending these wonderful ideas, as also new opportunities that you may see or read.

I also want to thank all those employees who supported the migrant workers and daily wage earners, by contributing generously for their provisions. I am happy to share that Thermax Foundation has been working

collaboratively with a number of credible NGOs and volunteers to feed the starving; supplying masks and other essentials to our frontline police force and the poor; as also medical equipment to hospitals. Our director Dr. Jairam Vardaraj sent face shields pro bono to hospitals in Pune. Dr. Sonde is working with a consortium of partners to develop effective healthcare equipment for Covid-19 treatment. Our thanks to everyone.

Let me conclude by reiterating what all of us spoke about during the Open Forum – **Cash** is king; we cannot afford any receivables or inventory hold up; we need to save every rupee and participate in the Agile 2.0 suggestion portal for cost reduction. **Communicate** extensively with every stakeholder, even if it is to ask how they are. **Innovation** – can we continuously look for ways to be faster, cheaper, more efficient than before; and most importantly, **Health and Safety** – I would urge all of you to follow the SOP to the 'T'. This crisis has taught us that none of us is safe, till all of us are safe!

Stay safe, healthy and positive!

Warmly,

Meher

## **Up Close**

**Swastika Mukherjee, in conversation with B C Rajesh, SBU head, TBWES Services takes us through his 15 years of exhilarating journey with Thermax, including various successes and challenges experienced along the way.**

***We are also leveraging the ambit of digital disruption to revolutionise our services through remote monitoring and diagnostics.***

## ***“In a service business, it should be on both value***

**I**ronically, Up close ended up being a distant conversation this time with Microsoft Teams coming to the rescue amid the lockdown. For someone like B C Rajesh who is used to meeting customers and visiting plants, it is indeed a new way of working. But he sees a silver lining emanating from the prevailing crisis. “This pandemic has forced countries, states, organisations, administration and individuals to bring out the best in them. The resilience and adaptability quotient of human species will not only help in negotiating this challenge but propel us to reevaluate our needs and wants. We will have an opportunity to deploy our collective wisdom and learnings to make this world a better place to live,” he says.

Rajesh moved to his present role as the head of TBWES Services about three years ago. He recalls, “I wasn’t sure of taking up this challenge, but thanks to Unny’s belief and Pravin’s support, we have been able to move the needle for this SBU!” Rajesh has grown the business significantly, introduced value-added services and achieved customer acquisitions through a host of adjacencies such as reformers and heat exchangers and focus on soft services (diagnostics and field services).

He further adds, “This Service business was seeded almost two decades ago during the Thermax Babcock and Wilcox (TBW) days and remained predominantly a project driven business which brings its share of cyclicity. There was a need to create an identity and a new model for this business. Our strategy for growth has been

to identify different segments across the service spectrum, create a roadmap to harness their potential and also drive synergies for collaboration among them, to deliver higher value.”

Rajesh hails from Mysore and grew up in a defence colony with fond memories of neighbours from varied cultures and ethnicity. “My father and two brothers were engineers, and I wanted to take an alternative path by becoming a doctor; but could not secure admission in a government medical college and joined the Government College of Engineering in Karad. Towards the end of the course, I developed a keen interest in project management. Mega construction projects such as dams, hydropower stations fascinated me, so I went on to pursue a masters from NICMAR (National Institute of Construction Management and Research), Pune,” says Rajesh. After a short stint in a Mumbai based consulting company, he joined the newly formed cogen business of Thermax to become a part of its first-ever cogen order of 2 X 27.5 MW combined cycle power plant for a textile major in Ahmedabad.

Rajesh recalls his first assignment. “I was fortunate to work in a complex project with a world-class consultant that helped me gain a deeper understanding of power plant and nuances of project management. The 18 months of execution were exhilarating and have shaped my career and personality immensely. Since the site was isolated with no connectivity those days, we understood the essence of team spirit and camaraderie—all of us

# *is imperative that the focus and customer experience.”*

went beyond our routine call of work to support each other.”

Then came a time when projects for Cogen dried up, and he had to pursue an opportunity outside Thermax and India where he diversified his exposure into business development and running operations in new geographies.

“Thermax continued to live in my heart,” he says. At the time when Cogen was rechristened to ‘Power’ to cater to the growing power sector, he rejoined Thermax in the MPP (Medium Power Plant) business where he was instrumental in bagging several prestigious orders, the most memorable one being the reentry of Thermax Power into gas-based power generation after almost a decade, since his first project.

These were the times when the power demand in India was at a surge. He moved to the LPP (Large Power Plant) business to spearhead one of the all-time mega projects of Thermax executing a 2 x 150 MW power plant, which even today is a benchmark in 150 MW CFBC boiler range of power plants and encompasses several first-of-a-kinds. When this plant commissioning was nearing its completion, he took charge of Power O&M and thus began his journey along a completely new curve, which eventually brought him to the TBWES Services business.

When asked about his plans going forward, he feels privileged and fortunate to be a part of a services business. “In a service business, it is imperative that the focus should be on both value and customer experience. We

need to modernise and grow our service offerings so that the OEM customers can extract greater value from the assets that they have. We have been working towards offering customised solutions and stay closely connected with our customers through improved regional presence and services such as a 24 x 7 technical hotline. We are also leveraging the ambit of digital disruption to revolutionise our services through remote monitoring and diagnostics. Customer choices have evolved; they are under constant pressure to deliver improvement. They expect partnership and value add from OEMs, and do not hesitate in experimenting with new models and solutions in the process.”

He believes that nothing can be achieved without the support of a committed and passionate team and explains it by sharing a quote from the famous Hewlett Packard co-founder David Packard – No company can grow revenues consistently faster than its ability to get enough of the right people to implement that growth and still become a great company. Rajesh says, “In Speciality OEM Service business most of our interventions are surgical where you are dealing with the shutdown of a revenue generating asset, hence the right people with the right attitude play a critical role. I have worked towards this transformation by identifying and channelising the strengths of my team, being an active listener, communicating extensively, taking calculated risks and seeking timely feedback.” Modesty and a strong will come across as his leadership style.

Reflecting on his 15 years of association with the company, he cites, “Thermax is a unique organisation that has successfully balanced business values and human values - driving financial performance while doing good for our shareholders. It has also allowed me to work with some fantastic managers and young, dynamic professionals, thanks to the leadership grooming interventions and wisdom to move roles and embrace changes.” He also believes that in the long run, ‘goodness outsmarts smartness’.

Rajesh is a sports enthusiast, runs marathon, reads extensively and is a Bollywood movie buff. He is married to Arya, and they have a daughter Shreya and son Eshaan.



## Round up

# Thermax becomes the first Indian company to supply boiler to Gulf

**T**BWES recently supplied a 100 TPH high pressure, wood chip fired travelling grate boiler at Gulf Chana Green Power Project located in the province of Songkhla, Thailand. Gulf is one of the leading energy producers having a gross installed power capacity of 11,910 MW with 27 power projects across Thailand and other countries around the world. For the first time, the customer chose a boiler of an Indian make over any other foreign brands, mainly due to Thermax's credibility in the region and its past track record with customers such as Korach Sugars and Mitrphul (projects covered in the previous issues of Fireside.) Thermax's boiler will help in generating steam for the customer's 20 MW power plant.

Thermax was entrusted with the project by Sino Thai Engineering & Construction Company (STECON), an EPC company in the region. The customer appreciated the service capabilities of TBWES in engineering and execution.

*Thermax's 100 TPH wood-chip fired boiler, helping the customer to generate green power*



## **FiRE**SiDE wins



Swastika Mukherjee, head of Corporate Communication receives the award on behalf of Thermax

**T**hermax's house magazine Fireside won the 'Best Internal Publication of the Year 2019' award at the Corporate Communication Awards 2020 on 13<sup>th</sup> February in Mumbai. The event saw eminent

communication leaders of organisations across India come together to share their perspectives on varied facets such as crisis communication, content strategy, artificial intelligence and technology driven communication. Thermax bagged the award in competition with reputed brands from B2B and B2C space. We thank our readers for their patronage and active participation that has helped the editorial team sustain the high standards of the magazine over time.



## Ashish joins as the Joint MD of the Thermax Group

The new financial year commenced with Thermax gearing up for its next phase of leadership. Ashish Bhandari joined the company as its Joint MD, effective April 7, 2020. He will succeed M.S. Unnikrishnan post his retirement and move into the role of Managing Director and CEO.

Ashish joins Thermax from Baker Hughes (formerly a G.E. Company), where he was the Vice President – India & South Asia region. He is an engineering graduate from the Indian Institute of Technology, Mumbai, and received his Master's degree in Business Administration from Duke University.

"I have long admired Thermax as India's foremost technology driven industrial company. I thank Meher and the Thermax Board for giving me this opportunity. Unny is an inspirational leader who has built a great team and has successfully delivered on all aspects over his significant career with Thermax. I look forward to leading the company through the next phase of its growth journey," says Ashish.

"Ashish has the right blend of international business experience, innovative spirit and a progressive vision that are essential to take Thermax to its next level of growth through technology and globalisation. I wish him great success in this journey," says Unny.

Fireside welcomes Ashish and looks forward to many more conversations with him in the future.

## Painting the facilities green!

Partnering the sustainability drive of a large paint company in India, Thermax's Solar business recently commissioned two solar plants at the customer's facilities located in Amritsar (Punjab) and Bawal (Haryana). Having a combined capacity of 1.7 MWp spread across 18,887 square meters of area, the power plants will deliver an output of approximately 24 lakh electrical units annually, saving up to 2,100 tonnes of carbon emission for the customer.

Thermax has deployed high quality modules and inverter technology along with the electrical balance of system to meet the performance parameters. Additionally, the team adhered to all important safety standards laid by the customers as well as Thermax.

The commissioning directly contributes to a saving

*Rooftop solar plant at Amritsar*



*Installation at Bawal is a combination of ground mounted and rooftop solar plants*

of 9-10% in the overall electricity bills which effectively helps in improving the customer's profitability as power cost account for 25%-30% of the total cost of production.

The project was won after rigorous technical and commercial evaluation, including reference checks. It was completed within a challenging time of four months at both the facilities with zero Lost Time Injury.

## Building a cohort of digital champions

Prosenjit felicitating the chief guest, Amit Saluja



(L-R) Prosenjit Sengupta moderating a panel discussion with EC members - Hemant Mohgaonkar, Rajendran A. and Sharad Gangal

The digital disruption has gained a never-like-before relevance in the pandemic-stricken world, and a saviour in helping businesses sustain some sort of continuity amid the restraints of lockdown and social distancing. Thermax adopted this wave in early 2019, and today digital and automation projects are going on in full swing across all functional areas; engaging 15 key users and a total of 27 business contributors from different divisions.

As a next step to engaging the digital enthusiasts in the company, Prosenjit Sengupta, CDO, Thermax and his team announced the launch of 'Digi Club' at an event in Thermax Learning Academy on 27<sup>th</sup> February. The club would be an informal group of employees across the organisation, wanting to be torchbearers of the 'Smart Thermax' movement. Additionally, it would also expand their sphere of knowledge and exposure through activities such as interaction with key personalities and benchmarked companies in

the digital arena; hackathons and other academia interfaces; and collaboration with start-ups on real-time business challenges.

Prosenjit set the context of the event with an interesting analogy between metamorphosis and digital transformation. He went on to dwell upon the digital journey of Thermax so far and the key themes around the Digital Club. He then moderated a panel discussion with our business and functional leaders on the topic, 'The necessity of digitalisation and its impact on the organisation'.

Amit Saluja, Senior Director at NASSCOM was a guest speaker at the event who shared insights on benefits of transformation due to digitalisation. The event concluded with an online live feedback session to capture perspectives from 117 employees present, including regions who connected over video conferencing. A lucky draw among respondents was done using machine algorithms, and the winners received exciting prizes.

## In touch travels to metro cities



Guests networking over a gala dinner during the programme in Mumbai



Senior personnel from companies at the seminar in Delhi

During the quarter, the 'In Touch' series of customer interactions were hosted at Delhi on February 28 and Mumbai on February 20, concurrent with the Boiler India 2020 expo. Customers across industrial sectors attended the event to witness Thermax's latest technologies in the energy and environment space, presented by divisional as well as product heads. A unique experience was created by the team, where they explained Thermax products by way of showcasing 3D models. The interactions continued over networking dinner, leading to discussions for future collaboration. Around 65 customers attended the Mumbai event while the Delhi seminar saw a footfall of over 100 customers.

## Thermax's EVC at a greenfield project



**M**ost of the milk chilling centres and cold storage manufacturers from the dairy refrigeration industry prefer evaporative condensers (EVC) over conventional systems due to higher efficiency and lesser energy consumption. Given the widespread acceptance of the product, Thermax Cooling Solutions Limited (TCSL) has commissioned many EVCs across varied industries with the recent one being an 80 TR unit for a Freon based refrigeration plant at a renowned dairy in Indapur, Maharashtra.

The division secured the order after displaying its technical expertise and capabilities during an in-house seminar conducted by TCSL's sales team for the entire technical team of the customer, including senior officials. The product is commissioned at the customer's greenfield cheese plant, a part of their expansion plan.

*80 TR evaporative condenser installed at the customer site*

## Churning savings for Providencia Sugars

**C**onverting sugarcane into sugar or any other by-product necessitates an array of processes where high-quality steam is a constant requirement at every stage. To enhance the steam generation capacity for Providencia Sugars SA – an agro industrial major in Colombia, the services arm of Thermax Babcock & Wilcox Energy Solutions (TBWES) upgraded the customer's existing boiler in November 2019. The 181 TPH bagasse fired travelling grate boiler supplied by another OEM was upgraded for 200 TPH steam generation. This additional steam has not only increased the sugar production for the customer but also resulted in saving bagasse up to 7,000 tons per year.



*TBWES Services supports the customer to improve productivity and efficiency*

An integrated solution for boosting steam generation coupled with improving thermal efficiency was proposed after a detailed assessment of the boiler performance, mechanical feasibility and operational study. The scope comprised superheater upgrade, an additional economizer, advanced fuel feeding and emission control systems, and other allied equipment.

# Bonding beyond work

The year 2020 commenced with team outbounds organised by various businesses and functions across Thermax. These informal gatherings at sought-after destinations provided employees with an opportunity to unwind, learn, reflect on the year gone by and gear up for a new inning.

## HR

The HR outbound took place at the scenic Raddison Blu resort in Alibaug on January 31 and February 1. The highlight of the two-day trip was a carnival-themed gala night and entertaining performances by the divisional teams, portraying their life as an HR in a humorous way.



## TCSL

70 employees from Thermax Cooling Solutions Limited (TCSL) went for their outbound trip to Radisson Blu, Karjat (near Pune) as their place of choice on 7<sup>th</sup> and 8<sup>th</sup> February. They organised a Bollywood themed evening gala, apart from various games and trekking.



## BTG

Prakruti Beach Resorts, Kashid was the weekend home for 47 employees of the Business Technology Group (BTG). Innovative presentations were made by teams comprising Gen Ys and team leads who shared ideas on the scope and future of digitalisation along with a five year roadmap for Thermax.



## Admin

Radisson Blu, Karjat hosted the Admin team on 28<sup>th</sup> and 29<sup>th</sup> February, where they engaged in various fun games such as roller coaster, lock knee relay, three-legged race and save the world.



## TBWES

On March 6-7, around 300 employees from TBWES drove to Fariyas Resort, Lonavala for their outbound. On the first day, an event called 'Sparks' was organised where employees showcased their talent, followed by team building activities the next morning.



## TBWES Services

TBWES Services organised their field engineers meet in two batches in September and October 2019 with the theme, 'Teamwork – together we are winners'. For the first time, 200 engineers from construction, commissioning and after-sales service functions came together to interact with peers, seniors and new joiners. The highlights of the programme were training sessions, case studies and presentations on innovative ideas implemented at work and discussion on technical issues related to product improvement.



Colleagues from Indonesia join the campaign by taking part in a motivational safety programme



Inauguration of HSE training kiosk as a part of the digitalisation initiative



## Leveraging technology for enhanced safety

The 49<sup>th</sup> National Safety Week was celebrated from 4-11 March 2020, reaffirming Thermax's commitment to safety at all its project sites, manufacturing facilities and offices.

This year too saw great participation from employees at various locations. The week-long celebrations around this year's theme – 'Enhance safety and health performance by use of advanced technologies', covered



Thermax participates in 'Walkathon 2020' organised at Sri City

various activities, starting with safety oath followed by online as well as *Chalta Bolta* (on-the-go) quizzes for employees, mock drills and other emergency preparedness sessions and competitions. In line with the theme of the year, an HSE training kiosk was inaugurated. The safety week celebration also took place



Safety week celebration at an APC customer site in Dolvi

at the vendor locations, organised through vendor development and management team.

## Road Safety Week



Thermax volunteers appreciating commuters for following traffic rules



Signing the safety oath

Road safety is a serious concern in India, given the increasing number of fatalities from road accidents every day, including the sad demise of some of our colleagues. In order to sensitise its employees on the importance of safety, Thermax commemorated the 'Road Safety Week' from 11<sup>th</sup> to 17<sup>th</sup> January; an initiative by the Ministry of Road Transport & Highways, observed every year throughout the country. The week saw a gamut of activities including trainings for operators of various mobile equipment in factories, PUC checkup for two-wheelers, inspection of various transport vehicles, oath taking ceremony, the release of a safety bulletin, campaign on the importance of wearing helmets, and

quiz contests on the topic. Various locations of Thermax participated in the celebration with dedication and enthusiasm.



It is aptly said that 'A picture is worth a thousand words'. Rohit Kumbhar from the Power O&M division beautifully sketches Meher and her vision of growing Thermax.

# I am fit, fierce and fabulous

**B**reaking free from their rote office attires, women at Thermax walked into the Learning Academy (TLA) wearing 'tracks' and 'tees' to celebrate the International Women's Day on 8<sup>th</sup> March 2020. This year, the focus was around 'sports & fitness', drawing attention towards the importance of regular exercise and healthy living, in line with the



organisation's ongoing 'Wellness' drive. Depicting the theme 'I am fit, fierce and fabulous', employees across Thermax offices in Pune staged performances in many creative ways on topics such as sports, yoga, and adopting fitness regime from the ancient lifestyle, interspersed with various fitness challenges. Meticulously planned



by the Learning & Development team, the entire space exuded refreshing and healthy vibe, right from the décor and various fun activities to even the snacks menu comprising wheat rolls, juices, fresh salads and other nutritious items. Many of us indulged in the social activities conducted by NGOs – Deepastambh and Corvee Foundation and realised that giving back to society can be done in bite sized chunks too. The celebrations became even more special with the participation of Anu Aga and Meher Pudumjee, the role models and inspiration for all Thermaxians.



# Keep the ball rolling



*Thermax football team*

**T**hermax claimed the runner up position in the Industrial Football Tournament 2019, organised among major Pune based corporates. 16 teams participated in the tournament organised by the Industrial Sports Association held at the Tata Motors Football Ground in Pune. Thermax team played two matches, and entered the semi-finals but lost to Tata Motors, thereby emerging as the runner up. Bibin Baby, Rohit Deshpande and Jacob Abraham were announced as the best players of the tournament. The team put in a lot of hard work, making time for diligent practise after office hours and on weekends. The team is looking for players and those interested may send their names to [Deepak.L@thermaxglobal.com](mailto:Deepak.L@thermaxglobal.com).

# Donate blood, save life

**T**hermax employees have always come forward wholeheartedly to support any social cause. This year's blood donation drive was no different, with a total of 620 employees across Thermax India doing their bit in saving precious lives.

Like every year, the blood donation camp was organised at the Thermax corporate office and pan India locations in the fond memory of our Founder Chairman, Rohinton Aga. Since the day of 16<sup>th</sup> February was a Sunday, the drive was organised at various locations on 14<sup>th</sup>, 15<sup>th</sup> and 17<sup>th</sup> February.



*Thermax Mumbai team at the blood donation camp*

## Arrival of the STORM

**T**o strengthen its campus connect and unleash the creative minds of budding engineers, the campus recruitment team of Thermax organised an online case challenge called 'STORM'. Our team reached out to select colleges across India and received commendable participation of 108 teams comprising students from the sixth semester. They were presented with real-time problems that were designed by our senior product experts, R.S. Jha from the Heating division and Makarand Desai from Chemical and their respective teams. The cases were assessed on both parameters of the solution designed as well its commercial viability. Seven best teams from the Mechanical case challenge and five under the Chemical category were selected to compete in the virtual presentations round, of which the top three winning teams

from each category were felicitated during the grand finale in Pune hosted on 13<sup>th</sup> February at TLA.

For the Mechanical case challenge, 'Helios' from NIT-Raipur bagged the first position and won Rs. 50,000 cash prize from Thermax followed by 'Leviathans' from SVNIT Surat and 'Three of a Kind' from Shri Vishnu College. All the winning teams for the Chemical case challenge were from Nirma University. 'Stormtroopers' stood first followed by 'Thermo Corps Solution' and team 'Delta'.



*STORM winners along with senior HR leaders and the campus recruitment team*

Right from conception to the D-Day, the event was covered on Thermax Instagram handle which received huge engagement. "Thermax STORM case challenge has been an exhilarating and very educational experience for all of us. From cohesive teamwork to technical skills, we have gained a lot in the entire process and look forward to participating next year as well," said the 'Stormtroopers'.

## Jai Jawaan lifts the winning cup

**T**he cricketing fever peaked once again during 'Cricomax 2020', the yearly cricket tournament organised for all employees at our Savli manufacturing facility. Nine teams from Cooling & Heating (C&H) and TBWES divisions competed against each other over two weekends comprising eight matches.

At the finals on 9<sup>th</sup> February, TBWES' 'Jai Jawaan' beat 'Heating Titans'. Vipul Tailor from TBWES grabbed the 'Man of the Series' title. Jayendra Ranpariya from C&H and Jaswant Rathwa from TBWES won the 'Best Batsman' and the 'Best Bowler' prizes respectively.

Congratulations to the winners, participants, organisers and the enthusiastic spectators who made this event an exciting one.



*Team Heating Titans*

## 55<sup>th</sup> AGM of WBCSA

**T**hermax's Channel Business Group participated at the 55<sup>th</sup> Annual General Meeting of West Bengal Cold Storage Association (WBCSA) in January 2020. Presently more than 90% of the cold storages in the state are members of this association, making it one of the largest and only recognised bodies of such units in West Bengal. During the event, our colleagues Dipu Das, CRM-Eastern region, Muzeemkhan Kamaal from Solar and Abhijeet Limaye from TCSL presented Thermax's energy-efficient offerings to close to 400 cold storage owners, key personnel, contractors and consultants.



## Seminar at Vapi on SOx regulations

**T**he Air Pollution Control division of Thermax in partnership with the Vapi Industries Association organised a seminar in Vapi (Gujarat) in December 2019. The event was hosted to create awareness about the recently introduced norms around SOx regulation and solutions for its abatement with the help of our air pollution control systems. The workshop witnessed more than 100 participants across various industries in the cluster, the majority being from paper and textile.



## Thai local sustainability

**T**hermax Thailand sponsored a three-day seminar organised in Bangkok from 29<sup>th</sup> to 31<sup>st</sup> January 2020. The topic of the seminar was 'Development of community-based power plants for Thai local sustainability'. The seminar saw participation from over 100 participants from various industries. Anil Misher from the Thermax International Business Group (IBG) delivered a presentation on 'Boiler and air pollution control technologies for biomass power plant'.



## Mookambika Expo 2020

**T**hermax's Channel Business Group participated in the 9<sup>th</sup> Mookambika Rice & Grains Tech Expo 2020 held in Hyderabad from 29<sup>th</sup> February to 1<sup>st</sup> March 2020. The event served as a good platform to showcase Thermax's wide range of solutions in heating, steam engineering, water and solar PV for the rice segment and also provided an opportunity to our technical experts and sales team for reaching out to potential customers.

# Limelight

## Pradnya emerges as a runner up

Pradnya Deshpande, daughter of Pramod Deshpande from the TBWES division, won the second place in the state level drama competition organised by Maharashtra Parishad.

Pradnya has won many such competitions in the past. Last year too, she was a part of the winning team in a drama competition organised by Sakal Papers in Pune.

She is a student of Jnana Prabodhini Navnagar Vidyalay, Nigdi (Pune) and is currently studying in the seventh grade. Along with acting, Pradnya likes to sing and has been a part of her school choir.



Pradnya

## Pranathi - an all-rounder!

Pranathi Mallya daughter of Ullas P Mallya from the WWS division won a gold medal in speed skating national championship conducted by Roller Skating Federation of India held at Visakhapatnam in December 2019. She also secured a gold medal in the Mayor's Trophy Teen-20 competition conducted by PCMC (Pune Chinchwad Municipal Corporation) in January 2020.

Apart from sports, Pranathi shines well in academics too. Securing an 'A' grade in school exams, she has won a gold medal in science GOF (Green Olympiad Foundation) live Olympiad 2019 organised by 'The Hindu Group' and has secured a certificate of excellence at the national level Science Olympiad.

Pranathi is studying in the 9<sup>th</sup> grade at New Pune Public School Nigdi and learning skating from Shailendra Potnis of Skate Master's Sports (SMS) Club, Pimpri (Pune).



Pranathi

## Energy certification by Jitendra Sonar and Aditya Gupta

Our colleagues, Jitendra Sonar and Aditya Gupta from Steam Engineering are now certified Energy Managers, after clearing the certification examination conducted by National Productivity Council (NPC) in coordination with Bureau of Energy Efficiency (BEE).

An energy manager optimises the energy performance of a facility, building or industrial plant by analysing optimum solutions thereby reducing the energy consumption in a cost effective manner. Similarly, they can conduct various kinds of audits as per BEE guidelines and can authorise the energy savings.

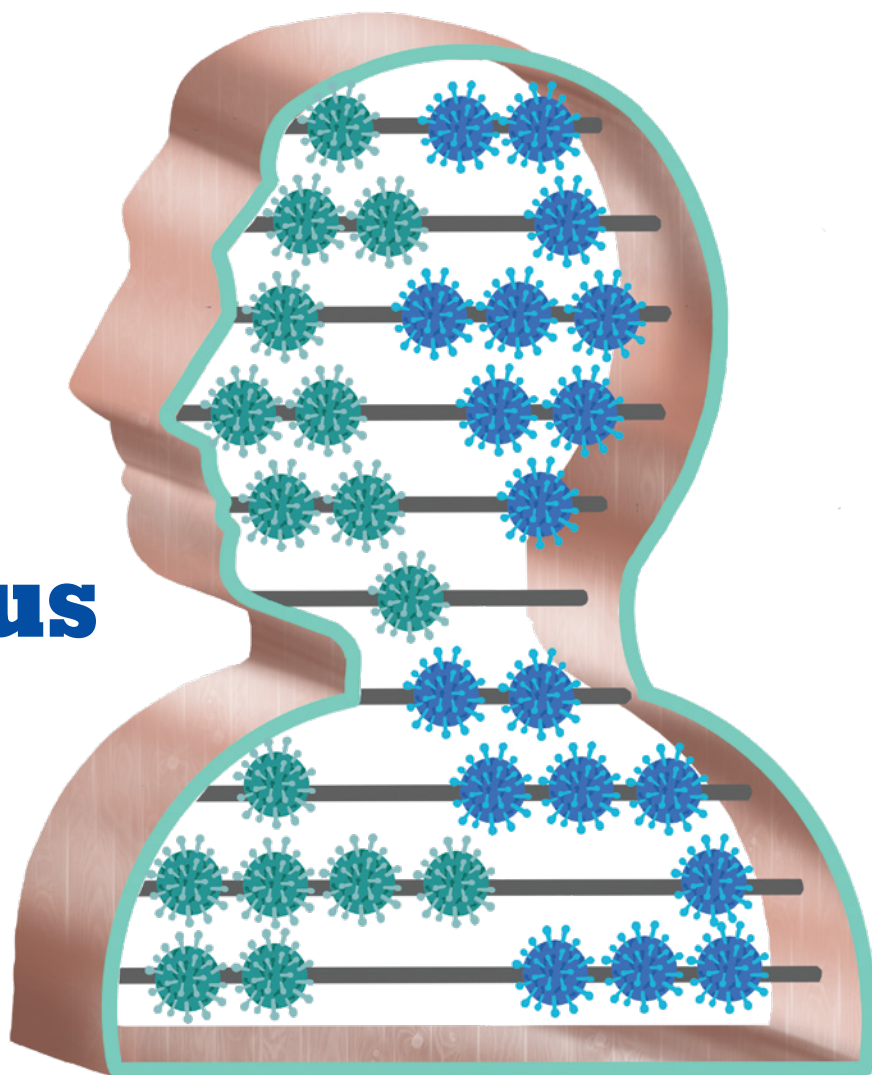


Jitendra

Aditya

## How Does the Coronavirus Behave Inside a Patient?

.....  
We've counted the viral spread across peoples; now we need to count it within people.  
.....



Since the seventeenth century, we've made unimaginable discoveries in the biology and epidemiology of infectious disease, and yet the covid-19 pandemic poses no shortage of puzzles. Why did it spread like wildfire in Italy, thousands of miles from its initial epicenter, in Wuhan, while India appears so far to have largely been spared? What animal species transmitted the original infection to humans?

But three questions deserve particular attention, because their answers could change the way we isolate, treat, and manage patients. First, what can we learn about the "dose-response curve" for the initial infection—that is, can we quantify the increase in the risk of infection as people are exposed to higher doses of the virus? Second, is there a relationship between that initial "dose" of virus and the severity of the disease—that is, does more

exposure result in graver illness? And, third, are there quantitative measures of how the virus behaves in infected patients (e.g., the peak of your body's viral load, the patterns of its rise and fall) that predict the severity of their illness and how infectious they are to others? So far, in the early phases of the covid-19 pandemic, we have been measuring the spread of the virus across people. As the pace of the pandemic escalates, we

also need to start measuring the virus *within* people.

Most epidemiologists, given the paucity of data, have been forced to model the spread of the new coronavirus as if it were a binary phenomenon: individuals are either exposed or unexposed, infected or uninfected, symptomatic patients or asymptomatic carriers. Recently, the *Washington Post* published a particularly striking online simulation, in which people in a city were depicted as dots moving freely in space—uninfected ones in gray, infected ones in red (then shifting to pink, as immunity was acquired). Each time a red dot touched a gray dot, the infection was transmitted. With no intervention, the whole field of dots steadily turned from gray to red. Social distancing and isolation kept the dots from knocking into one another, and slowed the spread of red across the screen.

This was a bird's-eye view of a virus radiating through a population, seen as an "on-off" phenomenon. The doctor and medical researcher in me—as a graduate student, I was trained in viral immunology—wanted to know what was going on *within* the dots. How much virus was in *that* red dot? How fast was it replicating in *this* dot? How was the exposure—the "touch time"—related to the chance of transmission? How long did a red dot remain red—that is, how did an individual's infectiousness change over time? And what was the severity of disease in each case?

What we've learned about other viruses—including the ones that cause AIDS, SARS, and smallpox—suggests a more complex view of the disease, its rate of progression, and strategies for containment.

In the nineteen-nineties, as researchers learned to measure how much H.I.V. was in a patient's blood, a distinct pattern emerged. After an infection, the virus count in the blood would rise to a zenith, known as "peak viremia," and patients with the highest peak viremia typically became sicker sooner; they were least able to resist the virus. Even more predictive than the peak viral load was the so-called set point—the level at which someone's virus count settled after its initial peak.

That raises the second question—does a larger viral "dose" result in more severe disease? It's impossible to erase from one's memory the image of Li Wenliang, the thirty-three-year-old Chinese ophthalmologist who sounded the alarm on the first COVID-19 cases, in his final illness; a photograph shows him crimson-faced, sweating, and struggling to breathe in a face mask, shortly before his death. Then there's the unexpected death of Xia Sisi, a twenty-nine-year-old doctor from Union Jiangbei Hospital of Wuhan, who had a two-year-old child and, the *Times* reported, loved Sichuan hot pot. Another Chinese health-care worker, a twenty-nine-year-old nurse in Wuhan, fell so critically ill that she started hallucinating; later, she would describe herself as "walking on the edge of death."

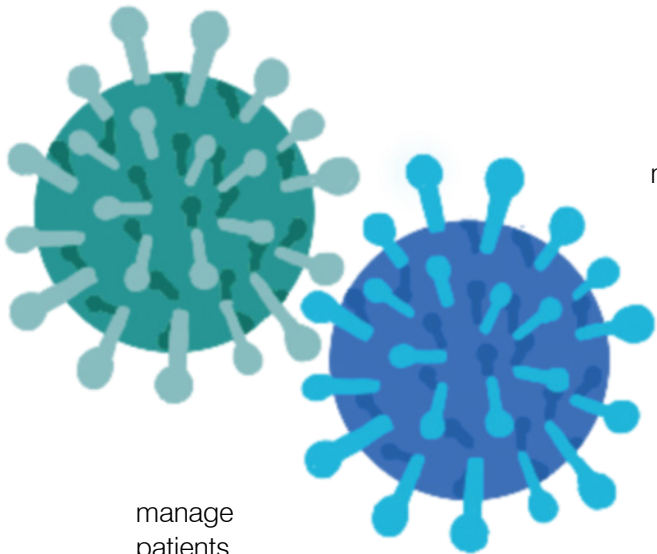
Could the striking severity of their disease—twenty- and thirty-year-olds with COVID-19 generally experience a self-limited, flu-like illness—be correlated with the amount of virus to which they were initially exposed? At least two E.R. doctors in the United States, both on the front lines of the pandemic, have also fallen critically ill; one of them, in Washington State, is only

in his forties. To go by available data from Wuhan and Italy, health-care workers don't necessarily have a higher fatality rate, but do they suffer, disproportionately, from the most severe forms of the disease? "We know the high mortality in older people," Peter Hotez, an infectious-disease specialist and vaccine scientist at Baylor College of Medicine, told CNN. "But, for reasons that we don't understand, front-line health-care workers are at great risk for serious illness despite their younger age."

What sparse evidence we have about coronaviruses suggests that they may follow the pattern seen in influenza. In a 2004 study of the coronavirus that causes SARS, a cousin of the one that causes COVID-19, a team from Hong Kong found that a higher initial load of virus—measured in the nasopharynx, the cavity in the deep part of your throat above your palate—was correlated with a more severe respiratory illness. Research into another acute viral illness, Crimean-Congo hemorrhagic fever, reached a similar conclusion: the more virus you had at the start, the more likely you were to die.

To answer the third question—whether we can track a COVID-19 patient's viral load in a way that helps us predict the course of the disease—we'll need more quantitative research into SARS-CoV-2 counts within patients.

As the virus continues to cyclone across the world, we will begin to find quantitative answers to these questions of how exposure intensity and subsequent viral loads relate to the clinical course of COVID-19. We will supplement the bird's-eye view with the worm's-eye view. How will these insights change the way we



manage patients, hospitals, and populations?

Start with the relationship between exposure intensity and infection. Think, for a moment, of how we monitor those who work with radiation. Using radiation dosimetry, we quantify someone's total exposure, and we set limits on it. We already know how critical it is for doctors and nurses to limit exposure to the coronavirus by using protective equipment (masks, gloves, gowns). But for health-care workers on the front lines of the COVID-19 pandemic, especially in places where protective equipment is scarce, we might also keep track of total exposure, and put in place viral-dosimetry controls, so that one individual can avoid repeated interactions with some set of highly contagious patients.

Establishing a relationship between dose and disease severity could, in turn, affect patient care. If we could identify pre-symptomatic patients who were likely exposed to the highest doses of viruses—someone cohabitating or socializing with multiple sick family members (as with the close-knit Fusco family of Freehold, New Jersey, which has had four deaths), or a nurse exposed to a set of patients shedding large amounts of the virus—we might predict a

more severe experience of the disease, and give them priority when it came to limited medical resources, so that they could be treated faster, earlier, or more intensively.

And, finally, the care of COVID-19 patients could change if we began to track virus counts. These parameters could be gauged using fairly inexpensive and easily available laboratory methods. Imagine a two-step process: first, identifying infected patients, and then quantifying viral loads in nasal or respiratory secretions, particularly in patients who are likely to require the highest level of treatment. Correlating virus counts and therapeutic measures with outcomes might result in different strategies of care or isolation.

We will also want to be able to identify people who have recovered from infection, have become immune to SARS-CoV-2, and are no longer contagious. Such people must meet two criteria: they must have a measured absence of viral shedding, and they must have signs of persistent immunity in their blood (something readily determined by an antibody test). Such individuals—especially those who are health-care workers—are of particular value to medicine: barring any decay in immunity, they can generally tend to the sickest patients without getting sick themselves.

My clinical practice is in oncology. Measurement and enumeration are the mainstays of medicine for people in my field: the size of a tumor, the number of metastases, the exact shrinkage of a malignant

mass after chemotherapy. We talk about “risk stratification” (categorizing patients according to health status) and the “stratification of response” (categorizing patients according to their response to treatment). I am able to spend half an hour or more with every patient to describe risk, explain how a remission is measured, and carefully devise a clinical plan.

A pandemic, by contrast, goes hand in hand with panic. Chaos reigns. Italian doctors are hanging I.V. drips on makeshift poles for patients lying on makeshift cots in makeshift wards. Measurement—viral-load testing—can seem like an improbable indulgence under such circumstances. But this crisis will require that we stratify and assess risk, and deploy dwindling resources in the most effective manner.

The word “epidemiology” is derived from “epi” and “demos”—“above the people”. It is the science of aggregation, the science of the many. Yet it works most effectively when it moves in step with medicine, the science of the one. To win the *battle* against COVID-19, it's essential to trace the course of the virus as it moves through populations. But it's equally essential to measure its course within a single patient. The one becomes the many. Count both; both count.

Excerpted from:  
<https://www.newyorker.com/magazine/2020/04/06/how-does-the-coronavirus-behave-inside-a-patient>

An article by Siddhartha Mukherjee

## The compassion imperative

**J**ust prior to the lockdown, I was fortunate to have moved in with my daughter and her family; and was very comfortable. But anxiety had entered my meditation space and I was preoccupied with thoughts of the well-being of my family and myself. All along, I was aware of starving migrants and daily wage earners, who were helped by many across India. But I had not realized the enormity of the suffering, until I heard a few stories in the Teach For India community in our very own city of Pune. This impacted me deeply and it shook me out of my self-centredness and anxiety, and instead, I felt very grateful and privileged.

All of us who are well-to-do have depended on those at the bottom of the pyramid to serve us and make our lives comfortable. We did not have to do the drudgery, or unpleasant daily chores, at our

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Covid-19 is a test for humanity. Let's remember that in the long run, business cannot survive in a society that fails.

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homes or at our factories. Today, due to the corona pandemic, the poor are suffering and are either trapped in cities or are on the move without livelihood or family support. At their hour of need, can we reach out and serve them? Very often, we discount the emotion that the poor feel towards their children and families. The poor have their pride and have worked hard all their lives to eke out a living with dignity. Without having to beg for help, can we reach out and preserve their dignity?

There are no easy answers to the dilemmas which the sensitive business community will face. With limited cash, do I safeguard the business by asking employees to leave, or retain everyone and find innovative ways to survive? Can the privileged and corporate India open up their hearts and support

non-governmental organizations who reach out to the deprived and denied? In normal times, corporates are largely concerned about profits, but at this time, can a sense of purpose towards the downtrodden take priority?

Covid-19 is a test for humanity. Getting over our self-centredness and forgetting our differences of caste, class and religion, can we together help out our fellow human beings? Let's remember that in the long run, business cannot survive in a society that fails.



– Anu Aga

# My urge to outgrow the Section 'C' tag

**W**e are entering the month of May, and it is that time of the year when students anxiously await their exam results or gear up for the next academic year. It reminds me of my school days that has proved to be a great learning experience, along with many challenges.

When I was in 9<sup>th</sup> standard, I shifted to Rajasthan from Assam along with my parents. It was mid-April when I started attending my new school. I was enrolled in Section-A of 9<sup>th</sup> standard. As an average student, I used to pass the exams with grace marks in some subjects. And here, I was surrounded with bright students having fabulous academic scores and highly attractive personalities. Their competitive outlook and constant urge to outperform started making me feel uncomfortable, scared, nervous and confused. Back in Assam, I never bothered about results as my classmates were not too meritorious and my father expected me to join his business, which he later wound up and moved to Rajasthan. I was overwhelmed with this new environment to the extent that I stopped attending school for the next 15-20 days until one of the teachers sent a notice to my parents through my sister. It mentioned that the first internal test is going to start, which implied that it is a mandate for me to attend the classes and the tests.

After one and a half month of summer vacation following exams, the school reopened, and the test results were announced. I was one of the very few students who merely passed in every subject with a score of 41.3%. A week later, all the low scoring students along with some average students from Section-A and Section-B were shifted to a newly formed Section-C, which in itself defined our low

academic credentials. On one hand, I was happy that there are few more like me, but a strong sense of regret started emerging within me, which consistently troubled my self-esteem.

Then came the turning point in my life when a voice within me urged to take this peer pressure in the right stride and develop a new perspective towards the situation. A strong desire to excel in academics emanated within me that defined the next phase of my academic journey.

I went to the class teacher of Section-A and asked, "How much does a student need to score to get back into Section-A?" He replied that a minimum annual aggregate score of 80% is mandatory, emphasising on the word 'aggregate'.

I took this next-to-impossible target as a challenge and started working hard. I stopped participating in sports as well as extra-curricular activities and utilised the time in the library to concentrate only on studies. I also read books of lower grades to clear my fundamentals in mathematics and science. I realised that I needed help with math, and I didn't hesitate to ask the subject teacher for extra hours of teaching. He became my guide and helped me in my difficult times.

My academic scores started improving consistently. The average of four internal tests was not impressive, but I had managed to score well in the half-yearly exams. It was getting challenging to compose an aggregate of 80% in the final exams. Finally, the results were announced. I scored around 91% in the final exams with an aggregate score of 79.8%. Missing my target by a mere 0.2% triggered a sense of failure within me. However,



my persistence and perseverance were finally rewarded. I was transferred to Section-A in 10<sup>th</sup> standard with a special appreciation announcement in the school assembly hall.

It was this success that made me realise the need to change my approach towards tackling difficult situations in life. From then till now, my thirst for learning hasn't stopped. After my 10<sup>th</sup>, I completed Diploma in Mechanical Engineering and joined Thermax in 2012. I earned a BE degree and postgraduate diploma through distance education. I have also enrolled in distant learning to pursue an Executive MBA.

When I look back, I am glad that I dared to step out of my comfort zone. Had it not been for the change in circumstances, I would have never known my

true potential. When we are passionate about achieving our goal, we should believe in ourselves and look for solutions, rather than surrendering to failure. This personal experience of my life inspires and motivates me to work with a positive attitude under any difficult circumstance.



– **Govind Gupta**  
(Power division)

# Slice of Life

## A bookshelf sends a message of hope

**A**s the world continues its fight against the coronavirus pandemic, one artist has delivered a message of hope with a clever picture that is going viral on social media. Digital-printmaker Phil Shaw created an image of a bookshelf with books arranged in such a way that the titles, when read together, reveal a hidden message on the pandemic and the importance of social distancing. The bookshelf that he created digitally includes books like 'It' by Stephen King, 'Hope Springs Eternal' by Ginger Simpson and 'In the Dark' by Mark Billingham, among many others.

The book titles, when read together, reveal the message: "The English patient had caught it on the beach. I should have stayed at home she said. Now she was in quarantine in the dark house of splendid isolation.

"Still hope springs eternal with a little bit of luck and personal hygiene. The corona book of horror stories must end soon. Always remember clean hands save lives and when in doubt don't go out!"

Source : NDTV



## Get dressed for Zoom hearings



**W**ith Zoom calls becoming a way of working during social distancing, we are witnessing hilarious instances of the extent to which people take their looks and attire casually. A Florida judge has one request for attorneys showing up for court hearings via Zoom: Get out of bed and put on some clothes!

Broward Circuit Judge Dennis Bailey made the plea in a letter published by the Weston Bar Association, news outlets reported.

"It is remarkable how many ATTORNEYS appear inappropriately on camera," Bailey said in the letter. "One male lawyer appeared shirtless and one female attorney appeared still in bed, still under the covers."

Bailey isn't making any exceptions for lawyers lounging in the Florida sunshine, either.

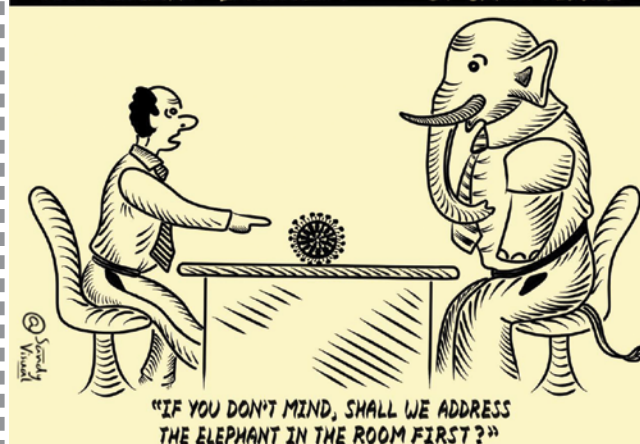
"Putting on a beach cover-up won't cover up you're poolside in a bathing suit," he wrote.

Since courthouses shut down on March 16 to help slow the coronavirus pandemic, Broward County's judicial system has held about 1,200 Zoom meetings involving some 14,000 participants, WPLG-TV reported.

Source: huffpost.com

## And this pun picture

TEMPORARY INSANITY BY SANDYVISUAL



Cartoon by Sandeep Shete



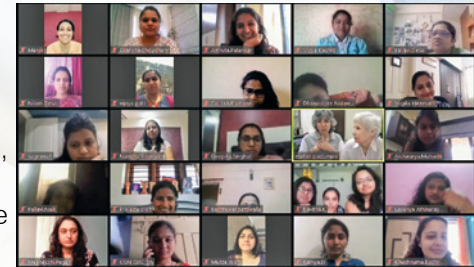
The coronavirus outbreak has redefined our way of living with all of us assuming multiple roles, balancing family and work from home and learning to deal with social distancing, while keeping our spirits high. At Thermax, we have adopted innovative ways to ensure that we stay connected despite being distanced. At the same time, we are trying to utilise this time of self-isolation for upskilling through training and maintaining our fitness regimes. Some glimpses of what has been keeping Thermaxians busy during the lockdown.



A social distancing campaign called 'Safe At Home, Smart At Work' was initiated with the idea to sneak-peek into each other's workday and feel connected.



The women employees had an informal chat over a cup of virtual 'coffee' with Anu and Meher where they engaged in a heart-to-heart conversation on their daily schedules, challenges and what have been some of the best moments during the lockdown.



The Thermax 'Wellness' programme sustained its momentum through various initiatives. To name a few, a 'Healthy Recipe Content' was rolled out to observe the World Health Day, a 24X7 Covid-19 helpline has been setup to consult health professionals on any queries or concerns, and various virtual fitness sessions around yoga, Zumba were conducted by experts.



A key highlight was the kickstart of the annual performance management cycle for 2019-20 on virtual platform by the HR team involving more than 300 leaders and managers across Thermax.



#### Virtual Training on 'Working Remotely' for Enviro



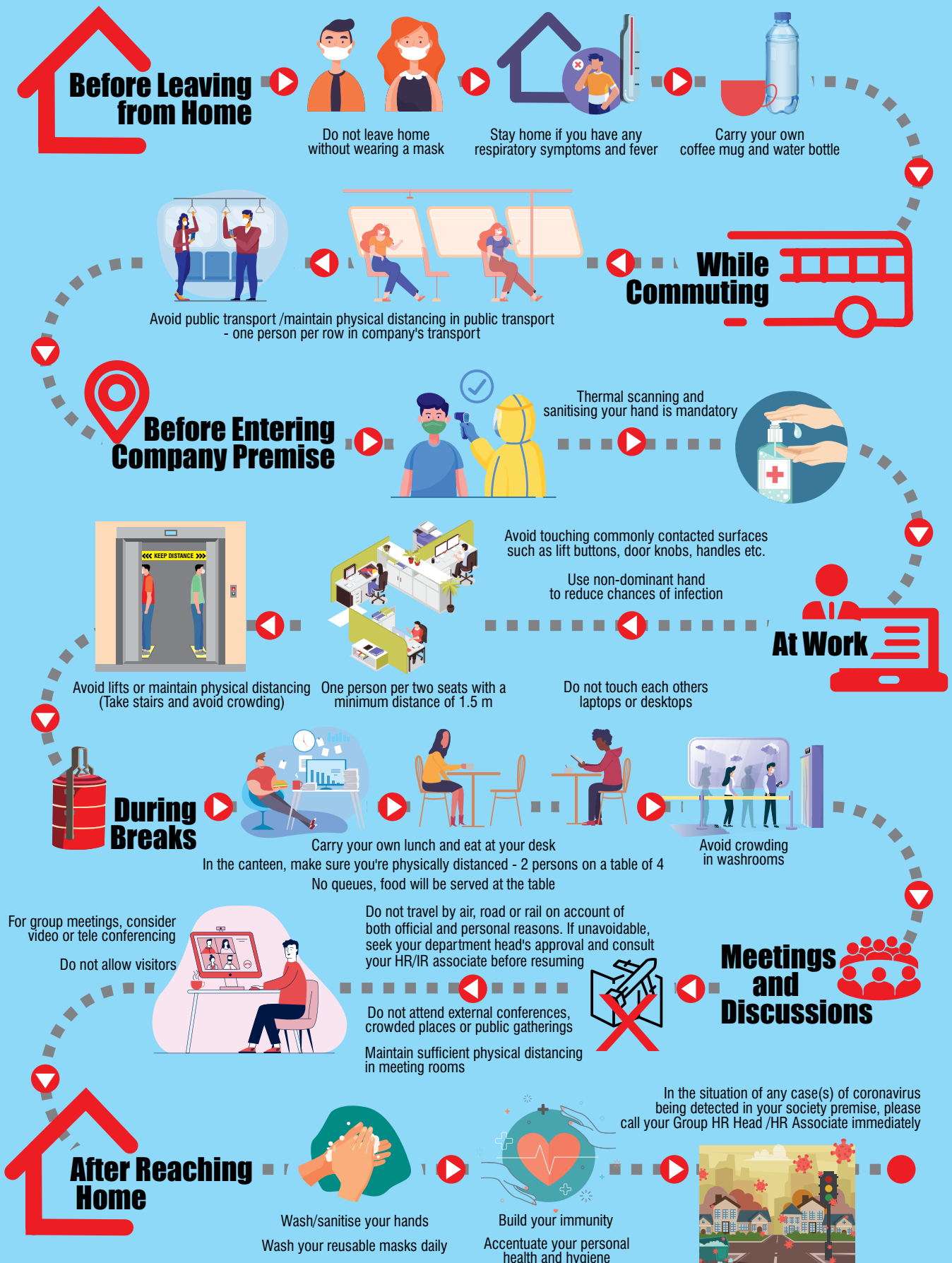
To utilise this lockdown period for upskilling, the L&D team has initiated virtual training programmes where they have been engaging employees in various functional, behavioural and compliance training.

With a commitment to staying 'Distanced but Together', divisions and businesses connect regularly with customers through 24X7 helplines, webinars and other remote monitoring services to address their queries and concerns during the lockdown, as also help them with SOPs on the upkeep of their utilities.



Distanced  
but  
Together

# A working day in the 'new' normal life



HR Assistance Helpline  
91686 47335 (available 24/7)

COVID-19 Helpline\*  
1800 266 2737

WhatsApp Chat Bot\*  
91118 91118

HR Helpdesk Email id  
hrhelpdesk@thermaxglobal.com

\* COVID-19 Helpline and WhatsApp chat bot services are available till 31<sup>st</sup> May 2020