



**CAPITAL  
GOODS SKILL  
COUNCIL**



Dear Readers,

### **TURN MASSIVE CHALLENGES INTO MEANINGFUL CHANGE**

Today's leadership are faced with overwhelming, competing challenges and uncharted waters as they continue to navigate the impacts of COVID-19 pandemic. Many organizations are already taking "no regret" actions to emerge from the pandemic stronger. These leaders are facing the crisis with a spirit of reinventing-accelerating digital transformation, establishing variable cost structures, and implementing agile operations.

The COVID-19 crisis has shown us that emerging technologies like the Internet of Things and artificial intelligence are not just tools, they are essential to the functioning of our society and economy. Particularly in this time of instability, we need to think of them as critical infrastructure.

This fourth edition of CGSC Newsletter reflects the tangible actions that our organization have taken to turn massive challenges into meaningful change. During the last few months entire CGSC team has continued to do their best. We continued with our activities using digital tools, online assessments, e-TOT/ TOA and state engagement workshops. A series of ATMANIRBHAR webinars to disseminate the knowledge on emerging new technologies were organized along with Global Players and Industry experts. Apart from the stupendous work we are doing, CGSC focus in 2021-22 would be to conduct skill activities in the subsectors of defence sector as well.

I thank all the industry & GC members for their continued commitment and support to deliver our purpose for making CGSC best council of India and best contributor to government of India under "ATMANIRBHAR" Skill mission of India.

**Ms. Shalini Singh**  
COO, CGSC

# INDUSTRY'S CONTRIBUTION

## INDUSTRY 4.0 APPLICATIONS IN SHOP FLOOR

Once you have a basic machine monitoring system in place in the factory, you can do a variety of things with the data that is collected automatically. Some use cases of industry 4.0 in manufacturing:

### Industry 4.0 – manufacturing: machine monitoring for production+productivity

You can track production quantities on every machine and generate reports for personnel or show them on Andon boards. You can get alerts on a mobile phone/email if the production is below target. You can track downtime durations and their reasons and generate reports that help in analyzing the causes and reducing them. You can get alerts if the machine is idle for a long time, or if the downtime is too high in a particular shift. You can track rejection and rework quantities and get alerts if rejection levels are too high. You can track and improve OEE, A, P, Q



### Industry 4.0 – Supply chain

A machine production monitoring system directly tracks production from the machine. Purchase software can use this data to update the available raw material, and automatically reorder material when the raw material reduces down to the reorder quantity.

### Industry 4.0 – Part traceability

You can include part traceability in the production monitoring system. Each part raw material (casting, forging, etc.) has unique serial numbers engraved on it as bar code or QR code. The operator reads this code using an electronic reader before loading each part. The production monitoring system saves this code against each part, so you have a record of the date and time of production of each part and its serial number. This is stored in a database and can be retrieved any time in the future.

### Industry 4.0 – Scheduling

When a part is scheduled for manufacture, often the actual production is very different from the schedule. The reasons for the deviation could be any of these : raw material shortage, operator on sick leave, machine breakdown, power outage, accident. What you think is happening can be very different from what is actually happening, because there is no direct feedback from the machines. Solution: Track production on the machines

directly with a monitoring system and get the scheduling software to pick up the production quantities from the monitoring system. The scheduling software then relies on this data to decide batch completion dates, machine availability, etc.

### Industry 4.0 – Maintenance

You can track the running time of the machine and condition of various parts, generate reports and alerts for preventive maintenance and predictive maintenance. You can track maintenance efficiency parameters like MTTA, MTTR and MTBF.

### Industry 4.0 – Inspection

When a part is inspected, each dimension can be recorded in the production monitoring system. The data is tagged against the part count or the unique serial number), and is available for audit any time in the future.

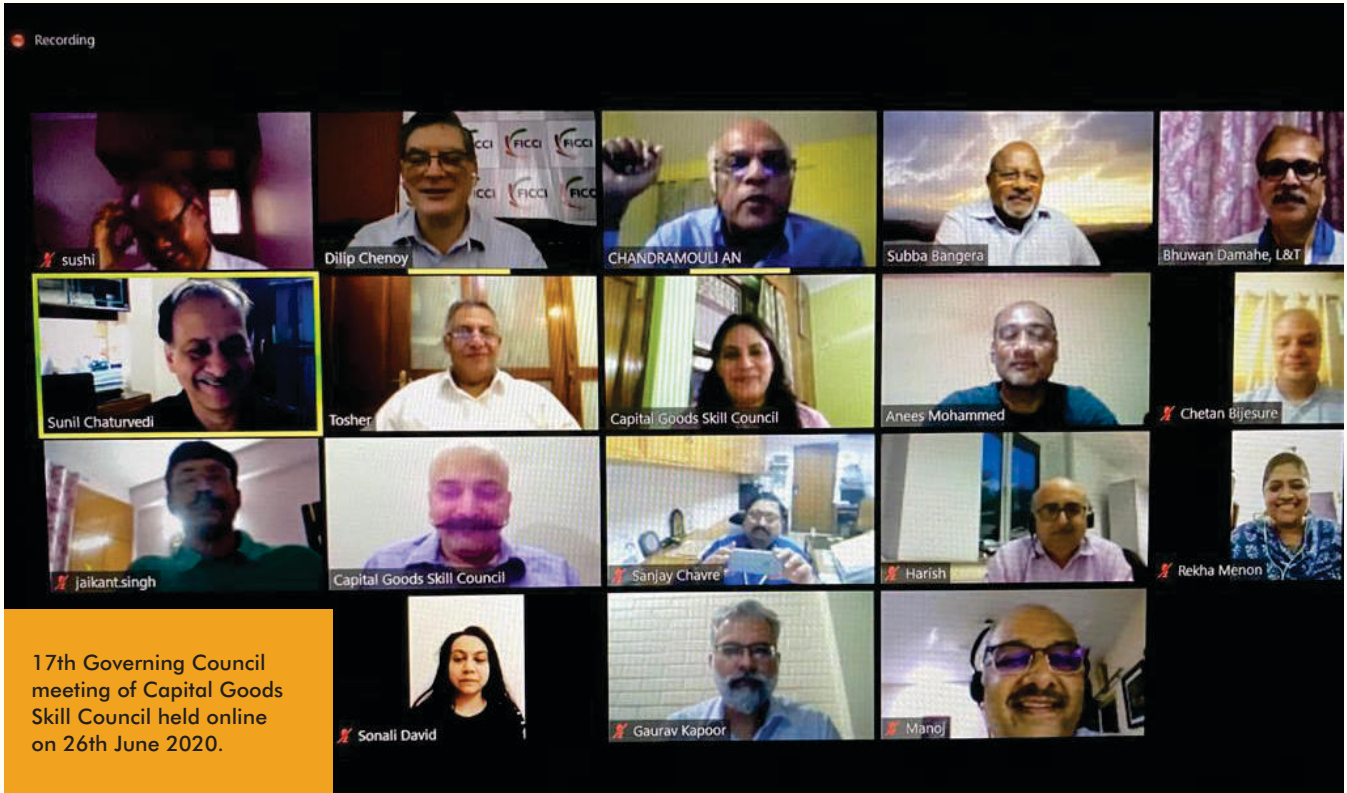
These are just a few examples of Industry 4.0 applications, and they are inside the shop floor. There are a whole lot of applications outside too.



Article Courtesy

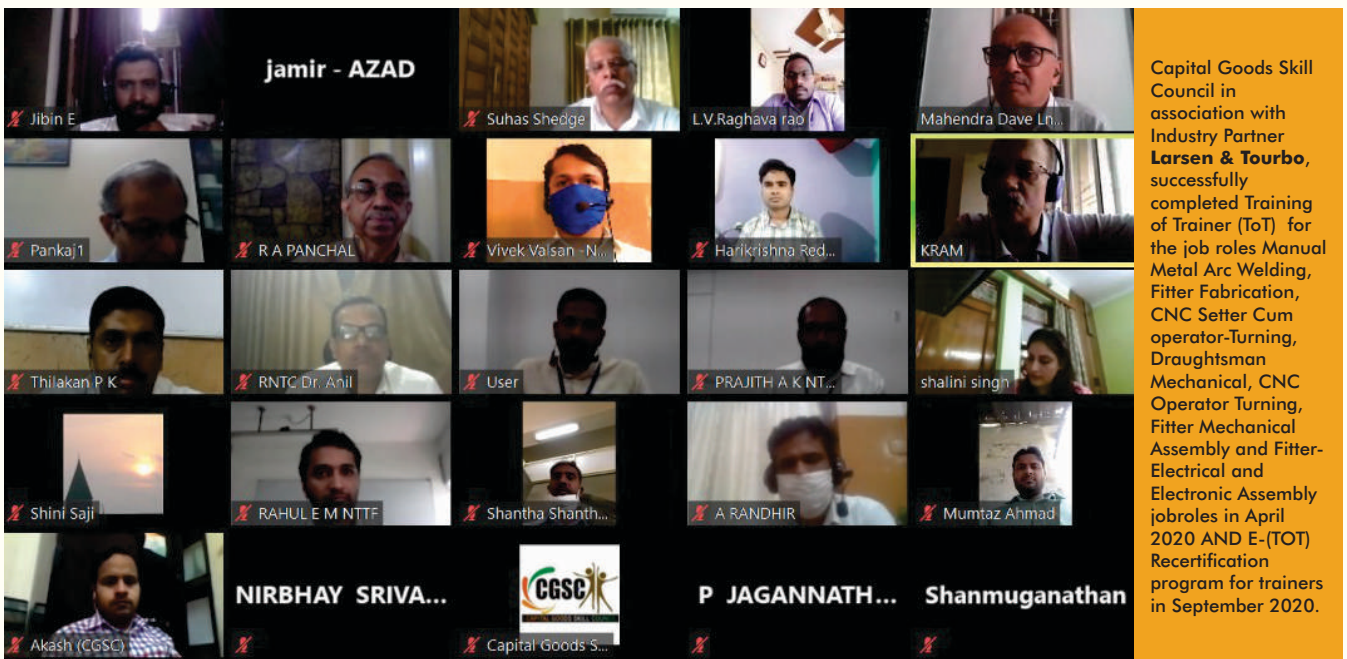
**Mr. Dasrathi G V.**  
Director - Application  
LEANworx Technologies Pvt. Ltd.

# 17<sup>TH</sup> GOVERNING COUNCIL MEETING



## DIGITAL WORKSHOPS

### TRAINING OF TRAINER WORKSHOP

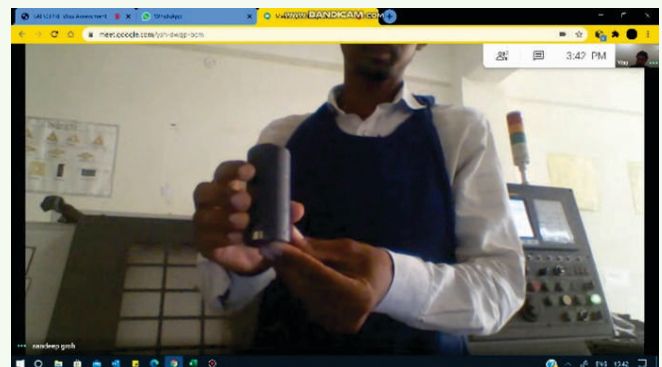
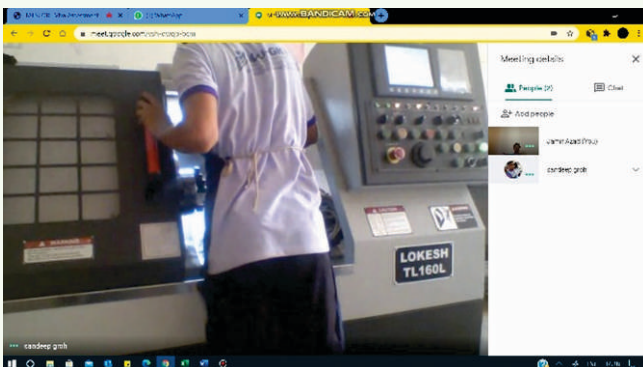


## TRAINING OF ASSESSOR WORKSHOP



Capital Goods Skill Council conducted online Training of Assessor (e-ToA) workshop for 14 Assessors from MSAG Skill India LLP, The Indian Institute of Welding and Mettle for job roles CNC Operator Turning, Draughtsman Mechanical, Fitter Fabrication, Fitter Mechanical Assembly, Fitter-Electrical and Electronic assembly, and Manual Metal Arc Welding/ Shielded Metal Arc Welding Welder from 16th June 20 to 20th Jun 20.

## ONLINE ASSESSMENT



During the COVID 19, Capital Goods Skill Council started online assessment and successfully assessed one DDUCKY batch of 13 candidates for job role CNC Operator-Turning on 10th Aug 2020.

# APPRENTICESHIP ASSESSMENT

Capital Goods Skill Council conducted Apprenticeship Assessment for 10 Candidates in job role Operator Centerless Grinder at FIA (Faridabad Industries Association) Haryana on 22nd Sept 2020.



# STEP TOWARDS CONNECTING WITH STATES DURING COVID -19 CGSC

## KERALA

Panel Discussion on Capital Goods Sector – Welding as Career: Demand and Opportunities in association with Additional Skill Acquisition Programme, Kerala and Fronius India Pvt. Ltd. on 22nd May 2020. It was well attended by 90+ to 100+ trainees from ITI, Polytechnic & Engineering Colleges.



## PUNJAB



Webinar organized in association with National Skill Development Council and Punjab Skill Development Mission on 06th July 20.

## ANDHRA PRADESH



A session was organized in association with Andhra Pradesh State Skill Development Corporation (APSSDC). The session was attended by more than 100+ participants including Training partners of Kerala and other Industry representatives

# SAFETY AT WORKPLACE

## CAPITAL GOODS SKILL COUNCIL ORGANIZED VARIOUS SESSION BY INDUSTRIES, FOR INDUSTRIES ON VARIOUS TOPICS DURING TESTING TIMES...

Capital Goods Skill Council in association with SIEMENS (SITRUST) organised Session on Safety at Workplace India on 28th May 2020. The webinar was well supported by Industry players - GAINWELL (Caterpillar) and TGMA - India and was well attended by Industry workforce.

Capital Goods Skill Council in association with PMMAI, TMMA (India) and SITRUST (Siemens) organised "Session on Safety at Workplace" on 7th August 2020. The session was well attended by 110 participants from different verticals from manufacturing Industry.

**Commitment from the highest level**

**SAFELY HOME. EVERYONE. EVERY DAY.™**

**Mr. Sunil Chaturvedi, CMD,**  
Gainwell Composites Pvt. Ltd.

*We at Gainwell, believe that nothing is more important than making sure that every day, each one of us return home safely.*

*At Gainwell, safety is not just a "have to," but it is a "want to"...*

*As the most critical resource, we are steadfast in our commitment to safeguard the employees...*

*Safety Initiative relies on the visible involvement of the entire management chain...*

*Vision ZERO on Safety has been one of our key priorities and I urge you to fully embrace safety initiatives*

**GAINWELL CAT**

**CGSC** presents

**Free Session on Safety at Workplace**

Aug 7<sup>th</sup> 20, Friday  
02:30 PM to 04:00 PM

**SPEAKER**

**Mr. A R Davies,**  
Senior Manager  
(Environment Safety)  
Siemens Ltd

**Supported by:**  
**SITRUST** **SIEMENS**  
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**The expected outcomes would be:**

- Preview of the SITRUST
- Sneak preview of the Safety Management Processes
- How and What of carrying out
  - Onsite Hazard Identification
  - Risk Assessment and Mitigation

# AATMA NIRBHAR BHARAT WEBINAR SERIES (INDUSTRY 4.0)

MAY 2020

Capital Goods Skills Council has launched a series of Technical Webinars under the theme of ATMA NIRBHAR BHARAT- Self Reliant India. The purpose of this Webinar series is to create awareness on SKILLED WORKFORCE required in Next Generation Technologies under PM's new mission of "VOCAL FOR LOCAL".

Capital Goods Skill Council in association with Bangalore Chamber of Commerce (BCIC) organised two sessions on Cyber & Physical Automation and Simulation and Precursor to Automation/Cyber-Physical Systems.

**Simulation- Precursor to Automation / Cyber Physical Systems**

**SPEAKERS**

**Mr. Harish Nischani**  
Head - Design, Festo India

**Mr. Senthil Kumar**  
Asst. Manager - Industrial Training and Application, Festo India

**MODERATOR**

**A N Chandramouli**  
Past President and Chairman, Industry 4.0 Expert Committee, BCIC and General Council member and Task Force member of Industry 4.0, CGSC

**HIGHLIGHTS**

- This webinar focuses on the power of Simulation in implementation of Digital Technology in the entire Product Life Cycle from Design to After Sales Service.
- This awareness workshop goes-up fresh and working executives towards Automation / Smart Manufacturing by the use of Simulation tools from Global leader that are available in the training domain, to explore, perfect and improve the necessary skill required to advance in the journey in the automation arena.
- Webinar covers practical Demos of the different simulation software such as ProSim and Crea, that are used in the training for automation with fluidic, mechatronics and robotics.

**Date: May 22, 2020**  
**Time: 11:00 am to 12:30 pm**

**FESTO**

The session is organized jointly by: Bangalore Chamber of Industry and Commerce under the aegis of Industry 4.0 Expert Committee and Capital Goods Skill Council, India.

**CLICK HERE FOR REGISTRATION:**  
<https://forms.gle/27BxT9a7Vh8WTP7>

**SESSION ON CYBER AND PHYSICAL AUTOMATION**

**SPEAKER**

**Jagannath V**  
Business Head, m2nxt Solutions - A BFW subsidiary

**MODERATOR**

**A N Chandramouli**  
Past President and Chairman, Industry 4.0 Expert Committee, BCIC

**Purpose of this webinar:**

- Cyber Automation:**
  - Data acquisition from every equipment to assess its performance
  - Enable facilitation of remote manufacturing exposing the dynamics of the production thus enhancing time management
  - Opportunity to improve the throughput of each equipment with generation of data every minute
- Physical Automation:**
  - Sustained output of dedicated products in manufacturing
  - Reduces dependency on the skilled labour force with committed inputs of raw material and power
  - Prominent position in manufacturing to maintain the committed production with lean workforce accomplishing social distancing

The session is organized jointly by: Bangalore Chamber of Industry and Commerce under the aegis of Industry 4.0 Expert Committee and Capital Goods Skill Council, India.

**CLICK HERE FOR REGISTRATION:**  
<https://forms.gle/27BxT9a7Vh8WTP7>

## TECHNOLOGY AND TRAINING SOLUTIONS

JUNE



**Webinar Series on Atma Nirbhar Bharat**

**"Technology & Training Solutions by Japanese leader in Automation Industry"**

**18th Jun 2020; 11:00 AM to 12:30 PM**





**Venkatesh Balasubramanian**  
Manager (Training & Marketing)  
SMC Corporation (India) Pvt Ltd

**A. N. Chandramouli**  
Governing Council Member,  
CGSC & Taskforce leader for  
Industry 4.0

Supported By



**Register Now**

Capital Goods Skill Council & SMC Corporation Pvt. Ltd. jointly organised webinar on "Technology and Training Solutions in Automation". The webinar was attended by 98 participants from the manufacturing industry. Many companies were interested in upskilling their existing workforce for Automation skills.

## DIGITIZATION IN AUTOMATION

JULY

Webinar on "Digitization in Automation" was organized by Capital Goods Skill Council in association with Festo Didactic India Pvt. Ltd. on 14th July 2020. The webinar was attended by 109 participants from the manufacturing industry and academia. Many companies are interested in the adoption of Automation of their workplaces.



**Webinar series on Atma Nirbhar Bharat**



**Digitization in Automation**  
Trends and Training in Real & Virtual world for Atma Nirbhar Bharat  
14<sup>th</sup> July 2020 | 11 am to 1 pm





**Ashwin Vanikar**  
Head - Application  
Engineering, Festo India

**Harish Nachnani**  
Head - Didactic,  
Festo India

**A. N. Chandramouli**  
Governing Council Member,  
CGSC & Taskforce leader for  
Industry 4.0

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# DIGITAL TWIN: REIMAGINE YOUR MANUFACTURING TO BECOME WORLD-CLASS

**AUGUST**

Knowledge Sharing Webinar on “Digital Twin: Reimagine your manufacturing to become world-class” was organized by Capital Goods Skill Council in association with Siemens on 12th August 2020. The session was attended by 80 participants from manufacturing as well as academia.

Participating companies have shown keen interest in Digital Twin technology and wanted to use the same in their related sector.

**CGSC**  
CAPITAL GOODS SKILL COUNCIL

Webinar Series on Atmanirbhar Bharat

## Digital Twin

Reimagine your manufacturing to become world class  
12<sup>th</sup> August 2020; 11:00 AM to 01:00 PM

**Aiyappan Ramamurthi**  
Technical Director,  
Siemens Industry Software

**A. N. Chandramouli**  
Governing Council Member,  
CGSC & Taskforce leader for  
Industry 4.0

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Supported By **SIEMENS**  
Ingenuity for life

# THE INDIAN FACTORY OF THE FUTURE: STAY COMPETITIVE IN THE COVID-19 ERA WITH COLLABORATIVE ROBOTS

**SEPTEMBER**

**CGSC**  
CAPITAL GOODS SKILL COUNCIL PRESENTS

**Pradeep David**  
General Manager - South Asia  
Universal Robots

**A. N. Chandramouli**  
Governing Council Member,  
CGSC & Taskforce leader  
for Industry 4.0

Supported by **UR** UNIVERSAL ROBOTS

Webinar series on  
**Atmanirbhar Bharat**

## THE INDIAN FACTORY OF THE FUTURE

Stay competitive in the COVID-19 era with collaborative robots  
4th September 2020 | 11:00 AM to 01:00 PM

REGISTER NOW

Capital Goods Skill Council in association with Universal robots organised webinar on “The Indian Factory of the Future: Stay competitive in the COVID-19 era with collaborative robots” on 04th September 2020.

The session as attended by 69 participants from different verticals of manufacturing sector.

# SUPPORT DURING - COVID 19 / INDUSTRY

- Siemens India commits Rs 20 cr to fight coronavirus pandemic and also the company to deliver 40,000 PCR test kits to ICMR.
- BHEL and its employees contribute Rs. 15.72 Crore to the PMCARES Fund
- Gainwell beats the lockdown Blues with digital training for Employees and Customers

In an Interview With The Indian Express, **Mr. M.S. Unnikrishnan**, Ex-Chariman, Capital Goods Skill Council & MD And CEO of Thermax Limited, Spoke About How The Present Pandemic Is Going To Affect The Economy And Shared His Suggestions For The Way Forward.

## ‘India can emerge as a major gainer in post-Covid world’

With the nationwide lockdown extended, the fallout from the suspension of nearly all economic activities is expected to be massive, as experts are predicting a significant slump in India's growth for the current fiscal. In an interview with **PARTHA SARATHI BISWAS, M S UNNIKISHNAN, MD and CEO of Pune-headquartered Thermax Limited**, spoke about how the present pandemic is going to affect the economy, and shared suggestions for the way forward



M S Unnikrishnan

**What, according to you, will be the effect of the lockdown on the Indian economy? What will be its effect say six months from now?**

What we have to understand is that we are facing a situation where it is life versus economy. The focus is now on saving lives and then the economy. The government has understood that the present lockdown has to continue for some time, which would mean very strong enforcement for the people and to see if industries can function in some way.

Coming to the question of its effect on Indian economy, it will be huge. Last year, India was a \$3 trillion economy. Other than agriculture, all other sectors will be hit. In the first quarter, even if we re-open manufacturing partly, it will not be able to function more than 25 per cent during the lockdown. Similar would be the case with construction while services might function around 30-40 per cent.

Overall, in the first quarter, Indian economy will lose out 50 per cent of its value addition. It is a humongous amount of loss to the economy but we are willing to pay the price for the country. In case there is no further lockdown, mathematical modelling shows that this disease can infect crores of Indians and the number of deaths can be very high... which we can ill afford.

**These losses are obviously going to trigger a crisis in the**

**economy. Do you see large-scale job losses as companies grapple with demand loss? Already, there are reports of lay-offs in the IT sector. Can't we have measures to tackle this?**

The government has already issued an advisory asking companies not to lay off people during this period. Good companies are already following this. The MSME sector, which is the largest employment generator after agriculture, requires help. The government has already announced additional working capital for them and also companies will be given interest-free loans to pay salaries for three months. We have to remember it is not the intention of the government to convert a good balance sheet into red. All companies will be facing the stress... the work of the companies is to convince its employees that this is inevitable, for white collar workers it might mean giving up on luxuries and being content with the basics. For those who already only have the basics, there has to be some sort of government help.

**What is your opinion about the projected 1-2 per cent growth rate post the pandemic?**

I do not subscribe to the projections and there are reasons for it. In case of GDP, usually in the Indian economy, the second and fourth quarters are bigger than the first and third quarters. If a major loss is happening in the

first quarter, then in the next three or four quarters the recessionary trends due to coronavirus will be evident. My take is that the Indian economy will see a degrowth of 8-10 per cent in the current year and we should be willing to live with that.

This does not mean all companies in the country are going to be in red. Imagine Thermax's top end is to come down by 10-15 per cent in the current year... I am not going to be in the red. What will be impacted in the coming year is that new projects other than infra-oriented ones, I have doubts about them... But we should not be scared about these numbers. Please remember profitability of India Inc, whether service or manufacturing, will come down just for a year. India Inc will have to learn to live with this with a nationalistic fervour. We have to wade through this and we can get through the difficulties.

**What opportunities do you see for India in a post-Covid world? Also, will work from home become the new normal then?**

India is sitting on a \$500 billion foreign exchange reserve, so even after a flight of foreign investors from the country, our currency did not tank. We have resilience to counter this as well as enough food grains in our stock. Also, we have a pool of sufficient medical professionals to manage the spread of a certain nature.

If we are able to withstand this and go through it for a year, India can emerge as a major gainer in the post-Covid world. There would be opportunities for the country, but we will miss them if we do things in a short-sighted manner.

I feel that work from home will be taken up in a higher way than is happening now. It is going to improve the overall environment and the happiness quotient will go up.

**The Indian EXPRESS** Sat, 18 April 2020 <https://epaper.indianexpress.com/c/5107>



BHEL's Tiruchirappalli Unit engaged the services of its in-house fire services crew for spraying disinfectant from Palpannai to Thuvakudi area, covering a distance of about 15 Kms.

**inventive 3D** Face Shield for COVID-19  
Giving 3rd Dimension to Your Dreams

**Face Shields are necessary Personal Protective Equipment which can be used by Medical, Healthcare and other Individuals which are exposed to high risk of airborne viral infections.**

**These Face Shield were actually developed using 3D Printing Technology to help the World fight the Pandemic.**





**Who Can Use ?**



Medical Staff



Quarantine Center Staff



Security Staff



Grocery & Petrol Pump Staff



All Staff on Emergency Duties

**Benefits**

- Protects face from Splashes, Sprays & Airborne Debris.
- Easy to Use and Clean.
- Light in Weight.
- Manufactured with Minimum Human Contact.
- Extremely low Cost.

Ready to Dispatch Bulk Quantity

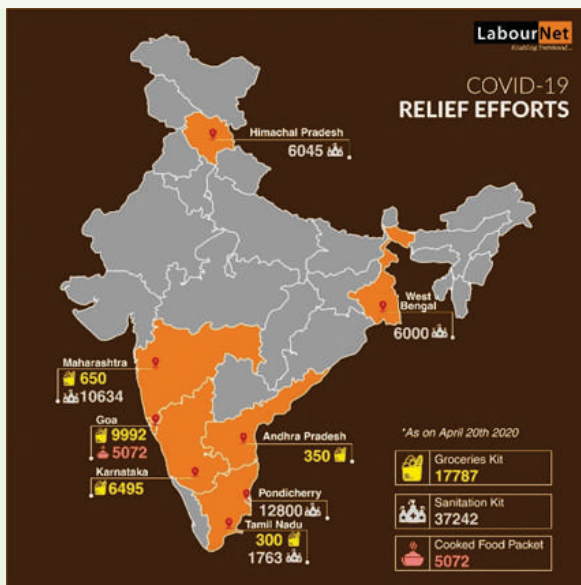
Inventive 3D, Gujarat based 3D printing technology company, has started using 3D printing technology for manufacturing of face shield, which will help staff from various fields like medical, quarantine center, security, etc. to fight against coronavirus.

# CONTRIBUTION BY CGSC AFFILIATED TRAINING PARTNERS

- Don Bosco technical institute has purchased and distributed food grains, masks and sanitizers to more than 500 migrants, slum dwellers, and rickshaw pullers.
- Also organized, awareness programs in slums regarding social distancing, sanitization, washing of hands and community health
- DB Tech has facilitated the stay through Don Bosco network institutions for Four trainees from West Bengal who got stranded in Chennai as their train got canceled for the journey back to home.
- DB Tech has also financially assisted one placed candidate for medical requirements (not associated with COVID-19).



Labournet in association with corporates giants have sponsored grocery kits and, sanitation kits and food packet as a part of the COVID 19 relief initiative.



For Further Queries Contact:

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