

# THE NEWS LETTER

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## Director's Message,

**Dear Team Members,**

we continue to navigate and thrive in our ever-changing industry, I want to take a moment to thank each of you for your unwavering dedication and hard work. Your commitment to quality and teamwork is the cornerstone of our success. Let's embrace upcoming challenges with optimism and maintain our focus on delivering exceptional outcomes for our clients.

Our achievements are a reflection of your tireless efforts and pursuit of excellence. As we face new opportunities and obstacles, let's remain united and aligned with our shared objectives. Every contribution you make propels us closer to realizing our collective vision. I'm confident that with our shared determination, we'll achieve even greater milestones. Keep up the fantastic work!

**-Shreehari Kalakeri.**



## Corporate News:

### Turning the Page: A New Home, A New Horizon

They say change is the only constant, and for [Your Company Name], this change marks a pivotal moment in our journey. We're thrilled to announce our move to a brand-new office—a space that isn't just larger and more modern but also perfectly aligned with our vision for the future. This transition is much more than a change in address; it's a bold step toward growth, innovation, and deeper connections with those who matter most—our team, clients, and partners.

Our new location offers an upgraded environment designed for collaboration, creativity, and sustainability. Open layouts encourage teamwork, while cutting-edge facilities ensure that we continue to deliver excellence. We've also incorporated eco-friendly materials and energy-efficient designs to reflect our commitment to a greener future. But perhaps the most exciting part of this move is how it enhances our ability to serve you. Centrally located and more accessible, our new space is ready to host your next visit—whether it's for a quick catch-up, a brainstorming session, or a hands-on workshop. This move is a testament to our shared journey and an invitation to dream even bigger together.



## A Moment of Pride: Recognizing Excellence at AutoScan India

We're thrilled to share some exciting news that marks a proud moment in our journey! AutoScan India Private Limited has been awarded the **Certificate of Appreciation** under the category of **Business Excellence in OEM Component Quality Assurance 2024** by Corporate Connect.

This recognition is a testament to our unwavering commitment to quality, precision, and innovation in OEM component quality assurance. At AutoScan India, we've always believed that excellence is not a destination but a continuous journey. Receiving this honour is not just a reflection of our achievements but also a motivator to push the boundaries of what's possible in our industry.



This prestigious award highlights our dedication to ensuring superior quality standards and delivering solutions that exceed expectations. It is also a recognition of the collective effort of our talented team, whose passion and hard work drive us forward every day.

The acknowledgment from Corporate Connect reinforces our position as leaders in OEM component quality assurance. It's a proud milestone that we share with all our stakeholders—clients, partners, and employees—who have played an integral role in our success story.

As we celebrate this achievement, we remain committed to innovation, excellence, and setting new benchmarks in quality assurance. Thank you for being part of our journey, and here's to many more milestones ahead!

This December, we turned the office into a hub of joy and holiday spirit as we celebrated Christmas together. The festivities began with a delightful **cake-cutting ceremony**, symbolizing togetherness and the sweetness of the season.

One of the highlights of the celebration was the ever-exciting **Secret Santa game**, where team members exchanged thoughtful and fun gifts, bringing smiles to everyone's faces. The thrill of guessing our Secret Santas added an extra layer of joy to the occasion.

The event was filled with laughter, camaraderie, and memorable moments that strengthened our bonds as a team. It was a wonderful way to wrap up the year and step into the festive season with positivity and happiness.

Here's to more celebrations and team spirit in the coming year!

"Happy New Year 2025! Wishing you a year filled with success, growth, and happiness. Thank you for being an essential part of our journey—let's make 2025 incredible together!"



Appreciation given to the employees who have given their outstanding performance for the last month. And also have celebrated the Birthday Celebration (Monthly) at Pune. Glimpse of the celebrations as follows



## Knowledge Sharing (General):

### Topic: 3D Printing

Printing was a revolutionary invention. But after printing on the paper one the things about which humans were curious to implement printing in order to create solid object. At first, it looked like a difficult job, but after various continuous attempts in that field, finally 3D printing came into existence. 3D printing is still a new tool but it has a lot of potential in production of material at anytime, anyplace.

So, let's look at what actually 3D printing is and how can we use it. 3D printing is a method of creating 3-dimensional products by computer-aided models (CAD models) usually by successively adding material layer by layer of specific material known as filament. Traditionally, 3D printing focused on polymers for printing, due to the ease of manufacturing and handling polymeric materials. However, the method has rapidly evolved to not only print various polymers but also metals and ceramics making 3D printing a versatile option for manufacturing.

Types of 3D Printing :-

There are many different types of 3D printing out there. Most used 3D printing out there are FDM, SLS, SLA, MJF. Most common of all of them is FDM (fused deposition modelling) in which a filament is fed into a heated nozzle which moves around in X and Y axis from one slice of part, then rises up in Z axis by the height of one layer.

In SLS which is also known as Selective laser sintering. Sintering is the process of bringing a polymer to not to its melting temperature but enough so that it joins with itself.

The raw material for this process is a very fine polymer powder. In this method a fine layer of powder is brushed onto the part and heated selectively with a laser beam. The heated regions fuse together, forming a layer. The machine lays down one more layer of powder, and repeats the process. This can be done for metals as well (as far as I'm aware, all metal 3D printing is Laser Sintering based), though when hit with a laser, the metals melt all the way, so it's not quite sintering, though it is called as such. Again, these parts are generally more isotropic than FDM parts, and stronger. All sintered parts come out with a matte finish and need to be air blasted to clean off. Of the three, SLS is the least consumer accessible. (you need a compressed air system, a way to prevent fine powder from getting everywhere, trained operators, etc) The resolution of this system is kind of dictated by the size of the heat affected zone.

There are two main ways this is achieved. upright, and upside down. The upright SLA method requires a full tank of resin. The build-plate initially sits at the top of the resin, with about one layer's worth of material above it. This material is hit with the laser in the desired pattern, and then the build plate moves one layer deeper into the resin. With upside down printing, you don't really need a full tank of resin. The build plate dips into a shallow pool of resin from above, and a UV laser hits it so that the first layer adheres to the build plate. The plate then moves upwards by one-layer height, and so on. A key challenge of this method is that when the resin cures, it also sticks to the bottom of the

build tray, and especially if you have a large cross section, if you just pull straight up, you could destroy the part or dislodge it from the build plate.

As we saw above there are various types of 3D printing methods out there for different applications. These methods are very useful in many ways.

Uses :-

1. The most common use of 3D printing is to make a prototype of accurate measures.
2. It is easier to share the model of same of same object as it need G-code which operates the 3D printer, which is easy to share.
3. It also enables to manufacture model at any place from anywhere by using cloud computing.
4. It has huge scope of application in space exploration.
5. It opens up the opportunities for huge customization which will help to make user more satisfied.
6. It is a comparatively slow process but with new methods like SLS and DMLS it is now entering in the field of Rapid manufacturing.
7. In the area food manufacturing also, 3D printing is introduced. Various food products like pizza, pancakes, chocolate are prepared by this method. It has huge potential to problem of food astronaut has to face in space.

## Knowledge Sharing (Safety):

### **Topic: Workplace Stress (AKA Work-Related Stress)**

Workplace stress, also known as work-related stress, refers to a negative experience people get when presented with work demands and pressures not matched to their knowledge and abilities. They feel the challenges stretch their ability to cope and master things (World Health Organisation - WHO).

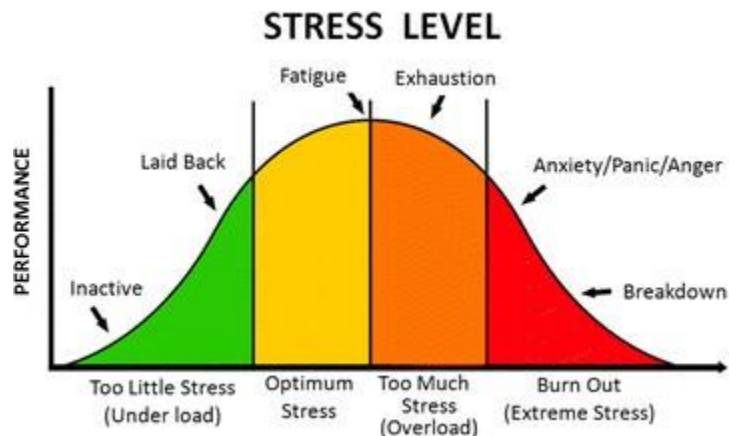
At times, when pressures from work are managed well by an individual, it can result in peak performance and be stimulating and motivating. In this instance, an individual may find they are more alert, engaged, and their ability to both work and learn is enhanced.

So, not all challenge is stressful; only some is. Why is that?

There is usually a bell curve involved. We experience challenge so that a certain amount of pressure, over a certain time-frame, is a positive thing. We meet the demands placed on us, perhaps with added training or supports, or on our own. But, after a certain level and a certain period of time, this positive experience diminishes and the pressure, if added to, becomes negative.

If this negative experience is short term, we can often handle it, with supports, training or some extra resources. However, if it continues over an extended time frame, this becomes experienced as stress- a negative fallout from unwelcome pressure. We feel this when we are over challenged and unable to keep up with and master the challenges we face.

(See below for a visual representation of what is known as the Yerkes-Dodson Law).



## When pressure becomes distress or stress

This tipping point, which can be due to an amount (build-up) of challenge, the timing of the challenge or another issue outside of the challenge area, which is separately reducing our capacity (bereavement/separation/financial worries) can hit us hard.

Other challenges can come from social isolation, sudden change, uncertainty, fear, illness or family conflict. Many of these may have been triggered during Covid, and these can increase our sensitivity to exposure to stress and reduce our resilience generally. When the challenge or pressure point comes from our work – tasks, climate, culture or function....it is called work-related stress. It can also be caused by other factors but made worse by work. Work-related Stress is abbreviated to WRS.

We know that when pressure becomes excessive or unmanageable it can lead to negative effects for the individual and thus for those around him or her. Mental and physical illness can develop if help and supports are not put in place. The main ways to treat stress when it first arises are to seek/offer supports, to have a reliable way to process the distress through talking and problem solving and by reducing or removing the source or cause of the stress.