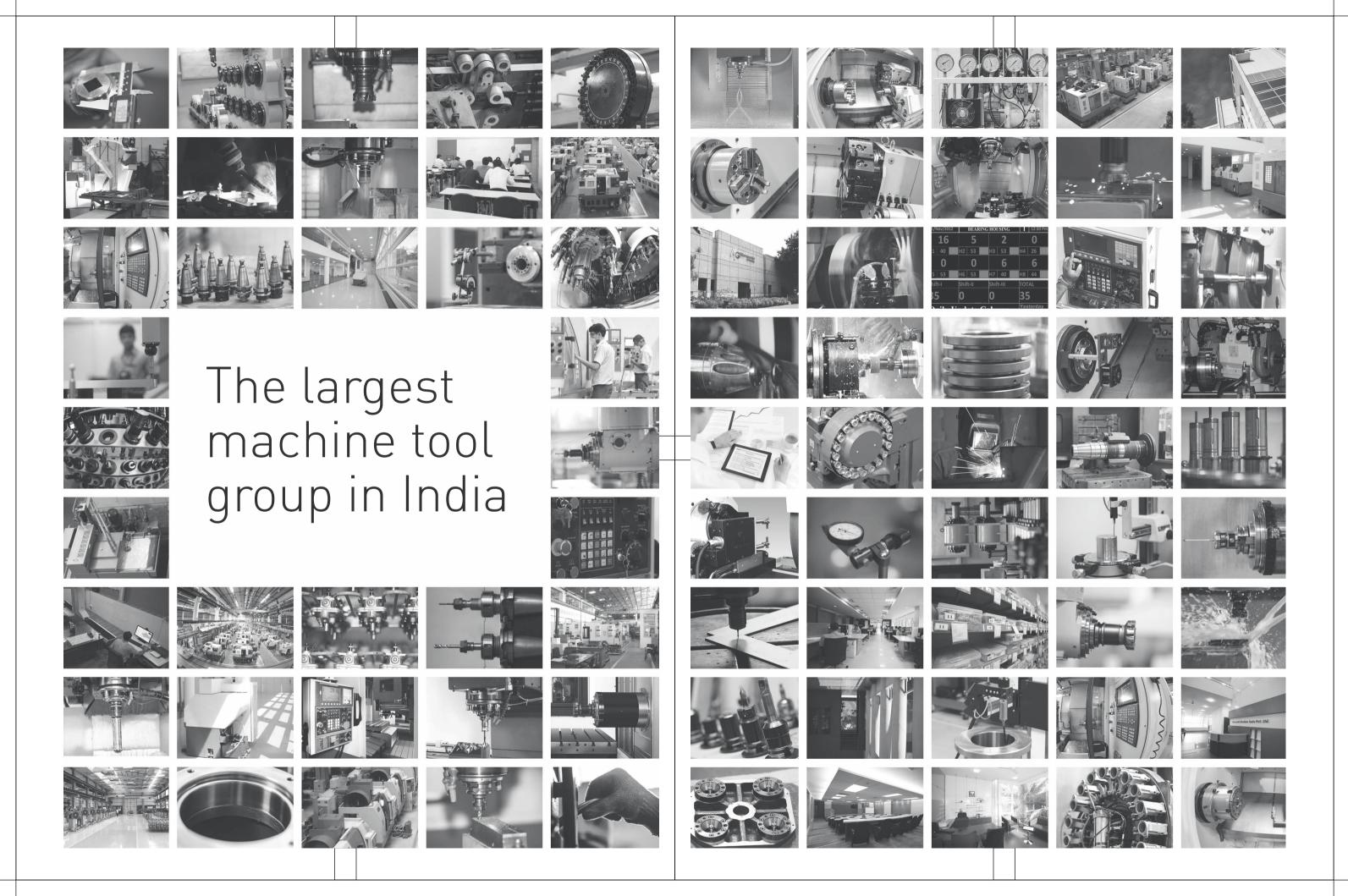


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## COVER PAGE

The cover page shows a series of spindles assembled in a best-inclass facility at Ace Designers.

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T.K. Ramesh, CEO

Micromatic Machine Tools Pvt. Ltd.

At the Ace Micromatic – India's Largest Machine Tool group, we are working continuously to make a difference to your business and it's productivity. This newsletter is an effort to share with you our initiatives, build a platform to celebrate customer success stories and mutual learning.

In this issue of our newsletter, we highlight our IMTEX efforts, the new tech centre in Aurangabad and our new office in Ahmedabad that brings our offerings and hand holding closer to you. We also share with you a customer success story and are proud to be associated with new startup entrepreneurs as we like to call them "Millionaires in the making". The Ace Micromatic group has played a supportive role in the making of many millionaires who have done themselves, their customers and their country proud by creating great success for themselves and made significant contributions to the success of the entire chain.

We hope you find value from this publication and eagerly look forward to your feedback to help us make this effort truly useful. We believe our business revolves around your business. Happy reading!

MGT Completed 40 Years of Service in Producing Cylindrical grinders.





Micromatic Grinding Technologies Ltd produces more than half the number of Cylindrical Grinders sold in India and is a group Company of Ace Micromatic Group.

The company offers a full range of Cylindrical Grinding machines- from entry level Eco 200 to e-Grind-200; Stallion Series; heavy Duty h-Grind; Rhino-Crank Pin Grinder & Cam grinder to Jaguar Centreless Grinder. Since inception, it has produced and sold over 4000 Cylindrical Grinders in India and exported over 125 units to Europe and other countries. Over the 40 years of excellence, the product range has widened, ownership has changed hands and the new segment of customer has evolved.

Micromatic Grinding Technologies Ltd. is Becoming the Best in Standard and CNC Cylindrical Grinding Solution since four decades. MGT's technical superiority lies in its ability to pack power and performance into a compact, efficient & Versatile Cylindrical Grinding Machine.

Miles to go before they sleep

Ace Micromatic Group

SS CNC Technology



# Miles to go before they sleep

The unassuming sign board declares the entrance to a small job shop in Peenya where the jobber is toiling away at high speed. We're in the thick of an industrial area and the ambient noises make it tough for us to talk. But the two smiling faces waiting to welcome our approaching figures are hard to ignore. They belong to Raghavendra and Prakash, close friends and proprietors of this fledgling job shop. They are a trio really - just that Pradeep, the remaining one-third, has gone to his native village.

But two genuinely happy customers are enough to make our day.

Miles to go before they sleep

"

The turnover was 20,000 in our first month of operations. In the second, it went up to 25,000 and now in the third, it's almost 1,00,000.

It's a sunny afternoon but Raghavendra is all smiles. A little prodding reveals the reason. "It's just been three months since we set up shop but we're very happy with the way business is growing", he gushes. When he says this, his gaze automatically turns towards the Super Jobber he purchased from Ace Micromatic Group. "This machine has been helping us create anywhere between 20,000 and 21,000 parts every month." But talk of their turnover and Raghavendra starts beaming. "The turnover was 20,000 in our first month of operations. In the second, it went up to 25,000 and now in the third, it's almost 1,00,000". He sure is looking forward to better days and the turnover target he has in mind is anything between 1,30,000 and 1,40,000 in a month.

Raghavendra may be a recent customer Ace Micromatic group client but his association with the group goes back several years in time. In 2005, when he joined Ace Super Auto Forge Limited, he did not have adequate technical qualification. Later, senior officials in the company conducted a study to identify people who were educationally compromised and sent them to be trained at Technical Centre. These centres had been created as a part of the Ace Micromatic Group's CSR initiatives. Of the 14 people sent for this training were Raghavendra and his business partners, both of whom were also with Ace Super Auto Forge at the time.

"I continued to work with Ace Super Auto Forge till 2010. That year, I went on to work with GCL. And this jobber has made life so easy for us that we don't even need to hire another person.

But in the next two years, I realized I had to do something more with my skills", recalls Raghavendra. 2012 was a year of big decisions for the three friends. "By late 2012, we knew we were ready to start something of our own."

And start they did in March 2013, right after they purchased the machine. Months of hard work followed with the three getting swamped by the demands of business. "It was and is just the three of us, which means we have to put in a lot of hours at work. But we realize that it means freedom of thought and respite from low salaries. And this jobber has made life so easy for us that we don't even need to hire another person. Because that would mean paying up anywhere between

8000 and 9000 as salary every month", he adds.

The three friends and business partners are already—planning on their next purchase from Ace Micromatic Group. "The Super Jobber manufactures big parts. For smaller parts, we need another machine. And since Ace Micromatic Group has supported us so much, they are our obvious choice", explains Raghavendra.

As our car pulls away, the machine at SS CNC Technology goes back to working hard. But we leave with the satisfaction of having spoken to two men with dreams and a firm resolve to make them come true.

As told to our correspondent Ms. Sunanda Pati.



1. Mr. Raghavendra inspecting the raw material

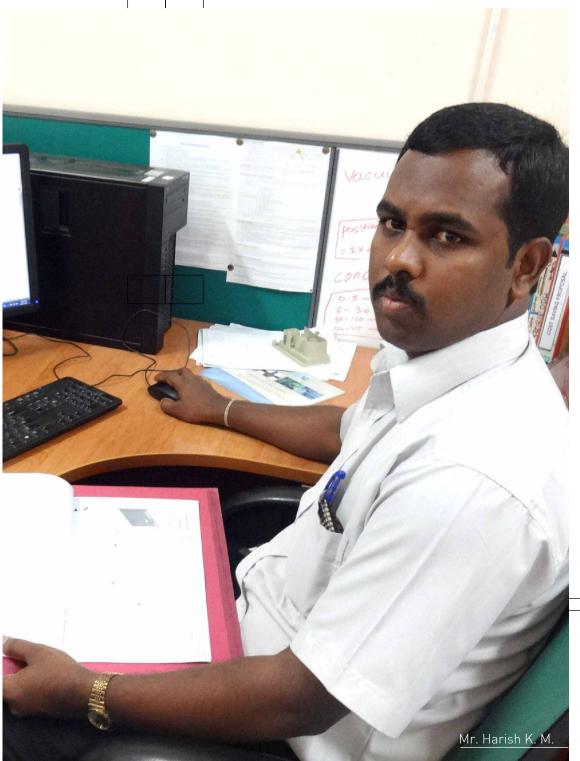


2. Mr. Prakesh working on the Super Jobber from Ace Designers

For the greater good







# For the greater good

On any given day, if you go to Auto CNC Machining Limited, situated in a surprisingly green corner of Peenya and ask for a certain Harish K M working there, a quiet, confident young man will walk up to you. His modest workstation might not say a lot about what he does, but here's a glimpse of what fills up his usual day at work: drawing, creating control plans, tooling layout, setup instructions and work instructions, calculating Overall Equipment Efficiency and Production Efficiency, looking into rejections and working on preventive analysis. Having worked with Auto CNC for the last six years, Harish now divides his work time between the Process Engineering Department and Management Information System. But why of all people Harish, you may ask. Here's why...

For the greater good

Learning at the Technology Centre gave me a chance to further my knowledge about measuring techniques, calculations necessary for inspection, instrument handling and CNC programming

Harish is an Ace Micromatic Technology Centre product. Technology Centres were started by the Ace Micromatic group about six years ago. And almost as soon as the initiative was in place, Harish's brother, who was working for Ace Designers at the time (and continues to do so), informed him about the opportunity. Harish, who had just finished his Second PUC, took the plunge readily. "I knew some measurement methods before I joined the classes but they weren't enough to be considered valuable. Learning at the Technology Centre gave me a chance to further my knowledge about measuring techniques, calculations necessary for inspection, instrument handling and CNC programming", he elaborates. At the end of the course, which was spread over two months, Harish was absorbed by Auto CNC after a test and brief interview.

In the scheme of things where people have found a sustainable existence through the Technology Centres,

Harish is not the only one. Talk to Javalakshmi, who like Harish has been with Auto CNC for six years, and you'll know. "After I completed my Second PUC, I enrolled for a teacher's training course. But before I could go along that path, I got to know about Ace Micromatic's Technology Centres from my husband and both of us saw a lot of merit in them", she says. And after all these years in the company, Jayalakshmi's certainly a happy soul. "I am responsible for multiple factors including inspection reports, test reports and dispatch and packing needs. That apart, I directly look into client requirements and accordingly give feedback to my company", adds Jayalakshmi. She is completely in charge of an export customer that gives the company annual business of USD 1 million – from conformance to delivery, Jayalakshmi is at the helm of things.

How the Technology Centre idea was conceived is another interesting story. When the leaders of the Ace

Micromatic group were evaluating operations from a Business Excellence point of view, they realised there is a need to do something substantial for the society. "Our idea was to give back to society without expecting immediate returns", says TK Ramesh, CEO, Micromatic Machine Tools. At the very start of their background research, the leaders decided to look into what customers had to say - what their pain points were, what changes they required for efficient operations.

"The first thing we discovered was that customers were facing difficulty in finding people who could operate and maintain machines. The IT boom was pulling people away from the machine industry and the worst affected were SMEs", he adds. That's when the group landed on the big idea - that there would always be people out there looking to have a sustainable income without really having access to the right opportunities. "School and college dropouts, people stuck in jobs that don't

promise growth, ragpickers... there were so many people looking to sustain themselves. That was our inspiration to devise a basic course that could give these people a livelihood", reminisces TK Ramesh.

In the last six years, training offered through these centres has gone places. It has been offered across various schools, a couple of colleges in places like Lucknow and Chennai and some ITI institutes. The program has also encouraged learning among faculty members through 'Train the Trainer' sessions. And even after 42 batches, Ace Micromatic Technology Centres are ready for more.

It is not often that we think about how the not-so-privileged go about their lives. But the need to be part of change is there in all of us.

As told to our correspondent Ms. Sunanda Pati.

TRAINING













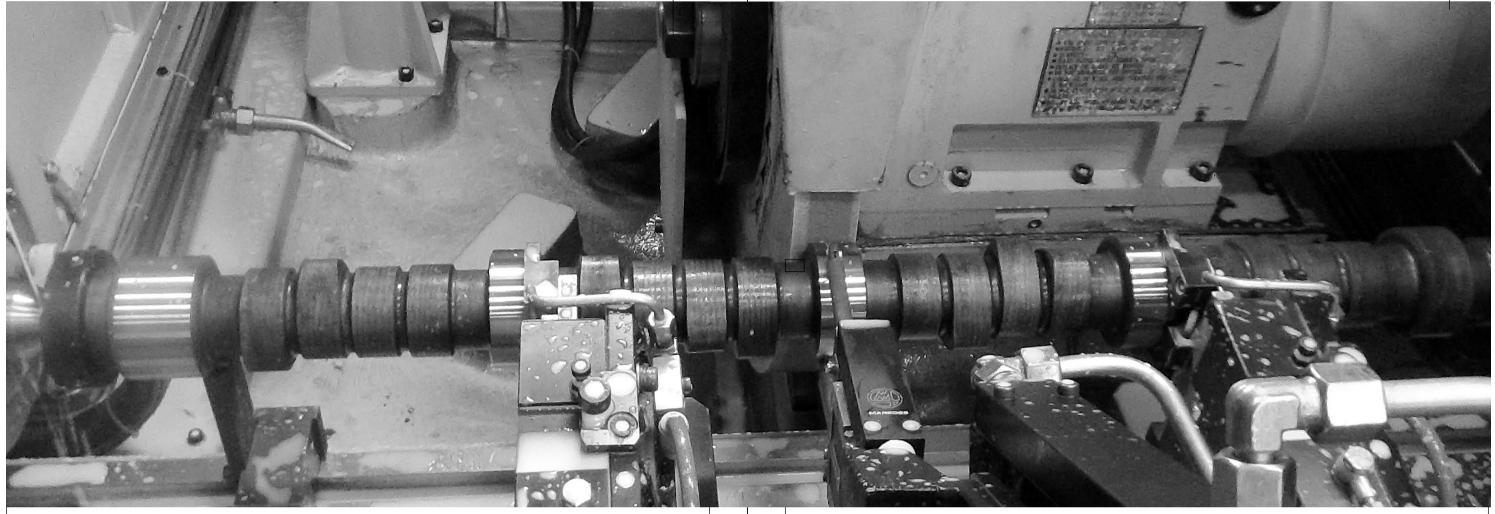


Initially, I was afraid to even go near the machines.
But now, I feel confident and responsible so much so that
I'm ready to train youngsters who become a part of
my company.

I'm skilled and I would be more than happy to be able to pass it on", signs off Jayalakshmi.



Ace Micromatic Group Newsletter, July 2013 10



# Cycle time Reduction in camshaft

In-process signal acquisition and analysis of the grinding process enabled us to identify the factors that could be modified to reduce the grinding cycle time.

Grind-Trak was used to capture the power, displacement signals during the grinding process. It was observed that the peak power being consumed by the wheel head motor was only 4 kW, which was considerably lower than motor rated capacity of 7.5 kW.

To utilize the excess available capacity, it was concluded that the feed-rates could be increased. This would result in a higher material removal rate (Q) and hence higher power consumption.

The higher feed-rates would also result in reduction of grinding cycle time. This required the machine to be stiff enough to handle the higher cutting forces and a wheel capable of such aggressive cutting.

## Component Details

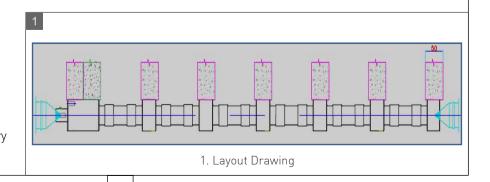
Component : Cam Shaft

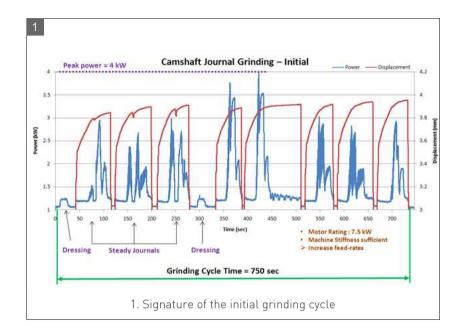
Material : C45/EN9

Hardness : 55-58 HRC

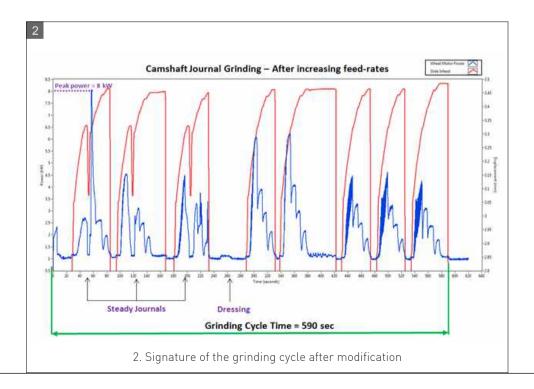
Stock : 0.6mm to 0.8mm

Application : Automobile Industry





Upon increasing the feed-rates, it was found that the power consumption had increased on an average and peaked at 🗀 around 8kW. From the signals, we could analyse that the wheel behaviour was still consistent and the size and form 🖂 parameters were achieved within limits indicating that the machine stiffness was sufficient.



# Grind Trak

Grind Trak is an in-process diagnostic tool which monitors the wheel head spindle motor power and the slide position. It enables us to get real time data, which acts like a signature representative of the grinding

In-process diagnostics is very useful for optimization of the grinding system as it reveals to us the nature of the various microscopic interactions taking place in the grinding zone. The grinding process occurs when the machine tool, tooling and supplies and the component come together in a manner determined by the operational parameters. The result of the grinding process is the quality of the work-piece and the total cost of the grinding operation. By understanding how each of the inputs affect the grinding process and how the process itself affects the outputs, it enables us to identify opportunities in which to improve the grinding system as a whole, rather than just optimizing it in pockets.

In-particular, Grind Trak is useful in achieving the followina:

#### Better asset utilization

- Capacity Increase & Reduced cost per part
- By optimizing grinding cycle
- Reduction of non-grinding time
- Increasing wheel life

# Solving process related issues

- Identify and resolve process problems
- Burn, wheel loading, glazing, high wheel wear

Process bench marking and machine characterization

- Document the grinding process for future
- Comparison of in-process signals between two grinding systems
- (1) 2 different cycles
- (2) Same cycles, but different machine, operator, wheel, etc.
- Machine characterization
- (1) Axis behaviour
- (2) Deformation shapes, etc.



Newsletter, July 2013

Micromatic is now in Ahmedabad, Gujarat



Ace Micromatic Group

Recently the new office in Ahmedabad was inaugurated by Mr. M.U. Bhat. With this milestone, the customers in this region can look forward to even better service quality and commitment from the Ace Micromatic Group.

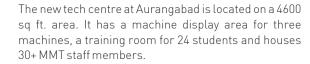
- 1. Seeking blessings from Lord Ganesha
- 2. Puja in progress
- 3. The new office ready for ribbon cutting ceremony
- 4. The team at Ahmedabad office













- 2. Puja in progress
- 3. The team at Aurangabad
- 4. The new building











A fish eye view of the expanse of the group's pavilion at IMTEX



# It was 11 am in the morning on Friday, January 25th, 2013

Hall 1A was flooded with visitors, not an unusual sight at IMTEX. The visitors would enter the hall, go through the various exhibitors and their offerings and move on. They would continue to do so until they move little inside the hall. It is here that they were left spellbound with a mammoth pavilion size and an equally impressive range of machineries on offer.

This year's IMTEX was another feather in the group's cap. The group's pavilion showcased more then 30 machines under turning, milling and grinding solutions, in addition to a dedicated cell for automation solutions. This entire pavilion was complimented by the productivity solutions on offer from the group.

Being the largest space occupant at IMTEX, and the single biggest display of machinery, the group reaffirmed its position as

The Largest Machine Tool Group in India

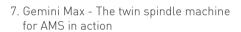
# IMTEX 2013



- 1. The flag hoisting ceremony at the group's pavilion on Jan 26, 2013
- 2. A variety of turning centers on display
- 3. Discussions all across the pavilion
- 4. Smiles all around







The automation cell showcasing turning, milling and grinding all synchronized and handled by a single robotic arm













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6<sup>th</sup> to 10<sup>th</sup>, June2013 at CODISSIA trade fair complex, Coimbatore

# On display:

- Column Moving HMC (CMH 500)
- Internal Grinder (IG 50)
- Vertical Turret Lathe (VTL 25)
- Productivity & OEE Monitoring Solutions







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# Customer Meet Faridabad







- 1. Lighting the lamp
- 2. Dignitaries at the dais
- 3. The gathering at the evening







- 4. A presentation by Mr. Kapil Dhand, Director, Micromatic Grinding Technologies, Ghaziabad
- 5. Lucky draw winner receiving the gift from Mr. L. S. Umesh, CEO, AMS
- 6. The chief guest Mr. T. K. Pal (Executive VC, Sona Okegawa Precision Forgings limited), being felicitated by Mr. B. Machado, Director, Ace Designers Ltd.

# Customer Meet Rohtak







- 1. Start of the evening by lighting the lamp
- 2. Dignitaries at the dais
- 3. The gathering at evening







- 4. Mr. Rajesh Jain, MD, LPS addressing the gathering
- 5. Mr. B. Machado, Director, Ace Designers Ltd.(L) and Mr. Rakesh chowla, Regional service Manager, North(C) in discussion with a customer
- 6. Mr. L. S. Umesh, CEO, AMS addressing the gathering

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