



ZCCM-CEO VISITS NDOLA LIME

The CEO of ZCCM-IH Dr Pius Kasolo visited Ndola Lime Company on 8 October 2014 to familiarize himself with the operations of the company. He was accompanied by the Ndola Lime Board Chairman Mr Mwila Lumbwe, the ZCCM Company Secretary Mr Chabby Chabala, the Chief Operations Officer Ms. Mutale Chanda and the Corporate Officer Mr Charles Mjumphi. During his visit, he held a closed door meeting with members of the Management team who explained to him the Strategy and operations of the Company.

Later Dr Kasolo was taken on a conducted tour of the Quarry, the Plant and the Recapitalisation Project. During the tour, the CEO Mr Abraham Witika explained that in the last 3 years, Ndola Lime Company had invested in dust control system in order to comply with Environmental regulations and to tag off the image of 'a dusty Company that pollutes the City of Ndola'. Currently, the company was compliant to the statutory Limit of 50mg/m³

The CEO of ZCCM-IH stated that as a Shareholder, he was expecting Ndola Lime to ensure that there was a fair return on investment particularly with the level of investments in the Recapitalisation Project.

NDOLA LIME BEATS QUICKLIME BUDGET FOR THE SECOND QUARTER

Ndola Lime Company beat the sales budget for quicklime and year to date by 10.7 % and 1.3 % respectively for the quarter ended 30 September 2014. This was confirmed to a Lime news Reporter by the CEO Mr Abraham Witika in December 2014. It is expected that the Company would continue on this upward trajectory.

NDOLA LIME UNDERGOES THE BSI PASS 99 AUDIT.

Auditors from the British Standards Institution (BSI) visited the Ndola Lime Company to audit the Company for recertification to the Integrated Management system standard PASS 99:2012. The integrated Management System lays a framework for integration of Quality Management ISO 9001:2008 System, Occupational Health and Safety Management System OHSAS 18001: 2007, Environment Management System ISO 14001:2004 . Mr Benedict Bukoka the SHEQ& Analytical Services Manager spearheaded the implementation of PASS 99:2012 at Ndola Lime Company during the past 2 years. Ndola Lime Company is only one of a hand full of companies in the Country that holds itself to these high standards.





FAMILY BUDGETS

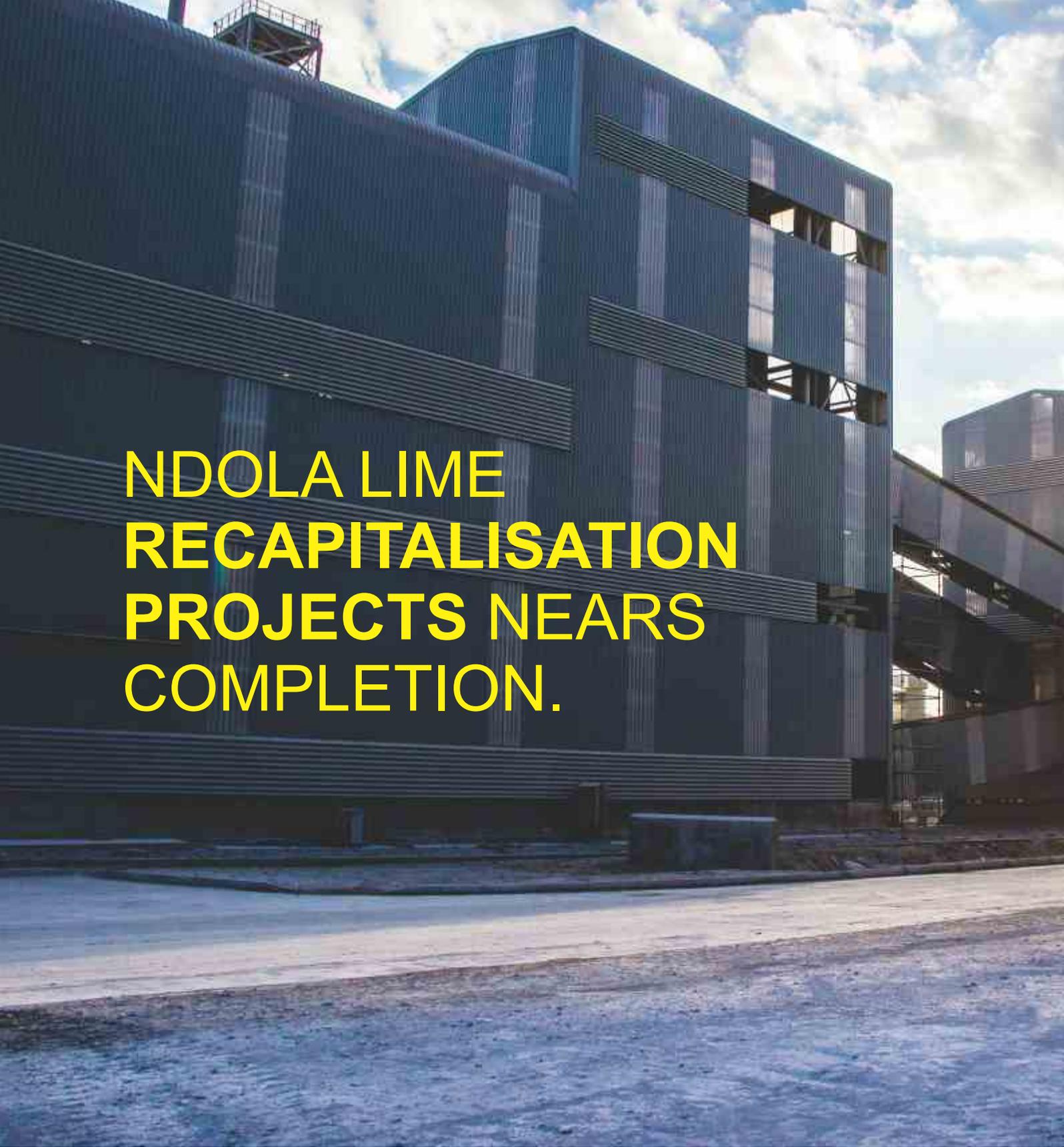
It may come as a surprise to some that any one should attempt to talk about family budgets. But it true that it is not just Companies and individuals who should budget. But before you go headlong into the mechanics of budgeting, you need to be very clear about who you are, what your values in life are so that whatever your values are, your budget should align to those values. This is not the time to teach you values or ask which values are good and which ones are not. For now we shall assume that yours are good family values. They are personal, they are deep seated within your psyche and they define who you are. They can be based on your religious beliefs, culture, previous experiences or philosophy. For example some people will say that "as a family we never borrow at all". Others may say that "as a family, we never borrow Kaloba "while others still may say that "we do borrow but once we do, we make sure we pay as promised regardless of personal inconvenience to themselves. Other families will say that "we are frugal and therefore we do not throw away food". While yet another will say that we do not eat ichimbala. None of the two are wrong. These statements are coming out of deep seated values. These are important causal components of your family decision making process. Having set the basis for budgeting, we now need to look at the family priorities. In some families, the priority may be food. The family may decide that whatever the cost, the family will have good food from "sate to sate bwa nkoko ne Nama". Other families may have clothing as a priority, they may decide that as far as they are concerned, they may sacrifice some expensive meals but they will ensure that they are the best dressed family and their budget will reflect that emphasis. For other families the emphasis may be education and others still

the house furnishing should be so nicely adorned that it should resemble a palace. For others it may be that the family should be well educated and the children sent to the best schools. For others it may be health facilities which may be of utmost importance.

Each of the above listed priorities will have an opportunity cost. You cannot eat a piece of cake and still have it. The accountants have an expression of opportunity cost. For each item, you include on the budget, you have unwittingly decided to forego some other item. This is because of the reality of limited resources. Money is a finite resource and you have to accept that some things will have to be foregone.

The trouble starts when you want to have all the good food, the best furniture, the best clothes, the best school and the best everything. It may not be possible. Stick to your values and resist the temptation of living like your neighbors. Trying to live like your neighbors means that you are not being guided by your budget and have succumbed to peer pressure. This phenomenon is common in societies that are artificially organized such as policemen, soldiers and miners have their pay day, everyone in town will know by common purchasing patterns. If someone has bought a decoder or a carpet you will see decoders and carpets being bought the next month by all the neighbors. It is called "groupthink" and is a lack of individuality, initiative and budgeting skills.

Unfortunately for our readers, even the space in this Magazine is limited budgeted for. The space allocated ends here. Join us in the next issue of Lime news as we discuss the mechanics of actual budgeting.



NDOLA LIME RECAPITALISATION PROJECTS NEARS COMPLETION.

The Ndola Lime Recapitalisation Project which was conceived in 2007 and implemented in 2010 is now coming to a close. This is a culmination of many years of painstaking design and construction. The Engineers from Terruzzi Fercalx and Cimprogetti are already in the Country working with the local Engineers. The cold commissioning tests for the Vertical Kiln began in November 2014 and for the Hydrating Plant, hot commissioning has already started.

The project involves the Construction of a 500 tons per day Vertical Kiln designed by Terruzzi Fercalx of Italy, a 15 Tons per hour Hydrator with associated Plants, Electrical Substations, Weigh bridges and Coal Handling and Grinding Plant.

Mr Abraham Witika (Ndola Lime CEO) stated that once the Kiln was fully commissioned, Ndola Lime will never be the same company again. The Project was financed by ZCCM-IH, the Parent Company of Ndola Lime and Standard Bank of South Africa.



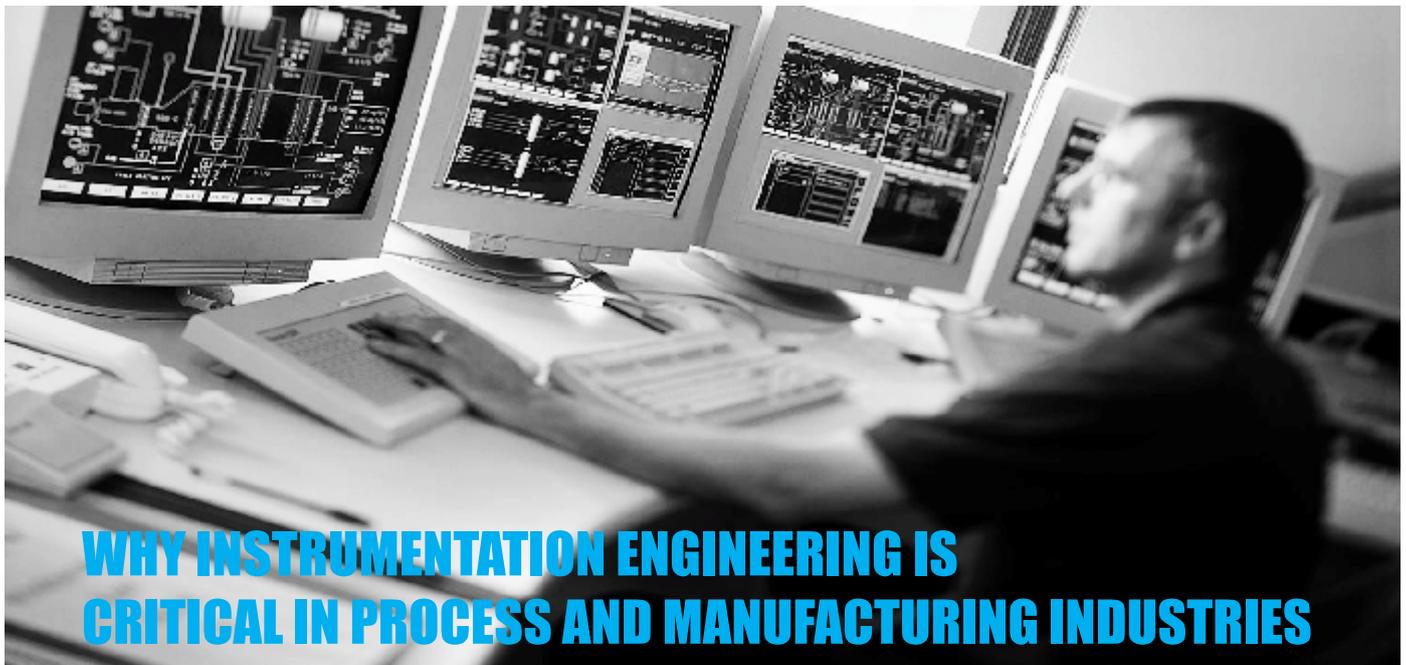
The Project drivers were to Increase the economic production capacity, reduce production costs and dust emissions by installing equipment which would make the company 100% compliant with the Environmental Management plan agreed with Zambia Environmental Management Agency.



Above, Mr Abraham Witika the CEO inducts Mr Philippe Taussac, a Director on the ZCCM-IH Board and Mr Charles Mjumphi the ZCCM-IH Corporate Officer on the Recapitalisation Project.



The staff is very excited at the prospect of working in this totally new plant.



WHY INSTRUMENTATION ENGINEERING IS CRITICAL IN PROCESS AND MANUFACTURING INDUSTRIES

Instrumentation is the use of measuring instruments to monitor and control a process. It is the art and science of measurements and control of process variables within a production. Laboratory or manufacturing area.

An instrument is a device that measures a physical quantity such as flow, temperature, level, distance, angle, or pressure. Instruments may be as simple as direct reading thermometers or may be complex multi-variable analyzers. Instruments are often part of a control system in refineries, factories, and vehicles. The control of processes is one of the branches of applied instrumentation. Instrumentation can also refer to handheld devices that measure some desired variable. Diverse handheld instrumentation is common in laboratories, but can be found in household as well. For example a smoke detector is a common instrument found in most western homes.

Instruments attached to a control system may provide signals used to operate solenoids, valves, regulators, circuit breakers, or relays. These devices control a desired output variable, and provide either remote or automated control capabilities. These are often referred to as final control elements when controlled remotely or by a control system.

A transmitter is a device that produces an output signal, in form of a 4-20 mA electrical current signal, although many other options using voltage, frequency, pressure or Ethernet are possible. This signal can be used for informational purposes, or it can be sent to a PLC, DCS, SCADA system, LabVIEW or other type of computerized controller, where it can be interpreted into readable values and used to control other devices and processes in the system.

Control instrumentation plays a significant role in both gathering information from the field and changing the field parameters, and as such are a key part of control loops.

HISTORY

Elements of industrial instrumentation have long histories. Scales for comparing weight and simple pointers to indicate position are ancient technologies. Some of the earliest measurements were of time one of the oldest weather clock, a drawing showing meteorological sensors moving pens over paper driven clockwise. Such devices did not become the standard in meteorology for two centuries. The concept has virtually remained unchanged as evidenced by pneumatic chart recorders, where a pressured bellows displaces a pen. Integrating sensors, displays, recorders and controls was uncommon until the industrial revolution, limited by both need and practicality.

In the early years of process control, process indicators and control elements such as valves were monitored by an operator that walked around the unit adjusting the valves to obtain the desired temperatures, pressures, and flows. As technology evolved pneumatic controllers were inverted and mounted in the field that monitored the process and controlled the valves. This reduced the amount time process operators were needed to monitor the process. Later years the actual controllers were moved to a central room and signals were sent into the control room to monitor the process and outputs signals were sent to the final control element such as a valve to adjust the process as needed. These controllers and indicators were mounted on a wall called control board. The operators stood in front of this board walking back and forth monitoring the process indicators. This again reduced the number and amount of time process operators were needed to walk around the units. The most standard pneumatic signal level used during these years was 3-15 psi (Pounds per square inch).

Electronics enabled wiring to replace pipes. The transistor was commercialized by the mid-1950s. Each instrument company introduced their own standard instrumentation signal, causing

confusion until the 4-20 mA range was used as the standard electronic instrument signal for transmitters and valves. This signal was eventually standardized as ANSI/ISA S50, "Compatibility of Analog Signals for Electronic Industrial Process Instruments", in the 1970s. The transformation of instrumentation from mechanical pneumatic transmitters, controllers, and valves to electronic instruments reduced maintenance costs as electronic instruments were more dependable than mechanical instruments. This also increased efficiency and production due to their increase in accuracy. Pneumatics enjoyed some advantages, being favored in corrosive and explosive atmospheres. The pneumatic and electronic signaling standards allowed centralized monitoring and control of a distributed process. The concept was limited by communication line lengths (perhaps 100 meters for pneumatics). Each pipe or wire pair carried one signal. The next evolution of instrumentation came with the production of Distributed Control Systems (DCS) which allowed monitoring and control from multiple locations which could be widely separated. A process operator could sit in front of a screen (no longer a control board) and monitor thousands of points throughout a large complex. A closely related development was termed "Supervisory Control and Data Acquisition" (SCADA). These technologies were supported by personal computers, networks and graphical user interfaces.

BENEFITS OF INSTRUMENTATION ENGINEERING

Instrumentation engineering is the engineering specialization focused on the principle and operation of measuring instruments that are used in design and configuration of automated systems in electrical, pneumatic domains etc. They typically work for industries with automated processes such as Process and Manufacturing plants with the goal of improving system productivity, reliability, safety, optimization, and stability. To control the parameters in a process or in a particular system, devices such as microprocessors, microcontrollers or PLCs are used, but their ultimate aim is to control the parameters of a system.

Instrumentation engineering is loosely defined because the required tasks are very domain dependent. An expert in the biomedical instrumentation of laboratory rats has very different concerns than the expert in rocket instrumentation. Common concerns of both are the selection of appropriate sensors based on size, weight, cost, reliability, accuracy, longevity, environmental robustness and frequency response. Some sensors are literally fired in artillery shells. Others sense thermonuclear explosions until destroyed.

Instrumentation also offers new wireless technologies for power plant instrumentation. This offer significant cost savings when compared to traditional wired networks. The value of this cost savings is especially relevant in the highly competitive power industry, where aging facilities are common and upgrades are an expensive necessity. Modern wireless networks offer a reliable upgrade path that even provides some unexpected benefits

when compared to traditional copper networks. A significant portion of the cost of a measurement loop is the cable, conduit, and multiplexing hardware required to connect the sensor to the plant's DCS (distributed control system). A wireless network requires none of these infrastructure improvements, and the resultant savings is significant.

A wireless plant network can also support voice communications over mobile devices similar to cell phones. Such a device can also be used to call up documents such as work orders and wiring diagrams. Plant security and work monitoring may be further enhanced via a surveillance system utilizing wireless cameras.

CONCLUSION

Instrumentation plays a significant role in the Plant Automation which bring about improved productivity, product quality and profitability.

Improved Productivity: plant productivity may be defined as the quantity of end products manufactured per unit of operating parameters, plant size, number of workers, time of operation etc. therefore productivity is directly related to how efficiently the input resources are utilized in translating them into marketable end products. This is possible because automation allows for efficient scheduling of workflow and labor use. The ability to maintain good records and information about past processes can clearly highlight areas that can be targeted for more efficient allocation of resources.

Improved Product Quality: Quality assurance is one of the most important goals in any industry. The ability to manufacture high quality products consistently is the basis for success in any Process or manufacturing industries. Thanks to advances in instruments such as conductivity sensors, metal detectors, thermocouples level sensors etc. substantial change have been implemented in these industries to facilitate automatic quality evaluation.

Improved Profitability: Increased profit is perhaps most important from the perspective of management. Improved profitability not only adds to shareholder value but also allows management to invest strategically in expanding plant operations, increasing product lines, further improving product quality etc. As discussed previously automation helps to improve Productivity and Product Quality. Both of these combine directly to improved Profitability.

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CLEAN AIR AND CLEAN WATER FOR NDOLA RESIDENTS.

Clean Air

Ndola Lime Company last year (2013) commissioned the K6 Million bag house filters at the Vertical Kiln 1. Mr Benedict Bukoka the SHEQAS Manager confirmed this in an interview with Lime news. This follows the commissioning of the Electrostatic Precipitator (ESP) which was installed at the Rotary Kiln at a total cost of K17.5 million in 2011. The installation of these two dust abatement equipment worth K23 million at Ndola Lime Company demonstrates the Company's Commitment to caring for the environment in which it operates. The specifications of the equipment is designed to discharge air with no 50 milligrams per normal cubic meter of air

discharged and is below the emission limits set by the Zambia Environmental Management Agency.

Clean Water.

Unknown to most people of Ndola, the water quality of Ndola will be so much worse if Ndola Lime Company stops pumping water into the Kafubu. As part of its Mining activity, Ndola Lime Company has to keep its mining operations dry by dewatering the Mining Areas. The Consequence of this is that the clean underground water has to be pumped out and discharged into the river, thereby improving water quality.

THE MOST LONGED FOR FRUIT 'MARKET'

Market is like a ripe, fresh fruit whose appearance is appealing to an eye and the taste so mouth watering and full of Succulence. Would be eaters have no option, but to scramble for a share of that great fruit.

Much as many organisations may want to attain certain heights in business, the following efforts are not exceptional; Continual improvement of customer service, constant optimizing of existing products, monitoring of markets, creativity, new ideas and new brand strategies. These really go a long way in ensuring that a strong business muscle is built that will stand the pressure being emitted by competitors.

This hectic and challenging exercise has not spared Ndola Lime Company which in turn has followed up the same foot steps. It has upgraded the customer sales building to a feel at home extent. Nice seats to rest on and availability of water drinking facilities. Samples of every product that a customer may want to buy are clearly labeled and nicely displayed.

Every project presents its own particular characteristic and challenges, more especially in the environment where competition is at its peak. Ndola Lime Company has stretched it ear towards the customer in order to deliver an optimized solution that meets and exceeds requirements and expectations of its customers. The block yard has continued to produce good quality and reliable blocks with an additional service of transport at a reasonable cost. In short, the Company through its efforts has formed a one stop and buy point. Limestone products such as Quick Lime, Hydrated Lime, Fluxstone, building blocks, Agriculture Lime and concrete stones of different sizes are conveniently placed in order to reduce time taken by the customer to access them.

Competition for Ndola Lime is like iron sharpens iron, this negative impact induced by neighboring forms of business has in some way aided Ndola Lime Company to embrace the idea of innovation. It has come up with a new vertical Kiln and Hydrator. The new Kiln will be using coal to burn lime stone unlike the old one which has been using heavy fuel making the production cost high and the atmosphere under which business is conducted unfavorable.

For some time the firm enjoyed monopoly as it was the only lime producing company in its location. In a nutshell, the new hydrator as well will increase production and reduce time taken to clear customers out of the premises.

Wow! Many thanks
to Ndola Lime Company
management for this
quick and
wise decision.

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Cars

1. The Funcargo

One of the most interesting cars on our roads is the Toyota Funcargo. It has replaced the Toyota Corolla on Zambian roads as a car of choice for Taxi operators. It is a low cost car which you can land at a little over K20, 000, and is low on fuel consumption. Interviewing one taxi operator however revealed that the Funcargo is funny.

Have you noticed that most Funcargo have broken rear windscreens? Asking one driver, why that was the case, he replied that it was because if you leave the Funcargo in the sweltering heat for a long time with windows closed, the air inside will become so hot that it will pressurize the interior and cause the glass to break. The upside of this car however is that what the corolla cannot do, it will. The fan cargo can double as a light van by carrying long items which cannot fit in normal cars by simply opening the rear door. As a Taxi, it has taken over market share that was initially dominated by the corolla. Clearly, this funny car means serious business!



2. The BMW

The designers of the BMW (Bayerische Motoren Werke) pride themselves in the quality of their designs. While their competitor Daimler Benz promoted their cars with the tag line “Engineered like no other car in the world” , The Makers of the BMW chose “The Ultimate Driving Machine” as their tag line. So, to the savvy, “The Ultimate Driving Machine” is the BMW. However, when one Ndola Lime employee was asked what the Ultimate Driving Machine was, he explained that it was the M463. Perplexed, this writer asked for a clarification, only to be told that the title of the Ultimate driving Machine was reserved for the Exhaust Gas Fan Motor for the Vertical Kiln. Of course the man is a metallurgist!



Did you know ?

1. Ka- Nsanshi-Mine

That Kansanshi Mine is named after the Kaonde word “insanshi” which means the copper cross ingot. The items were smelted from copper ore which was abundant in the area using handmade furnaces and leather bellows to charge the air into the furnace. For those that might struggle to visualize the Nsanshi, you only need to look at the Logo of Zanaco.It; one of the local banks. It is a nicely polished copper cross ingot with a glint at the edges. The prefix article used “Ka” in the Ka-nsanshi is the diminutive rather than the expansive form and is used and attests to both the smallness and the preciousness. This linguist feature is absent in the English language.

2. Cha-Mbishi Mine

The place of the Zebra. It is not Chambeshi as is commonly said among the un-initiated sojourner. We mean the name of the mine between Kitwe and Chingola. It is said that travelers between the two towns would frequently encounter Zebras (Imbishi) so they may say “twaliba bwene pa Cha-Mbishi”, meaning, we saw them at Chambishi. No wonder most of the mines in that locality have the Zebra colours on their logos. Now you know.

QUOTABLE QUOTES

“ Football is a game played by 22 people who need a rest and watched by 22,000 people who need exercise ”





LIME HOTSPURS DEMOTED.

The Lime Hotspurs football club has been demoted from Division I North of the FAZ Premier League. This was after the team ended up with 32 points and fourth from the bottom of the table. The demotion of the team has invited mixed reactions with some quarters calling for the over haul of the entire team while others called for the disbanding of the team .A somber mood has hang over the otherwise zealous Lime Hotspurs football Supporters who are yet to strategise on the way forward as they play division two football for the first time in many years. The club enjoys fairly good sponsorship from Ndola Lime Company as part of the Company s corporate social responsibility.

“BA LAIMU” Lime Hotspurs supporters. In the terraces a supporter simply known as “ba Kateka”, meaning, the Ruler.

“Ti wine

Ti Luze se bana ba zambia!

Tili pa Mbuyo ya Laimu!”

