

TECHNOLOGY ROUNDUP

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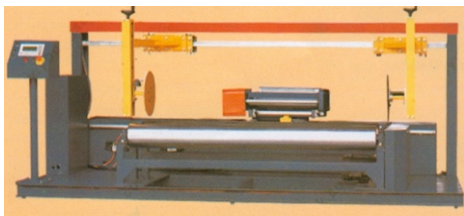
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Tech & Trade Offers

Orbital Wrapping Machine



Strapping Machine



Indigenous Technology

Drying of Grapes using a Dish Type Solar Air Heater

Dried fruit and vegetables are vital source of food and nutrients like protein, carbohydrates, high density lipids (good cholesterol), vitamins and minerals in human diet. Since fresh fruits and vegetables are perishable hence they are on hand for a short while in the market. Grapes are grown in Pakistan with a total annual production of more than 5 thousand tons. Different types of preservation methods and techniques have been developed to guarantee availability of grapes for extended marketing. Drying and preservation of grapes by the application of chemicals have been practiced since long. Sun-drying of grapes in open air is more chosen over other preservation techniques because it is more economical and free from chemicals. However, this type of drying could not be adopted on wider scale because of climatic factors.

Open sun-drying of grapes is not satisfactory as it takes long time. Also the product become polluted with bacteria and insects and deteriorates rapidly in the uncontrolled ambient temperature and high relative humidity. These losses can be reduced by the use of dish type solar drier in the form of solar air heater. Locally made solar driers in the form of dish type solar air heaters, with good control over temperature and relative humidity, may offer an economical solution to these problems.

The study was conducted to develop an efficient drier in the form of a dish type solar air heater that could dry grapes. A small solar air heater, connected to a drying chamber was developed at Khyber Agency (FATA), Pakistan in the month of August, 2011 for drying grapes. Efficiency of this solar air heater was evaluated in the Department of Agricultural Mechanization, Faculty of Crop Production Sciences, Khyber Pakhtunkhwa Agricultural University, Peshawar, Pakistan. Two air flow rates i.e. 1 natural (0.01kg/sec) and 2 convective (0.21 kg/sec and 0.28 kg/sec) air flow rates at different day timings. The results showed that flow rates significantly ($P < 0.001$) affected efficiency of solar air heater. Efficiency increased from 12 percent at natural to 24 percent and 35 percent at convective air flow rates of 0.21 and 0.28 kg per second, respectively. Further, grapes were dried at temperature of 50°C and less than 20 percent humidity. Air flow rate of 0.28 kg per second was given for drying in drying chamber and grapes were dried less than a moisture content of 10 percent. It was observed that grapes were dried in 24 hours by dish type solar air heater's drying chamber. The study concluded that dish type solar air heater for drying grapes should be operated at high flow rates to achieve high efficiency at minimum time. Solar air heater also maintained the quality of grapes and minimized losses from pest attacks.

Courtesy:

Journal of Agricultural Research, 2012 50(3): 423-431 refs14

Author: Muhammad Hanif, Muhammad Ramzan and Muhammad Aamir (Department of Agricultural Mechanization, Faculty of Crop Production Sciences, Khyber Pakhtunkhwa Agricultural University, Peshawar, Pakistan).

Indigenous Technology

Evaluation of Drinking Water Quality in Urban Areas of Pakistan: A Case Study of Southern Lahore

Drinking water must be free from components which may adversely affect the human health. Such components include minerals, organic substances and disease causing microorganisms. A large portion of the population in developing countries suffers from health problems associated with either lack of drinking water or due to the presence of microbiological contamination in water. Poor water quality is responsible for the death of an estimated 5 million children in the developing countries. The problem is further aggravated by rapidly increasing population which results in poor water-quality management.

In Pakistan, water supply coverage through piped network and hand pumps is around 66%. It is estimated that, in Pakistan, 30% of all diseases and 40% of all deaths are due to poor water quality [5]. Diarrhoea, a water borne disease is reported as the leading cause of death in infants and children in the country while every fifth citizen suffers from illness and disease caused by the polluted water [6]. Unfortunately, little attention is being paid to drinking-water quality issues and quantity remains the priority focus of water supply agencies. There is a lack of drinking-water quality monitoring and surveillance programmes in the country. Weak institutional arrangements, lack of well equipped laboratories and the absence of a legal framework for drinking-water quality issues have aggravated the situation. Above all, the public awareness of the issue of water quality is dismally low [7]. Intermittent water supply is common in urban areas and outbreaks of gastroenteritis and other water born diseases have become a normal feature [8]. Estimates indicate that more than three million Pakistanis suffer from waterborne diseases each year of which 0.1 million die [9]. Thus there is a need to find out where the actual problem lies; whether the water sources are contaminated or lapses occur in the distribution system. Presently, Pakistan has no national drinking water quality standards and WHO guidelines are followed [10-11]. This research work was undertaken with the objective: (1) to evaluate the drinking water quality in southern Lahore both at the source and in the distribution system according to WHO guidelines and (2) to suggest preventive measures in case of any lapses found.

A study was carried out to evaluate the quality of water supplied by Water and Sanitation Agency (WASA), Lahore. A portion of southern Lahore was selected for this purpose. Water samples from four different sources (tubewells) and eight house connections (two from each tubewell) were collected making a total of twelve sampling points. Two set of samples, one before monsoon and one after the monsoon were taken from each sampling point. Four physicochemical parameters (pH, turbidity, hardness and total dissolved solids) and two bacteriological parameters (total coliform and faecal coliform) were tested for each sample and values compared with World Health Organization (WHO) guidelines for drinking water. The results of the study demonstrated that physicochemical and bacteriological quality of water at sources was satisfactory. In the distribution system, physicochemical quality of water was satisfactory while 50 to 62.5% of the samples contained bacteriological contamination before monsoon. This percentage rose to 75% after the monsoon. Possible causes of contamination were leaking water mains and cross connections between water mains and sewers due to close proximity. It is recommended to carry out compulsory chlorination at water sources while maintaining reasonable residuals at the consumers' end to eliminate the bacteriological contamination.

Courtesy:

Journal of Engineering and Applied Sciences, 2009 5(7): 16-23 refs 12

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Indigenous Technology

Studies on The Development and Storage Stability of Cucumber-Melon Functional Drink

The functional beverages can play an important role in health promotion and disease prevention. Beverages are considered to be an excellent medium for the supplementation of nutraceutical components for enrichment such as soluble fibre or herbal extract. The functional beverages not only provide taste and refreshment satisfaction, but can also provide necessary nutrients to prevent nutrition-related diseases.

Cucumber contains calcium (20 mg /100 g), iron (0.7 mg/100 g), thiamin (0.3 mg /100g), niacin (0.2 mg/100g) and riboflavin (0.01 mg/100g) (6). Large quantity of cucumber gets spoiled due to excessive production in peakseason. Spoilage of cucumber during harvesting can be minimized by long term preservation of cucumber in drink form.

Melon is the 4th important fruit in the world fresh fruit market with several varieties and serves as major food sources. Its flesh and seeds both have high nutritive value Muskmelon is a rich source of vitamin C, β -carotene, vitamin A, carbohydrates, sugars, protein and also traces of vitamin B6, vitamin K, niacin, vitamin B2 and vitamin B1. Its seeds contain 40-44 percent oil and used as a substitute of almond and pistachio. The fruit pulp and juice is used in refreshing drinks. Fruit pulp contains 94 percent water, 5 percent carbohydrates, 1 percent protein, 3420 IU of vitamin A and 33mg vitamin C.

Blending could lead to the production of delightful and delicious beverages with improve organoleptic quality and high nutritive value. Blending increases taste and flavour of fruit juices. A blend of drinks from cucumber (*Cucumis sativus*) and muskmelon (*Cucumis melo*) was formulated and evaluated for its storage stability in Food Technology Section, Post Harvest Research Centre, Ayub Agricultural Research Institute, Faisalabad, Pakistan during the year 2010-11. Addition of muskmelon to cucumber juice increases the nutritional value of the drink and also provides various health benefits to consumers. These ready-to-use functional drinks were prepared by blending different ratios of cucumber and muskmelon (100:0, 90:10, 80:20, 70:30, and 60:40). The physico-chemical parameters and sensory characteristics of blended drinks were evaluated for four months at 15 days of storage interval. It was observed that TSS mean values increased (15.49-16.09%) during storage. Increase in acidity (0.41-0.51%) and decrease in pH (4.89-4.82) was also observed. Reducing sugars increased from 1.9 to 2.48 percent while non-reducing sugars decreased from 9.36 to 8.70 percent. Regarding sensory attributes, maximum scores (7.51) for overall acceptability was observed in cucumber and muskmelon ratio of 90:10 followed by ratio of 100:0 (7.33) Drink prepared at 90:10 was also found as The most acceptable in maintaining the physico-chemical and organoleptic characteristics as compared to other treatments.

Courtesy:

Journal of Agricultural Research, 2012 50(2): 239-248 refs33

Author: Humaira Kausar, Shazia Saeed (Assistant Research Officer & Abdus-Salam (Food Technologists, Food Technology Section, Post Harvest Research Centre, Ayub Agricultural Research institute, Faisalabad, Pakistan)

Autism Risk Spotted at Birth in Abnormal Placentas

Researchers at the Yale School of Medicine have figured out how to measure an infant's risk of developing autism by looking for abnormalities in his/her placenta at birth, allowing for earlier diagnosis and treatment for the developmental disorder.

One out of 50 children are diagnosed with an autism spectrum disorder Internationally each year, according to the Centers for Disease Control and Prevention (CDC), but the diagnosis is usually made when these children are 3 to 4 years of age or older. By then the best opportunities for intervention have been lost because the brain is most responsive to treatment in the first year of life.



Dr. Harvey Kliman, research scientist in the Department of Obstetrics, Gynecology & Reproductive Sciences at the Yale School of Medicine, and research collaborators at the MIND Institute at the University of California, Davis, have found that abnormal placental folds and abnormal cell growths called trophoblast inclusions are key markers to identify newborns who are at risk for autism.

The team examined 117 placentas from infants of at-risk families, those with one or more previous children with autism. These families were participating in a study called Markers of Autism Risk in Babies, Learning Early Signs. They compared these at-risk placentas to 100 control placentas collected from the same geographic area.

The at-risk placentas had as many as 15 trophoblast inclusions, while none of the control placentas had more than two trophoblast inclusions. Kliman said a placenta with four or more trophoblast inclusions conservatively predicts an infant with a 96.7% probability of being at risk for autism.

Currently, the best early marker of autism risk is family history. Couples with a child with autism are nine times more likely to have another child with autism. According to researchers when these at-risk families have subsequent children they could employ early intervention strategies to improve outcomes. "Regrettably couples without known genetic susceptibility must rely on identification of early signs or indicators that may not overtly manifest until the child's second or third year of life.

It is hoped that diagnosing the risk of developing autism by examining the placenta at birth will become routine, and that the children who are shown to have increased numbers of trophoblast inclusions will have early interventions and an improved quality of life as a result of this test.

www.sciencenewsline.com

Engineering Breakthrough Promises Significantly More Efficient Solar Cells

A new technique developed by The Researchers of the University of Toronto Engineering, could lead to significantly more efficient solar cells.

The research titled, "Jointly-tuned plasmonic-excitonic photovoltaics using nanoshells," describes a new technique to improve efficiency in colloidal quantum dot photovoltaics, a technology which already promises inexpensive, more efficient solar cell technology. Quantum dot photovoltaics offers the potential for low-cost, large-area solar power, owever

The new technique developed by Sargent's group shows a possible 35 per cent increase in the technology's efficiency in the near-infrared spectral region. Overall, this could translate to an 11 per cent solar power conversion efficiency increase making quantum dot photovoltaics even more attractive as an alternative to current solar cell technologies.



There are two advantages to colloidal quantum dots. First, they're much cheaper, so they reduce the cost of electricity generation measured in cost per watt of power. But the main advantage is that by simply changing the size of the quantum dot, one can change its light-absorption spectrum.

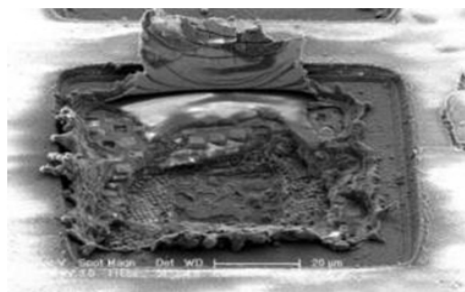
Changing the size is very easy, and this size-tunability is a property shared by plasmonic materials by changing the size of the plasmonic particles. Researchers were able to overlap the absorption and scattering spectra of these two key classes of nanomaterials. They achieved the increased efficiency by embedding gold nanoshells directly into the quantum dot absorber film. Though gold is not usually thought of as an economical material.

More work needs to be done to achieve more optimization, and they're also interested in looking at cheaper metals to build a better cell. They would also like to better target where photons are absorbed in the cell, this is important photovoltaics because one wants to absorb as many photons as he can as close to the charge collecting electrode. The research is also important because it shows the potential of tuning nanomaterial properties to achieve a certain goal. This work is a great example of fulfilling the promise of nanoscience and nanotechnology,

www.sciencedaily.com

Self-Healing Integrated Chip

Imagine that the chips in your smart phone or computer could repair and defend themselves on the fly, recovering in microseconds from problems ranging from less-than-ideal battery power to total transistor failure. It might sound like the stuff of science fiction, but a team of engineers at California Institute of Technology (Caltech), for the first time ever, has developed just such self-healing integrated chips



The team, made up of members of the High-Speed Integrated Circuits laboratory in Caltech's Division of Engineering and Applied Science, has demonstrated this self-healing capability in tiny power amplifiers. The amplifiers are so small, in fact that 76 of the chips, including everything they need to self-heal could fit on a single penny. In perhaps the most dramatic of their experiments, the team destroyed various parts of their chips by zapping them multiple times with a high-power laser, and then observed as the chips automatically developed a work-around in less than a second. It was incredible

the first time the system kicked in and healed itself. The researchers had literally just blasted half the amplifier and vaporized many of its components, such as transistors, and it was able to recover to nearly its ideal performance. Until now, even a single fault has often rendered an integrated-circuit chip completely useless. The Caltech engineers wanted

to give integrated-circuit chips a healing ability akin to that of our own immune system, something capable of detecting and quickly responding to any number of possible assaults in order to keep the larger system working optimally. The power amplifier they devised employs a multitude of robust, on-chip sensors that monitor temperature, current, voltage, and power. The information from those sensors feeds into a custom-made application-specific integrated-circuit (ASIC) unit on the same chip, a central processor that acts as the "brain" of the system. The brain analyzes the amplifier's overall performance and determines if it needs to adjust any of the system's actuators, the changeable parts of the chip.

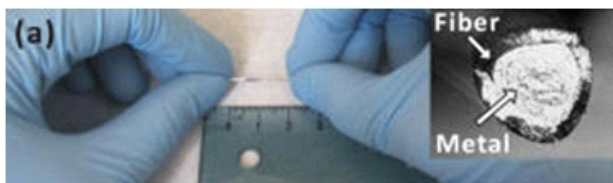
Interestingly, the chip's brain does not operate based on algorithms that know how to respond to every possible scenario. Instead, it draws conclusions based on the aggregate response of the sensors. "You tell the chip the results you want and let it figure out how to produce those results," says Steven Bowers, a graduate student in Hajimiri's lab and lead author of the research. "The challenge is that there are more than 100,000 transistors on each chip. We don't know all of the different things that might go wrong, and we don't need to. We have designed the system in a general enough way that it finds the optimum state for all of the actuators in any situation without external intervention."

Looking at 20 different chips, the team found that the amplifiers with the self-healing capability consumed about half as much power as those without, and The Caltech team chose to demonstrate this self-healing capability first in a power amplifier for millimeter-wave frequencies. Such high-frequency integrated chips are at the cutting edge of research and are useful for next-generation communications, imaging, sensing, and radar applications. By showing that the self-healing capability works well in such an advanced system, the researchers hope to show that the self-healing approach can be extended to virtually any other electronic system.

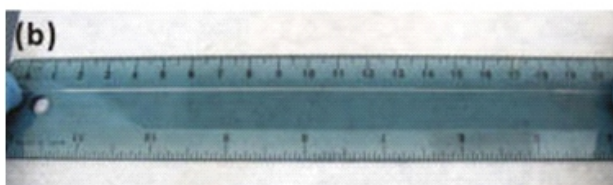
Bringing this type of electronic immune system to integrated-circuit chips opens up a world of possibilities. It is truly a shift in the way we view circuits and their ability to operate independently. They can now both diagnose and fix their own problems without any human intervention, moving one step closer to indestructible circuits.

www.caltech.edu

Liquid Metal Wires could be Stretched Eight Times of their Original Length



Researchers from North Carolina State University have created conductive wires that can be stretched up to eight times their original length while still functioning. The wires can be used for everything from headphones to phone chargers, and hold potential for use in electronic textiles.



To make the wires, researchers start with a thin tube made of an extremely elastic polymer and then fill the tube with a liquid metal alloy of gallium and indium, which is an efficient conductor of electricity.

Previous efforts to create stretchable wires focus on embedding metals or other electrical conductors in elastic polymers.

Increasing the amount of metal improves the conductivity of the composite, but diminishes its elasticity. This approach keeps the materials separate, so one has maximum conductivity without impairing elasticity.

www.sciencedaily.com

Hydrogen Sulfide Greatly Enhances Plant Growth: Key Ingredient in Mass Extinctions Could Boost Food, Biofuel Production



Hydrogen sulfide, the pungent stuff often referred to as sewer gas, is a deadly substance implicated in several mass extinctions. But in low doses, hydrogen sulfide could greatly enhance plant growth, leading to a sharp increase in global food supplies and plentiful stock for biofuel production.

Researchers from University of Washington found some very interesting things, including that at the very lowest levels plant health improves. But that's not what they were looking for. They started off to examine the toxic effects of hydrogen sulfide on plants but mistakenly used only one-tenth the amount of the toxin they had intended. The results were so unbelievable that they repeated the experiment. Still unconvinced, they repeated it again, and again and again.

In fact, the results have been replicated so often that they are now a near certainty. Everything else that's ever been done on plants was looking at hydrogen sulfide in high concentrations,".

At high concentrations levels of 30 to 100 parts per million in water, hydrogen sulfide can be lethal to humans. At one part per million it emits a telltale rotten-egg smell. The researchers used a concentration of 1 part per billion or less to water seeds of peas, beans and wheat on a weekly basis. Treating the seeds less often reduced the effect, and watering more often typically killed them. With wheat, all the seeds germinated in one to two days instead of four or five, and with peas and beans the typical 40 percent rate of germination rose to 60 to 70 percent.

Hydrogen sulfide, probably produced when sulfates in the oceans were decomposed by sulfur bacteria, is believed to have played a significant role in several extinction events, in particular the "Great Dying" at the end of the Permian period.

Researchers recently have applied hydrogen sulfide treatment to corn, carrots and soybeans with results that appear to be similar to earlier tests. But it is likely to be some time before they and the general public, are comfortable with the level of testing to make sure there are no unforeseen consequences of treating food crops with hydrogen sulfide. The most significant near-term promise, they believe, is in growing algae and other stock for biofuels. Plant lipids are the key to biofuel production, and preliminary tests show that the composition of lipids in hydrogen sulfide-treated plants is the same as in untreated plants. When plants grow to larger-than-normal size, they typically do not produce more cells but rather elongate their existing cells. However, in this treatment with hydrogen sulfide, they found that the cells actually got smaller and there were vastly more of them.

www.sciencedaily.com

Battery Low? Give Your Mobile Some Water



A power source for your mobile phone can now be as close as the nearest tap, stream, or even a puddle, with the world's first water-activated charging device.

Based on micro fuel cell technology developed at KTH Royal Institute of Technology in Stockholm, the MyFC PowerTrek uses ordinary water to extend battery life for devices of up to 3 watts. The device can be powered by fresh or seawater. The water need not be completely clean.

The invention has great potential to accelerate social development in emerging markets. There are large areas that lack electricity, while mobile phones fulfill more and more vital functions, such as access to weather information or electronic payment. A USB connector attaches the compact PowerTrek charger to the device. When plain water is poured onto a small disposable metal disc inside the unit, hydrogen gas is released and combines with oxygen to convert chemical energy into electrical energy. The resulting charge is enough to power an iPhone to between 25 and 100 per cent of its battery capacity.

The researcher has worked on micro fuel cells and small flat Proton Exchange Membrane (PEM) fuel cells for more than 15 years at the Department of Applied Electrochemistry at KTH. He says the business vision behind MyFC is to commercialize fuel cell technology and contribute to the development of environmental technology.

He says the charger is the first step toward building fuel cells in laptops. The launch of our charger is a strategic move to gain wide acceptance of fuel cells throughout society. These chargers may be considered expensive now; but in the longer term, as they reach a mass market, they would go down in price.

Fuel cells can already be found in electric cars, trucks and buses, and backup electrical power supply systems for hospitals and cogeneration plants. The process by which fuel cells generate electricity is considered to be safe and environmentally-friendly, and the only by-product is water vapour. The fuel cell system is passive and has no fans or pumps.

Researchers say that these fuel cell chargers are faster and more reliable than solar chargers. The main target groups for MyFC PowerTrek are those who travel or live in remote areas of the world, outdoor enthusiasts and aid workers. The charger is both a fuel cell and a portable battery, providing a direct power source as well as a storage buffer for the fuel. MyFC plans to open an online shop for its MyFC PowerTrek product. The company has already sold the technology to users in China, Japan, the U.S. and much of Europe.

www.sciencedaily.com

Self-Healing, Stretchable Wires Created Using Liquid Metal

Stretchable self-healing polymer



Microchannel filled with liquid metal

Researchers from North Carolina State University have developed elastic, self-healing wires in which both the liquid-metal core and the polymer sheath reconnect at the molecular level after being severed. "Because we're using liquid metal, these wires have excellent conductive properties," says researcher, "And because the wires are also elastic and self-healing, they have a lot of potential for use in technologies that could be exposed to high-stress environments."

The researchers first created tiny tunnels, called microfluidic channels, in a commercially available self-healing polymer using solid wire. By filling those channels with a liquid-metal alloy of indium and gallium, they were able to create a liquid-metal wire in an elastic sheath.

Because the wire is liquid, it can be stretched along with the polymer sheath. When the wires are sliced or severed, the liquid metal oxidizes forming a "skin" that prevents it from leaking out of its sheath. When the severed edges of the wire are placed back together, the liquid metal reconnects and the sheath re-forms its molecular bonds. The researchers are excited about this work because it allows them to create more complex circuits and rewire existing circuits using nothing more than a pair of scissors by cutting and reconfiguring the wires so that they connect in different ways.

Similarly, the technique developed by Dickey's team could be used to create complex, three-dimensional structures with connecting microfluidic channels, by cutting the polymer sheath into sections and reconnecting them at different angles with the channels still in alignment.

[Www.sciencedaily.com](http://www.sciencedaily.com)

Scientists Create 'Rubber-Band Electronics'



For people with heart conditions and other ailments that require monitoring, life can be complicated by constant hospital visits and time-consuming tests. But what if much of the testing done at hospitals could be conducted in the patient's home, office, or car?

Scientists foresee a time when medical monitoring devices are integrated seamlessly into the human body, able to track a patient's vital signs and transmit them to his doctors. But one major obstacle continues to hinder technologies like these: electronics are too rigid.

Researchers at the McCormick School of Engineering, working with a team of scientists from the United States and abroad, have recently developed a design that allows electronics to bend and stretch to more than 200 percent their original size, four times greater than is possible with today's technology. The key is a combination of a porous polymer and liquid metal.

With this technology, electronics are able to stretch a small amount, but many potential applications require a device to stretch like a rubber band, with that level of stretch ability we could see medical devices integrated into the human body.”

In the past five years the team has developed electronics with about 50 percent stretch ability, but this is not high enough for many applications. One challenge facing these researchers has been overcoming a loss of conductivity in stretchable electronics. Circuits made from solid metals that are on the market today can survive a small amount of stretch, but their electrical conductivity plummets by 100 times when stretched. This conductivity loss really defeats the point of stretchable electronics.

The team has found a way to overcome these challenges. First, they created a highly porous three-dimensional structure using a polymer material, poly(dimethylsiloxane) (PDMS), that can stretch to three times its original size. Then they placed a liquid metal (EGaIn) inside the pores, allowing electricity to flow consistently even when the material is excessively stretched.

The result is a material that is both highly stretchable and extremely conductive. "By combining a liquid metal in a porous polymer, they achieved 200 percent stretch ability in a material that does not suffer from stretch. Once you achieve that technology, any electronic can behave like a rubber band.

www.sciencedaily.com

Forthcoming Tech Events

Spring World Congress on Engineering and Technology (SCET)

31st May - 2nd June, 2013

Wuhan, China

www.engii.org

2013 Spring International Conference on Advance in Physics (CAP-S)

31st May - 2nd June, 2013

Wuhan, China

www.engii.org

2013 Spring International Conference on Agriculture and Food Engineering (AFE-S)

31st May - 2nd June, 2013

Wuhan, China

www.engii.org

Semantic Technology & Business Conference (SemTachBiz 2013)

2 -5 June, 2013

San Francisco, United States, America

www.semanticweb.com

DAC 2013 - Design Automation Conference

2 - 6 June, 2013

Austin, United States, America

www.dac.com

The 1st International Virtual Conference on Advanced Scientific Results (SCIECONF - 2013)

10 - 14 June, 2013

Slovakia, Zilina

www.scieconf.com

Nordic Environmental Social Science Conference

11 - 13 June, 2013

Copenhagen

www.ness2013.ku.dk

Strategic Science in Antarctica Conference

24 - 28 June, 2013

University of Tasmania, Hobart

www.conference.antarctica.gov.au

8th International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE 2013)

3rd - 7th July, 2013

10 Boulevard Jeanneteau, Angers, France

www.enase.org

2nd International Renewable Energy and Environment Conference (IREEC - 2013)

4 - 6 July, 2013

Kuala Lumpur, Malaysia

www.allconferences.com

Nutrition and Healthy Ageing Conference

15 - 18 July, 2013

Newcastle upon Tyne, London, United Kingdom

www.nature.com

International Science and Technology Conference (ISTEC)

18 - 20 July, 2013

Songdo-Dang, Korea

www.iste-c.net

11th ICMGP International Conference on Mercury as a Global Pollutant

28 July - 2 August, 2013
Edinburgh, United Kingdom
www.mercury2013.com

Gordon Research Conference: Cell Biology of Metals

28 July - 2 August, 2013
Newport, United States
www.grc.org

Microscopy & Microanalysis 2013 Meeting

4 - 8 August, 2013
Indianapolis, United States
www.microscopy.org

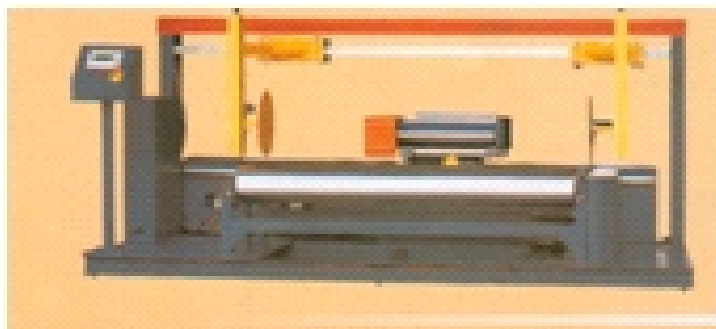
Tech & Trade Offers

Orbital Wrapping Machine

The orbital wrapping machines are designed for wrapping automatically furniture cabinets, Doors, Sheets, Borads and other bulky products, protecting them of dirt, dust and dampness during the transport and storage. One can pack Fabric Roll, Denim Roll, Pipes, Carpets, Aluminum & Wooden Bars, Rubber, Cartons, Doors, Leather Product, Cabinets, Glass, Plastic Roll, all types of cloth rolls, Lengthy & Bulky products etc.

MH-FG-2200 Fabric Roll Wrapping Machine by Youngsun

- Transducer could adjust the speed depend on the different packing require
- After product finished packing will push out the product automatic
- The carriage could use international standard film which diameter use 250mm, core is 76mm and height is 76mm
- PLC could command automatic and enactment coils depend on different size
- Electronic photo eye could automatic measure the product length



Tech & Trade Offers

Strapping Machine

This is a special strapping machine which have some additional new features. These features are compact mechanical control head, electronic tension control, sensor controlled heater, large main switch etc. With adjustable table height workers do his job very easily and adjust this machine according to their desired height. Sensor controlled heater increase its life and maintain its temperature when working.

T-502 (Genesis TP-502) Semi & fully automatic strapping machine

- Strap width 5mm-13mm
- Strap tension 8-45kg
- Adjustable table height 780mm-950mm
- Net weight 70kg
- Power 110V, 220V, 230V 50/60 Hz Ip



Company Contact

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