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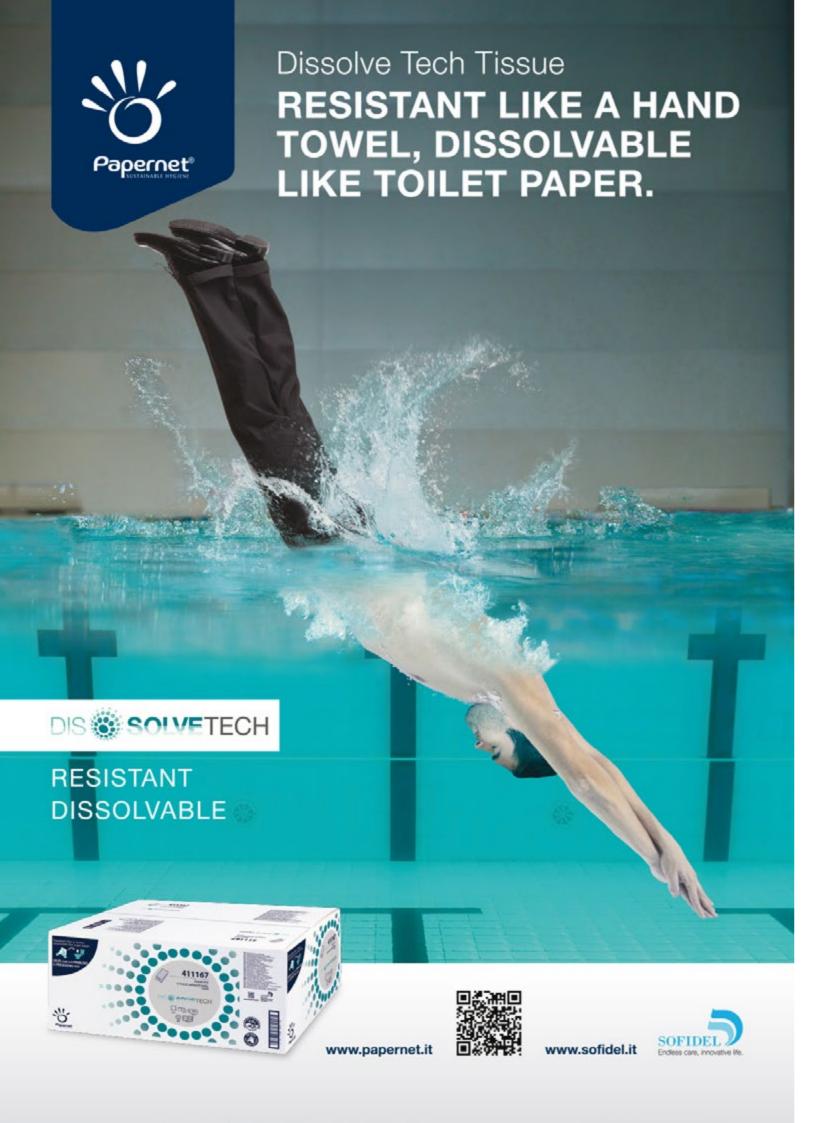
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FULL SPEED AHEAD!

CHIARA MERLINI

The year's big appointment in the professional cleaning world has been over for a while now, and we've had time to reflect and draw conclusions. I think the words of Giulio Guizzi. Afidamp Ambassador, acute observer and historian of the sector, on what he saw in Amsterdam are well worth considering. "I had the sensation of a reawakening of interest and a widening of the audience, both of which were confirmed by the number of visitors and participants and their international dimension. ISSA Interclean renewed its world leadership," Guizzi commented. "Exhibitions today are no longer just 'showcases for innovation' - the Afidamp Ambassador continued – but play an important role in human relationships as the places in which bonds are made and strengthened at international level". In a world in which technology is making its mark everywhere and it is certainly much easier to interact and communicate than even just a few years ago, it's the human element that

still makes the difference. It is the relationships created when people meet 'on the real plane' that establish a 'bridge' between different cultures. Giulio Guizzi concluded on a theme he bears close at heart: "The more history I study, the more convinced I become of the shortcoming typical of Europeans that is their reluctance to grant cultural significance to their chosen profession, cleaning". Granting 'cultural significance' in the cleaning world means knowing the history of the art, being proud of the progress that has been made and proud of what you do, and always looking ahead.

Look ahead: this appears to be

the conclusion. With no false hopes, without overestimating expectations but also without resignation or even worse, playing the victim. Today's industrial world, and the professional cleaning sector in particular, means this: it's up to us to marshal our powers of resilience, look ahead. rediscover our enthusiasm, and search for new solutions. Although Christopher Columbus was sure he'd discovered the Indies but actually discovered the New World instead. all in all, isn't it better to leave and find something new than sit around at home moaning about how bad things are?



Worldwide new

NEWS FROM 3M

3M announced that Dr. Ashish K. Khandpur has been appointed senior vice president, Research and Development and Chief Technology Officer. He replaces Dr. Frederick J. Palensky, who is retiring after a successful 37-year career with the company. "Ashish is a highly accomplished and respected leader with a proven track

> record of success across multiple 3M businesses and geographic regions," said Inge G. Thulin, 3M's chairman, president and chief executive officer. Dr. Khandpur joined 3M in 1995 in the company's adhesive technology center in St. Paul. H e was born in India and earned a bachelor's degree in Chemical Engineering from the Indian Institute of Technology in Delhi, and a Ph.D. in Chemical Engineering from the University of Minnesota, specializing in polymers. Dr. Khandpur's most recent leadership role was vice president and general manager for 3M's Personal Safety Division. With \$31 billion in sales, 3M employs 89,000 people worldwide and has operations in more than 70 countries.



AMBIENTA SGR BUYS 100% OF IP CLEANING

Ambienta SGR, the largest European private equity fund specialised in the environmental sector, is pleased to announce that it has completed the acquisition of a 100% stake in IP Cleaning SpA, a leading manufacturer of professional machines and equipment for the professional cleaning sector. Ambienta is investing c. EUR50 million in the company, primarily to finance the industrial revamp and the reorganisation of the company.

The agreement has been signed following exclusive negotiations that also involved current lenders (UniCredit, Intesa, Ubi, Bper, Banco Popolare, IKB, MPS), who agreed to a rescheduling of outstanding debt. IP Cleaning manufactures its products in six plants located in the North of Italy and employs c. 1,000 people. It is a truly global company with c. 90% of sales recorded outside Italy,



of which a significant portion outside Europe. Ambienta intends to build upon IPC's existing sustainability focused product range through further investments in R&D. Federico De Angelis will be appointed as CEO and Chairman The business plan will be focused on increased investment in product development, further integration of existing business

The transaction was managed by Ambienta's Chief Investment Officer, Mauro Roversi, and Investment Manager, Francesco Lodrini

ELEVATOR BUTTONS. **GERM'S FRIEND**

A new Sunnybrook-led study of three large urban hospitals has found e that elevator buttons are more likely to be colonized by bacteria than toilet surfaces (the study was published July 8, 2014 in Open Medicine Journal. "Elevators are a component of modern hospital care, and are used by multiple people with ungloved hands who will later go on to make contact with patients", says study co-author Dr. Donald Redelmeier, a staff physician in the division of general internal medicine at Sunnybrook



Health Sciences Centre and a researcher with the Institute for Clinical Evaluative Sciences (ICES). At each hospital, 120 randomly selected interior and exterior elevator buttons were swabbed over a 10-day period. These were compared against swabs of toilet surfaces in men's washrooms, including exterior and interior entry-door handles, the privacy latch and the toilet flusher. 61% of the elevator button samples showed microbiological growth, compared to only 43% of the toilet surface samples. Bacteria included Staphylococcus, Streptococcus, Coliform bacteria, Enterococcus and Pseudomonas. The strategies for reducing the frequency of bacterial colonization suggest to use alcohol-based hand sanitizer before and after touching the buttons.

ANGLICAN CHURCHES TOWARDS THE

'GREEN'

World Council of Churches, representing 300 institutions including the Church of England, set to phase out oil, gas, and coal holdings. The Church of England is among a group of 300 Anglican churches backing the worldwide fossil fuel divestment movement.

The Central Committee of the World Council of Churches (WCC), whose members represent 590 million people in 150 countries, this week agreed

to phase out its own fossil fuel holdings and encourage its members to do the same, according to environmental campaign 350.org.. "There was an explicit wish at the Finance Committee to include fossil fuels as one of the sectors where the WCC will not invest in, based on decisions to divest from fossil fuels taken by member churches in different parts of the world", said Guillermo Kerber, who co-ordinates the WCC's work on care for creation and climate justice, in a statement released by



Steven Ashkin did these thoughts watching the World Cup. "I have been struck by how sports inspire its faithful followers. Regardless of age, gender, race, color, religion, economic means or political affiliation; sports can overcome the barriers that separate; and inspire us to become the best version of ourselves. Imagine what we could do if our sports stars and leaders inspired us to work together to create a more sustainable future? Imagine if they encouraged us to be more efficient with the use of energy, water and other materials conserving more and

wasting less; using products that reduced the risk of harm to people and the environment; being better stewards. Just imagine... ".

Green Sports Alliance in a very short period of time has grown to over 250 teams and leagues including the NFL, NBA, WNBA, MLB, NHL, MLS, major colleges and more; with a specific goal of helping sports facilities reduce the environmental impacts associated with how they operate. While this isn't quite 'saving the world', it is a start, it's important and it's fun! Ashkin adds: "I am honored to serve on the Alliance's Board of Directors and lead an effort to write a "Playbook" designed to help sports facilities "green" their cleaning programs".



GREEN

CLEANING

IN SPORTS

JAPANESE TRAIN-CLEANERS

Possibly the world's fastest cleaners are the team responsible for cleaning the Japanese bullet train between each journey. The Japanese cleaners team is said to be able to clean an entire train in seven minutes flat. The Japanese bullet train is capable of speeds up to 200kph and more than 300 trains are in service



every day. The average stop time is just 12 minutes and since it takes five minutes for passengers to alight and board, only seven minutes are left for the cleaning operation to take place. As the train arrives at the Tokyo platform, cleaners armed with rubbish bags line up by the doors and bow as it pulls in. Holding open their bags, the cleaners thank the alighting passengers for handing over their discarded newspapers, drink cans and wrappers. Staff then run through the train picking up further rubbish, replacing dirty seat covers, wiping down tray tables, sweeping floors and checking the over-

seat luggage racks for rubbish. When the operation - which has become known as the "seven-minute Shinkansen theatre" - is complete, the cleaners line up by the train again and perform a second bow before departing for their next job.

EVENTS

2014

September 3rd-4th Glasgow, Scotland

CLEANING EXPO SCOTLAND

The Scottish Exhibition and Conference Centre (SECC), a worldclass exhibition center in the heart of Scotland prepares to host the first edition of cleaning Expo Scotland. www.cleaning-expo.com

September 17th-19th New Orleans, LA, USA

IFMA'S WORLD WORKPLACE **CONFERENCE & EXPO 2014**

The major event for the world of Facility Management.

www.worldworkplace.org

September 18th-20th Bangkok, Thailand

PULIRE ASIA PACIFIC 2014

It is an international platform dedicated to the latest industry news for the cleanliness and hygiene which presents trends and solutions for professional, industrial and institutional sectors.

www.pulire-asiapacific.com www.impact.co.th

September 20th-25th Berlin, Germany CMS CLEANING MANAGEMENT

International exhibition for the cleaning systems, Facility Management and services. www.cms-berlin.de

From 30 September to 2 October 2 Tampere, Finland

FINNCLEAN

SERVICES

This exhibition provides visitors with information on the latest industry trends.

www.tampereenmessut.fi www.finnclean.fi

September 25th-27th Istanbul, Turkey ISSA/INTERCLEAN **ISTANBUL**

International trade show for the cleaningh industry in Eurasia. www.issa.com

October 3rd-6th Fiera Milano Rho, Italy

EXPO DETERGO INTERNATIONAL

International Specialized Exhibition of Equipment, Services, Products and accessories for laundry, ironing and cleaning of fabrics and Engineered in general.

www.expodetergo.it

October 9th - 11th Rome, Italy **EOLICA EXPO MEDITERRANEAN** ZERO EMISSION

Renewable energy, energy production, software systems, water treatment.

www.zeroemission.eu

October 14th Melbourne, Victoria, Australia **AUSCLEAN 2014**

The exhibitors are suppliers of equipment, services, chemicals, hygiene products, safety products, services, pest control, waste management, energy management. www.auscleanpulire.com

October 20th-23th Bolzano, Italy HOTEL 2014

A program of events with high profile international speakers.

www.fierabolzano.it

October 21th-23th Dubai, UAE CLEAN MIDDLE EAST PULIRE www.afidampservizi.com/it info@pulire-india.com

October 21th-23th Moscow, Russia CLEANEXPO

info@internationalshow.it Major show of industry leading equipment and materials for professional cleaning, health and hygiene, laundry.

primexpo.ru/ru

November 4th-7th Orlando, Florida, USA ISSA/INTERCLEAN NORTH **AMERICA**

It attracts up to 16,000 top decisionmakers.

www.issa.com

November 5th-7th Almaty, Kazakhstan

CLEANEXPO KAZAKHSTAN

It is a unique project for Kazakhstan: to provide a platform to show the products in the supply chain. www.cleanexpo.kz/en

November 5th-8th Rimini, Italy **ECOMONDO** 18th International Trade Fair of Material & Energy Recovery and Sustainable Development. www.ecomondo.com

2015

February 25th-27th Mexico City, Mx ISSA/INTERCLEAN LATIN AMERICA

International trade fair for the cleaning industry in Mexico, Central and South America.

www.issa.com

March 10th-12th London, United Kingdom THE CLEANING SHOW One event for all sectors of the industry and the only one supported by all member associations of the British Cleaning Council. www.cleaningshow.co.uk

From 31 March to 2 April Paris, France EUROPROPRE

The exhibition of solutions for the hygiene and cleanliness, and also for the multiservice.

www.europropre.com

May 19th-21th Verona, Italy **PULIRE**

The most professional cleaning exhibition in Italy, which hosts offer of goods full of machines, chemicals, equipment and components for professional cleaning. www.pulire-it.com











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obots have replaced humans in the assistance of performing those repetitive and dangerous tasks which humans prefer not to do, or are unable to do. Now, the robots are having a lot of importance in the world of cleaning. The term 'robot' was first used to denote fictional automata in a 1921 play R.U.R. Rossum's Universal Robots by the Czech writer, Karel Čapek.

THE ROBOTS AT THIS TIME

robots are now in

Commercial and industrial

widespread use performing jobs more cheaply or with greater accuracy and reliability than humans. Robots are widely used in manufacturing, assembly and packing, transport, earth and space exploration, surgery, weaponry, laboratory research, and mass production of consumer and industrial goods. The domestic robots for cleaning and maintenance are increasingly common in and around homes in developed countries. Commercial and industrial robots are now in widespread use performing jobs more cheaply or with greater accuracy and reliability than humans.. Mobile robots are the focus THE USE OF MACHINES FOR MANY JOBS CAN BE AN OPPORTUNITY

WORLD OF Cleaning

TEXT
ANGELA
CHIARAMONTE

ROBOTS IN THE

of a great deal of current research and almost every major university has one or more labs that focus on mobile robot research.

There are many jobs which humans would rather leave to robots. The job may be boring, such as domestic cleaning, or dangerous, such as exploring inside a volcano.

SERVICE ROBOTS

A domestic robot, or service robot, is an autonomous robot that is used for household chores. Thus far, there are only a few limited models, though speculators, such as Bill Gates, have suggested that they could become more common in the future. Many domestic robots are used for basic household chores. While most domestic robots are simplistic, some are connected to WiFi home networks

or smart environments and are autonomous to a high degree. There were an estimated 3,540,000 service robots in use in 2006, compared with an estimated 950,000 industrial robots. *In-home robots* - This type

of domestic robot does chores around and inside homes. Different kinds include: Robotic vacuum cleaners and floor-washing robots that clean floors with sweeping and wet mopping functions. Cat litter robots are automatic self-cleaning litter boxes that filter clumps out into a built-in waste receptacle that can be lined with an ordinary plastic bag.

Outdoor robots - Outdoor

robots are domestic robots

that perform different chores that exist outside of the house. Robotic lawn mowers are one type of outdoor robot that cut grass on their own without the need for a driver. There are automated pool cleaners that clean and maintain swimming pools autonomously by scrubbing in-ground pools from the floor to the waterline in 3 hours, cleaning and circulating more than 70 US gallons (260 l) of water per minute, and removing debris as small as 2 µm in size. Window-washing

robots commonly use two magnetic modules to navigate windows as it sprays cleaning solution onto microfiber pads to wash them. It covers about 1,601 square feet (148.7 m2) per charge. Gutter-cleaning robots can blast through debris, clogs, and sludge in gutters, and brush them clean.

THE OPINION OF AN EXPERT

Ed Selkow is president and CEO of Janitorial Growth Solutions, a consulting firm focused on the jansan industry. He speaks in an article about the growth that had robots in the world of cleaning. This growth is set to increase further in the future.

"2014 is the year that – he said - cleaning industry leaders, both in supply and services, will have to get used to robots". Selkow spoke about some robots already in use.

- Underfloor air distribution (UFAD) flooring is raised flooring that often hause cables for large computers rooms. These airdistribution systems require periodic cleaning to assure positive indoor air quality (IAQ) since as we know, poor IAQ in a tighly closet building system is health hazard and can be life-threating to the occupants. The Honda Co. Unveiled a

The Honda Co. Unveiled a state-of-art robot, Asimo, in 2012. Asimo is a fully functioning humanoid robot. Humanoid robots are service-oriented with one primary pur pose to provide personale care for an aging population. Basic cleaning is sure

to become part of their routines in time, especially since today there are already cleaning robots in hospitals that are used to disinfect patient room.

- A specific windowcleaning robot was identified as note-worthy this year at the *Consumer Electronics Show* by the major press. However, there are several windowcleaning robots now in use, including one that was designed to clean solar panels.
- Robotics designed within the service industry are now available to do everything from clean pools to mow lawns to clean gutters.

The price of computational systems (the brains of the robot) is going down, and the proliferation of robots in service industries is about to expand exponentially, according to Rodney Brooks, chairman and chief technology officer of the Boston, MAbased Rethink Robotics. a world leader in robotic technology, interviewed from McKinsey &Co, the global consulting firm. Cleaning robots for commercial and institutional facilities are counted in the professional category with vacuuming robots growing at 60 percent per year. The total sales of service robots is estimated at US\$ 4.3 billion.

AN INTERESTING TOPIC

Even the Financial Times has paid attention to the subject, talking about the characteristics of different robot cleaners.

Two of the latest top

models are Neato BotVac 85 and iRobot Roomba 880. In an article talking about these two robots: "Neato's new BotVac 85 includes important improvements on earlier models that help justify its premium price of \$600 (£450 in the UK). Two of the BotVac's most significant improvements, a side brush and a longer main brush, aim to make cleaning more effective. Other improvements include a larger dust filter, bigger dirt bin and what Neato claims is the most powerful suction in a robot vacuum cleaner. Like other robot cleaner makers. Neato has made its latest creation more intelligent and better at assessing the shape of a room before it gets started. The BotVac 85 can be set to clean several rooms, automatically returning to its base for recharging and resuming where it left off if necessary. It also detects and avoids stairs, and manages to navigate its way round most furniture. iRobot Roomba 880 is a

The robots, which have a distinctive round shape with a central power/home button, were the first to have a rotating side brush to reach into corners that other vacuum robots just cannot access. Now iRobot has another innovation. Both the \$700 (£460) Roomba 880 and the similar Roomba 870 (it costs less but lacks the 880's remote control) replace the bristle brushes used in most robot vacuum cleaners with two counter-rotating rubbery

part of the Roomba line of

floor cleaners.

"extractors".

AN INTERNATIONAL project

SOME PEOPLE
WAIT FOR
THE WORLD
TO CHANGE,
OTHERS
DEVELOP NEW
IDEAS

TEXT CHIARA MERLINI ime for sunshine, time to look around with renewed interest. This is the right moment to discover new projects and see who has the courage to head down new roads with curiosity. A few days ago, we met an "old" acquaintance of ours, Franco Cesaro, a man with projects, ideas, and plans to spare. He shared a few with us.

Does the cleaning world have any interesting new projects, anything encouraging at the moment?

"An important project with the involvement of companies in Italy, Switzerland, Austria, Germany, Slovenia, Great Britain, and Mexico is currently underway and is linked to cleaning only in the sense that one of the three companies selected (two in Europe and one in Mexico) to conduct an experimentation protocol is Fimap. The project leader is the University of Linz in Austria, and the research effort - funded by the European Union and set up by universities and research centers - will be applied

in three years: it began in October 2013 and will come to an end in the same month in 2016".

What's the scope of the study?

"The purpose is the desire to understand which factors are most capable of improving a person's working life and the respective organizational system. The point of departure is therefore the human being and the new relationship to be established between man and machine. A few companies that



have shown a marked tendency to innovation have been identified: Fimap, with Massimiliano Ruffo, was chosen for its experimentation capacity, which is not limited to products alone, and has become an experimentation center with a wider outlook. Three companies were chosen, one in Mexico and two in Europe. Thanks to its skills in organization analysis, Studio Cesaro & Associati was selected as one of these. The data gleaned from the research, which was conducted according to strict methodology and involves human resources and quality assessment managers, will be sent to Fondazione Bruno Kessler FBK in Trento, which has been assigned the task of distributing them step by

Tell us more.

SO-PC-PRO SUBJECT ORIENTATION FOR PEOPLE CENTRED PRODUCTION

This project is a part of the project funded by the European Union under the auspices of Program entitled FP7
Funding Scheme - EU
FP7-2013-NMP-ICT-FOF
"Workplaces of the future: the new people-centred production site" "Factories of the Future" - 2013 and envisions a research conducted in 3 years at various companies in the world of production.

THE EXPERTS

An international consortium headed by the University of Linz (Austria)



NICOLA FLORES E FRANCO CESARO (STUDIO CESARO & ASSOCIATI).

has been set up with the participation of scholars, engineers, psychologists, IT experts, and SMI entrepreneurs from all over the world.

WHO'S INVOLVED

The nations involved are Austria, Germany, Switzerland, Italy, the UK, Slovakia, and Mexico.

The purpose of the project

WHAT'S THE PURPOSE?

is to search for a new approach to productive units that puts people at the Specifically speaking, Studio Cesaro & Associati was chosen for Italy on the basis of the skills it has acquired with SMI and especially its experience in human resources all across the board, from headhunting and recruiting (authorized by the Ministry of Labor) to organizational analysis, business consultancy, international development programs, and technical occupational

psychology skills.

FIMAP was selected on

the basis of its attention

to human resources and its innovative spirit that is always ready for new experimentation, and the high quality of both its products and internationalization achieved despite its compact size (compared to multinationals with thousands of employees and associates). The company from S.Maria di Zevio was selected also because its owners and management were willing to take part and interested in improvement while creating well-being for every member of its organization at the same time.

JUST WHAT WILL BE

ANALYZED?

Specifically speaking, the researchers want to see whether providing workers at worksites with information, instruments, and knowledge for the re-design of the workplace is capable of having any positive effect on increasing wellbeing, the capacity for effort, and therefore reducing absenteeism, human error, and risk while researchers want to at the regular in established before the project will the project will the internation at world conferred the sector and it is capable of having any published in scandemic journed to the purpose.

increasing output and gratification.
This is a process that regards every aspect of the working environment: the possibility will be given to completely re-design the workplace, in fact, and to propose the modification of internal processes, changes, innovations in procedures, and support in relationships. An ambitious objective indeed!

THE METHOD

For the achievement of this objective, an information technology system that permits the free exchange of ideas, indications, and suggestions will be provided. Specific feedback sessions to reveal just how the workers are living the project and its modifications will be conducted at regular intervals.

Processes that permit the improvement of the

Processes that permit the improvement of the workplace through both top-down and a bottom up approaches (with suggestions from the workers involved in such processes and situations day after day) will also be analyzed.

DURATION

The project will be closely monitored for the entire period of analysis. During these three years, in fact, at the regular intervals established beforehand, the project will return to the international spotlight at world conferences for the sector and in articles published in scientific/academic journals, and will be shared through the mass media and publications by business branches related to the purpose.

THE WIDE RANGE OF **SOLUTIONS BY FIMAP** INSPIRED BY TECHNOLOGY. THANKS TO YEARS OF **EXPERIENCE**

TEXT CHIARA

his Veneto-based company that positions its products in the medium-top end has always wanted to be known for its propensity to innovation. It has developed machines that are smaller and smaller and more and more versatile over the years that meet the various needs of its clientele and ensure both high performance and easy use: an apparently simple recipe that demands constant and careful attention to quality, however.

Fimap presented its range of machines at the ISSA Interclean Show with a surprise: its latest innovation was enclosed in a 'black box' in an area closed to the public reserved to only a few selected clients prior to official presentation!

AROUND THE MACHINES...

We were permitted to inspect more than one new

development from close up, however, thanks to Fimap Product Manager Antonio Incrocci, who presented all the characteristics. As Mr. Incrocci demonstrated, much of this innovation is the fruit of all the experience acquired by working with different machines for the optimization of production in the context of global resource economy management and the acquisition of technology.

GENIE LI-ION

Apparently not much has changed: this washer-dryer is aesthetically the same as the previous models in the line, but the news lies in the battery, which no longer contains lead but lithium. This creates numerous advantages, from the over 30% reduction in weight compared to traditional lead battery models (the machine weighs less than 50 kg) to the extended operational autonomy. thanks to the 2-hour

recharging time. The cost might have increased but so have the advantages: a lighter machine with longer working autonomy offers a big help to those who have to perform cleaning many times a day and must transport the machine from one place to another in a van. The one-battery version works with a standard battery recharger (the two-battery model has its own special type).

MMX

Where is the innovation in the range of micro- to small washer-dryers? Suited for the cleaning of floors of 1,200 to 1,750 square meter areas, in this case, the new feature of the MMx is represented by a model that has been renewed thanks to experience and technology of its "sister model", the iMx. With a 50 cm work track, this walk-behind washer-dryer uses the same electronics and componentry already consolidated in the iMx, such as the base, the wiper support and the wipers. These parts are made in die-cast aluminium and are therefore stronger and treated for resistance to corrosion. The application of this technology gives the model a thorough renewal.

VACUUM CLEANERS

Among the many other products presented, the single-phase dust/liquid vacuum cleaners also deserve a special word. The range here has been completely renewed with the FV 30/60/80 models that differ by capacity. The news lies in the

"WETorDRY" system: the possibility to suck both dust and liquid at the same time without requiring the change of filters thanks to the new-concept head. What's more, the filter can be cleaned without even interrupting operation thanks to "AUTO-CLEAN" technology. And that's no little advantage!

All this is complemented

by the news in the GPRS system that provides direct access to machine status information: where it is, whether it's working or not, and for how long it has been running, the battery charge level, and any malfunctions present. This solution has been developed particularly for clients who intend to work with the machinefleet system because it guarantees total and constant control over the machines and better overall management while avoiding machine standstill times.

All the Fimap products presented at the Issa Interclean Show complete an ambitious project that intends to make professional cleaning more accessible to everyone and open up the horizons, bringing quality and efficiency to the cleaning of surfaces in any sector. Fimap products reflect the company's mission: a combination of innovation, quality, simplicity, and design in the manufacture of reliable, technologically advanced products that make cleaning work easier as the result of a perfect

equilibrium in design.



he research literature has been consistent in finding that workplace characteristics affect the level of stress and number of health problema experienced by workers. According to the EU Labour Force Survey nearly 28% of respondents, corresponding to approximately 55.6 million European workers, reported that their mental well-being had been affected by exposure to psychosocial risks. Too little time and too much work was the most commonly selected main risk factor (23%). Among workers with a work-related health problem, 'stress, depression or anxiety' was reported as the most serious health problem by 14%. Moreover, in the 5th European Working Conditions Survey, around 45% of workers reported having experienced, during the previous three years, some type of organisational change affecting their work environment, and 62% reported working to tight deadlines. Managers are also aware of this issue, with the European Survey of Enterprises on New and Emerging Risks finding that 79% of European managers are concerned about stress in their workplaces. At the same time, less than 30% of organisations in Europe have procedures for dealing with workplace stress, harassment and third-party violence. Employers have a legal responsibility to reduce risks to workers' health

and safety stemming from

the Framework Directive (89/391/EEC), and this also includes psychosocial risks. Nevertheless, in many organisations there is an erroneous perception that addressing psychosocial risks is challenging and will incur additional costs when, in fact, the evidence

suggests that failure to address these risks can be even more costly for employers, workers and societies in general.

GUIDELINES TO HELP ESTIMATE THE COSTS

Several guidelines developed to help

HEALTH CARE COSTS FOR CVD IN THE EU COUNTRIES (IN € THOUSANDS)

Country	Total health care costs for CVD	Cost per capita	Percentage of total health expenditure
Austria	2 338 617	280	8%
Belgium	2 374 817	221	6%
Bulgaria	347 877	46	13%
Cyprus	66 750	84	7%
Czech Republic	1 567 633	150	14%
Denmark	1 244 403	226	5%
Estonia	166 457	124	17%
Finland	1 958 752	368	12%
France	12 731 261	198	6%
Germany	30 679 159	374	11%
Greece	2 799 545	249	11%
Hungary	998 760	100	14%
Ireland	925 547	208	6%
Italy	14 488 331	241	10%
Latvia	203 355	90	17%
Lithuania	250 913	75	12%
Luxembourg	133 045	270	4%
Malta	48 511	117	11%
Netherlands	5 797 817	352	8%
Poland	4 157 650	109	17%
Portugal	1 215 392	114	6%
Romania	802 565	37	12%
Slovakia	594 854	110	10%
Slovenia	263 352	130	8%
Spain	7 935 489	173	8%
Sweden	2 430 301	263	8%
United Kingdom	9 635 790	156	6%
Total EU	106 56 940	212	9%

Source: Nichols et al. (2012).

organisations obtain a better understanding of the estimated financial cost to them of workplace psychosocial risks and stress have been found These guides vary in complexity, but all are based on the inductive approach (i.e. an estimation method in which individual costs for identified categories are calculated and summed to obtain the total cost of stress or psychosocial risks). However, it is recognised that in some organisations, particularly micro- and small-enterprises, available data is usually limited and it may not be feasible to include all of the possible cost-generating factors when calculating the financial burden of psychosocial risks. A review identified seven aspects that needed to be estimated in order to obtain a total cost of work-related stress to the organisation: stressrelated sickness absence: premature retirement; staff replacement costs; grievance and litigation/ compensation costs; damage to equipment and production resulting from accidents and mistakes; reduced performance/ productivity; and loss of public goodwill and reputation.

The Chartered Institute of Personnel and Development in the United Kingdom published a report examining the business case for managing stress. The report also provides guidance to enable to organisations to estimate the costs of work-related

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stress. The categories taken into consideration and some examples of calculating the cost (based on the data from the United Kingdom) are presented in the table below.

GUIDELINES TO ESTIMATE THE COSTS OF WORK-RELATED STRESS

Sickness absence - First, estimate the proportion of sickness absence that is stress related. Alternatively, research averages can be used, such as for example the NHS Scotland's estimate that between 30% and 60% of absence is stress related. Secondly, estimate the annual cost of sickness absence per employee. Alternatively, the CIPD estimated this figure to be £666 per employee. Third, multiply the figures from steps 1 and

2, and then multiply this

figure by the number of

with 10 employees that

conservative estimate of

formula would be (0.3 x

stress-related sickness, the

wants to calculate a

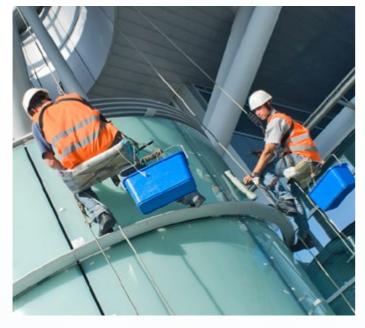
employees in the company.

For example, for a company

666) x 10 = £1 998.

Presenteeism - If an organisation cannot estimate the cost of presenteeism or productivity loss, national estimates can be used instead. For example, in the United Kingdom the cost of stressrelated presenteeism is estimated to be £605 per employee per year. Therefore, presenteeism

costs a company with 10



employees an estimated £6 050 per year. *Turnover* - The cost of stress-related staff turnover is calculated in similar way to the

cost of sickness absence.

First, the proportion of stress-related staff turnover is estimated. Alternatively, the CIPD's survey showed that 19% of UK turnover is stress related. Next, estimate the cost of replacing an employee. If this information is not available. the CIPD estimated this figure to be £5 800 for the average employee but it depends on employee role and sector. Finally, multiply the figures from steps 1 and 2 and then multiply this figure by the number of employees who have left the company. For example, if three employees have left the company in the past year, the cost of stressrelated staff turnover would be $0.19 \times £5800 \times 3 = £3$

Other costs - For example, costs associated with accidents and injuries,

workplace conflict, employee relations, insurance premiums **Costs related to stake holders** - For example, company reputation, brand and investor relations.

COST OF MUSCULOSKELETAL DISORDERS

The workers in the cleaning sector often have disorders of the musculoskeletal system.

All studies reported a relationship between MSDs (Muscolo Skeletal Deseases) and at least one psychosocial factor, most commonly job stress, low job satisfaction, low job control and high job demands. In another literature review, Many studies described a link between psychosocial factors (such as stress, low pay and benefits, long working hours, lack of job control, lack of social support) and MSDs including repetitive stress injuries (muscle injuries due to frequent usage of the same muscles such

as welding or typing on a keyboard) and pain in the upper limbs, neck, back and muscles.

The wide variety of

MSDs makes it difficult to estimate their cost with any accuracy; while some authors attempt to quantify the cost of MSDs overall, others focus on specific MSDs such as back pain or arthritis. At an EU level, it is estimated that up to 2% of GDP is spent on the direct costs of MSD, with back pain in the European workforce costing over €12 billion per year. It has been estimated that. in the United Kingdom, 'MSDs and joint diseases' cost the National Health Service £186 million. while the health care cost associated with rheumatoid arthritis is £560 million per year, rising to £1.8 billion when loss of employment and sick leave are included. Also in the United Kingdom, it has been calculated that the health care costs, informal care costs and production losses due to back pain totalled £10.67 billion. In the Netherlands, the annual cost of work-related repetitive strain injury is €2.1 billion, while annual cost of rheumatoid arthritis has been estimated at €1.6 billion in Ireland and €2 billion in Spain.

The information contained in this article have been taken from 'Calculating the cost of work-related stress and psychosocial risks' of European Risk Observatory – European Agency for Safetyand Health at Work (EU-OSHA 2014a, 2014b).

































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eeping an eye on the market, following trends, living with today's uncertainties complexity has become a way of life for anyone involved in the world of cleaning.

You need to be on the lookout constantly for signals indicating where to direct your energies, how to update strategies and how to find new markets, as well as keeping an eye on the international situation, whether consolidated or emerging, and the action required. To get an "inside" view, we met Toni D'Andrea, managing director of Afidamp Servizi. He has wide experience in predicting potential and development in the sector. Last June, there was a new trade fair launched in the field of professional cleaning, 'esCLEAN', in Madrid. It was organized by Aefmil (the Spanish association of manufacturers and importers of cleaning equipment).

Was this fair significant? Did it give a clear indication of how things are going?

did not give a true picture of the situation in our sector. In fact we were included as an unfinished "extra" in a fair dedicated to the world of urban hygiene, waste management, recycling .. Machinery and equipment for indoor/outdoor cleaning were exhibited in a

So are there any signals which could give an indication of how the market is going?

"The most interesting

contribution this year was again from ISSA (Interclean Amsterdam). Many companies presented new products (Comac, Ghibli, IPCleaning...). However, this was not a reflection of the general attitude from Italy which showed little driving force. German companies, in a moment of crisis, invest in different sectors, while the companies in our country adopt a more passive approach and wait for things to get better and for a return to the flourishing economic conditions of the past."

The future does not look promising or dynamic. How can we get out of this standstill?

"Speaking from my own

experience, I can give a small example. After four years of "freeze", we proposed a project called Pulire Asia with the aim of putting Italian companies back in the game in a sector in which, until a short time ago, we had 65% of the market share, in one of the few areas with a growing economy. The ICE (Institute of Foreign Business) was ready to provide financing on condition that an adequate number of companies representative of our country, participated. The costs were very attractive to enable even the smallest companies to find new opportunities and possibilities. But it came to nothing. This is

the mentality which will stop our businesses from moving forward."

Is the so-called Bric (Brazil, Russia, India, China) area still as promising as it once was?

"Russia certainly still

with some privileged

has a growing economy.

However, in the past, it

made bilateral agreements

suppliers. Among these is Turkey, which has a production profile very similar to the Italian one. It consists of small and medium-sized companies which can fill clients' orders fast. So Turkey is a strong competitor for Italian companies as it guarantees fast delivery and prices 30% lower than the Italian ones. Brazil, with a visible. growing economy, has a protectionist policy which penalizes exporters heavily with a duty of about 40% on goods. This means that, in practice, companies which produce outside of Brazil are out of the game. IPCSoteco, Karcher, IPCleaning (some of their machines) are companies which produce locally (Tennant has now also bought a local production facility). South Africa is also an interesting market, but Italian companies don't have the drive to launch themselves on it."

From what you say, it seems that, apart from the current general difficulties, it is the attitude of Italian businesses in our sector which is holding back development. Could there also be a different generations factor

involved?

"I don't think so. The

previous generation took a lot of risks and invested heavily in the sector. It was the first generation to believe in foreign markets. Now I see a creeping laziness, a type of collective lethargy which stops people looking outwards. People don't want to take risks, they lack the business mentality necessary for a country which needs to export as the internal market is limited. We have the resources. In the machinery and equipment sector, exports account for 75% of production. Why not look for other market areas outside Europe where there are great opportunities? They are up for grabs."

Does everything look negative then?

From where I stand, yes. And things are getting worse. For example, I wonder why so many companies put 70-80% of their budget into a single fair like ISSA Interclean, which is now wellestablished on traditional lines, while there is a shortage of visitors to Amsterdam from distant areas because they find what they want locally. Anyone who concentrates their resources on a single fair shows an inability (or unwillingness) to risk. As a general rule, it is the supplier who moves his product on the markets, not the opposite. All of this indicates a falling short and a loss of opportunity for new business. There is great untapped potential in this sector."



uality and standards of services are the two important points for the achievement. Who is in contact with many people should also consider the importance of providing cleaning and hygiene even in the washing room. This topic has been the subject of an article by Peter Barratt, technical manager for Initial Washroom Hygiene. Initial Washroom Hygiene undertook global rsearch to evaluate public hygiene habits.

the result of the research showed that 82% of respondents in the U.K. said that the place where they can spend their money and saving (which does not separate easily) must be absolutely clean. Even the hygiene of the staff has to be perfect, it says 79% of people. In particular, in the area we are talking about, 18% said that he would not return to the store if he had found the hygiene of the amenities to be poor. Says Barratt: "These findings highlight the financial and reputational value of improving hygiene standards, as well as the need for estblishments to educate their employees about the importance of personal hygiene. We know how hard people work in the retail sector, particularly during peak times such as the summer and festive seasons, but without good hygiene standards many customers will not return. It is therefore a serious issue, and one which business must face if they

HAND WASHING



are to remain buoyant in a competitive market".

HYGIENE ADVICE

The retail sector needs to focus on the critical points concerning hygiene. You must make sure that employees have good personal hygiene, especially clean hands and that the toilet facilities are available and kept clean.

The risk of losing customers

The risk of losing customers is real and therefore suffer financial losses and image. To this can be remedied with little tricks and tips to put into practice.

Peter Barrett suggests that

Peter Barrett suggests that we must encourage staff to wash their hands frequently and dry them well. Must also be available suitable products, sanitizers. The most effective kind are non-alcohol-based. In addition, you must to ensure thorough cleaning of the common areas. To do this the companies must commit to a professional deep cleaning at least twice

a year. All this in order to

avoid the accumulation of dirt in the most hidden places, the presence of microorganisms and the consequent contamination. Another point on which explanation is that the shelves, the same show room, and changing rooms are regularly cleaned with antibacterial wipes and food-friendly surface sanitisers, as well as ensuring that sanitising gels available in public areas. If a staff member contracts a virus such as Norovirus. remember that should stay away from the store for at least 48 hours after the symptoms have disappearad, to avoid contamination.

AROUND THE NOROVIRUS

Norovirus is a genus of genetically diverse single-stranded RNA, non-enveloped viruses in the Caliciviridae family. The known viruses in the genus are all considered to be the variant strains of a single species called Norwalk virus. The viruses are transmitted by contaminated food or water, by person-to-person contact, and via aerosolization of the virus and subsequent contamination of surfaces. Noroviruses are the most common cause of viral gastroenteritis in humans, and affect people of all ages.

Although having norovirus can be unpleasant, it is not usually dangerous and most who contract it make a full recovery within a couple of days. The virus affects around 267 million people and causes over 200,000 deaths each year; these deaths are usually in less developed countries and in the very young, elderly and immuno-suppressed. 'Winter vomiting bug' is a common term for noroviruses in the UK. because the virus tends to cause vomiting and to spread more easily in winter, when people tend to spend more time indoors and near to each other.

CONCLUSION

To ensure that good habits become the norm, encouraging staff to wash their hands properly with good quality products. The duration of handwashing must be equal to the time it takes to sing heappy birthday twice (approximately 30 seconds); thorough hand washing help to reduce and remove bacteria and viruses, especially if the time and quality of washing is appropriate, and that are dried well.

Products



FA new versatile and compact trolley

Vileda Professional is now introducing the **VoleoPro** trolley. It has been developed to meet the market demands for a truly professional trolley, where space is limited and a full-size trolley is too big. Compact design, flexibility and versatility have been the guiding principles in the product

development, and with its small footprint - only 0.5 m2 - VoleoPro is the ideal solution when space is tight or when the cleaning or storage area is limited. VoleoPro is produced in two configurations - Basic and Standard. One of the major advantages is that all large cleaning tools and accessories are kept within the trolley's outer

Two in one

TecnoDuo, by **IPC Pulex**, is a pratical, time-saving tool that cuts window cleaning costs and times. Made in higly impact resistant ABS, this professional tool resists to accidental falls and is ideal for use with poles. It combines the cleaning force of the MicroTiger washer and the qualità of te Pulex squegee in

one tool. Advantages: fast: helves the time for cleaning with poles; ergonomic: anatomic handle for a safe, non-slip grip even when wet; safe: no accidental falls thanks to SafeCone; pratical: just one tool instead of two; different size holders and rubbers available. Applications: window cleaning, cleaning of glass facades, cleaning of any other smooth surfaces.





Innovative dispenser

Dosely by **TTS** is an innovative mechanical dosage of detergent solution that makes possible the impregnation of cloths on demand only necessary to cleaning service, directly on the carriage of the operator and with the possibility to adjust when the correct dose of the solution required, also for each cloth. And above all, gives the operator greater autonomy and

flexibility with the ability to precisely adjust the humidity of each cloth on the spot (from a minimum dosage of 100 ml to a maximum of 400 ml). Setting yourself directly at the time of need according to the particular dirty conditions, the width of the area, the porosity of the floor and the type of cloth used, and avoiding waste of detergent.





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Compact and powerful street sweeper

CS2000 by <u>Comac</u> is a compact street sweeper, ideal to easily move in old town centers. It is equiped with a powerful vacuum turbine that ensures clean streets with only one pass and with all the needed accessories to clean also sidewalks, around benches and grassy areas. CS2000 is

very comfortable to use, thanks to the intuitive controls that are easy to reach from the driving position, and to the cab that offers full visibility. The hydraulic traction ensures the maximum safety and stability even on wet surfaces. A water recycling system reduces water consumption and stops. The frame is completely removable, to make inspections and maintenance easier.

Eco-Jet driers

<u>Vama</u> presents **Vision Air**, hands dryers with many advantages: Easy & ergonomics: use it with insertion of hands horizontally, which combines ergonomics with accessibility for all user categories. Less consumption... super speed & extreme energy savings: optimization of air flow through a system of 4 circular air blades: speed 425 km / hand drying in 10-12 seconds. Total power of only 1100 W, with absence of heating element to maximize power energy savings, for over 95 % compared to other drying systems. Design customer-oriented: developed and designed according to the study of customer needs and improving

all gaps of the existing models. Dual sensor startup and light sensors to alert water tray full / brush motors finishing/HEPA filter change need. All these features allowing easy monitoring of the life cycle of the product and minimize the need for technical assistance, in particular all urgencies dued to a lack of maintenance - monitoring by the final customer. Integrated care: antibacterial protection and environmental protection, guaranteed by the HEPA filter H13 against 99.997 % of bacteria present in the air and by the collection of residual water in the tank, no longer draining to the ground. Designing the future: contemporary design & completely Made in Italy.



Safety and efficiency in professional dishwashing

Hagleitner constantly develops innovations with sustainibility, safety and clear advantages for cliente in mind. This also hold true with the integralCLEAN, which has recently received both the Austrian ecolabel and the EU ecolabel. integralCLEAN is dosed automatically via the computer-controlled integralCOMPACT dispenser. The identification of the correct refill cartridge happens with a RFID chip (RFID = radio-frequency-identification-data — "identification with the help of electromagnetic

waves"), which is affixed on every cartridge. The chip holds valuable information such as production date, batch and part number. This technology ensures that product mix-ups are a thing of the past. Also new is the fact, that the control and dosing unit (dispenser) are separated. This allows an even more flexible installation. The display of the control shows all necessary information for the user. The further developed integralCLEAN dispenser with RFID echnology offers numerous advantages and makes professional dishwashing all the more simple, efficient and safe for the user.

The hidden soul that moves it all

Amer presents DC motors, Gear motors and Traction systems.

Amer is an Italian company with headquarters in Valdagno (Vicenza). Established in 1974, Amer manifactures high quality premanent magnet DC motors, gear motors and a wide range of traction systems to be used in the cleaning industry, material

handling, machine automation, medical and fitness equipment. Certified Vision 2000 and highly focused on research and development of new solutions to improve market standards, Amer is extremely relationship oriented and produces itself in providing unparallel service to customers. The company employs approximately 150 peoples and exports its products worldwide.



A high power charge

Nuova Brescia Accumulatori

NBA, established in Gambara (Brescia) in 1986, can provide solutions for many different applications thanks to its wide range of lead-acid starter batteries, stationary batteries and batteries for light or industrial traction that are completely manufactured in house.

NBA products are especially characterised by ease of handling, lightweight, easy maintenance,

high capacity and long life. For the manufacturing phase, which takes advantage of advanced assembly techniques, very high-quality materials are employed which ensure maximum components' strength and longer battery life. NBA has managed to be awarded the certifications UNI EN Iso 90001/2008, regarding company, management systems, and UNI EN ISO 14001, regarding environmental management systems.

The new generation of environmentally friendly paper

Eco Natural Lucart (Lucart Group) is synonymous with ecological conscious choice that meets end-users appreciation as well as eco-friendly customers. Eco Natural Lucart guarantees cost control: it reduces garbage disposal costs, because it allows to recycle beverage cartons that would otherwise end up in a rubbish dump; it controls running costs thanks to the product high performance along with the dispensing systems, which provide only the necessary amount of paper

without any waste. The quality of unbleached cellulose fibres. contained in beverage cartoons, can be compared to virgin fibres and therefore can guarantee excellent resistance, absorbance and softness features in the finished product. The innovative productive process uses a clean and zero-waste technology: it takes part thanks to a mechanical action that physically separates cellulose fibres from plastic material and aluminium found in beverage cartons, without using damaging substances for man and the environment. The range: Wipers, Handtowels, Toilet paper, Napkins, Kitchen towels, Dispenser.



the various plasmids are to

IMPORTANT

be gaining.

Italy has eradicated the disease in the years just after the Second World War, but currently there are any doubts about the risk of reintroduction due to exotic tourism and workers

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which is reminiscent of the buzz already in the pronunciation of these bothersome insects, are indicated numerous species of stinging insects that experts call "culicidae." there is no doubt that mosquitoes constitute a major hazard to humans because it represents the vector of malaria, a disease that in some parts of the world represents a mortal danger so much

as to launch an appeal

on appeals to the World

he term "mosquitoes",

in foreign missions in risk Many towns in North and

Central Italy are colonized by species originally from South-East Asia: Aedes albopictus, also known by the evocative name of "tiger mosquito" for the clear rings of its livery.

In the areas of origin is unlikely vector of dangerous diseases in our latitudes; however, remains a blatant example of the possibility of colonization of our territories of exotic species and the necessary attention that should be given to the problem. Examples of similar situation are the rise of Tingides on the plane tree, now a widespread epidemic in all the trees in the city. Our plane trees is now a green chlorotic, indicating a state of suffering consolidated.

FIGHT AGAINST MOSOUITO IN CITY **BIOLOGICAL CYCLE**

From the time of oviposition to the "flickering" of the adult mosquito spend an average of two weeks. The variability is especially functional to temperature. This should be reported to the "group" Culex pipiens because in some species of Aedes egg, can remain quiescent for several months, usually all over the autumn and winter period. In detail, we can show that the egg in the reference species (C. pipiens) opens after two / three days after oviposition.

The young larva passes from the stage L1 to L4 stage with three changes

/ mute, each stage lasts from two to three days, further wetsuit carries our mosquito as pupae (mobile) that after forty-eight hours gives rise to the adult flying which, after a few days, making the coupling Then the cycle begins again as exemplified repeating a dozen times during the vear, of course, related to the climate. Adults live a few weeks, except for the adults that go towards winter which is delegated to survive the rigors of the cold season refuge in the basement, in the sewer, in sheltered places, not too

PROTOCOLS OF INTERVENTION **OVERWINTERING ADULTS** Residual And Fight Knockdown

- identify areas and niches to be treated.
- Carefully prepare solutions of Use.
- The choice of the product may be directed toward action knockdown in case you need not have active compounds, usually some residual action, however, is desirable.
- Check and adjust the equipment in order to get the kind of delivery and the extent necessary to fulfill the dosages.
- Safety, follow the instructions on the label (the general rule) control their own kit.
- Assess the results and evaluate the results in the warm season.

ACTIVE ADULTS fight knockdown (residual) Technique to be used only

in case of real necessity: in general, takes place concurrently with events and festivals made outdoors during the warmer is one of the key points to months; in places of social gathering; in dining places as anguriere, taverns, restaurants, etc.. Atomizers are used in medium and low volume doses calibrated, the minimum possible. Products to adopt environmental fate brief exception of the treatments on vegetation or even weed or ornamental in which a residual action is of undoubted more effectively. can carry other forms of

LARVICIDAL FIGHT

It is undoubtedly the preferred technique since it heartworm. affects the extent of weed in origin, a form of preventive action. The results are obtained only if it is possible to work on a percentage of outbreaks of reproduction significant. The choice of products should take into consideration the degree of pollution of the water in which you intend to act.

Pay attention: the fight against mosquitoes should be carried out with specific to allow the capitalization reference mapping and with careful, accurate and timely processing of work.

SCHEDULE OF WORK

We will repeat the key concepts in more than one occasion since, although obvious is often overlooked. For example, the fight against overwintering adults is often not realized, as well as the project phase and monitoring.

However, after seeing how and where to intervene is good to take care of when to intervene: careful planning get good results in a logic of economy of operation

WHY TAKE ACTION? **ECONOMIC ASPECTS**

The fight against mosquitoes, more often than not, is carried out for the harassment that these "flying syringes" procure; should not be forgotten, however, the health aspect that the bite of mosquitoes involves. Beyond the malaria, the mosquito disease, including viral infections, for humans and animals: just think of the dog

We will not go into detail in this chapter to avoid the risk of emphasizing aspects that Doctors are well aware of that and for the uninitiated can be a sort of scientific terrorism. For the economic aspects is essential, when you make a fighting mosquitoes on the territory of a certain size, frame this struggle in a well-studied, preferably formalized in a project, with detection techniques and data management, such as experiences. If is true that the

environment is a common heritage to be protected, and nothing authorizes us to deny it, it is necessary to act in a rational way and possibly integrated with everything that is done in this direction. Only in this way the objectives will be achieved safely and economically.

IT IS IMPORTANT TO TALK ABOUT THE VECTOR-**BORNE DISEASES**



The National Pest Management Association (NPMA) applauds the World Health Organization (WHO) for bringing attention to the dangers of vector-borne diseases on World Health Day, a designation highlighting public health problems around the world. Although the majority of vector-borne, or animal-transmitted, diseases are more prevalent outside the U.S., Americans are at risk from several mosquito and tick-borne illnesses. Dr. Jorge Parada, infectious disease specialist and medical advisor for the NPMA, said: "West Nile virus and Lyme disease remain a serious health problem in the U.S. The medical community has also been seeing sporadic cases of vectorborne diseases typically found in countries outside the U.S., which calls for greater awareness among the American public when traveling

and spending time outdoors." West Nile virus (WNV) and Lyme disease, two of the most common vector-borne diseases in the U.S. have seen an increase in recent years.

The Centers for Disease Control and Prevention (CDC) said that in 2013 there were 2,374 cases of WNV in the U.S., of which 114 were fatal. WNV is transmitted through the bite of a mosquito that has fed on an infected bird. In most cases the virus results in a mild infection, however, in extreme cases, it can be a potentially life threatening infection with high fever, head and body aches, weakness, confusion and even coma.

Lyme disease is transmitted by the blacklegged deer tick, and is estimated to affect approximately 300,000 Americans each year according to the CDC.

BEE HEALTH IS IMPORTANT



In April, Bayer CropScience opened its North American Bee Care Center in Research Triangle Park, N.C. The 6,000-square-foot, \$2.4 million center will support scientific research, product stewardship and sustainable agriculture to protect and improve honey bee health, as well as educate stakeholders and the public about the beneficial insects.

The center has a laboratory with a teaching and research apiary, honey extraction and hive maintenance space; interactive learning center; meeting and training facilities for beekeepers, farmers and educators; office space for staff and graduate students; and on-site

honey bee colonies, pollinator-friendly gardens and a screened hive observation area. The company recently concluded its second annual Bee Care Tour to promote the role of honey bees in the food supply. The tour stopped at five research universities, a tradeshow and in Washington, D.C., and featured a mobile hive, stewardship workshops, and presentations on issues like varroa mite research. Bayer says its Bee Care Program has helped promote and develop solutions to improve bee health for more than 25 years.

A SOUTHERN **CALIFORNIA** MAP OF AREAS **AT RISK**



Pro Pacific Pest Control has developed a rainbow-colored map that represents the susceptibility of obtaining an infestation for a variety of pest types (bed bugs, fleas, cockroaches, wasps, etc.) within their service area. Using Google Maps and their Fusion Tables application, the highlighted maps offer a unique visualization of vulnerability to pest problems within southern California.

The analysis was conducted by totaling all of the inquiries for each type of pest problem serviced, then categorizing into a city or Census-Designated Place (CDP). For the results, the total number of households within a specific area, provided by the United States Census

Bureau, was divided by its appropriate inquiry count to produce some very advantageous maps. To avoid duplication issues, all addresses with multiple services for the same pest problem were removed. Not only can this research be used for future projections, but also serve as a way to measure the effectiveness of their marketing efforts. The company stresses the need for accountability and this will allow them to identify and eliminate any advertising expense not working for their business. Pro Pacific will continue to refine their research to create a solid reporting tool that will allow them to make strategic decisions based on an accurate forecast.

ESTCONTROL