

Newsletter

September 2011

Factory Inspections – the day of truth

Arrival at the airport at 02:45 p.m. Through passport control, then pick up luggage and go through customs. Outside, a company's representative is already waiting. For this company, this is the critical stage of their application for oSa membership - the mandatory factory inspection. But how is such a factory inspection carried out? Is it difficult to get into the oSa? Is everything above board? Do we actually have a chance?



Factory inspection in Thailand

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Editorial



The economy is booming – the oSa, too!

Dear oSa – Newsletter readers!

Do the characters „20 VR 7748“ mean something to you? Under this number the oSa was entered in the Register of Associations in Bonn on 13 June 2000, three months after its foundation on 16 March 2000. Did you think of the 10-year anniversary last year? To be honest, we didn't either. We were in an economic crisis, which is now over. The economic upswing is felt everywhere. Our members benefit from an increase in grinding and cutting. And almost imperceptibly China positioned itself at the peak of the biggest merchandise exporters of the world.

China and oSa – this need not be a contradiction. Because the oSa sends a clear message about the highest level of abrasive safety. We do not make any compromises on this issue. And also Chinese manufacturers have acknowledged that safety pays in the end.

There still exist problems with product counterfeits that often originate from China. Here the government will still have to take many steps to instill among their fellow countrymen a feeling for the value of intellectual property. It was all the more important for our safety organization to finally register and protect the oSa®-trademark in China. It was a stony path. But after filing the trademark application in November 2000, our community trade mark was granted the well-deserved registration by the Chinese patent office on 9th October 2010.

The oSa will take advantage of this legal security in order to increase their action against product and trademark plagiarism. It must be our aim to promote the oSa safety philosophy also in China. A major importance is attributed to the Chinese oSa members selected in line with the strict admission criteria of the oSa. The uncharted territory on our safety map will be reduced – we are very confident.

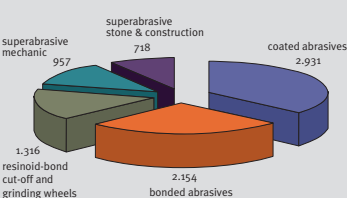
Pierre Balian
oSa-President

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Accidents with abrasive products – a look at statistics

As an old German saying goes “You cannot grind without generating chips or particles”. Those chips should however not fly into the eye, least of all cause serious injuries.

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PORTRAIT

Manufacturers of coated abrasives

In terms of turnover, coated abrasives globally represent the biggest group of all abrasive products. Of the total market volume for abrasives of approx. 8 billion USD, they represent a good third. The product variety is enormous. ► Read more on page 3

Factory Inspections – the day of truth ▶ Continued from page 1

These and similar questions might be asked by a company that, some months after the initial contact with the oSa-headquarters, has overcome all previous obstacles and now faces the crucial test. Without question, the requirements are high. But this is part of the oSa safety philosophy. We only want the best manufacturers, for whom user safety and economic success belong together. Who make enormous efforts in order to produce safe abrasives.

But back to our oSa inspector and the accompanying oSa representative. After the drive to the factory, we start with a short welcome and introduction. The applicant was asked in advance to include in this round the representatives from the area of quality management, testing, production, occupational safety and research and development. Often representatives from sales also join this round in order to function as interpreters for English and the language of the country.

First of all, the oSa inspector will randomly inspect the application form and documents. Already at this stage, lengthy discussions can arise e.g. if it is suddenly unclear which tools shall be labelled with the oSa®-trademark in future. For which product groups will the oSa®-trademark be applied? In which dimensions and specifications are these products manufactured? For which maximum operating speeds are these tools designed? Sometimes the product range has changed in the time from application to the implementation of the inspection.

After clarification of the questions arising from the application documents, a short

tour around the production site will generally be made in order to get a first impression of the production and be able to determine the further course and main focus of the inspection.

The actual factory inspection starts in the raw material store and ends in the dispatch department. It comprises all production steps up to the final tool.



Job cards help ensure traceability

Typical questions are: Which measures are taken in the company in order to ascertain constant quality and safety of the tools? Which tests are carried out after the single production steps? Is all stipulated test equipment available? Are these test machines calibrated regularly? In which intervals is the calibration taken out? What happens with flawed abrasives? Are the final tools stored in a way to prevent damage?

Abrasive products that are allowed to bear the oSa®-trademark meet the highest safety standards. Consequently, the working conditions and the operational environmental protection reflect the importance of the safety aspect in

the corporate philosophy. This is why the inspector and the oSa-representative also take into account if the workers are provided with personal safety equipment, as for example safety shoes, goggles and ear protection, and wear them where required by the working conditions.

The production facility must also comply with certain safety relevant minimum requi-

rements, regardless if this facility is based in Europe or Asia.

There is no room for power cables with brittle insulation, moulding presses without emergency stop or open laser welding machines without safety guards in oSa-approved companies. Furthermore, the environmental pollution must be reduced to a minimum. Dust extraction in the workplace, dust filters, interceptors and air washers, but also appropriate storage and disposal of production waste are self-evident for oSa member companies.

Much time is consumed by the verification of marking and user information: Is the tool marked with the correct maximum operating speed and rotation speed according to the stipulations of the safety standards? Is reference made to restrictions of use? Is it possible to trace back the product

in case of accidents, e. g. via the manufacturing or serial number? The traceability is verified by the oSa inspector based on case studies. The applicant must be able to trace back each tool to a limited production lot.

Depending on the product range, the steps outlined above take one day to one and a half days. The last day is all about product testing. After the inspector has satisfied himself that all test machines have been calibrated and the necessary test appliances are at his disposal, he goes into the storage facility and selects those abrasives that are the most critical in terms of safety in order to submit them to tests.

As a rule, the tests are carried out both on the site and at the test laboratory of the IFA based in Sankt Augustin. Besides burst speed and unbalance tests, also side load, bending and shear tests are carried out depending on the type of abrasive. The test requirements are stipulated in the relevant European Safety Standards for Abrasives.

After finishing the tests, the oSa-representative and the inspector reflect on the past inspection days and formulate the result: Have all requirements of the oSa been met or are rectifications necessary as regards the QM-system or product safety? In the worst case, the shortcomings are so extensive that the company cannot be granted oSa membership.

The result of the inspection is explained to the company and the necessary corrective measures are discussed. The oSa-representative determines with the company management the further procedure up to the final oSa membership. In the meantime, it is 05:00 p.m. After two exhausting, but also highly interesting days we hurry to the airport in order to catch the plane back home.

Applications for oSa-membership can be downloaded under
http://www.osa-abrasives.org/pdf/Membership_application_form_Oct2010.pdf.

Accidents with abrasive products – a look at statistics

As an old German saying goes “You cannot grind without generating chips or particles”. Those chips should however not fly into the eye, least of all cause serious injuries. Nevertheless this happens again and again. And sometimes the injuries are even fatal. 5.673 reportable accidents with hand-held cut-off grinding machines – this is the balance drawn by the German Statutory Accident Insurance for 2009. One of these accidents was fatal. Out of these accidents, 25 were so severe that the employee will be unable to work for many months or even years due to the consequences of the accident. He will figure in the statistics as recipient of accident benefits. Stationary grinding machines still caused 2.022 accidents, 8 of them necessitated the pay-

ment of accident benefits. It would be interesting to know the exact circumstances of each accident. We could certainly draw conclusions for our work in the oSa in order to make grinding and cutting-off safer. But this information is confidential. So we dare to take a deeper look into the figures at hand.

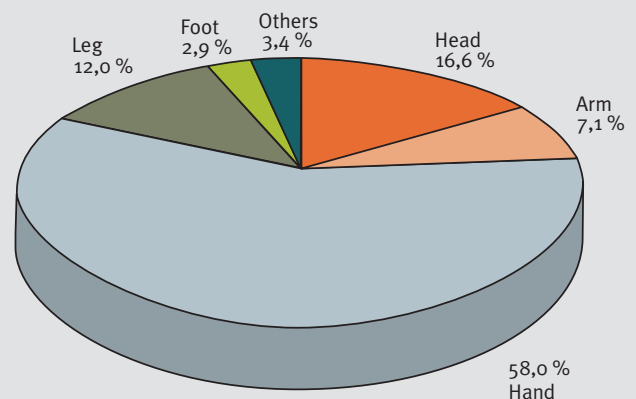
Out of the 5.673 accidents with hand-held cutting-off machines, most led to injuries of the hand (3.292), followed by injuries of the head (941) and approximately to the same number of injuries of the lower arm, the upper and the lower leg.

The question may seriously be posed why especially the risk of injury to the hand is so high. Was the work performed without protective gloves? And the high risk of injury to

the head - 760 reported injuries of the eyes/the eye region - can surely only mean that the grinding and cutting-off was performed without adequate eye or face protection. These are frightening figures, all the more as they only reflect the tip of the iceberg: reportable accidents in the

professional range in a single country. They show that much more clarification is necessary regarding the correct handling of abrasives. This is also an important task of the oSa. For this purpose, the Never-Always-Poster can be helpful, which are now available for members and their customers (see page 4).

Accidents with cut-off grinding machines according to type of accident (5.673 total)



MEMBER PORTRAIT

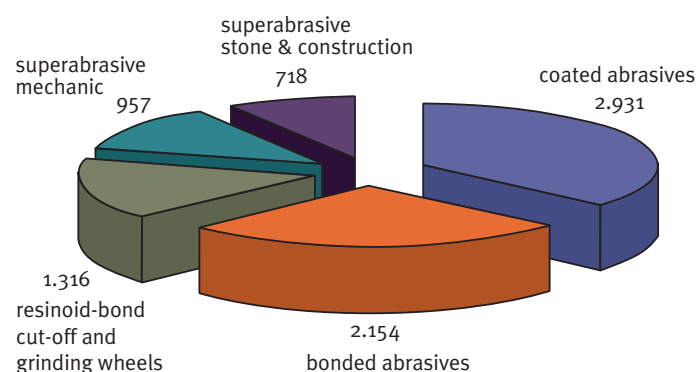
Manufacturers of coated abrasives

In terms of turnover, coated abrasives globally represent the biggest group of all abrasive products (see fig.).

Of the total market volume for abrasives of approx. 8 billion USD, they represent a good third. The product variety is enormous. There are abrasive papers and fabrics, which are used purely manually.

Everyone knows the abrasive sheets that are used to work on the window frame before applying fresh paint. There also exist numerous high-tech products with which to obtain excellent surface finish or enormous machining rates. The finest abrasive grains are also found in this product range. The FEPA-grit sizes reach up to P 2500. In contrast, the finest grains for bonded abrasives are “only” F 2000.

World market for abrasives (in million USD)



For the oSa, rotating tools such as flap discs, vulcanized fibre discs, flap wheels and spindle-mounted flap wheels are of major importance. Since the last revision of the EN 13743, there also exist safety requirements for back-up pads for vulcanized fibre discs. These can now also be labelled with oSa®.

Some will wonder why abrasive belts and non-woven products do not bear the oSa®-logo. The answer is simple - these product classes do not fall into the scope of the mentioned standard. And the basic pillars of the oSa-safety philosophy are the three safety standards. Under certain conditions, non-woven products can

now also be labelled with oSa®, namely as non-standard product (see box “Non-standard products arriving at oSa”, p. 4). 19 manufacturers of coated abrasives now take advantage of an oSa-membership, among them many founding members of our organization. In concerted action with all abrasive manufacturers, they play a major role in assuring that the user can hold his flap disc angle grinder with a good feeling and derust his garden door. Having confidence in the oSa®-trademark, he knows that he holds in his hands a premium product with a high and verifiable safety standard. For a complete list of all oSa-members from the range of „coated abrasives“, please refer to our homepage: <http://www.osa-abrasives.org/seiten/2mitgliederverzeichnis.html>.

Now available: Never-Always-Poster “Diamond saws”

The safety of their products lies at the heart of all oSa-members. This also means instructing the end-user on the safe use of abrasive tools. Each manufacturer is required by law to provide the user with suitable information and application instructions.

The oSa takes this task very seriously and after the Never-Always-Poster „Safety recommendations for the use of bonded abrasive wheels” has now developed the second that basically contains all rules aiming to prevent accidents caused by improper use of a superabrasive tool for stone and construction.

Next we will tackle the task of developing a Never-Always-Poster for coated abrasives. The oSa will have to narrow down the major topics of this poster, as the product variety in this range is enormous. As soon as this poster is completed, we will inform our members.

The Never-Always-Poster for diamond cut-off wheels (diamond saws) is now available in sizes A0 and A1.

To place an order please contact:
monika.hesse@osa-abrasives.org

Safety recommendations for the use of diamond saws

Never

- Permit untrained people to handle, store, mount or use diamond saws
- Mount or remove a diamond saw until the machine has been isolated from its power source
- Mount a diamond saw that cannot be identified or one which does not bear the correct marking
- Mount a diamond saw on a machine running at a speed higher than the maximum operating speed of the diamond saw or mount on a machine which does not bear its spindle speed
- Use diamond saws for cutting metal unless specifically designed to do so
- Mount a diamond saw that has been dropped, damaged or incorrectly stored
- Apply force to fit the diamond saw on the mounting device, fit diamond saws with oversized bores or alter the bore size
- Use drive pins or bladders to prevent slippage on hand-held diamond saws
- Tighten flanges with excessive force or use a hammer or extension
- Use damaged, distorted or dirty flanges and fastening screws
- Use a machine which is not in good condition or one with a damaged guard
- Turn on the machine until the wheel guard has been re-fitted, secured and adjusted correctly
- Stand in the line of the diamond saw when starting the motor after fitting or re-fitting a diamond saw
- Start the diamond saw in contact with the workpiece or any
- Work from a ladder or in a position where you do not have a control
- Leave the diamond saw to cut or allow it to overheat
- In the cut, stop, turn in the cut or grind with a diamond saw
- Allow the diamond saw to bounce or be trapped or pinched in the cut
- Press against the diamond saw surface to stop it or put down a machine until the diamond saw has stopped running
- Leave the diamond saw running on a stationary diamond saw or leave the diamond saw running on an unattended machine
- Portability and saws which are not suitable for this
- Use diamond saws for dry cutting on hand-held machines, unless locally authorised

Always

- Observe the safety recommendations of the machine and diamond saw manufacturer
- Exercise care when handling diamond saws
- Keep the working area well lit, clean and tidy. Avoid slippery and uneven floors and ice or snow
- Ensure other workers in the vicinity and passers-by are protected from sparks and debris
- Store diamond saws on a full, flat surface, hung on a peg or in suitably constructed racks. Lightly lubricate to prevent rusting
- Visually check the diamond saw for damage such as core cracks and missing or deformed segments
- Check that the diamond saw is suitable for the application and that the markings are intact and legible
- Use the correct tools at all times when mounting or removing a diamond saw
- Observe direction of run markings
- Ensure mounting flanges are in matched pairs, clean, free from burrs and undistorted
- Ensure an adequate coolant supply to both sides of the diamond saw if cutting wet
- Ensure that the workpiece is secure and cannot move whilst being cut
- Ensure guards are in position and correctly adjusted so that they do not foul the diamond saw
- Rotate the diamond saw manually to ensure that it runs true and freely before turning on the power
- Wear suitable protective clothing
- Observe the operating speed recommended by the diamond saw or machine manufacturer
- Run the diamond saw for at least 30 seconds at maximum operating speed after mounting or re-mounting diamond saws
- Ensure the diamond saw is running true and without vibration. Check frequently for undercutting or loss of tension
- Allow the diamond saw to come to rest naturally after turning off the machine
- Ensure machine spindle speed is checked periodically using a tachometer
- Ensure that the diamond saw is removed before transporting or storing portable and mobile machines

Use products bearing the oSa® logo to minimise accidents due to unsafe abrasives

Organization for the Safety of Abrasives **oSa®** The Symbol of Safety

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TRADE FAIR DATES 2011/2012	
annually 19 - 24 Sept. 2011	EMO Hannover The world of metalworking Hanover, Germany www.emo-hannover.de
annually 21 - 24 Sept. 2011	MARMOMACC International Exhibition of Marble Stone and Technology Verona, Italy www.marmomacc.com
every two years 7 - 12 Nov. 2011	BATIMAT International Building Exhibition Paris, France www.batimat.com
every two years 28 Febr. - 3 March 2012	METAV International Trade Fair for Manufacturing Technology and Automation Düsseldorf, Germany www.metav.messe-duesseldorf.de
every two years 4 - 7 March 2012	Practical World Hong Kong International Hardware Fair Hongkong, China
annually 06 - 09 March 2012	Xiamen International Stone Fair Xiamen, China www.stonefair.org.cn
every two years 14 - 17 March 2012	GrindTec International Trade Fair for Grinding Technology Augsburg, Germany www.grindtec.de
every two years 23 - 26 March 2012	CARRARA MARMOTEC International Fair for Marble Carrara, Italy
every two years 9 - 12 May 2012	PIEDRA International Natural Stone Fair Madrid, Spain www.piedra.ifema.es
18 - 22 Sept. 2012	AMB International Exhibition for Metal Working Stuttgart, Germany www.amb-messe.de

NEWS

Non-standard products arriving at oSa

In the latest newsletter No 7 of February 2010, we reported that now also abrasives not included in the European Safety Standards (EN 12413, EN 13743, EN 13236) can be labelled with oSa® under certain conditions. By doing so, our safety organization complied with the wish of many members to place their product innovations under the oSa-safety umbrella. Currently applications for labelling non-standard products with the oSa®-trademark are mainly filed for flap discs. Their abrasive flaps do not consist of conventional coated abrasives but of non-woven material. The expert knows that non-woven products are not covered by the current version of EN 13743. At a revision of this standard, implemented every 5 years, this topic will be thoroughly discussed. There are good reasons to include this product group into the safety standard. Because non-woven products play an important role on the abrasive market. And their manufacturers successfully prove towards the oSa that these products are as safe as conventional coated abrasives. And this at a maximum operating speed of 80 m/s. As yet, these abrasives bear the oSa®-trademark, but no EN-number. However, this might change after the standard's revision.

Imprint

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