

**Minutes of IIW Commission VIII Intermediate Meeting  
in Gliwice, Poland 1 – 2 April 2008**

Submitted by Steve Hedrick (USA)

**HEALTH AND SAFETY**

This document is submitted to Commission VIII for study and commits only the person or persons under whose signature it appears.

**MINUTES OF IIW COMMISSION VIII INTERMEDIATE MEETING  
GLIWICE, POLAND 1 – 2 April 2008**

Session 1

1. Chairman Costa opened the meeting at 0930 hours and welcomed the attendees. The attendance list is attached. Those present introduced themselves by name, affiliation and professional work areas in regard to health and safety in welding. Apologies were received from G. McMillan, G. Carter, V. Spiegel-Ciobanu, M. Pesek, and G. Sawemark.

3. The agenda was accepted (Document VIII 2060-08).

4. The Minutes of the Commission VIII Annual Assembly meeting in Dubrovnik, 2 – 4 July 2007, were approved (Document VIII 2059-07).

5. Matters arising from the minutes and not on the agenda:

a. The Chairman reported on a resolution taken by the IIW Board of Directors during the Annual Assembly in Dubrovnik stating the difficulties with the limits in the European Directive on EMF. In October 2007, the European Commission postponed the deadline for introduction of legislation on workers' exposure to electromagnetic fields by four years until 30 April 2012.

b. A letter of appreciation from the Commission will be sent to G. McMillan.

c. S. Hedrick presented a brief update on manganese litigation in the U.S. In March 2008, welding rod manufacturers lost one case in Mississippi and won one case in Louisiana. The presented report is attached to the minutes.

6. National reports:

a. Switzerland: C. Abert reported on the topic of EMF of welding units in Switzerland (attached to the minutes).

b. Finland: B. Engstrom reported on the start of a program in Finland on the effects of EMF on pacemakers.

c. Germany: W. Zschiesche reported on an international working group looking at the electrical stability of implants in workers. He noted two working groups were dealing with early markers in lung inflammation. Other work underway involves research on metal in the body at the molecular level and work on ultrafine particles looking at how the outer shape of the particle affects its action in the body.

7. V. van der Mee presented a discussion of a paper produced in the Netherlands about welding fume, including background information on limit values, current measurement protocols for welding fume, and advanced measurement protocols for fume concentration

and emission (Document VIII 2061-08 will be presented during the next annual assembly after the finalization of the document).

8. X. Verni reported on the REACH regulation. The aim of REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) is to improve the health and environment through the better and earlier identification of the intrinsic properties of chemical substances (Document VIII 2062-08).
9. B. Engstrom and T. Johnsson presented a discussion of the “Weld Thro” project. The objectives of the work were to identify and evaluate thermal degradation products formed when welding or straightening painted or coated steel plates; to evaluate the exposure of welders to degradation products; and to produce recommendations for standard procedures for testing degradation products (Document VIII 2063-08).
10. J. Gromiec presented the paper “Assessment of hazards to health of welders due to welding fumes and gases emitted during welding of different construction materials” (Document VIII 2064-08). It was noted that approximately 160,000 people are involved in welding in Poland, including 70,000 to 80,000 full-time welders. The study confirmed that welders may be exposed to welding fumes in concentrations exceeding OEL values.
11. “Laboratory for Work Safety, Health Protection and Environmental Impact in Welding – The presentation of the research” (Document VIII 2065-08) was discussed by J. Matusiak. The various activities of the laboratory were reviewed.
12. The draft ISO Technical Report “Health and safety aspects of welding – Health and safety check list” (Document VIII 2047r1-08) was reviewed. C. Abert will propose a list of covered activities for discussion at the next meeting; the revised document will be circulated with the minutes (Document VIII 2047r2-08).
13. Report on voting:
  - a. The draft ISO Technical Report “Health and safety aspects of welding - Arc welding fume components related to welding processes and base metals” (Document VIII 2057r1-07) has not yet received final approval due to the delay in the mail vote procedure; final results will be presented during the next meeting (Annual assembly in Graz).
  - b. The draft ISO Technical Report “Health and safety aspects of welding – Non-consumable thoriated tungsten electrodes” (Document VIII 2054r1-07) has not yet received final approval due to the delay in the mail vote procedure; final results will be presented during the next meeting (Annual assembly in Graz).
14. Administrative matters:

- a. The definition of the new terms of reference, based on the inclusion of the item “environment,” was discussed. Modifications were made during the meeting and are reported attached for further considerations.
- b. Chairman Costa reviewed the IIW peer review process for certain publications in *Welding in the World*. Commission VIII members will be appointed by the Chairman on a case by case basis to serve as peer reviewers.
- c. Chairman Costa proposed the idea of developing a list of welding related standards. A list of standards will be developed and circulated for review and additions.
- d. Arrangements for future meetings: Discussions will be held concerning the feasibility of joint meetings with Commissions III and XII at the Annual Assembly in Graz. The time and location for the next intermediate meeting of Commission VIII has not yet been determined. Possible suggestions are expected to be received before the annual assembly in Graz.

#### Session 2 – Joint meeting with Econweld Project Technical Committee

15. S. Escala presented a brief overview of the general aspects of the Econweld Project. She noted there were 730,000 full-time welders and 5.5 million welding related jobs in Europe. Welding has an impact on health leading to a high percentage of sick leave (yearly about 160 working hours per welder). The project intends to stop the downward spiral in which welding is at the moment and make welding a healthier and more attractive career.

#### 16. Presentations on technical work packages:

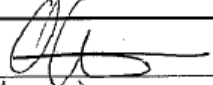
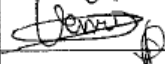
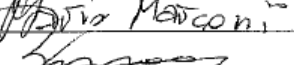
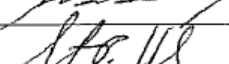
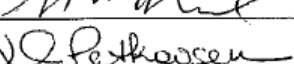
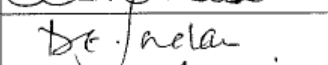
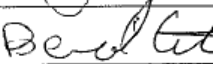
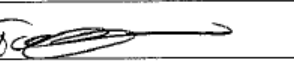
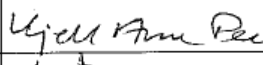
- a. C. Rosellini presented Work Package 2: Welding Fumes, Development of Prototype for Lightweight Fume Extracting Welding Torch and Exhaust Arm (Document VIII 2066-08).
- b. M. Marconi presented the paper “Capture efficiency of integral fume extraction torches for GMA welding (Document VIII 2067-08). A final document with the complete results will be presented during a further meeting of the commission.
- c. L. Costa presented Work Package 3: Sick Leave among Welders, Development of Prototype Welding Helmets and Ergonomic Tools (Document VIII - 2068-08).
- d. A. Nilberto presented Work Package 4: Viweld, Presentation of Viweld program, a predictive tool for virtual welding (Document VIII 2069-08).

17. Demonstrations of the technical achievements of the Project were held at the IS facilities and laboratories:

- a. Prototype of lightweight fume extraction torch;

- b. Video demonstration of flexible moving exhaust arm;
  - c. Demonstration of Viweld Software.
18. Closure of the meeting: There being no further business, the meeting was adjourned.

**Attendance List – Commission VIII intermediate meeting  
(Gliwice, 01.04.2008)**

| No  | Name                | Position (Delegate, Expert, Observer) | Signature                                                                             |
|-----|---------------------|---------------------------------------|---------------------------------------------------------------------------------------|
| 1.  | Christoph ABERT     | Delegate                              |    |
| 2.  | Xavier VERNI        | Delegate                              |     |
| 3.  | Vincent van der MEE | Delegate                              |    |
| 4.  | Luca COSTA          | Chairman / Delegate                   |    |
| 5.  | Mario MARCONI       | EXPERT                                |    |
| 6.  | Albano BRAVACCINI   | Director / EXP                        |    |
| 7.  | Steve HEDRICK       | Expert                                |    |
| 8.  | John PETKOVSEK      | Expert                                |     |
| 9.  | David JORDAN        | Expert                                |    |
| 10. | Bernt ENGSTRÖM      | Delegate                              |   |
| 11. | Tom JOHNSON         | OBSERVER                              |   |
| 12. | Kjell Arne PERSSON  | Expert                                |   |
| 13. | Wolfgang ZSCHIESCHE | D                                     |  |
| 14. | Jan GROMIEC         |                                       |                                                                                       |
| 15. | Jolanta MATUSIAK    |                                       |                                                                                       |
| 16. | Bogusław CZWÓRNÓG   |                                       |                                                                                       |
| 17. | Tomasz PFEIFER      |                                       |                                                                                       |
| 18. | Jan PILARCZYK       |                                       |                                                                                       |

## **United States: Welding Rod Manufacturers Lose In Mississippi; Win In Louisiana**

11 March 2008

**Article by Peggy Brenner and Mark Font**

Counsel for the welding rod manufacturers have been busy defending simultaneous trials - one in Mississippi federal court and one in Louisiana state court. Both trials ended late last week. After consecutive trial victories by Plaintiffs, including a victory in the Mississippi case, counsel for the welding rod manufacturers can take a deep breath after a big win in Louisiana.

On Thursday, after 2 days of deliberations, jurors in a Gulfport, Mississippi, Federal District Court awarded Robert Jowers \$2.9 million against 3 welding rod manufacturers. The two week trial was presided over by Judge Kathleen O'Malley, who oversees the federal welding rod product liability MDL in the Northern District of Ohio. Mr. Jowers spent 33 years as a shipfitter, sheetmetal worker, insulator, and foreman. One of Mr. Jowers' treating physicians testified that as a result of his exposure to welding fumes during his career he now suffers from manganism. Although the jury awarded Mr. Jowers \$1.2 million in compensatory damages, they also found him to be 40% responsible for his injuries. The jury also awarded Mr. Jowers \$1.7 in punitive damages - \$750,000 each against Lincoln Electric and the ESAB Group, and \$200,000 against the BOC Group. Interestingly, the jury did not award Donna Jowers any damages on her loss of consortium claim.

On Friday, after more than 3 weeks of testimony, jurors in Judge Lloyd Medley's New Orleans, Louisiana, State District Court took about an hour to return a verdict in favor of the welding rod manufacturers on claims brought by 4 former welders. Noah Andre, Timmy Champagne, Ronnie LaBauve, and Silvester Lethermon brought claims against various welding rod manufacturers asserting that they each suffer from manganism as a result of being exposed to welding fumes during their careers as welders and pipefitters. The welding rod manufacturers argued that Andre, Champagne, and LaBauve suffer from Parkinson's disease, not manganism, and Silvester suffers from a psychogenic tremor. A significant factor in this case appears to be the fact that none of the plaintiffs' treating physicians diagnosed them with manganism; only Dr. Paul Nauseida, a well-known plaintiff's expert, diagnosed the plaintiffs with manganism.

*The content of this article is intended to provide a general guide to the subject matter. Specialist advice should be sought about your specific circumstances.*

## INSPECTIONS



## Note

Basle, 2008-02-19  
 Author: Christoph Abert

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**Topic: EMF of welding units in Switzerland**


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The basic requirements (exposition limits for workplaces, Publ. 1903) and recommendations of Suva (Swiss Accident Insurance Fund) are based on the state of the art given in the presentation of IIS.

There are some smaller variations and remarks, e.g.:

1. The ICNIRP reference levels for occupational exposure (slide 21 of presentation IIS) correspond with the action limits of the European directive (slide 28). Based on these obligatory limits have been defined in Switzerland over 10 years ago. In case of exceeding these limits the employer has to take corrective actions or has to prove the compliance with ICNIRP Basic Restrictions = EU-Exposure Limits. Normally basic restriction limits cannot be measured directly. One must follow the standards (slide 30).
2. ICNIRP Reference levels for public exposure (slide 22) correspond to the immission limits given in the Swiss by-law for the protection from non ionising radiation (SR 814.710 from 1999). The states (Swiss cantons) are responsible for the execution of this by-law (environmental protection).
3. For the electromagnetic compatibility of technical equipment the same standards must be followed (slide 29). This is in the responsibility of the Federal Inspectorate for Heavy Current Installations ESTI.
4. Additionally Suva is concerned with the safety of workers with pacemakers, which is not covered by the IIS-presentation. The draft DIN-VDE 0848, part 3, 2002 is used.

In Switzerland most companies have to introduce a system which describes how to deal with health and safety aspects (ASA-System). This system covers risk assessment as well as safety declarations of suppliers of technical equipment. The suppliers' safety recommendations have to be followed. Suva, physics department, helps employers e.g. with measures at work places. Sometimes Suva interacts also after inquiries/hints of occupational doctors or employees.



**COMMISSION VIII**  
**“Health, safety and environment”**

***Proposed terms of reference***

- To act as interdisciplinary network for the exchange of knowledge in the field of Health, Safety and Environment in welding.
- To regularly review the general trends in the exposure to physical and chemical agents which may affect Health Safety and Environment in welding.
- To share information on national laws, rules and regulations related to Health, Safety and Environment in welding.
- To develop best practices for the management of Health, Safety and Environment in welding.