



### **Inside this issue:**

Welcome	1
The new MineWolf machine	1
Demining Symposium in Sibenik	2
Review 2004	3
R&D: Use of magnets	4
Coming up next	4

### **Welcome,**

*to the first issue of MineWolf News. As a leading provider of state-of-the-art mechanical demining technologies and services, we like to provide anyone interested in the subject with latest news about our company and the MineWolf technology.*

*Enjoy reading - feel free to contact us for any remarks, questions and suggestions.*

***Tobias Schmidt, Managing Director***

---

### **The new MineWolf machine**

Based on the experiences in 2004 several enhancements were undertaken by MineWolf Systems and its manufacturing partner AHWI with the objective to increase the overall performance, improve the handling and make the machine more resistant when operating in remote and desert-like conditions.



The new MineWolf with tiller

like dust and extreme heat beyond 50°. Due to a larger engine and a double filtering system the machine will deliver a constant performance also under severe conditions.

#### **Cabin**

The working environment for the operator was redesigned in order to provide maximum comfort and safety. Despite extensive functionality within the cabin the focus is on the task ahead and the operator is only alarmed if one of the predefined parameters shows an irregularity.

#### **Overall Appearance**

The whole framework has been redesigned in a way that the MineWolf's point of gravity is lower now which significantly improves the driving capabilities especially on steep ground.

#### **GPS**

Using standard equipment applied by the construction industry the GPS system allows for accurate driving and documentation of the clearing performance. Especially the latter should provide valuable and reliable information to the demining authorities about the accomplished work.

#### **Engine, Cooling & Filtering System**

The engine and related parts were adapted in cooperation with Deutz and Bosch Rexroth in order to withstand rough operating conditions

### **Contact Information:**

MineWolf Systems GmbH  
Marsstr. 24  
80335 Munich  
Germany

Phone +49 (0) 89 543 435 10  
Fax +49 (0) 89 543 435 15

Email [info@minewolf.com](mailto:info@minewolf.com)  
Internet [www.minewolf.com](http://www.minewolf.com)

### Remote Control

Despite MineWolf Systems' firm belief that any demining operation needs a manned system when using mechanical means, the MineWolf provides a remote control option in case of an unclear mine/UXO threat and for better handling during transport.



The new MineWolf with flail

### Detostop

With safety being one of the key priorities in mine clearance a new feature has been added which prevents an explosion in case the fuel tank is hit by mine or UXO fragments. *Detostop* has been applied in the military sector for many years and has proved to be a valuable safety feature.

First tests and statements of specialists in the field indicate that the machine is bound to set new standards in the field. With the tiller as key attribute the MineWolf is equipped with everything needed to guarantee an efficient demining process. Additionally, MineWolf Systems offers its expertise for a functioning support infrastructure.

---

## Demining Symposium in Sibenik: MineWolf demonstrates outstanding clearing capability

From 24-28 April 2005, the brandnew MineWolf II was presented to the international demining community in Sibenik, Croatia. Experts from all over the world could witness a superb machine performance during a live field demonstration on April 26. Spectators were amazed with the machine's performance even in difficult terrain including rocks, vegetation and steep slopes. Christoph Frehsee, MineWolf's Program Manager explained the new machine's features to the international demining community. "The patented open tiller design compensates for limitations of existing systems and shows unprecedented results when used against both AP and AT-mines", he explained. "The basket-type segment structure allows the mine blast to expand through the tiller to avoid or reduce damage." Spectators were especially excited about the constant clearing depth of 30cms and the smooth clearing process using the tiller.



Even in rough terrain the MineWolf demonstrates outstanding clearing results

The Symposium, hosted by the Croatian Center for Testing and Development, has proved to be an excellent meeting point for all industry experts involved in mechanical demining. With a list of highly renowned speakers from such institutions as Geneva International Center for Humanitarian Demining (GICHD), International Testing and Evaluation Program (ITEP) and

others, the conference program in the auditorium was an ideal complement to the life field demonstration of demining machines on a nearby demonstration site.

The entire MineWolf Systems Team enjoyed to be a major contributor to this symposium and is committed to participate at similar events in the future!

---

## Review of a successful year 2004

The year 2004 was to produce the final proof that the MineWolf stands up to the challenges in the minefield and contradicts any concerns about the use of that kind of machines. Almost 1Mio m<sup>2</sup> were cleared in less than 5 months, most of it together with Norwegian People's Aid (NPA).



MineWolf in demining action

In cooperation with the Norwegian NGO, 7 tasks were accomplished, most of which were in the area around Brčko in Bosnia and Herzegovina, all with a high social impact on the local community.

Almost all tasks were technical survey but the team experienced a number of detonations among others five PROM 1 on one single day. The machine proved its reliability under all conditions, repairs were rare and could be dealt with on the field.

MineWolf Systems' responsibility was to provide the mechanical assets including one team leader, who trained two local operators, and one mechanic. The team made sure that the machine was running at full capacity and achieved results that outperformed everybody's expectations.

"I've seen a lot of fancy and expensive demining machines that break down in five days," Paul Collinson, program manager Balkans at NPA, said in an interview to the German newsletter FAZ. "The Minewolf, in comparison, can sustain this type of difficult operation and get the job done, eight hours a day, twenty days a month, and nine months a year."

The cooperation with NPA was very fruitful and will be continued into 2005 not only in Bosnia-Herzegovina but also in Southern Sudan.



Field operations NPA / MineWolf

## Research & Development: Use of magnets

MineWolf Systems is drawing its competence not only from a superior technology but also from experience in the field. Every demining task is unique and needs careful analysis as to what process to choose.

Currently, every organization has, despite existing standards, its own philosophy concerning the optimal procedure and methods to rely on. Machines, over the last few years, have gained in importance and will continue to do so. Besides, there is much debate on how to conduct the quality control. Both areas, technology as well as quality control, bear great potential for efficiency gains.

From the beginning, MineWolf Systems spent considerable time and effort in researching for the optimal process complementing the work of the MineWolf. The vehicle is destined to replace many tasks necessary nowadays and considerably speed up the demining process. Accordingly, using an optimized

quality control would further improve the overall cost/performance ratio.

Apart from usual means like manual demining, MDDs and detectors, there are other methods currently evaluated. One of those, which seems of particular interest, is the use of magnets. The effect would be that a certain amount of metal is extracted from the ground making any subsequent search more time-efficient. Little information is available so far concerning the best parameters necessary for the configuration of the magnet. Therefore, MineWolf Systems has sponsored a test conducted by SWEDEC together with GICHD to validate some assumptions. For the testing a HYAB magnet was used.

Valuable insights were gained but more research needs to be conducted concerning the design of the magnet and the process during operations. All parties agreed to continue the dialogue in order to produce sustainable and practicable results.

### Coming up next in MineWolf News

#### Featuring:

- MineWolf mission in Sudan
- Project kick-off in Croatia



### MineWolf Systems GmbH

Marsstraße 24  
80335 Munich / Germany

Phone +49 (0) 89 54 34 35 10  
Fax +49 (0) 89 54 34 35 15

Email [info@minewolf.com](mailto:info@minewolf.com)  
Internet [www.minewolf.com](http://www.minewolf.com)