**The DIAG.Lexd® software** facilitates the analysis, in respect to the EN ISO 9612 standard, and measures the exposure to noise experienced by workers, by offering the following advantages:

- **Interface with simple and guided processing**, also adapted to:
  - internal services of prevention,
  - inter-company services,
  - official bodies of control,
- **Optimization** of the number of the measurements and thus of time and cost of investigation thanks to the grouping of the staff in Groups of Homogeneous Noise Exposure (GEH),
- **Checking** of automatic of the validity of the measurements,
- **Diagnosis** of the sound exposure with the possibility of identifying the most harmful activity,
- **Updating** of results with automatic calculation,
- **Publishing** of the results in the form of:
  - synthetic classification of the staff,
  - detailed index card per person,
  - index card detailed by GEH Noise.

**Equipment configuration:**
- 100% PC compatible,
- Recommended memory 512 MO,
- CD-Rom drive and hard disk,
- Windows 7, Vista, XP

Since July 19th, 2006, the **2006-892 decree** has modified the employment legislation concerning the prescriptions of safety and health in case of exposure of workers to the risks due to the noise, and it **fixes the new levels of exposure limits and values activating legal procedures**. This decree is the transposition into French law of the **directive 2003/10/CE of the European Parliament of February 6th, 2003**.

This decree specifies that **noise protection** must be taken into account in the calculation of the exposure.

Besides since May 29th, 2009, the standard **EN ISO 9612** demands the evaluation of the medium-term risk and the **carrying out an analysis on groups of homogeneous exposure** with consideration of the uncertainties in the calculation of exposure.

Stemming from the experience of several tens of thousands of measurements at work stations, the **DIAG.Lexd® software** was conceived by GAMBA Acoustique et Associés to allow the people who have responsibility for these measures (prevention services, hygiene and safety, occupational medicine, official bodies of control, etc.) to **diagnose easily the exposure to noise and to publish rapidly the analyses corresponding to the standard**.

We offer you DIAG.Lexd® which completely covers these changes:

- ✔ Creation of homogeneous groups of exposure site by site, …
- ✔ Calculation in compliance with the European directive,
- ✔ Comparison and analysis (EN ISO 9612) of results by group or department,
- ✔ Creation of a data bank of noise protection,
- ✔ Calculation of the exposure of the Groups of Homogeneous exposure with consideration for individual noise protection, 
- ✔ Evaluation of the impact of irregular wearing of protection and the analysis of the risk.

**This software is designed for confirmed specialists as well as people who have no particular skills in acoustics nor in statistical analysis.**

**GROUPE GAMBA**

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163 Rue du Colombier - 31670 Labège
Tél. : +33 (0)5 62 24 36 76 - Fax : +33(0)5 62 24 35 25
E-Mail : infos.logiciel@acoustique-gamba.fr - Site : www.gamba-logicielacoustique.fr
User parameters settings, control structured by your information

It is adapted to internal services of prevention, as well as to inter-company services and to bodies of control.

Processing following a treelike structure adapted to your organization

Processing of the information concerning staff:

Individualized complete and specific control

Possibility of preserving anonymity

Easy, fast and safe processing of various measured parameters:

Easy: input fields are clearly clarified

Fast: the repetitive information is proposed by default

Unique: Data bank of Noise protection
**A precise and complete diagnosis in clear language:**

**Validity of the GEH Noise**: the DIAG.Lexd® software verifies the hypotheses of homogeneity of the groups.

**Diagnostic détaillé:**

2. Durée des mesures: Les durées des mesures sont conformes à la norme (EN ISO 9612). La durée cumulée des mesures est valable pour un effectif total du GEH inférieur ou égal à 10 membres.
3. Homogénéité du groupe: Le groupe semble homogène.
4. Nombre de mesures: Le nombre de mesures est conforme à la norme (EN ISO 9612).
5. Diagnostic Lpc: Aucun dépassement de seuil 135 dB(C) n’a été observé pendant la durée des mesures. Aucun dépassement de seuil 137 dB(C) n’a été observé pendant la durée des mesures. Aucun dépassement de seuil 140 dB(C) n’a été observé pendant la durée des mesures.

**Checking of the normality of measurements**: you can visualize the normality of the distribution of samples compared with la droite d’HENRI.

**The test SHAPIRO WILK test confirms that the hypothesis of normality can be accepted or rejected**

<table>
<thead>
<tr>
<th>A(i)(dBA)</th>
<th>0.5</th>
<th>1.25</th>
<th>2.5</th>
<th>5</th>
<th>10</th>
<th>20</th>
<th>40</th>
<th>80</th>
<th>160</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.8</td>
<td>4.7</td>
<td>6.6</td>
<td>8.6</td>
<td>12.4</td>
<td>16.3</td>
<td>19.3</td>
<td>22.4</td>
<td>27.2</td>
<td>34</td>
</tr>
</tbody>
</table>

**Test de normalité (Shapiro-Wilk): Hypothèse de normalité est acceptée**

**Statistical analysis of the samples of measure, according to the indications of the NF EN ISO 9612.**

<table>
<thead>
<tr>
<th>Nb. dépassem. CRETES</th>
<th>&gt;=135</th>
<th>&gt;=137</th>
<th>&gt;=140</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Consistency of EPI (Equipment of Individual Protection)**

**Reminder of the measures**: synthetic vision of all the parameters necessary for diagnosis.
**Synthetic index card:**

It facilitates the publishing of the annual report of the company doctor. It allows the classification of the staff in relation to warning levels and in relation to danger defined by the regulations.

**Detailed index card per person:**

It can be inserted into the medical file.

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**ANALYSE PAR SERVICE**

<table>
<thead>
<tr>
<th>G.E.H. rattaché au service</th>
<th>Effectifs</th>
<th>Effectifs</th>
<th>Durées des mesures (h:m:s)</th>
<th>L’ex,8h en dB(A)</th>
<th>Nombre de CRETES dB(C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constatés</td>
<td>Max. autorisés</td>
<td></td>
<td>83.3 / 80.8</td>
<td>0 / 0 / 0 / 0</td>
</tr>
<tr>
<td>Usinage</td>
<td>15</td>
<td>41</td>
<td>23:38:30</td>
<td>84.3</td>
<td>0 / 0 / 0 / 0</td>
</tr>
<tr>
<td>DC Caster</td>
<td>4</td>
<td>10</td>
<td>7:31:20</td>
<td>83.4</td>
<td>0 / 0 / 0 / 0</td>
</tr>
<tr>
<td>Découpe jet d’eau</td>
<td>1</td>
<td>8</td>
<td>Without EPI</td>
<td>83.4</td>
<td>0 / 0 / 0 / 0</td>
</tr>
</tbody>
</table>

**CUMUL :** 20 / 37:57:45 /

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**Maximum exposure without EPI :** 84.4 dB(A)  
**Maximum exposure with EPI :** 83.2 dB(A)

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**Observations :**

- **Discovery of the activity whose contribution to the total exposure is strongest**

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**DIAG.LEXD®**

The publishing of the prevention oriented results: exclusive

Without EPI  
With EPI