



國際職業訓練中心  
御列席の皆様  
技能五輪 国際組織役員

**Organisation Internationale  
chargée de promouvoir  
la formation professionnelle**

**International Organisation  
for the promotion  
of vocational training**

**Organización internacional  
la formación profesional  
para promocionar**

**Internationale Organisation  
zur Förderung  
der Berufsbildung**

Industrialisation was possible on a large scale mainly due to Jan was in the forefront in this development. At the beginning

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Great Britain was in the forefront in this de

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Tout à coup, la logistique d'entreprise est devenue un objectif à part

secteur devait tenir compte des intérêts des autres secteurs en amont et en aval. Les fauteuils des responsables des expéditions commencèrent à devenir bancals! La logistique telle qu'on la connaît aujourd'hui s'est développée au début des années 80 dans un environnement de concurrence acharnée et de discipline naissante en matière de coûts. A ces facteurs s'ajouta que l'utilisateur

for this purpose and its first policy was written in 1867. In Great Britain and

Machinery Insurance is even today coupled with an independent inspection service. In Germany developments were similar. Statutory regulations were enforced for the construction, maintenance and revision of steam boilers and pressure vessels as early as 1856. The first Boiler Inspection Au-

De pronto, la logística empresarial obtuvo una finalidad global. Se eli-

ciones intermedias, el propio sector tenía que considerar tanto los intereses de los sectores superiores como de los sectores subordinados y se comenzó a poner en tela de juicio el puesto de los jefes de expedición en todos los niveles. La logística actual se desarrolló a comienzos de los años ochenta en el marco de una dura competencia y de una disciplina de gastos emergente. Además, se dispuso del conocimiento

Plötzlich gab es für die Unternehmenslogistik ein Gesamtziel. Insehlösungen

der eigene Bereich musste die Interessen der vor- und nachgelagerten Bereiche berücksichtigen, und es wackelten die Stühle der Versandchefs auf allen Ebenen. Die Logistik der Gegenwart entwickelte sich Anfang der achtziger Jahre im Umfeld eines harten Wettbewerbes und einer aufkommenden Kostendisziplin. Dazu kam das theoretische



るので拡大図で住所を解き、デザイナーたちが手に入れたレターヘッドのデザインは、多く、用紙や活字の選定、のが多い。郵便法の規制がインは案外と難しい。また、やワープロ用に打ち出しのの要素で工夫したり、封筒のの(アラビヤの)のののからはデザインは同じでも出る。サイズにしても、故が、他の書籍とのデザインにする方が、コピーを作るサイズへの統一を呼びかけてレターヘッドのデザインでのが、そのデザインの効果!デザインされたレターヘッドはデザインはその最終的な状態!タイピングを邪魔してはならヨーロッパのレターヘッドはなデザインでしかもお金をかて保守的で典型的である。エネルギーと費用を投入する資料として位置づけられ、こい。本来業務用であれば、あるいはブランドものの働いてよいはずなのが一、れることがなかったせいである理由は私自身のほわり、よりヒューマンなコミュニケーションやデザインが欲しい。なお、本書は1986年に出、今回も世界各国の素、この場を借りて感謝の、

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必要最小限の要素でデザイナーのレイアウトがその点であって、ユニークなレイアウトの基本もある。例えば位置を示すガイドを活字のタイプ名にともなう、便箋、セカンドシート、そして所氏名の入らないものを用いては、ターサイズというものを考える。それとはとても合理的で、機会がある。

やはり重要なことは、だれが何を期待するかということだ。文章がタイプされて完成している。評価される。一歩ないということだ。

おどろしいデザインが多い。我々は残念だ。便箋、封筒、花紙がない。これらのものは、11のメディア価値にビジネススーツやネクタイライターを購入する程度のもう、今までの世界に積極的

## pouvait disposer d'une connaissance théorique sous une forme pratique: les micro-ordinateurs

Other power machines such as steam turbines, electric generators and electric motors were invented during the rapid technical development taking place towards the end of the 19th century. Many losses occurred particularly with the steam turbines, such as shafts bursting and the physical explosion of turbine casings. Insurance then covered the physical explosion of the parts of the turbine that were subject to steam pressure and the disruption of rotating parts of the unit. The invention of other rotating machinery such as pumps, compressors, electric generators and motors, produced more frequent damage due to novel and prototype design and the operating firms asked for a broader form

## lowed the thermal energy contained in wood and coal to be

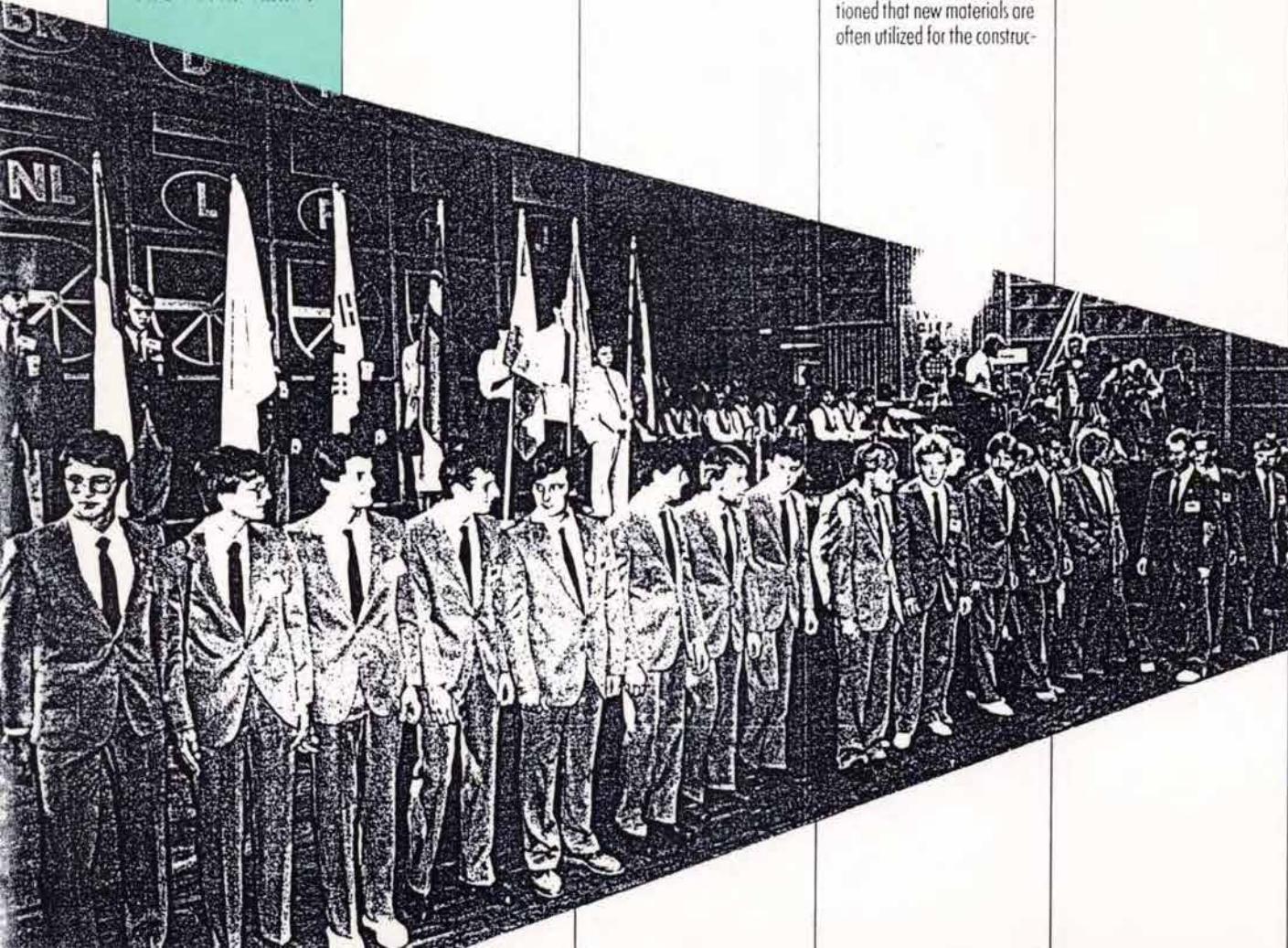
late 1920s, the first separately developed lines for flywheel, engine breakdown and electrical machinery insurance were combined under the general classification of machinery insurance, which even today is the basic form of cover offered under this line. During the heavy recession period up to the Second World War, the technical development became somewhat stagnant since the economic outlook was rather gloomy. There was little incentive for

## teórico obtenible en forma manuable: en microcomputadoras y ordena-

reliability. This outweighs a high efficiency because longer continuous operating periods are possible. The layout and design of every machine or industrial installation is always a compromise between technical possibilities and economic justification. Today's technology has reached such a high standard that it would be theoretically possible to produce machines with almost absolute operating reliability for an extremely long period of operation. However, the costs of developing such machinery would be disproportionate to the useful economic life span, which is always shorter than technical lifetime since new machines with improved efficiency are continuously being developed. Finally, it must also be mentioned that new materials are often utilized for the construc-

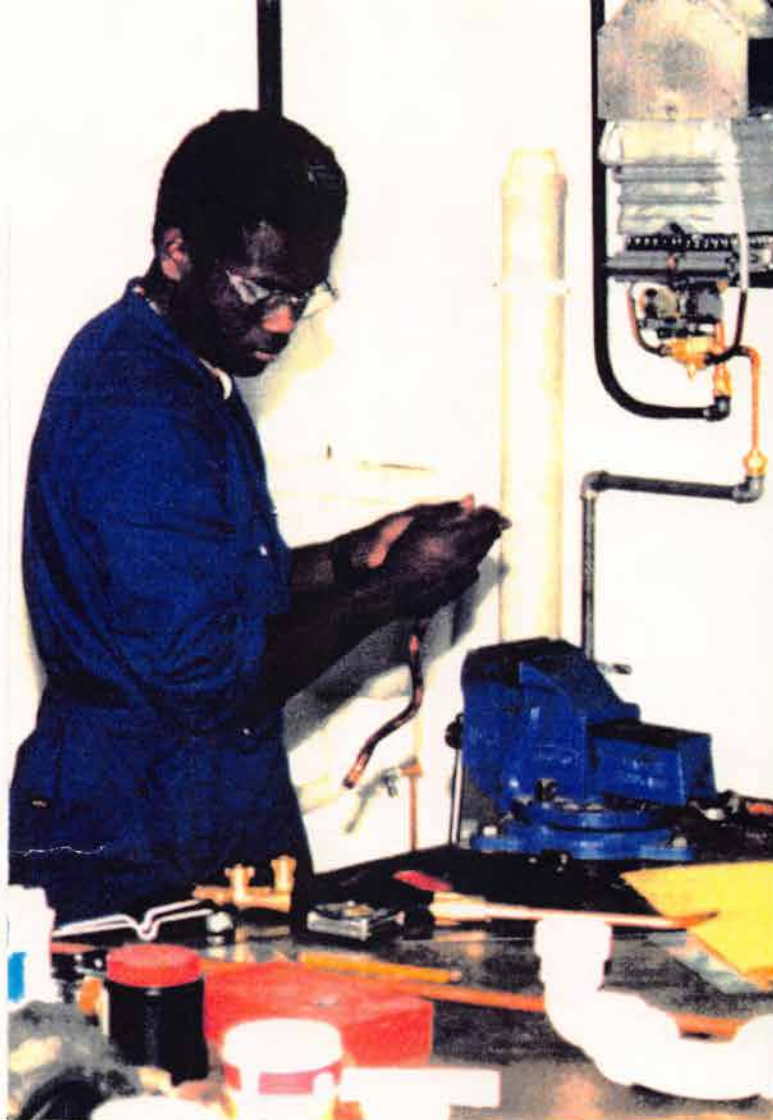
## Wissen, das dem Anwender in handlicher Form zur Verfügung stand: Auf

large investments in research and for developing new, larger and better machinery and equipment. The situation changed radically after the end of the war with an enormous backlog demand to take up and realize all the projects that had been shelved during the recession and war years. The heavy demand for raw materials and energy for the production of investment and consumer goods required the development of larger and more efficient machines and technical installations. With the constant rise in investment costs and high expenditure for the operation and maintenance of installations, the demand for a high degree of re-



## et les PC pouvaient réaliser et Tout à coup, la logistique

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### problems occurred in connection with this new energy

mage due to novel and prototype design and the operating firms asked for a broader form of coverage. Therefore, in the late 1920s, the first separately developed lines for flywheel, engine breakdown and electrical machinery insurance were combined under the general classification of machinery insurance, which even today is the basic form of cover offered under this line. During the heavy recession period up to the Second World War, the technical development became somewhat stagnant since the economic

### dores personales se podían De pronto, la logística empresarial obtuvo una

periods. It is almost unavoidable that certain parts of a plant of novel design and built with new materials will fail prior to the end of the calculated lifetime of such an installation. It takes years for a plant to go from the drawing board into operation and even during this span of time, many new design features, new materials and manufacturing processes are introduced for which operating experience is lacking. Safety factors are constantly being reduced in order to produce more competitive and cheaper equipment. Human failure remains, by experience, an important damage factor. More complex plant increases the probability of failure. Human failure further mounts with the complexity of the task. With pro-

### wart entwickelte sich Anfang der achtziger Jahre im Umfeld eines har-

duction units becoming larger and larger, the indirect losses are increasing correspondingly. When modern processes and machinery and plant are crammed together in order to gain space, we are also faced with the domino effect of loss propagation. Rapid technological change makes it difficult to obtain loss statistics for large amounts of similar machinery. Considering all these aspects, the need for Technical insurance and in particular also for Machinery Breakdown cover becomes evident. Heavy losses occurred in parti-

何事も電話で済ませることの  
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今まで出会ったことがないか  
は1920-30年代のものが  
一たちのものを数点手に入  
いては、優れたデザインのレ

イブライターの普及と共に「ターヘッド・デザイン」と呼ばれ、この考え方は大いに参考と

一ペーパーの頭部分に差頭にあるものという意味で使われるものでも「簡便、封筒、名刺」あれば、これはかの事務用紙として制作され、レターへわれるのが普通である。ア、個人用でも住所氏名入りの紙の選択によって、簡単に付

との出会いは1968年にさか手元に、数通の手紙が「アッド」を手にした最初でも「くタイプされたプロフェッショナル」用紙で作った自分の手紙その3年後に私はレターへ、ほど、その高度なデザインと、対して脱却せざるを得なかつた。

「どの程度いるのか、私に、ら、そう多くはないだろう。ア、ることがあって、私もバウ、てたことがある。しかし、こ、ターヘッドは、デザイン年記

**d'entreprise est devenue un objectif à part entière. Chaque secteur devait**

changed radically after the end of the war with an enormous backlog demand to take up and realize all the projects that had been shelved during the recession and war years. The heavy demand for raw materials and energy for the production of investment and consumer goods required the development of larger and more efficient machines and technical installations. With the constant rise in investment costs and high expenditure for the operation and maintenance of installations, the demand for a high degree of reliability of the new industrial plants was of primordial importance. Up to the early Seventies, technical development concentrated mainly on increasing the efficiency of

**such machinery but also to insufficient training of person-**

Finally, it must also be mentioned that new materials are often utilized for the construction of new machinery. In many cases, no test results are available at the time on their behaviour over long operating periods. It is almost unavoidable that certain parts of a plant of novel design and built with new materials will fail prior to the end of the calculated lifetime of such an installation.

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**finalidad global. Se eliminaron las soluciones intermedias, el propio sector te-**

reliability. This outweighs a high efficiency because longer continuous operating periods are possible. The layout and design of every machine or industrial installation is always a compromise between technical possibilities and economic justification.

Today's technology has reached such a high standard that it would be theoretically possible to produce machines with almost absolute operating reliability for an extremely long period of operation. However, the costs of developing such machinery would be disproportionate to the useful economic life span, which is always shorter than technical lifetime since new machines with improved efficiency are continuously being developed.

**ten Wettbewerbes und einer aufkommenden Kostendis-**

cesses are introduced for which operating experience is lacking. Safety factors are constantly being reduced in order to produce more competitive and cheaper equipment. Human failure remains, by experience, an important damage factor. More complex plant increases the probability of failure. Human failure further mounts with the complexity of the task. With production units becoming larger and larger, the indirect losses are increasing correspondingly. When modern processes and machinery and plant are crammed together in order to gain space, we are also faced with the domino effect of loss propagation. Rapid techno-





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## jourd'hui s'est développée au début des années 80 dans un environnement de concurrence

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## ers' Association" in 1854, an independent organisation for the inspection and revision of

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## puesto de los jefes de expedición en todos los niveles. La logística actual se desarrolló a co-

During the heavy recession period up to the Second World War, the technical development became somewhat stagnant since the economic outlook was rather gloomy. There was little incentive for large investments in research and for developing new, larger and better machinery and equipment. The situation changed radically after the end of the war with an enormous backlog demand to take up and realize all the projects that had been shelved during the recession and war years. The heavy demand for raw materials and energy for the production of investment and consumer goods required the development of larger and more efficient machines and technical installations. With the constant rise in investment costs and high expenditure for the operation and maintenance of installations, the demand for a high degree of reliability of the new industrial plants was of primordial importance. Up to the early Seventies, technical development concentrated mainly on increasing the efficiency of the machines, which could only be achieved by increasing the operating conditions such as pressure, temperature, rotating speed, etc. This caused higher stresses, however, and increased vulnerability to material and operational fai-

## logistik ein Gesamtziel. Insellösungen wurden eliminiert, der eigene Bereich musste die Interes-

Other power machines such as steam turbines, electric generators and electric motors were invented during the rapid technical development taking place towards the end of the 19th century. Many losses occurred particularly with the steam turbines, such as shafts bursting and the physical explosion of turbine casings. Insurance then covered the physical explosion of the parts of the turbine that were subject to steam pressure and the disruption of rotating parts of the unit. The invention of other rotating machinery such as pumps, compressors, electric generators and motors, produced more frequent damage due to novel and prototype design and the operating firms asked for a broader form of coverage. Therefore, in the late 1920s, the first separately developed lines for flywheel, engine breakdown and electrical machinery insurance were combined under the general classification of machinery insurance, which even today is the basic form of cover offered under this line.



**Concours  
internationaux  
de formation  
professionnelle  
destinés  
à la jeunesse**

**acharnée et de dis-  
cipline naissante en  
matière de coûts.**

**International Youth  
Skill Olympics**

**production machin-  
ery, resulting in  
heavy losses to**

**Concursos  
Internacionales  
de formación  
profesional  
para la Juventud**

**mienzos de los años  
ochenta en el mar-  
co de una dura**

**Internationale  
Berufswettbewerbe  
für die Jugend**

**ziplin. Dazu kam  
das theoretische  
Wissen, das dem**

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10



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technical lifetime since



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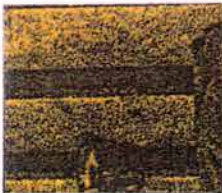


are possible. The layout

ces facteurs s'ajou-  
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tion of new machinery. In  
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"Hartford Steam  
Boiler Inspection  
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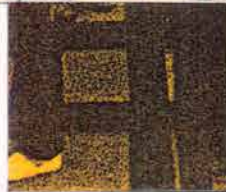
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It takes years for a plant to go  
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Today's technol

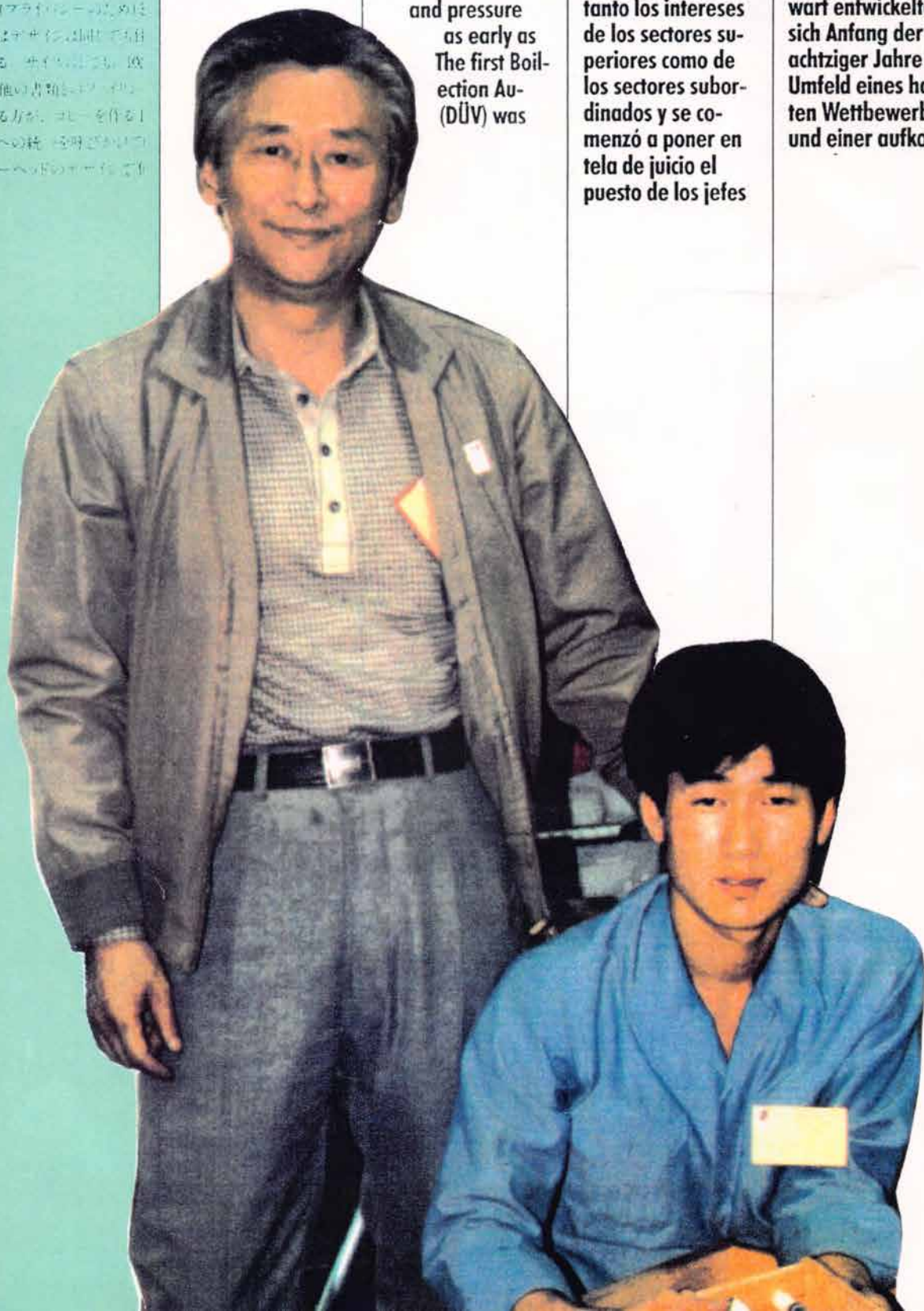
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**coup, la logistique  
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In Germany deve-  
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und einer aufkom-



founded in 1866 in  
Mannheim on the

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design features, new materials and manufacturing processes are introduced for which operating experience is lacking. Safety factors are constantly being reduced in order to produce more competitive and cheaper equipment. Human failure remains, by experience, an important damage factor. More complex plant increases the probability of failure. Human failure further mounts with the complexity of the task. With production units becoming larger and larger, the indirect losses are increasing correspondingly. When modern processes and machinery and plant are crammed together in order to gain space, we are also faced with the domino effect of loss propagation. Rapid technological change makes it difficult to obtain loss statistics for large amounts of similar machinery.



development of larger and more efficient machines and technical installations. With the constant rise in investment costs and high expenditure for the operation and maintenance of installations, the demand for a high degree of reliability of the new industrial plants was of primordial importance. Up to the early Seventies, technical development concentrated mainly on increasing the efficiency of the machines, which could only be achieved by increasing the operating conditions such as pressure, temperature, rotating speed, etc. This caused higher stresses, however, and increased vulnerability to material and operational fail-  
reliability. This outweighs a high efficiency because longer continuous operating periods are possible. The layout and design of every machine or industrial installation is always

のが、そのデザインに効果的  
 ザインされた。カーベッドは  
 ザインはその最終的な状態に  
 タイピングを邪魔してはなら  
 ない。ヨーロッパのカーベッ  
 ドは、デザインで、その金をか  
 けて保守的で典型的である  
 繊維と費用を投入する  
 素材として位置づけられ、さ  
 すが、本来業務用であれば  
 様、あるいはブランドものの  
 9割は、よいはずないが、い  
 ることがなかった。その理  
 由は、私自身、より、より  
 ヒューマンなコミュニケーション  
 デザインやデザインが欲しいと思  
 った。本書は1986年に出版  
 され、今も世界各国の未だ  
 だ、この本を借りて感謝の

その出会いは1968年にさか  
り手元に、数通の手紙がア  
ヘッドを手にした最初でもあ  
くタイプされたプロフェッショ  
ナル用紙で作った自分の手紙  
その3年後に私はレターヘ  
ッド、その高度なデザインと  
に対して脱帽せざるを得なか  
る。

どの程度いるのか、私には  
ら、そう多くはないだろう。ア  
ることであって、私もバウ  
れたことがある。しかし、ここ  
ターヘッドは、デザイン年

teurs des responsa-  
bles des expédi-  
tions commencèrent  
à devenir bancals!  
La logistique telle  
qu'on la connaît au-  
jourd'hui s'est dé-  
veloppée au début  
des années 80 dans  
un environnement  
de concurrence  
acharnée et de dis-  
cipline naissante en



erwachungs-Verein)  
was founded in  
1884 and was the  
predecessor of the  
Association of the  
Technical Inspection  
Authorities: V d TÜV  
(Vereinigung der  
Technischen  
Ueberw-

puesto de los jefes  
de expedición en  
todos los niveles. La  
logística actual se  
desarrolló a co-  
mienzos de los años  
ochenta en el mar-  
co de una dura  
competencia y de  
disciplina de

ergente.  
dispuso  
cimient  
ible en  
manua

Plötzlich gab es für  
die Unternehmens-  
logistik ein Gesamt-  
ziel. Insellösungen  
wurden eliminiert,  
der eigene Bereich  
musste die Interes-  
sen der vor- und  
nachgelagerten Be-  
reiche berücksichti-  
gen, und es wackel-  
ten die Stühle der  
Versandchefs auf  
allen Ebenen. Die  
Logistik der Gegen-





## pouvait disposer d'une connaissance théorique sous une

a compromise between technical possibilities and economic justification. Today's technology has reached such a high standard that it would be theoretically possible to produce machines with almost absolute operating reliability for an extremely long period of operation. However, the costs of developing such machinery would be disproportionate to the useful economic life span, which is always shorter than technical lifetime since new machines with improved efficiency are continuously being developed. Finally, it must also be mentioned that new materials are often utilized for the construction of new machinery. In many cases, no test results are available at the time on their behaviour over long operating periods. It is almost unavoid-

forme pratique: les micro-ordinateurs et les PC pouvaient

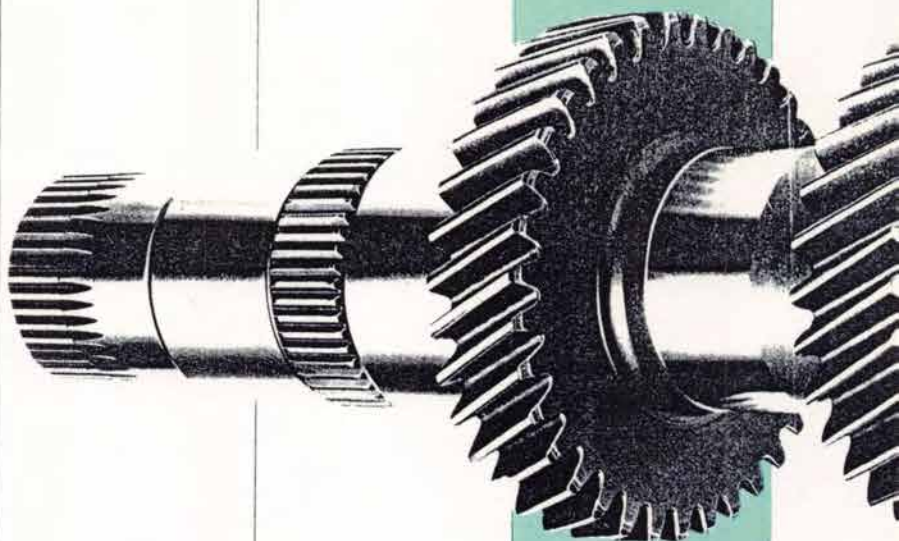
## ers and pressure vessels as early as 1856. The first Boil-

mous backlog demand to take up and realize all the projects that had been shelved during the recession and war years. The heavy demand for raw materials and energy for the production of investment and consumer goods required the development of larger and more efficient machines and technical installations. With the constant rise in investment costs and high expenditure for the operation and maintenance of installations, the demand for a high degree of reliability of the new industrial plants was of primordial importance. Up to the early Seventies, technical development concentrated mainly on

Mannheim on the same principles as the British organi-

## una disciplina de gastos emergente. Además, se dispuso

type design and the operating firms asked for a broader form of coverage. Therefore, in the late 1920s, the first separately developed lines for flywheel, engine breakdown and electrical machinery insurance were combined under the general classification of machinery insurance, which even today is the basic form of cover offered under this line. During the heavy recession period up to the Second World War, the technical development became somewhat stagnant since the economic outlook was rather gloomy. There was little incentive for large investments in research and for developing new, larger and better machinery and equipment. The situation changed radically after the end of the war with an enor-



doras y ordenadores personales se podían De pronto,

## wart entwickelte sich Anfang der achtziger Jahre im

Other power machines such as steam turbines, electric generators and electric motors were invented during the rapid technical development taking place towards the end of the 19th century. Many losses occurred particularly with the steam turbines, such as shafts bursting and the physical explosion of turbine casings. Insurance then covered the physical explosion of the parts of the turbine that were subject to steam pressure and the disruption of rotating parts of the unit. The invention of other rotating machinery such as pumps, compressors, electric generators and motors, produced more frequent damage due to novel and proto-

Umfeld eines harten Wettbewerbes und einer aufkom-

何事も電話で済ませることといった状況でやって来るようになるべく簡単に片付けたいの事務用箋でも構わないかなければならないことが多い。せっかく便利なワープロが在りて手紙を書いたのでは、手紙をたいて作る時代になった手紙に不足しがちな人間、大限に引き出す努力は、タねれてきている。それからレターヘッド時代を迎えた我々にとって版した意図もここにある。レターヘッドとは本来、シタを印刷したことから、手紙のである。個人用でも会社用されることが多い。大企業でなデザインプログラムのコード称あるいは代表として取り扱店にレターヘッドと言えは、簡が、豊富なデザインを用いるになっている。

今まで出会ったことがないかは1920-30年代のものが用一たちのものを数点手に入いては、優れたデザインのレ

16

réaliser et Tout à coup, la logistique d'entreprise est devenue un objectif à part entière. Chaque secteur devait tenir compte des intérêts des autres secteurs en amont et en aval. Les fauteuils des responsables des expéditions commencèrent à devenir bancals! La logistique telle qu'on la connaît au-



Suddenly, corporate logistics had an overall goal. Stand-alone approaches were eliminated, individual divisions had to take the interests of upstream and downstream activities into account, and the positions of dispatch



la logística empresarial obtuvo una finalidad global. Se eliminaron las soluciones intermedias, el propio sector tenía que considerar tanto los intereses de los sectores superiores como de los sectores subordinados y se comenzó a poner en tela de juicio el puesto de los jefes de expedición en todos los niveles. La logística actual se

menden Kostendisziplin. Dazu kam das theoretische Wissen, das dem Anwender in handlicher Form zur Verfügung stand: Auf Mikro- und Personal-Computern konnten komplexe Abläufe und deren Optimierung wie Plötzlich gab es für die Unternehmenslogistik ein Gesamt-



**jourd'hui s'est développée au début des années 80 dans**

the turbine that were subject to steam pressure and the disruption of rotating parts of the unit. The invention of other rotating machinery such as pumps, compressors, electric generators and motors, produced more frequent damage due to novel and prototype design and the operating firms asked for a broader form of coverage. Therefore, in the late 1920s, the first separately developed lines for flywheel, engine breakdown and elec-

**where started to look shaky. Modern**

as steam turbines, electric generators and electric motors were invented during the rapid technical development taking place towards the end of the 19th century. Many losses occurred particularly with the steam turbines, such as shafts bursting and the physical explosion of turbine casings. Insurance then covered the physical explosion of the parts of

**desarrolló a comienzos de los años ochenta en el mar-**

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**ziel. Insellösungen wurden eliminiert,**

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のか、そのデザインの効果は  
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タイピングを邪魔してはなら  
ヨーロッパのレーザーヘッドは  
なデザインでしかもお金をか  
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い。本来業務用であれば  
様、あるいはブランドものの  
動いてよいはずなのだが……  
ねることになった。いであ  
する理由は私自身のまわり  
よりヒューマンなコミュニケー  
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り、今でも世界各国の書籍  
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**pouvait disposer  
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théorique sous une  
forme pratique: les  
micro-ordinateurs**

high efficiency because longer  
continuous operating periods  
are possible. The layout and  
design of every machine or in-  
dustrial installation is always  
a compromise between tech-  
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possible to produce machines  
with almost absolute operat-  
ing reliability for an extremely  
long period of operation.  
However, the costs of devel-  
oping such machinery would  
be disproportionate to the

**Explosion Act" pre-  
scribing compulsory  
periodical inspec-**

useful economic life span,  
which is always shorter than  
technical lifetime since new  
machines with improved effi-  
ciency are continuously being  
developed.  
Finally, it must also be men-  
tioned that new materials are  
often utilized for the construc-  
tion of new machinery. In  
many cases, no test results are  
available at the time on their  
behaviour over long operating  
periods. It is almost unavoid-  
able that certain parts of a  
plant of novel design and

**Además, se dispuso  
del conocimiento  
teórico obtenible en  
forma manuable:  
en microcomputa-**

built with new materials will  
fail prior to the end of the cal-  
culated lifetime of such an in-  
stallation.  
It takes years for a plant to go  
from the drawing board into  
operation and even during  
this span of time, many new  
design features, new materi-  
als and manufacturing pro-  
cesses are introduced for  
which operating experience is  
lacking. Safety factors are  
constantly being reduced in  
order to produce more com-  
petitive and cheaper equip-  
ment. Human failure remains,  
by experience, an important  
damage factor. More complex

**der eigene Bereich  
musste die Interes-  
sen der vor- und  
nachgelagerten Be-**

plant increases the probability  
of failure. Human failure fur-  
ther mounts with the com-  
plexity of the task. With pro-  
duction units becoming larger  
and larger, the indirect losses  
are increasing correspond-  
ingly. When modern processes  
and machinery and plant are  
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propagation. Rapid techno-  
logical change makes it diffi-  
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large amounts of similar ma-  
chinery.



**modest output were already in opera-**

plosion of turbine casings. Insurance then covered the physical explosion of the parts of the turbine that were subject to steam pressure and the

**the beginning of the 19th century,**

outlook was rather gloomy. There was little incentive for large investments in research and for developing new, larger and better machinery and

**boilers. Great Britain was in the**

late 1920s, the first separately developed lines for flywheel, engine breakdown and electrical machinery insurance

**invention that allowed the thermal**

constantly being reduced in order to produce more competitive and cheaper equipment. Human failure remains, by experience, an important

**property and bodily injuries. These were**

ing place towards the end of the 19th century. Many losses occurred particularly with the steam turbines, such as shafts bursting and the physical ex-

**this new energy production machin-**

equipment. The situation changed radically after the end of the war with an enormous backlog demand to take

**large scale mainly due to James Watt's**

were combined under the general classification of machinery insurance, which even today is the basic form of cover offered under this line.

**Industrialisation was possible on a**

als and manufacturing processes are introduced for which operating experience is lacking. Safety factors are

**ery, resulting in heavy losses to**

Other power machines such as steam turbines, electric generators and electric motors were invented during the rapid technical development tak-

**problems occurred in connection with**

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**tion. However, many teething**

It takes years for a plant to go from the drawing board into operation and even during this span of time, many new design features, new materi-

**some 500 steam engines of very**

damage factor. More complex plant increases the probability of failure. Human failure further mounts with the complexity of the task. With pro-

**used in so-called steam engines and**

disruption of rotating parts of the unit. The invention of other rotating machinery such as pumps, compressors, electric generators and motors,

**energy contained in wood and coal to be**

During the heavy recession period up to the Second World War, the technical development became somewhat stagnant since the economic

**forefront in this development. At**

able that certain parts of a plant of novel design and built with new materials will fail prior to the end of the calculated lifetime of such an in-

私とレーサーヘッド・デザイン  
留学準備を進めていた私の  
届いていた。これがレーサー  
デザインにもかかわらず、美し  
倒されながら、既製のタイ  
にあぜんとしたものだ。つな  
でいる。手に入れば入れ



