

BELFOR 

Impact Emergency Aid Recovery Restoration

Reducing Losses by Restoration



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Restoration - a brief definition

Equipment restoration

- Definition
- Process

Cases

Conclusion

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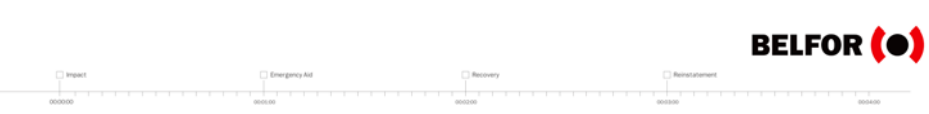
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Impact Emergency Aid Recovery Restoration

BELFOR Worldwide Leader in Restoration

- Some 4.600 Employees
 - 230 Offices
 - In more than 30 countries worldwide
- 2010 Sales >1.000 Mio. \$
 - 1/3 Europe
 - 2/3 America

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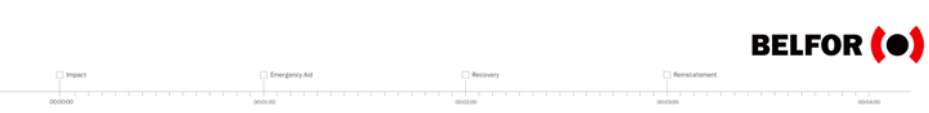
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Impact Emergency Aid Recovery Restoration

**Restoration –
Emergency Service following a loss incident**

- Incidents
 - Typically fire and water losses
 - Storms and spills
- Objective
 - Support for the person / organization affected by an incident / loss to come back as fast as possible to pre loss situation
- Key advantages
 - Fast service with specialized know how
 - Reduces business interruption / loss of market share
 - Reduces consequential losses
 - Has a better value (is less expensive) than new construction / equipment

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**Restoration –
Specialized Decontamination and Repair Service**

- Restoration of Building
 - Decontamination, Drying and Repair of buildings (Reconstruction)
- Equipment Restoration
 - Process of decontamination and repair (“recovering”) of existing equipment rather than replacing the equipment
- Document and Data Restoration
 - Cleaning and Drying Books
 - Restoring Data from All Types of Storage Media
- Contrary to many opinions majority of equipment can be recovered to full pre-incident performance specifications – if not destroyed by the heat

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Impact Emergency Aid Recovery Recontamination

Restoration – Decontamination and Repair

- Soot
- Fire extinguishing powder (often corrosive)
- Water (white water / contaminated water)
- Chloride (and other corrosive contaminations)
- Others (in case of technical dysfunction – e.g. spills)

- Repair of partially damaged structure
- Repair of technical equipment in some cases

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Impact Emergency Aid Recovery Recontamination

Fire Affected Equipment which cannot be Recovered

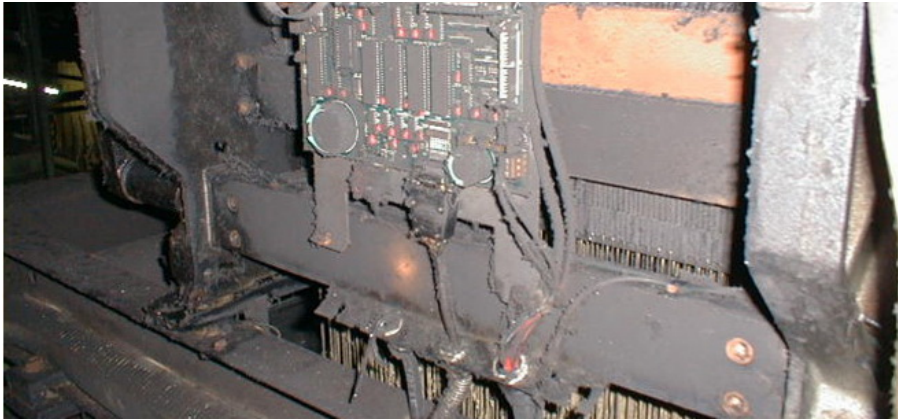


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Fire Affected Equipment which **can** be Recovered



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Effects of Fire Contamination

- Chloride, released when PVC is heated or burned, combines with high ambient humidity to form hydrochloric acid (HCl), causing corrosion on unprotected metallic surfaces
- One kilogram of combusted PVC produces 1.5 liters of concentrated hydrochloric acid, which is sufficient to contaminate up to 1,000 square meters
- Humid conditions generated by water used for fire suppression can initiate corrosion on unprotected metallic surfaces
- Carbon deposits (“soot”) can cause serious damage to electrical and electronic equipment, due to “short-circuits” when equipment is energized

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Abstraction of a Typical Fire Situation

Restoration Zone
Contamination (Soot, smoke, water)
Temp. < 100 °C

Total Loss Zone
Centre of Fire Damage due to intense heat.
Temp. > 100 °C

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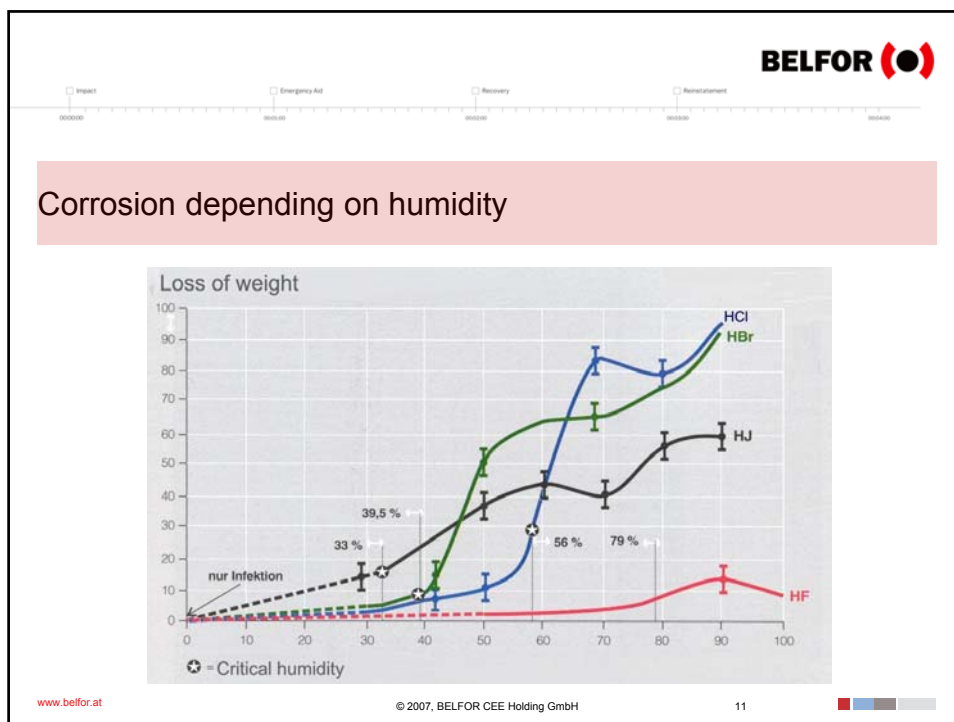
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Corrosion due to HCl

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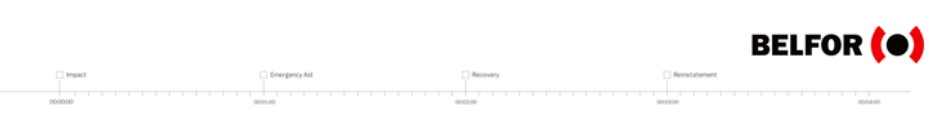
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How to react?

- It is crucially to act immediately
- Critical concentration of Chloride: $10\mu\text{gCl}/\text{cm}^2$
- First aid: Stabilizing the situation!
- 3 Components relevant:
 - Oxygen protection of the surface (with oil)
 - Water removal of water, reduction of humidity
 - Chloride chloride binding chemicals are applied

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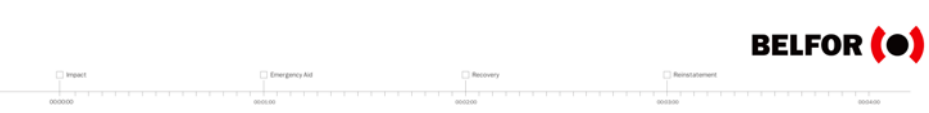
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Restoration

- Reinststate full functionality
- Without loss of reliability
- Without loss of value
- Without loss of useful lifespan
- Carried out by professionals
- In compliance with international standards

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Impact Emergency Aid Recovery Restoration

Warranty Solutions

- Warranty Status Following a Contamination Event:
 - Fire, and water ingress will automatically void the manufacturer's warranty (where existing)
 - In the majority of cases, manufacturers warranty has already expired
- Warranty Options Following Restoration:
 - Restoration specialist will guarantee Restoration work carried out
 - Full maintenance service can be provided, replacing the manufacturer's warranty
 - In all instances, the provision of warranties is simply a matter of economics

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Skills of Restoration Specialist vs. OEM

<p>Equipment manufacturers</p> <ul style="list-style-type: none"> • Sell new machines (replace old) • Replace spare parts on existing machines (faulty) 	<p>Restoration specialists</p> <ul style="list-style-type: none"> • Decontaminate machines (contaminated) • Repair machines in some cases
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Engage the appropriate service provider!

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Impact Emergency Aid Recovery Reinstatement

Cases



Russia:
Power Station, Moscow

Slovakia:
Motor Car, Banská Bystrica

Poland:
Novostrat, Pabianice

Hungary:
Appartement

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Fire at Chagino Power Station (Russia)



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Fire at Chagino Power Station – aftermath



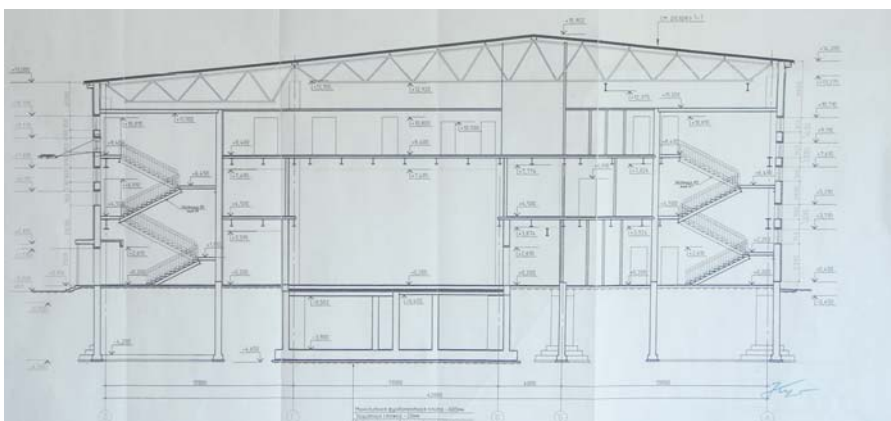
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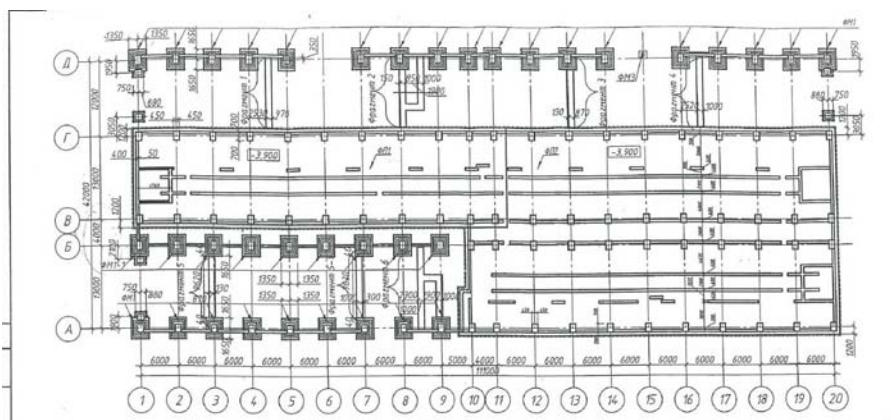
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Vertical section of building



Basement




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After coffee break



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□ Impact □ Emergency Aid □ Recovery □ Recontamination

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Decontamination work in the hangar



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Cleaning in the hangar



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Detailed description: This slide shows a close-up view of a large, green-painted cylindrical component, likely a turbine or generator part, being cleaned in a hangar. The component is mounted on a dark, possibly metal, structure. The cleaning process is visible as a bright green spray or mist is directed at the surface. The background is dark, suggesting an indoor industrial setting.

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March 13th – After 7 days of working



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Detailed description: This slide provides a wide-angle view of a large industrial hangar. The hangar is filled with numerous large, green-painted cylindrical components, similar to the one shown in the previous slide. These components are arranged in rows and are supported by blue metal scaffolding. The hangar has a high ceiling with visible structural beams and lighting fixtures. The overall scene depicts a busy industrial environment where large-scale machinery is being prepared or assembled.

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GIS – See the difference




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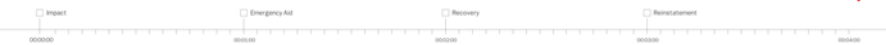
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GIS – See the difference



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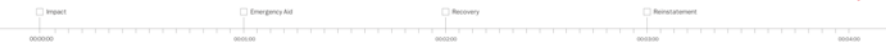


GIS – see the difference (2)



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Motor Car Banská Bystrica



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Building

Restoration on Building




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Equipment

Restoration on Special Tools & Workshop Platform



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Special Tools and Equipment Restoration

Special tools, cables, spare automobile parts and other equipment



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Document restoration



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Document restoration





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Car restoration




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Novostrat, Pabianice, PL



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Detailed description: This slide features a timeline at the top with four stages: Impact, Emergency Aid, Recovery, and Reestablishment. Below the timeline is a pink header with the text 'Novostrat, Pabianice, PL'. The main image shows a dark industrial interior with complex machinery, including a large blue machine on the right and a white cabinet on the left. The bottom of the slide contains the website 'www.belfor.at', copyright information '© 2007, BELFOR CEE Holding GmbH', the number '35', and a color calibration bar.

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□ Impact □ Emergency Aid □ Recovery □ Reestablishment

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In the center of the heat



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Detailed description: This slide features a timeline at the top with four stages: Impact, Emergency Aid, Recovery, and Reestablishment. Below the timeline is a pink header with the text 'In the center of the heat'. The main image is a close-up of industrial machinery, showing a large, dark, cylindrical component in the foreground and various pipes and structures in the background. The bottom of the slide contains the website 'www.belfor.at', copyright information '© 2007, BELFOR CEE Holding GmbH', the number '36', and a color calibration bar.

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□ Impact □ Emergency Aid □ Recovery □ Reinstatement

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Producing line – after the fire




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□ Impact □ Emergency Aid □ Recovery □ Reinstatement

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Producing line – after restoration




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□ Impact □ Emergency Aid □ Recovery □ Reinstallation

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Chloride corrosion



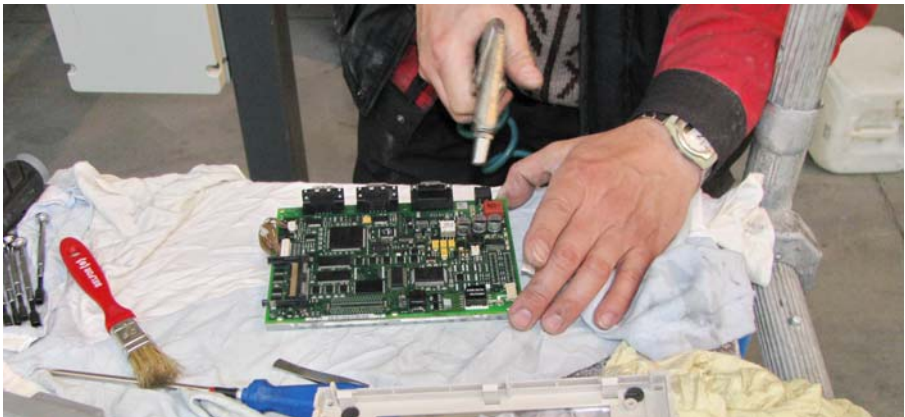
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□ Impact □ Emergency Aid □ Recovery □ Reinstallation

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Restoration includes electronics




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□ Impact □ Emergency Aid □ Recovery □ Reestablishment

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The most critical parts: tools




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□ Impact □ Emergency Aid □ Recovery □ Reestablishment

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The most critical parts: tools




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Impact Emergency Aid Recovery Reinstatement

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Producing line – after fire




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Producing line – after restoration




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□ Impact □ Emergency Aid □ Recovery □ Reinstatement

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Fire restoration in private space




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□ Impact □ Emergency Aid □ Recovery □ Reinstatement

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Bathroom



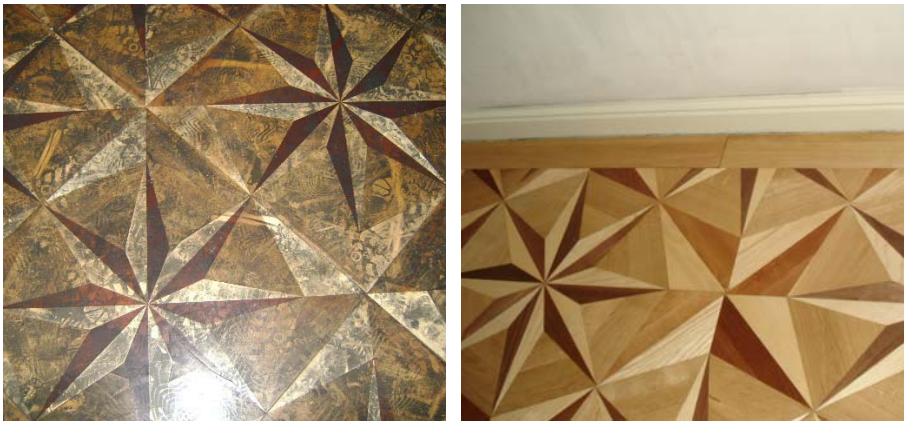
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□ Impact □ Emergency Aid □ Recovery □ Reestablishment

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Floor




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□ Impact □ Emergency Aid □ Recovery □ Reestablishment

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Ceiling and Walls



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Impact Emergency Aid Recovery Reestablishment

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Ceiling and Walls



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This slide features a timeline at the top with four stages: Impact, Emergency Aid, Recovery, and Reestablishment, each with a corresponding icon and a numerical scale below it. The main content is a photograph of a highly ornate, dark-colored ceiling and wall corner, showcasing intricate carvings and decorative moldings.

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Impact Emergency Aid Recovery Reestablishment

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Ceiling and Walls




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This slide features the same timeline and navigation elements as the previous slide. The main content is a photograph showing a worker in a dark shirt using a long-handled tool to clean or restore the ornate ceiling and wall area. Another person is partially visible in the background, and a ladder is positioned nearby.

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Impact Emergency Aid Recovery Reinstatement

Ceiling and Walls



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Ceiling and Walls



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Impact Emergency Aid Recovery Reinstatement

Ceiling and Walls



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This slide features a timeline at the top with four stages: Impact, Emergency Aid, Recovery, and Reinstatement. Below the timeline is a pink header with the text 'Ceiling and Walls'. The main image shows a close-up of highly detailed, classical-style architectural moldings on a ceiling and wall. At the bottom, there is a footer with the website 'www.belfor.at', the copyright notice '© 2007, BELFOR CEE Holding GmbH', the number '53', and a small color calibration bar.

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Impact Emergency Aid Recovery Reinstatement

High Value Stereo Equipment




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This slide features a timeline at the top with four stages: Impact, Emergency Aid, Recovery, and Reinstatement. Below the timeline is a pink header with the text 'High Value Stereo Equipment'. The main image shows a vintage vacuum tube stereo amplifier with a wooden front panel and a grey top. Several vacuum tubes are visible on the top surface. At the bottom, there is a footer with the website 'www.belfor.at', the copyright notice '© 2007, BELFOR CEE Holding GmbH', the number '54', and a small color calibration bar.

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Impact Emergency Aid Recovery Reinstatement

High Value Stereo Equipment



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Impact Emergency Aid Recovery Reinstatement

Conclusion

- Restoration through BELFOR brings the customer fast back to his business
- BELFOR is experienced working in nearly all industries and nearly all developed countries
- Your customer has (normally) no experience with fire or flood
- You can add value for your customer in bringing BELFOR
- This will save time and money and secure the customers market!
- This will strengthen your business relationship and might even save a customer for you!

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