

BELFOR (●) SOLUTIONS

BELFOR international journal #10

PROACTIVE KNOW-HOW

Problem solving in theory and practice

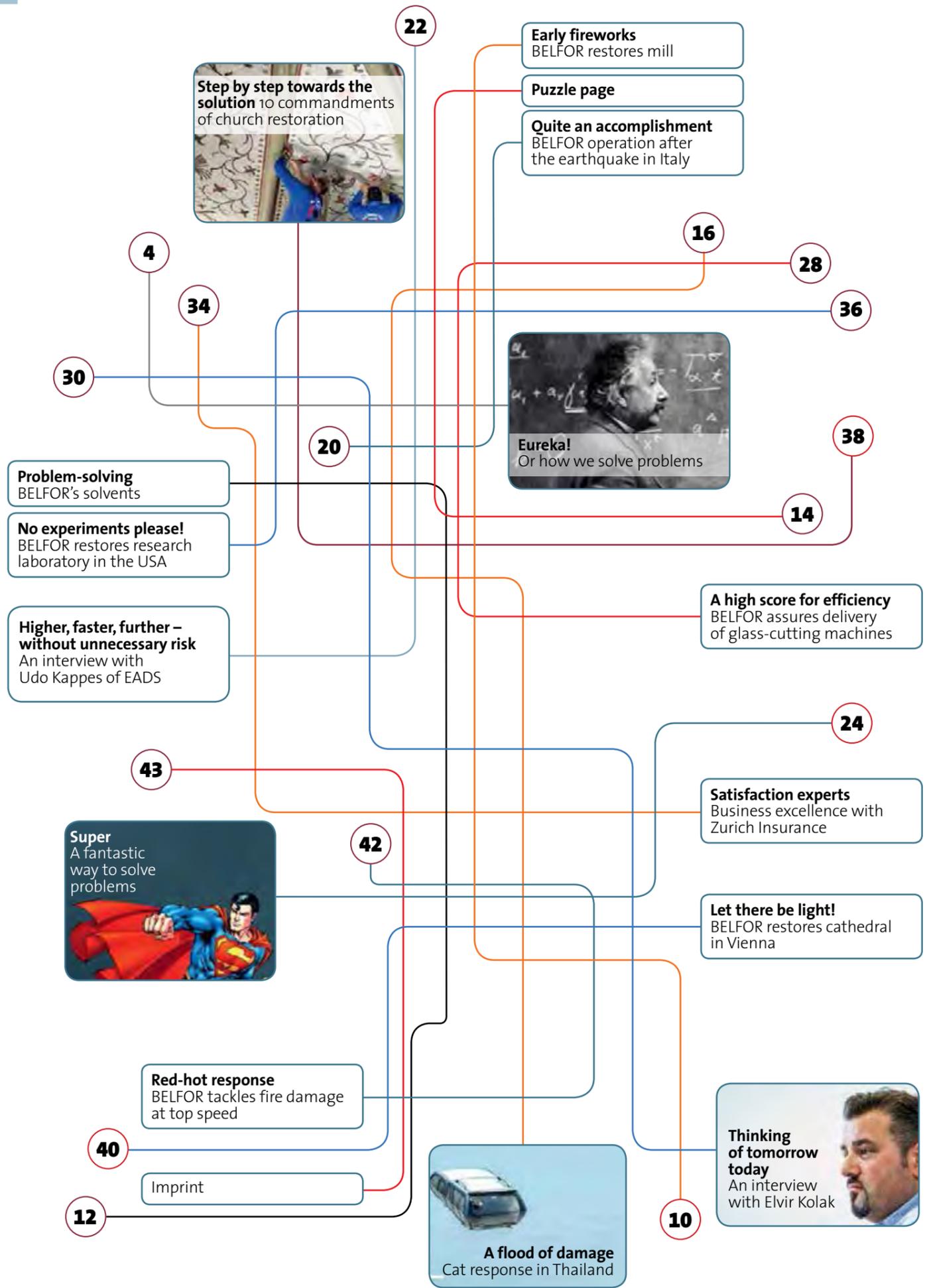
Eureka!
Or how solving problems
creates problems

Satisfaction experts
Business excellence
in damage management

**A flood
of damage**
Catastrophe response
in Thailand

**Higher, faster, further –
without unnecessary risk**
An interview with
Udo Kappes of EADS





Dear reader

"All life is problem solving", sighed the philosopher Karl Popper. In his best-known work "The Open Society and Its Enemies" (1945), he conjures up an image of a society that is developing through a continuing process of improvement attempts and error corrections. The "Open Society" has now become an established term. But speaking as someone in that society, I can see a lot of unanswered questions: Who will stop global warming? Who will solve the education crisis? Who will save the Euro? To name just three.



Our personal lives are also a permanent problem-solving process, from exams at school and university to the everyday challenges of the workplace, not to mention the ultimate human enigma of the meaning of life itself. And as if that were not enough, many people spend time solving crossword puzzles or playing sudoku at the most challenging level.

"All life is problem solving."

Karl Raimund Popper,
Austro-British philosopher
(1902–1994)

And some "die-hards" – like the employees of BELFOR – have even made problem-solving their profession. Where classic problem-solving strategies such as calling a meeting suddenly go out of the window – because the round table has been flooded, a storm has ripped the roof off, or a fire has paralysed the electrics – you can rely on BELFOR to arrive in an instant and get everything up and running again as quickly as possible, so that you can carry on concentrating on your day-to-day problems without a lengthy business interruption.

Problem solving is our stock-in trade and the name of our annual customer magazine, "BELFOR solutions", reflects this. This is now its tenth year. To celebrate the anniversary of "solutions", we have used the title as a theme. solutions #10 features not just exciting problem-solving reports from all over the world, but also new solution strategies for dealing with the current challenges of the global restoration market, such as innovative solvents, which we develop in our own R&D laboratories and adapt continuously to new damage requirements (page 12) or consistent employee development and the expansion of the private client business (page 30). solutions #10 is packed with interesting articles and also includes some entertaining puzzles that challenge you to find solutions of your own.

A further strategic solution is the fact that we plan to gear our communication with our customers even more towards specific target groups in future. This 10th edition of solutions is therefore the last in this form. In future, our readers will hear from us more than once a year, and we will be covering a variety of themes. The topics and content will be arranged differently with more direct and modern presentation using suitable media, as befits today's fast-moving insurance and restoration business. I am looking forward to tailor-made BELFOR solutions – both now and in the future – and I hope you are too! I hope you enjoy reading this edition. And I wish you every success in solving your next problem!

Yours
Bernd Elsner
CEO BELFOR Europe GmbH



EUREKA!

Or how solving problems creates problems.

I've got it! Or in Greek: Eureka! This was the cry of Archimedes of Syracuse (approx. 287-212 BC), mathematician of the ancient world. He had been searching for days for a method to determine the gold content of the crown of the tyrant of Syracuse. The answer came to him in the bath tub, where he discovered that the quantity of bathwater displaced corresponded exactly to the volume of his body. Overcome with this brain wave, he leapt out of the bath and ran naked through the streets of Syracuse, loudly crying "Eureka!" again and again. Archimedes' cry is still used today to express the unadulterated joy of discovery. The US State of California has even made it its state motto.

A buoyant force for humanity

Archimedes' "buoyancy principle" enabled the gold content of the king's crown to be precisely calculated. If it displaced more water than a pure gold bar of the same weight, this would mean that base metals had been secretly mixed into it. And this was indeed the case! The new method of measurement cost the king's goldsmith his head, but secured its discoverer's immortality. Many thinkers and inventors since Archimedes have had their own eureka moments which have pushed back the boundaries of established knowledge and been a buoyant force in human history – in the development of ships, chairlifts, helicopters, jet fighters, satellites, Space Shuttles and remote-controlled weapons.

The solution of every problem creates another problem

This brings us to an irresolvable constant in the history of problem solving: "Most problems arise by their answer," said the Italian painter and philosopher Leonardo da Vinci (1452-1519) who was the modern equivalent of Archimedes in the ancient world, the archetypal, universally talented inven-

tor genius. Around 300 years later, the German poet Johann Wolfgang von Goethe paraphrased the phenomenon thus: "The solution of every problem is another problem". Or to put it another way, no matter how many problems we solve, we will never solve the problem of problem solving! Every new discovery throws up new questions. Every new invention confronts us with new challenges, not to mention humanity's eternally unanswered question about the meaning of existence.

Innovation or stagnation?

To illustrate the phenomenon of consequential problems, let us look at the invention of the car. When the first "self-propelling" vehicles with combustion engines began chugging along the bumpy roads at the close of the 19th century, they gave rise to delighted cries of "It's the start of the age of clean mobility!" The euphoria was understandable, as the evidence at the side of the road left not the slightest doubt as to what "fuel" drove the established "traction vehicles" of the time, i.e. horses. 100 years on, roadsides are indeed no longer covered in horse manure. Instead, some 1 billion cars are driving around all over the planet, clogging up six-lane arteries to cities, sending levels of particulate emissions through the roof, fuelling the greenhouse effect and causing over 1 million road deaths per year. The "age of clean mobility" appears to have mutated into its opposite. The car has the worst environmental record of any mode of transport, with the sole exception of the aeroplane.

But humans would not be humans if we turned our backs on a challenge. Instead, we set about reinventing the wheel, be it with innovative vehicles such as the fuel-cell, solar or electric car, or with new mobility concepts like "shared mobility" that seek to tackle the threat of gridlock in cities through



The Thinker (Le Penseur) – bronze sculpture by August Rodin (1840–1927)

the principle of “use not own”. As with all other problem solutions, however, a careful distinction needs to be drawn between innovation and “stagnovation”. Stagnovations – an invented term that is a cross between stagnation and innovation – only shift the problem elsewhere. A hybrid or electric car is not necessarily cleaner to run if the energy that drives it comes from a coal-fired power station. Innovative approaches to problem solving, on the other hand, go deeper. They go straight to the heart of the problem by changing the structure of mobility and not simply replacing the vehicle or its engine.

From actual state to target state – modern problem-solving strategies

Problems – from the Greek “próblema” meaning something thrown or laid in front of someone – are a universal fact of human life, both individual and collective. And they seem to be actively on the increase. Never before in human history have so many scientists, business consultants, psychologists and personal coaches turned their attention to problem-solving strategies. Nowadays, the classic problem is regarded as a “challenge” rather than an obstacle or barrier.

One definition of problem solving is as follows: “the transformation of an actual state into a target state by overcoming resistance, by means of intelligent action, mostly using conscious thought processes.” Dissatisfaction with the actual state is the trigger for the problem-solving action. In the simplest models, this generally consists of three steps:

1. Defining the actual state and/or the problem (“as-is analysis”)

2. Application of the solution process
3. Reaching the desired target state

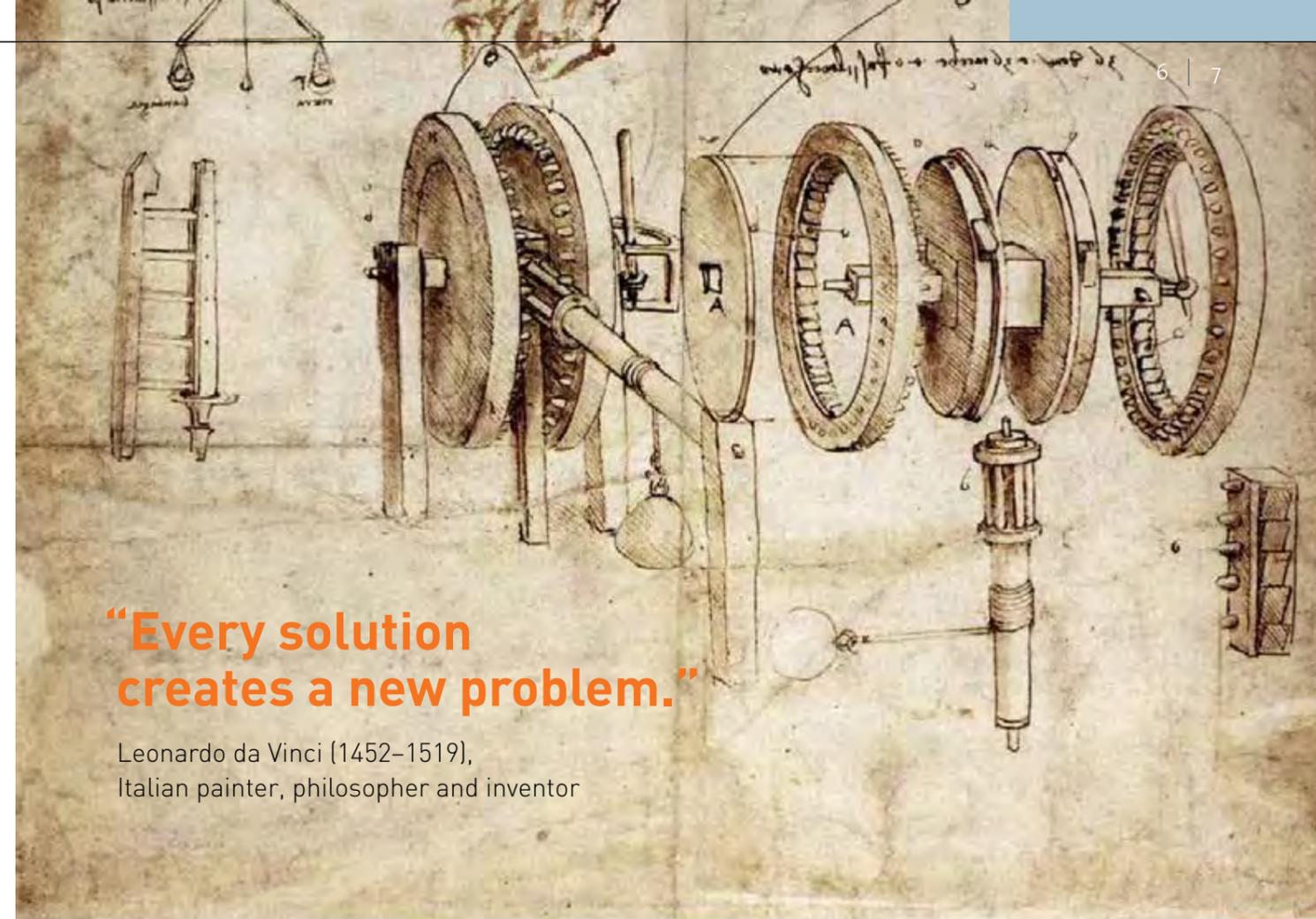
The search for a suitable solution tends mostly to range between two extremes: the often painful process of trial and error or the process of learning through insight. Both processes require good memory skills. This is the only way to avoid constantly hitting a brick wall with the same unsuccessful strategy, like a fly against a window pane (until the fly swapper puts it out of its misery).

Structuring, abstraction, construction

Since many problems are similar, but no two exactly alike, learning through insight requires the ability to restructure what has been learnt combined with a good measure of abstraction. This involves adapting learned patterns to new, yet similar circumstances by using the ability to generalise. Creative approaches to solutions transcend learning through insight by incorporating new, previously unexhibited behaviour patterns or ideas in the problem-solving process. Many major discoveries that have shaped human history are based on this, as are many of BELFOR’s “minor” inventions that enrich everyday, routine restoration work with creative stimuli and proposals. Some of these can be found in this issue – for instance in the “BELFOR’s solvents” article on page 12-13.

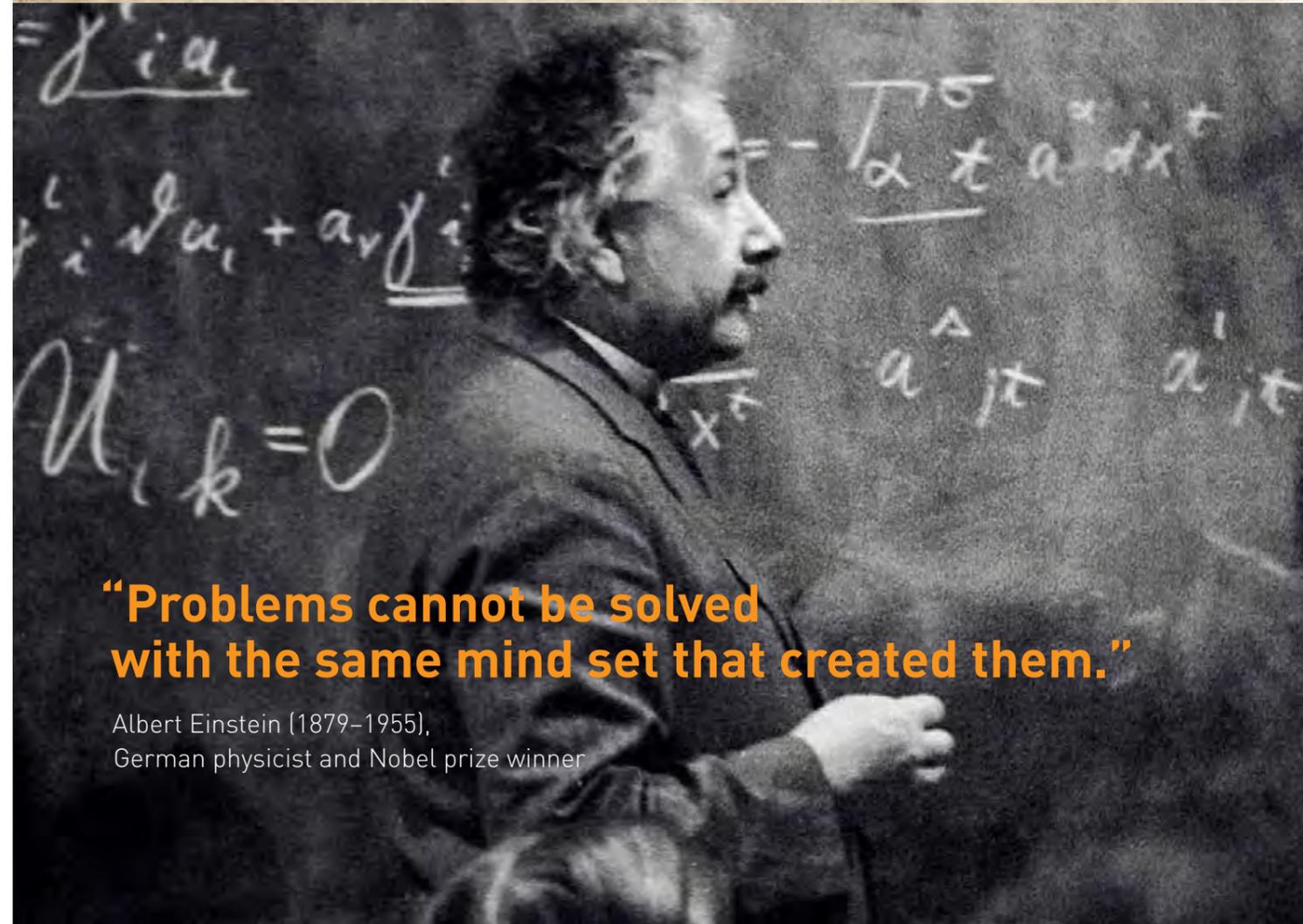
From one to many

Looking at a complex, globally successful company like BELFOR broadens the perspective to reveal a key discovery regarding the solution of modern problems: Whereas the history of problem solving within living memory revolved around a few individual geniuses – thinkers, discoverers, inventors – who drove the march of progress with groundbreaking discoveries, today’s “genius” lies in the intelligence of the many. Close networking of everyone with everyone and everything else – largely thanks to the media revolution in telecommunications and the internet – is totally transforming the dynamics of information exchange and massively speeding up technical developments in all areas. The virtual is becoming the motor that drives the real. Excessive speed is becoming the new rhythm of life. However, close networking and the resulting global interdependencies in the age of synchronism also require suitable “braking systems” in order to mitigate the consequences of undesirable developments – the proverbial beat of the butterfly’s wing



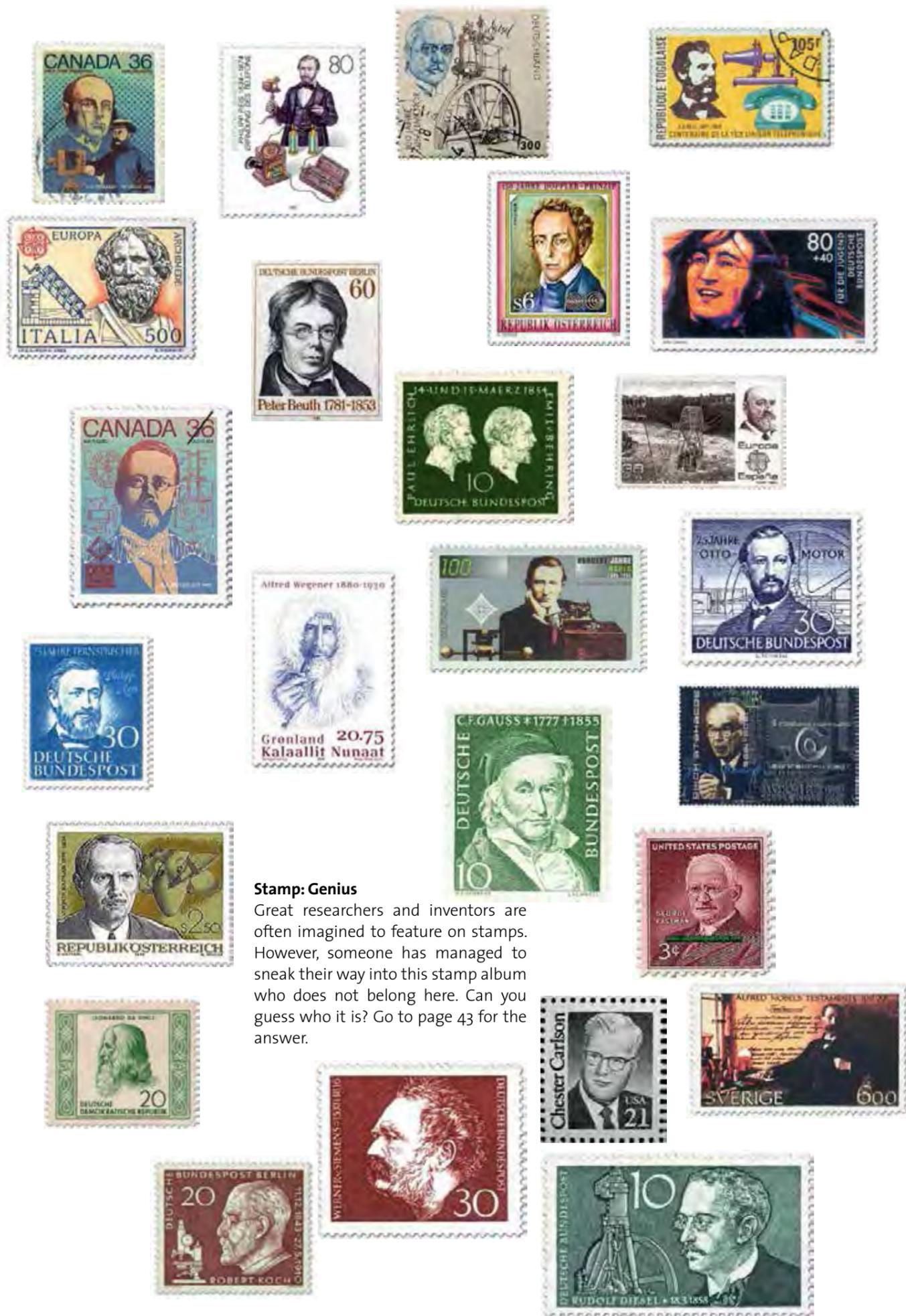
“Every solution creates a new problem.”

Leonardo da Vinci (1452–1519),
Italian painter, philosopher and inventor



“Problems cannot be solved with the same mind set that created them.”

Albert Einstein (1879–1955),
German physicist and Nobel prize winner



Stamp: Genius

Great researchers and inventors are often imagined to feature on stamps. However, someone has managed to sneak their way into this stamp album who does not belong here. Can you guess who it is? Go to page 43 for the answer.

Unorthodox problem-solving strategies

(loosely based on Paul Watzlawick, 1921–2007)

Strategy 1:

The inverted question: What would we need to do to worsen the given situation?

Focusing exclusively on improving a situation often has an inhibitive effect. The “negative” question, on the other hand, helps to see the problem clearly. The solution then lies in the doing the exact opposite of the worsening strategy.

Strategy 2:

The mountain climbing method: thinking about the way back from the destination

When they first climb a mountain, experienced climbers reconstruct the ideal way to the top by climbing down to the bottom in their minds. Firstly they consider how best to reach the nearest point below the summit. From this point, they inch on down to the next point below that – until they reach the foot of the mountain. If they emerge at the place where they already happen to be standing, then they have found the ideal starting point. If not, they change their starting position. Thinking something through from the end backwards helps to avoid errors at the start. So, instead of the journey being the destination, the destination defines the journey.

Strategy 3:

Someone else’s shoes: or looking at things from someone else’s point of view

Problem-solving is not a lone struggle. In a conflict, therefore, the following rules of procedure are advisable: Before talking about the problem itself, each conflict partner must present the problem to the other from his or her own point of view – until the other agrees with the description of the problem. This strategy bridges the gap between diverging standpoints and shortens interminable dogmatic debates.

Strategy 4:

Sleep on it: or think about the decision again in another state

According to the Greek historian Herodotus, the Persians made important decisions in a state of drunkenness, then reassessed them when they were sober again. And vice versa, every sober decision was reassessed in a drunken state. Seen in a sober light, this anecdote from antiquity can be seen to recommend not acting in the heat of the moment, but sleeping on the problem before making an important decision. And do not start pouring the Champagne until the problem has been successfully solved!

that triggers an earthquake might today be the burst property bubble of a New York investment bank, with unforeseen consequences for the global economy. As interdependencies become more complex, so do problems – and the requirements for modern approaches to solutions. Sometimes we at BELFOR are very glad that our challenges are so concrete in nature. And that we do not have to spend too long reflecting before rolling up our sleeves and getting stuck in!

From the eureka moment to the aha moment

The end of each successful problem-solving process brings with it a satisfying “aha” moment and ideally a learned strategy that can also be applied successfully to similar future problems. BELFOR employees can recall many such aha moments over the course of three decades. They frequently come about when a seemingly irresolvable “problem” – where the normal order has been completely destroyed by fire, water or storm damage – is successfully resolved and the desolate actual state transformed into a suitable target state. This has enabled us to continuously refine our problem-solving strategies so that we now reach our desired goal ever faster, better and more efficiently. We often do not just restore the old actual state, but achieve a target state that is superior to it. That makes for a real aha moment for all concerned, especially the sustainer of the damage! The 10th issue of “Solutions” recounts aha moments like these and the solution strategies that led to them. BELFOR hopes you enjoy discovering them.

Source: “Journal Panorama: In memoriam Paul Watzlawick”, Österreichische Rundfunk Oe1 radio essay, 3 April 2007

EARLY FIREWORKS

BELFOR restores flour mill in Düsseldorf harbour.

The Fortin mill can be seen for miles around in Düsseldorf harbour and is one of the tallest buildings on the large site downriver of the bend in the Rhine. Designed as one of the most cutting-edge mills in Europe, the plant was built using the latest technical expertise in the course of the construction of the new state parliament building. Since its completion, the new plant has been producing hulling mill products such as foodstuffs made of oats, wheat, maize and rye, including flakes for the bread and cereal industry. However, the company itself dates back a lot further. This August, it will celebrate its 80th anniversary. Unfortunately, the anniversary fireworks came almost a year too soon.

A minuscule trigger

In September last year, smoke suddenly rose from the 5th floor of the Fortin mill on Fringsstraße. By the time the fire brigade arrived, the flames had already reached the 6th floor. To reach all the hot spots, the fire fighters had to open up the plant. The extinguishing operations proved difficult, due in part to the size and rambling nature of the production plant which extends over ten storeys and two basement levels. Meanwhile, there was also a danger of the fire spreading. Due to the intense heat at the source of the fire, relief units had to take over continuously. With such intensive deployment, it is understandable that a lot of damage occurred, including sooting of the building, corrosion of the equipment by extinguishing water and chemical pollution of all the production facilities. Fortunately, the proportion of overall damage was small. However, for a company that depends on impeccable hygiene in the food-producing area, this damage was certainly considerable. Like most fires, the actual cause was pretty banal. A small metal part that had lodged between the rollers began to smoulder, then fell into the air-bed dryer where it ignited the product residues. The fire then spread from the dryer to the cable lines.

Hand in hand with the authorities

BELFOR introduced initial measures immediately despite it



Visible impact: the Fortin mill after the extinguishing operations.



The disaster took place in this air-bed dryer.



The control cabinet for controlling the system burnt out completely.



Stainless steel containers before and after restoration.

Removal of machines by crane.

being a weekend. The remaining extinguishing water was siphoned off, damp product residues removed, access routes cleared, and initial corrosion protection applied. Since production business was affected, the restoration work was naturally extremely urgent. Obligations to deliver to important trading partners had to be honoured. At the top of the list of priorities, however, was restoring optimum hygiene for production in the food-producing area. The chemical survey report brought to light a high level of chloride surface pollution. Right from the outset, therefore, the food regulatory authorities of the consumer protection agency of the City of Düsseldorf were included in the restoration plans and their expertise incorporated. Everything needed to happen quickly, but without impairing the previously exemplary quality of the Fortin mill's products.

Heavy machinery and real hands-on work

BELFOR began the restoration work while corrosion protection was ongoing. Completely ruined sections of machinery were dismantled and removed from the upper storeys using a truck-mounted crane, which was also used to take out machines for repair. Other machines were dealt with on their respective floors. At the same time, all product residues were removed from the process lines in the internal ar-

ea, and cables, cable lines and control cabinets dismantled. The residues were removed from the building surfaces using various application techniques, including the soot removal process.

For the groat cutter and other mill-specific plant components, Fortin and BELFOR developed a joint solution with the manufacturers, which allowed them to work efficiently hand in hand. Some of the machine repair work could be carried out directly at the manufacturers' premises. Some residues could only be removed by hand with cleaning pads. But the work was to pay off ultimately, because the delivery deadlines were largely met and the Fortin mill resumed full operation in January of this year. That should really set the company's 2012 anniversary celebrations alight.

SOLVING PROBLEMS WITH SOLVENTS

BELFOR's solvents.

BELFOR has made solving problems its business for over 35 years. Much of this problem solving is thanks to chemical solvents. To really get the better of intractable problems, BELFOR has developed many ground-breaking solvents* over the years, some of which it is the only company in the world to use. The new ALLFIX bonding agent is just one of many.

Research and development

In addition to tried-and-tested processes, highly effective solvents are the key to successful restoration. All "solutions" in BELFOR's armoury need to be effective and efficient, easy to store and transport, applicable both locally and internationally, reliable and environmentally friendly. As their developer and the manufacturer, BELFOR is able to adapt solvents precisely to the different damage requirements while ensuring consistent quality. Development takes place in two of the company's own R&D laboratories, where BELFOR chemists work out, mix and test new formulations year on year. Even heavily corroded machine components – in this case an injection mould – are "as good as new" after being restored by BELFOR. And in fact, they often function better than they did before.

Testing and control

The effectiveness and compatibility of materials is tested both in the laboratory and in practice according to international and internal BELFOR standards. Depending on the restoration materials, grease-dissolving properties are tested, for example, using a ball bearing degreasing test, or corrosion removal investigated on different metal surfaces. Outdoor weathering tests over several months round off the findings for preserving agents. The results are analysed by an experienced "expert's eye" or by special measuring methods such as gravimetry (qualitative analysis technique). Particularly effective formulations are precisely defined both chemically and physically and approved for mass production.

ALLFIX – does precisely that

The new ALLFIX binding agent was born from this lengthy procedure. As its name suggests, this alkaline sealing film

made from polymers and silicates binds almost anything, including dust, asbestos, glass fibres, polycyclic aromatic hydrocarbons (PAHs), corrosive substances after fire and water damage, mould, spores and lots more. ALLFIX combines the advantages of silicate paint with those of a self-crosslinking emulsion paint. The film can be applied to any substrate and if necessary coated with any commercially available coating. ALLFIX is particularly suitable for areas that are hard to access such as suspended ceilings, roof structures, drywall structures, cable ducts, utility shafts and edge joints, in which undesirable deposits or released substances require permanent binding. ALLFIX can be painted on in the classic manner or applied using fogging (damp mist spraying). ALLFIX does not leave any contaminants behind and is completely harmless to health.

Employees – solving problems with solvents

ALLFIX is just one of many restoration materials that BELFOR uses successfully worldwide. However, any solution is only as good as the person using it. That's why BELFOR employees receive ongoing training so that they can use effective solvents as efficiently as possible and achieve a consistent restoration result for total customer satisfaction.

BELFOR's solvents

BELFOR ALLFIX

Sealing, binding and encapsulating agent to combat particles, soot, mould and corrosive and toxic substances

BELFOR PEROXY 19 and PEROXY PF

Oxidise fire odours and disinfect in the case of bacteria or mould infestations

Soot Removal Film (SRF)

Environmentally friendly dry film restoration process for soot removal in fire damage restoration

Alkaline cleaners (pH value 10-14)

For effective removal of contamination from surfaces

Organic cleaners

For fast removal of contamination containing grease and oil or (builder's) dust

Corrosion removers

For dissolving corrosion products such as rust, or treating the effects of hydrochloric acid after fire or water damage

Preserving agents

To stop or slow down corrosion on metals using inhibitors and (gas-proof) protective films



The police are driving in front of me and a horse-drawn coach behind me. To my right is an aeroplane, to my left the railway.

Where exactly am I?



Two fathers and two sons went hunting together. Together they shot three hares. Each of them still brought one hare home. How can this be explained?

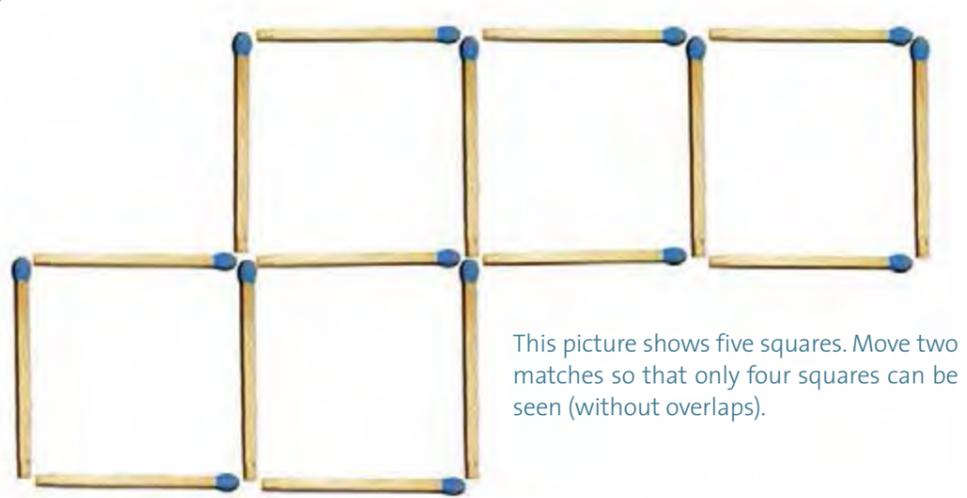
Fake diamonds

Out of four sacks that are supposed to contain real diamonds, one is filled with fakes. The diamonds and the fakes are indistinguishable externally, but the real diamonds weigh 1 g and the fakes 2 g. How can the diamond dealer, whom the fakes are intended to deceive, identify the sack with the fakes with just one weighing?



Do you enjoy solving riddles?

Here you have ample opportunity to solve riddles; from entertaining and amusing riddles to challenging riddles and those which are utterly mind boggling. Just in case your brain can take no more or your patience is wearing thin, the answers are found on page 43. Have fun!



This picture shows five squares. Move two matches so that only four squares can be seen (without overlaps).

In a square room, ten chairs need to be arranged so that the same number of chairs are against each wall. How can this be done?



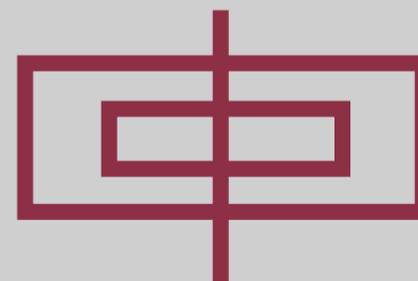
	3	8			10	7			6	4	
4	7		11					10		8	5
		6	9					12	7		
	1	11	5	3				12	8	4	2
	10			4				5			12
	12			2				3			9
	2	10	4	6				8	1	12	3
		3	12					4	11		
5	8		10					9		1	6
	6	1			9	5			10	7	

Three lights and three switches

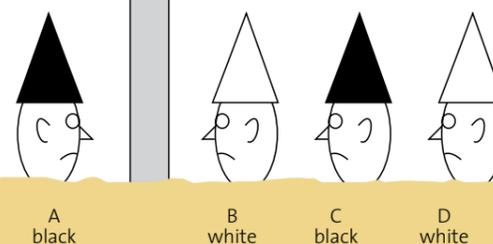
Grandfather Smith has three switches on the ground floor of his house. Each of these switches turns one of the three bulbs in the cellar on. Unfortunately, he has forgotten which switch is connected to which light. Does he need to make the arduous trip down to the cellar three times?

After brief reflection, Grandfather Smith lights on an idea that means he only has to go down to the cellar once to find out which switch belongs to which light.

How often does he switch a switch before he goes to the cellar?



How can this outline be traced with a single pen stroke? Each part of the outline must only be traced once, and no part of the outline may be traced more than once.



Four men have been condemned to death, but they are offered a reprieve if they can solve a problem. Naturally, the men want to seize their chance of survival and they agree. They are buried up to their necks in sand, as shown in the picture. They are told that each one will have a hat put on his head, two of which are black and two white. None of the men are allowed to turn round or talk to the others. There must be complete silence and after 15 minutes at the latest, one of the four men has to say: "I have a black hat on" or "I have a white hat on." If the answer is correct, they are all saved, but if it is wrong, they have lost their chance. Of course, one of the men is particularly clever and solves the puzzle, so all four are saved.

Questions:

- Who says the right answer?
- What is it?
- Why is he sure that he knows the right answer?



Try to section the cross in the picture by cutting it with just two straight cuts. It should then be possible to construct a square from the resulting separate pieces.



Three boys buy a football in a sports shop for 15,- EUR. When the boys have left the shop, the manager says to the sales clerk that the ball should actually only have cost 10,- EUR and the remaining 5,- EUR is to be distributed among the boys. The sales clerk wonders how he should do this and decides on

the following solution: He drinks a beer for 2,- EUR and gives each boy 1,- EUR back.

Now each of the boys has paid 4,- EUR for the ball (12,- EUR) and the sales clerk has paid 2,- EUR for his beer. That comes to a total of 14,- EUR.

What has happened to the missing euro?

The row of numbers starts with a 3. Each number in the sequence is greater by 1 than half of the next number.

3 ? ? ? ?



How can you cut a round nut cake into eight equal-sized pieces with three straight cuts?

The Einstein-Riddle:

There are 5 houses on a street and each is painted a different colour. Each house is inhabited by a person of a different nationality. Each inhabitant prefers a particular drink, smokes a particular brand of cigarettes and has a particular pet. None of the 5 persons drinks the same drink, smokes the same cigarettes or has the same pet as any of his neighbours.

- The Briton lives in the red house.
- The Swiss has a dog.
- The American drinks tea.
- The green house is on the left of the white house.
- The owner of the green house drinks coffee.
- The person who smokes Pall Mall has a bird.
- The man who lives in the middle house drinks milk.
- The owner of the yellow house smokes Dunhill.
- The Italian lives in the first house.
- The Marlboro smoker lives next door to the man who has a cat.
- The man who has a horse lives next door to the man who smokes Dunhill.
- The Winfield smoker drinks beer.
- The Italian lives next door to the blue house.
- The German smokes Rothmanns.
- The Marlboro smoker has a neighbour who drinks water.

Question: **Who does the fish belong to?**

Diary of a disaster

A FLOOD OF DAMAGE



31 July 2011: In Thailand, the monsoon season is beginning. The rain comes down in endless torrents, collecting into trickles that become small ponds. Puddles become vast expanses of water that ultimately flow together to become a huge lake. And by this point, everyone finally realises that this rainy season is going to be unusual.

20 September 2011 25 Thai provinces are under water and the number of victims is rising. All of this brings back bad memories of the March earthquake and tsunami in Japan. In Japan, a single natural event had unleashed a chain of misfortune. In Thailand, however, the “tsunami” falls from the sky: floodwaters rise, rescue services are stretched to their limit while hopes sink below the water’s glassy surface.

IMMEDIATELY ON SITE

2 October 2011 The entire Ayuthaya province, one of the country’s most productive regions, has been declared a disaster zone. Many local and international high-tech companies are located here and there is nothing more threatening to highly sensitive technical installations than water. BELFOR knows from many years of experience that a quick response is key to saving high-tech assets. No sooner said than done: BELFOR sets up a CAT response team in Bangkok, headed by BELFOR’s Asian region Managing Director and South East Asian Regional Manager. BELFOR establishes a central warehouse outside of the flood zone and moves in a large inventory of restoration equipment. They bring together an international team of experts specializing in machinery, electronics and building restoration. Technical Support BELFOR Europe oversees the international coordination of personnel, equipment and chemicals from the BELFOR subsidiaries.

Mid-October 2011 Even before the floods reach the capital Bangkok, the first team of BELFOR employees are there making boat trips with clients to the affected companies to plan the first measures. On 24 October, the Bangkok River bursts its banks and floods large areas of the capital that is home to some 7 million people. Now it gets a bit dicey!

BEWARE OF SNAKES AND CROCODILES

7 November 2011

Large areas of Bangkok are evacuated. BELFOR, meantime, is instigating the first stabilisation measures in a number of factories, even though the flood waters have not yet receded. Along with flotsam and mud, snakes and crocodiles also make work difficult for our employees. However, the biggest danger is not below water but above it. To be more precise: the air and water lines. The slowly receding water gives oxygen corrosion free reign. Rust, mould and bacteria coat the machine surfaces, causing serious damage. Mud carried by the water, impact damage caused by flotsam and bacterial attack have all had a serious impact on the machinery too. Mould is forming on valuable components of machines. As soon as the flood waters recede, the process of rescuing and protecting machinery and other production equipment against further damage will commence in full force.

20 November 2011

Restoration logistics is used to ensure consistency: BELFOR moves the entire CAT Team from Bangkok to Ayuthaya, to be closer to the work sites. Few hotels have reopened. All the same, all employees still must have accommodations. In addition, daily access to the worksites is extremely difficult due to damaged or destroyed roadways. Improvisation is the key.



Brian Whitmore, Managing Director, BELFOR Asia and Director of BELFOR's Thailand CAT response.

“Despite our many years’ experience in Asia, the coordination of the CAT response in

Thailand was the most challenging task undertaken by myself and my colleague Guido Gavio in our entire careers. The international BELFOR team handled it masterfully. Additional valuable knowledge was acquired – which means we are now better equipped than ever for further operations of this magnitude.”



1: The central equipment store houses machinery from all over the world. 300 specially-produced high-pressure cleaners were supplied from Germany.
 2: BELFOR employees inspect one of the largest ultrasound dipping bath lanes before commissioning. The equipment has been flown in by air freight.
 3: The flood severely affects many CNC precision machines.
 4: Functional tests after the successful restoration confirm the complete restoration of the original specifications.

ONE JOB ENDS, ANOTHER ONE BEGINS

March 2012

The work is still continuing; there is still more machinery to restore. But also the evaluation of the effectiveness of the CAT team response to this regional effort is underway. The goal for BELFOR is to build on the experience gained in Thailand and prepare a more comprehensive CAT response plan to be implemented when future catastrophes occur. In Thailand, we were able to experience the complexities of mounting a significant CAT response within the Asian region. Looking ahead to future CAT responses in Asia, the core team who will meet our customers will consist of senior colleagues from each of our Asian branches. This is to minimise cultural obstacles and ensure effective communication, thereby allowing the projects to commence as quickly as possible. All this saves important time and allows affected companies to resume production more quickly – with BELFOR's help.



Even heavily corroded machine components – in this case an injection mould – are “as good as new” after being restored by BELFOR. And in fact, they often function better than they did before.



Dr. Rupert Pentenrieder, Head of Technical Support BELFOR Europe GmbH, European Coordination Manager for the Thailand mission.

“BELFOR’s restoration skills often brought astonishment to the

faces of the people of the ‘Land of Smiles’, especially after the restoration of severely damaged high-tech machines.”



Company Christmas party on site.

BELFOR CAT response Thailand:

The team:

- 80–100 BELFOR employees from all over the world in action
- Specialists from Austria, Belgium, Canada, France, Germany, Israel, the Netherlands, Poland, Switzerland, the United Kingdom, the USA and Asia (Japan, Singapore, Taiwan, China)

Technical assistance:

- Approximately 200 machines from the USA (high-pressure cleaners, steam jets, etc.)
- Additional 300 specially-produced high-pressure cleaners from Germany
- Installation of one of the largest ultrasonic cleaning lines

HIGH-TECH RESCUES HIGH-TECH

1 December 2011

Despite the persistent flooding, countless machine parts are restored to full working order in one of the largest ultrasonic cleaning lines available within BELFOR. Even electronic components for NCC controls operated by renowned suppliers to the computer industry are completely restored. Personnel from client companies work with the 80 BELFOR employees from various countries on the CAT team. From a logistical perspective, the challenge is tremendous, since a visa needs to be procured for everyone in the midst of nationwide chaos, accommodation found and transport arranged to the inaccessible parts of the country.

QUITE AN ACCOMPLISHMENT

BELFOR cleans buildings, machinery ... and cheese.

Modena, 20 May, 4:03 a.m.: An earthquake of magnitude 5.9 on the Richter scale shakes the Italian province of Emilia Romagna. Its epicentre is the small town of Finale Emilia in the province of Modena. Depth 6.3 km. 6 fatalities, thousands of evacuees, enormous damage to architectural monuments and homes and major problems for countless companies. Filippo Emanuelli, Managing Director of BELFOR Italia, explains what happened in the hours after the earthquake. In the early hours of Sunday, 20th May, a company task force was mustered with the purpose of defining what needed to happen next: it ascertained the nature and extent of the event, and defined an effective and specific solution for handling the emergency situation. Using the customer geolocalisation system PIA (Pronto Intervento Azienda), we were able to establish initial contact by telephone in order to find out what level of damage our corporate customers had sustained, and to provide initial advice over the telephone. Based on the situation and our experience, we sought out the right specialists for the task force: the team included construction engineers to assess the static stability of the buildings, engineers to secure the buildings with temporary constructions (e.g. multi-directional supports and props) aimed at supporting the damaged structures (such as struts or beams), demolition / reconstruction engineers, etc. From the morning of Monday, 21st May 2012 onwards, we were on site and began the first of forty checks that were carried out in total during the days after the earthquake. Among the companies that we carried out checks on today is a manufacturer of Parmesan cheese.

Companies look forward: The Albat Case

Albat is a member of the GRANTERRE consortium and produces Parmesan cheese. The factory in Modena comprises a cheese production hall with a capacity of over 150 wheels per day and 5 maturing halls. Following the earthquake, the high-bay storage units in the 4th and 5th halls have become structurally weakened and collapsed.

We were contacted at 1 p.m. on 21st May and we were on site at the cheese production hall by 3.30 p.m. The situation is hard to assess, since there are huge piles of cheese wheels and twisted units in front of the entrances to each of the 4 storage rooms we inspect.

Each hall contains 12 high-bay storage units, each containing 20 maturing shelves, with each shelf holding around

95 wheels. That equates to around 90,000 wheels – a quantity of food that cannot be wasted.

In the storage room with the least damage, the high-bay units have not collapsed but do need to be structurally reinforced so that the risk of further collapse can be limited. Even the supply technology systems in the building have been damaged in some places; a number of components have fallen onto the wheels. Fortunately, the air-conditioning system is still working, which means that the temperature and humidity conditions required for the ripening process are maintained.

Many of the wheels are intact, while others exhibit mechanical breaks due to the impacts they sustained during the collapse of the shelving units. The wheels have to be rescued so that they, or at least some of them, can be used again. Further damage also has to be avoided wherever possible, which is why the wheels have to be rescued by hand while at the same time taking account of the employees' safety. The operational safety plan is then drawn up, explaining the planned operational phases. The plan sets out the following operational phases, listed in accordance with their priority:

1. Clearing of the access routes to the most badly-damaged storage units, with the dangerous unstable elements (air-conditioning system panels) and the cheese wheels lying on the floor having to be removed by hand.
2. Removal of the wheels from the high-bay storage units and positioning on pallets, so that they can be extracted from the halls as quickly as possible.
3. Stabilisation of the high-bay storage unit that was still standing in the warehouse with the least damage.
4. Removal of the pallets bearing the wheels from the working area.
5. Checking and storage of the wheels by the customer's technicians.

The operational plan is approved by the cheese factory's emergency team and their engineers, along with engineers from the insurance company. Work gets underway on Wednesday, 23rd May.

Tuesday, 29th May, 9:00 a.m.: A further earthquake of magnitude 5.8 shakes the Emilia Romagna region yet again. This

time, the epicentre is further to the north west, in Medolla. The earthquake causes massive damage to the structures that had already been weakened by the previous earthquake. 15 people are killed, many people are injured and many more are made homeless. Over 40 engineers from BELFOR are working in areas affected by the first earthquake, but all are safe apart from being very shocked by developments.

We have to interrupt our work and check the safety conditions. The difficulty in accessing the area requires particular improvisation skills. At one point, our employees even perform a cardiac massage during the long wait for the arrival of the emergency doctor. We also have to interrupt our regular work and check the safety conditions. After 24 hours, we can carry on; the structures of the cheese factory have withstood the latest earthquake without problems, which means we are able to assess the resumption of the rescue work together with the safety coordinators. The work takes a total of 4 weeks, and on Friday, 22nd June, the completion log is signed. We've done it. However, the situation in Emilia is very complex; it will take a while before everything returns to normal, but from the 22nd of June, at least one company can look confidently to the future.

Creativity in problem-solving

Following the second powerful earthquake on the 29th of May, we were forced to revise our operational methods in light of the risky situation that had arisen as a result of the weakening of the structures already damaged by the first quake. Following appropriate stability checks on the structures and the deployment of suitable stabilising measures, we planned the individual next steps focusing squarely on the absolute safety of our employees.

Inside the structures, some of which were either damaged or had collapsed completely, there were products, items and equipment that needed to be rescued. Solutions were needed that would allow the rescue to be carried out and still allow these articles to be reused without direct employee involvement. The ongoing quakes made it clear to everyone that the complete safety of employees takes top priority. Further efforts were needed, this time with a more creative approach, to come up with alternative solutions that would allow the reusable items to be transported out of the storage units without direct human involvement. Over the course of a few days, we therefore installed a video surveil-



The earthquake stopped production abruptly and threw tens of thousands of the maturing Parmesan cheeses off the shelves.

lance system that allowed the operational equipment to be monitored remotely. The operators were able to actuate the operational equipment from a safe distance without taking even the slightest risk in terms of their own safety.

Using diggers and forklifts, the pallets bearing the products were removed and loaded onto carts, then taken to a dedicated area outside where they were inspected by the customer's employees. With this process, we were able to rescue around 700 pallets of material at a single company in a space of four weeks. Finished products, raw materials and semi-finished products: after a close inspection by the customer's employees, the company was able to at least partially satisfy its delivery conditions with the intact materials.

HIGHER, FASTER, FURTHER – WITHOUT UNNECESSARY RISK

An interview with Udo Kappes, Head of Property Insurances & Captive at Corporate EADS Insurance Risk Management.

Ariane 5, Eurofighter, Airbus A380 – EADS is the name behind all the most spectacular flight technology. A large corporate group with such “high-flying” ambitions has particular requirements when it comes to insurance risk management. Udo Kappes explains in Solutions how the Corporate EADS IRM handles the challenges.

Solutions: Mr. Kappes, what are the insurance-specific risks in the aerospace industry?

In addition to the general product liability risk, a lot of other risks need to be taken into account in the aerospace sector, such as development risks, supply chain risks and test and trial risks. The risk of high value concentrations should not be underestimated either. For satellites and launch vehicles, we are dealing with very high values and production requirements. Endurance tests and satellite transport also present major risks. Depending on the supply contracts, the launch itself and the in-orbit positioning may also be elements in the risk chain. The satellite is worth its maximum value during these phases. This figure might well run to several hundred million euros – and the insurance needs to cover this.

In just one decade, EADS has developed into the largest European aerospace company. What demands do the company's size and rapid growth place on Insurance Risk Management?

Firstly, it is important to keep pace with all developments – or ideally, to anticipate them. This starts during planning of new-construction projects or in the due diligence phase for company acquisitions. The IRM is involved at an early stage, in order to assess potential risks and develop minimisation measures. The development of insurance solutions designed to handle the dynamically changing requirements profile of our corporate group represents a further challenge. This is an area where our business partners – insurers in particular – still struggle. I think that, together, we are on the right track, though.

Die European Aeronautic Defence and Space Company

The EADS Group was founded on 10 July 2000. With over 133,000 employees at over 170 sites worldwide, it is the global market leader for aerospace and defence technology. The Group has four divisions:

- Airbus – world's leading manufacturer of highly innovative commercial and military aircraft,
- Astrium – Europe's leading company for space systems and satellite services,
- Cassidian – one of the world's leading providers of global security solutions for civil and military applications,
- Eurocopter – world's leading manufacturer of helicopters for the civil and partly state-owned sector.

EADS achieved sales of just under Euro 50 billion in 2011.

IRM. Corporate Insurance Risk Management

Corporate Insurance Risk Management (IRM) was created as an internal corporate finance function, in order to respond proactively and efficiently to all risks that can be absorbed by actuarial practices. The responsibilities of the 37-person IRM team include:

- Definition, implementation and continuous further development of the EADS strategy for insurance risk management,
- Continuous, standardised identification, assessment and classification of insurable risks
- Development of suitable measures for reducing and preventing these risks
- Efficient, professional handling and transfer of insurable risks, and lots more.

IRM has been working directly with BELFOR worldwide since 2005 and takes advantage of the benefits of the RED ALERT® programme.

What concrete risk minimisation measures do you take?

We address physical risks such as fire at the site with organisational measures, for example, or technical recommendations such as fire extinguishers or fire alarm systems. In addition, all the larger sites are inspected by external assessors from our leading insurer once a year. We also carefully check all our suppliers' contracts in order to identify and minimise contract-related risks. And lastly, with our continuous Counterparty Risk Assessment, we ensure that the insurer has sufficient and adequate capacity available, under the current market conditions, in the event of a claim.

Are there also some risks that you bear yourself?

There are indeed. Very soon after it was founded, EADS decided to opt for high retentions. Before we approach insurance companies, therefore, we consider what risks we can cover ourselves – through our internal reinsurance company – and the thresholds above which we will involve external insurers. That's where BELFOR comes in.

How?

Within the framework of the retentions, we have arranged with the insurers that we will handle the logistics for efficient damage management ourselves. This means that we go to BELFOR directly for certain types of damage. Since 2005, we have even been one of BELFOR's RED ALERT® customers.

How did BELFOR make it onto the divisions' emergency lists?

Previously, BELFOR was one of a number of restoration companies that submitted bids to us directly. After careful benchmarking, we established that BELFOR is the company best able to meet our specific needs. The bar was set very high, but BELFOR more than met the standard – and even more importantly, lived up to this standard in practice with its quick response times and professional approach.

What else convinced you that BELFOR was the right choice?

It has a full-coverage network, which means there is always a local contact person who speaks the language of the site in question. We also have a valuable central contact, Hans-Peter Wollner from the management team of BELFOR Germany, who has full authority to act for us as an interface and troubleshooter. In addition, we value BELFOR's efficient, extremely high-quality restoration work and high cost transparency.

What damage do you use BELFOR for?

Usually classic damage like fire damage, smoke damage, soot damage or floods, but also mechanical and electronic restoration. Fortunately, we have not had any major damage over the past few years. Thanks to the robust IRM process, occurrences of damage and the probability of damage spreading have been reduced throughout the corporate group. Last year, however, flood damage occurred in south Germany, and this summer, BELFOR reacted very quickly and performed very professional work at Eurocopter in France. Our experiences with BELFOR over more than ten years confirm that we made the right decision in opting for closer cooperation with them in 2005.

How will the cooperation between IRM and BELFOR develop in future?

The globalisation of EADS is set to continue. To keep pace with this, we will strengthen the necessary qualitative and quantitative resources in Insurance Risk Management accordingly. As EADS grows in size, the role of BELFOR can develop too, so that we can continue to call on the required service worldwide in future too.

Mr. Kappes, thank you very much for this interview!



Udo Kappes, Head of Property Insurances & Captive in the Corporate Insurance Risk Management section of EADS, is a qualified insurance specialist and business administration graduate (university of applied sciences). He has held positions at the Verband der Sachversicherer property insurance association and the in-house insurance broker of DaimlerChrysler, moving to EADS in 2001. In his current position, Udo Kappes is responsible for group-wide technical risk engineering, self-insurance, and reinsurance solutions and risk transfer of the global property risk and business interruption risk of EADS. Udo Kappes is also a member of the Advisory Board of EADS's own reinsurance company.

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SUPER

A fantastic way to solve problems.

Many challenges are beyond human powers to solve, from the international financial crisis and continuing environmental destruction to the guy next door who gets the better of you in every fight, the bad-tempered manager or the search for a parking space just before the shops shut. Whether tackling large problems or small ones, we continually come up against the limits of our powers. But necessity is the mother of invention!

A fantasy that has always fired human imaginations is the superhero who toils to save the world – and entertain cinema-goers.





The daddy of all heroes

The prototypical hero of the modern age first appeared on the scene as the colourful antidote to the Great Depression that afflicted the USA after the Black Friday of 1929. An orphaned child from the remote planet Krypton who winds up in the suburbs of Smallville, Kansas, he soon recognises his superhuman powers and decides to put them to the service of the troubled planet Earth. In his ultramarine blue muscle suit, crimson cape and with the world's most famous logo on his chest, he manages to foil every catastrophe at the last minute. With SUPERMAN in 1938, comic writers Jerry Siegel and Joe Shuster ushered in the modern era of saving the world.

The Achilles heel

Superheroes fight for good unconditionally, while their adversaries – mostly also endowed with superhuman powers or terrifying lethal weapons – seek to plunge the world into ruin. To keep this fight exciting right up till the last second, the hero's creator often spices up the proceedings by giving him a weakness. Superman's powers desert him in the presence of kryptonite, for example – a cosmic childhood trauma. This recalls the heel of Achilles or the linden leaf between the shoulders of the dragon slayer Siegfried. Yet while the weaknesses of the heroes of old prove to be their doom, today's superheroes overcome them and defeat evil, leading to a happy ending instead of a tragic catharsis.



The man behind the mask

Behind every superhero is a regular guy. In the case of Clark Kent, he is a shy, gangly wimp with glasses that are too big for him. In the alter ego of the hero, we see a reflection of our own weaknesses, the bewildered, insecure and not particularly attractive youth with real worries and feelings. The superhero releases "our" chains and enables us to fight back. This is where the hidden psychopathology of the hero myth shines forth: his birth from a sense of powerlessness and the inexorable longing to overcome hurt.



Real Life Superheroes

Inspired by the heroes of comics and the silver screen, the idea of "Real Life Superheroes" came about in the USA a few years ago. Calling themselves names like Silver Dragon, Civitron or Knight Owl, they dress in the costumes of their favourite heroes and assist the needy, helping the old and disabled cross the street, carrying their heavy bags or providing the homeless with food and clothing. Real Life Superheroes want to encourage people that progress can be made despite the difficult times – even without superpowers.

Real-life helpers of BELFOR

Other real-life heroes prefer a simple boiler suit to a flashy costume and grapple with real everyday catastrophes caused by house fires, floods or storms. Instead of superpowers, they rely on experience, endurance and tried-and-tested tools to restore things to their former good order. Who are they? You guessed it! BELFOR employees.

The new anti-heroes

The damaged psyche is becoming more and more evident in the character of the newer superheroes. Instead of being muscle-bound and handsome, this new breed are fragile freaks. Hellboy and Hancock, Punisher, Wolverine and Daredevil are traumatised by their dark pasts, plagued by doubts or driven by dark revenge fantasies. The safe world of comics, where the categories of good and evil used to be so clear until the 1980s, now seems to have been subsumed by the reality of the 21st century with all its contradictions. Nowadays, every child in the cinema knows that the omnipresent chaos can no longer be straightened out with a valiant flight over the roofs of New York or Gotham City.

Strong together

With so much turmoil, the only answer is group therapy! As the major problems of humanity can no longer be solved alone, more and more supermen and superwomen are joining forces to form powerful teams. From the X-Men and Watchmen to the Avengers, uniting their powers not only helps them achieve more, but also lends the conflict much more dramatic effect.



A HIGH SCORE FOR EFFICIENCY

BELFOR assures delivery of glass-cutting machines.



A few guys, some matches and a pile of wooden pallets – it is not hard to guess what happened at Bystronic AG, Bützberg, Switzerland. A fire wreaked havoc in a production hall for high-quality cutting and bending machines.

The pile of pallets was stored directly against the façade. When the fire was started, the flames at first only damaged the façade. However, as the heat increased it quickly burst the windows. The flames then suddenly became almost the lesser of two evils. The greater damage was caused by the soot which then permeated two production halls and warehouses measuring 2,500 square metres each.

Deadline pressure

BELFOR was on site the very next day, because Bystronic AG was under massive time pressure. Four glass-cutting machines that had already been finished were scheduled for delivery, but were now contaminated with soot. A lot of work was also needed on the built-in electronic control units, semi-finished products and electronic storage racks. This much was already clear on the first day. The value as new of the machines and equipment components amounted to roughly CHF 13.5 million, or around Euro 11 million. For BELFOR project manager Luigi di Giacopo, therefore, the highest priority was clear. The finished machines had to be restored to their new state as quickly as possible to keep the delivery delay to a minimum. The next steps were planned in consultation with Erich Geissmann's team of technical experts and the loss adjuster of the insurance company Mobiliar, Kurt Zahnd.

No interruption to production

BELFOR installed scaffolding throughout the halls so that everything could be restored. The burst windows were replaced, and the soot removed from the ceilings and walls which were restored to their former good condition. This work was all carried out while the plant continued to operate, which was the only way to ensure that the losses incurred by the fire were not further compounded by massive loss of production. In the end, the restoration work took 8 weeks and cost almost CHF 2 million. However, this money was an excellent investment, because it allowed the four machines completed before the fire to be delivered to the customers with only a short delay. And not only that, they were immediately tested by the customers and functioned to their total satisfaction.



Large-scale & small-scale restoration: Large areas of soot contamination on the hall ceilings and walls and deposits on the built-in electronic control units had to be efficiently removed.

THINKING OF TOMORROW TODAY

Harnessing our full potential, optimising processes

An interview with Elvir Kolak, CEO BELFOR Deutschland GmbH.

BELFOR is the world's acknowledged premium damage restoration company. We aim not just to maintain this leading position, but also to expand it – by continuously improving and extending our service portfolio. At BELFOR Germany, we have our sights firmly set on the future. Elvir Kolak tells Solutions where the journey is taking us.

Mr. Kolak, you have been CEO of BELFOR Deutschland GmbH since 1 December 2011. What has been your experience of your first 9 months?

Elvir Kolak: I have had the opportunity to make extensive use of my most important tools: my eyes and ears. I have visited all the BELFOR branches in Germany, spoken to lots of employees in person and listened to their opinions and suggestions – as well as to their worries and needs. This impressively confirmed the good image that I already had of BELFOR... but naturally also brought to light a few areas with potential for optimisation.

What tool are you using to implement this optimisation?

Our hands and mouths! Together with the management team, we are rolling up our sleeves and actively implementing the things that need to be done. The kick-off meeting for this took place on 11 and 12 June with all BELFOR managers.

What is your main strategic objective?

As the world's premium damage restoration company, we are aiming to be "the best" not just on a global scale, but also locally for each individual damage incident – in other words, the undisputed number 1 for service quality and range of services. Instead of reacting to market trends, we aim to redefine the market with innovative services – and to continuously push the boundaries of what is possible. With this in mind, we are currently working together with our customers to develop new ways of thinking and management approaches.



“Most of the cake consists of lots of small pieces – and you need to know how to grab those pieces.”

“We strive for a win-win-win situation for everyone: the insurer, the policy holder and BELFOR.”

What concrete interim goal are you aiming for in Germany?

Within the next three years, we intend to extend our market leader status in fire damage restoration to water damage – not just throughout Germany, but at each individual site. Our strong brand and good reputation are important bases for this. But when your reputation goes before you, you need to make sure you live up to it!

What target groups do you particularly have in your sights?

We are aiming primarily to further strengthen our private client business. In this sector, incidentally, we are up there with the best, following our continuous successful expansion over the last few years! The private client business currently accounts for some 85 % of the whole restoration market, while the major catastrophes, i.e. the established BELFOR core business, only account for around a 15 % share of the market, with a downwards trend. This means that most of the cake consists of lots of small pieces – and you need to know how to grab those pieces.

What challenges does this pose for BELFOR?

We are already very well positioned and we intend to build on this. For a strategic push like this, our good name is a major asset, but we still need to work on tailoring our strength and size even more effectively to small damage incidents. In the private client sector, less is often more, particularly in the efficiency-driven framework contract business.

What does that mean exactly?

So as not to overshoot the mark – in terms of cost, in many cases – we need to optimise processes, concentrate employees and streamline communication. Faster processing is the key benefit for the claimant. The good service of the insurer transforms the dramatic event into a positive experience for the client. We strive for a win-win-win situation for everyone: the insurer, the insurance holder and BELFOR.

How can quality and profitability be squared with each other in the long term?

Dealing with numerous small construction sites at the same time requires particularly efficient processes. We are adjusting our approach to suit this, with the right local manpower and a sufficient amount of equipment, which we are currently investing in, streamlined logistics and lean project management. In addition, each individual needs to do their best to ensure the high service quality of BELFOR locally. This is why our main focus is consistent employee development and broadening our service spectrum.

What is the current situation for BELFOR employees?

On my visits to the branches, it struck me what a vast wealth of experience BELFOR has accumulated. This is something we need to cultivate. I would like to further strengthen the culture of involvement, i.e. bring out hidden potential, bring exceptional skills to the fore, and coax the best out of each individual.

How do you aim to achieve this?

With intensive training, which we will implement both internally and with external support. The focus is on developing management and team skills – soft skills instead of “hard drill”! By concentrating on employee development, we aim not just to send out signals internally, but also to become an attractive magnet for new recruits. Ultimately, only well trained and motivated team players provide perfect services for clients. This in turn makes the insurance company attractive to new customers, who look forward to this first-class service – while existing customers remain loyal to their insurer thanks to their positive experiences in the event of a claim.

Is there anything else new at BELFOR Germany?

With our new strategic orientation, we have also further simplified our corporate structure. BELFOR-Relectronic has be-



Elvir Kolak, CEO BELFOR Deutschland GmbH, has held management positions in the international restoration industry for 17 years. His core area of expertise is organisational and management development. Following positions in Europe, Asia, North America and Australia, he took over the helm of BELFOR Germany on 1 December 2011.

come BELFOR Deutschland GmbH, while the former BELFOR Brandschutz has become "BELFOR Prevention". This means we can offer our clients and employees even clearer orientation in future and are expanding our service portfolio – in a way that is clearly visible to everyone – by intelligently re-combining our know-how. Our fire prevention experience is now being seamlessly incorporated into the prevention of future damage. This is where our RED ALERT product comes into play too. This is BELFOR's international priority service for emergencies, based on our many years' experience of damage restoration and minimising business interruptions.

“I want to coax the best out of each individual!”

What exactly is RED ALERT®?

RED ALERT® clients have a special plan specifically tailored to their company should the worst happen. In other words, BELFOR knows the company already and implements all the necessary first-response damage limitation measures in the event of an emergency – with no time delay and in accordance with individually agreed priorities. The company's employees are also prepared in advance for potential damage incidents. The aim of the program is to professionally coordinate restoration measures and minimise business interruptions and the associated financial effects by providing the fastest possible response.

What incentives is BELFOR Germany providing for BELFOR worldwide?

Germany is one of the largest restoration markets in Europe. It therefore harbours a vast array of experience and skills that can be called on worldwide. Many technical achievements originate from Germany, such as the long-standing machine restoration expertise of BELFOR DeHaDe that can be harnessed internationally at any time. BELFOR does not stop at national borders – but only once each damage incident has been remedied to the full satisfaction of all those involved and affected!

From service provider to partner

The BELFOR success model

As a reliable service provider, we are delighted when we are called on for a damage incident. However, we can do even more for our clients when they see us as a partner on equal terms and invite us to meet for discussions with them before any potential damage occurs. Intensive brainstorming about efficient cooperation models is at the top of the agenda for Elvir Kolak. BELFOR also works with the Institute of Insurance Economics (I.VW-HSG) of the University of St. Gallen in Switzerland. As an international knowledge broker for risk and insurance management, the institute develops practical solutions based on scientific basic research. BELFOR supports the courses with regular seminars and guest lectures. The result is a powerful synthesis of analysis and expertise.

More information at www.ivw.unisg.ch



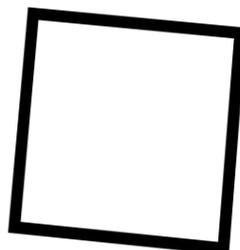
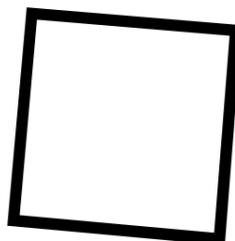
FROM INSURER TO SATISFACTION EXPERT

Business excellence in claims management.



Insights from Dr. Hans-Ulrich Vollenweider, Member of the Management Board of Zurich Switzerland.

Dr. oec. HSG Hans-Ulrich Vollenweider is the Chief Claims Officer at Zurich Switzerland. In 2011, his department was awarded the prestigious "ESPRIX Swiss Award for Excellence".



Damage can leave you at a loss, particularly when the roof has burnt off, the cellar is flooded or a serious car accident has turned your life upside down? Only in the event of a claim does it become apparent how good the services of an insurance company really are. Customer satisfaction is the ultimate aim of any insurance industry, which is why Zurich in Switzerland sets itself such high standards. The key success factors are outlined below.

1. Fast and straightforward, easy to understand and individual

Surveys reveal that customers want service to be "fast, convenient and easy, with a friendly and individual approach". In the current experience economy, the ability to generate positive feelings towards a company is becoming a decisive differentiating factor. Only when a customer receives exactly the service he is looking for does he remain satisfied. His experiences in the event of a claim need to exceed his expectations. Zurich processes over 500,000 claims in Switzerland every year with this approach.

2. Success logic and claims strategy

Claims management is an integrated process. The "success logic" of Zurich Switzerland maps the interdependencies of all determinants, identifies the key indicators and devises individual claims strategies, with the aim of providing customers with the perfect balance between satisfaction, effectiveness and efficiency. To ensure this, our predominantly regional organisational structure was centralised in 2008. This allowed standardised processes with clear specialisation and increased professionalism for all activities. All interdepartmental claims functions – such as claims to damages, combating fraud, processing very large losses or risk management – can thus be managed even more efficiently.

3. Key performance indicators

Key performance indicators (KPIs) enable us to ensure the optimum balance between customer satisfaction, claim payment and adjustment costs. A precisely defined quality assurance process ensures that the agreed service levels vis-a-vis our customers are met. The number of settled claims per year and per employee and the processing time and total are incorporated into a detailed internal cost allocation which serves as the basis for our financial and HR planning.

Our employees' work is now less broad-based and more targeted and effective.

4. ClaimZ College, Wikiih-Trophy and Einstein

Good employees are our most important success factor. To improve qualifications and motivation, we have set up the "ClaimZ College" as a platform for further training. This offers training and courses for operational claims processing. Targeted training on conduct when dealing with customers is offered under the abbreviation "Wikiih" – "Wie kann ich Ihnen helfen?" – which means "How can I help you?" in German. A "Wikiih-Trophy" is awarded quarter yearly to employees who have gone the "extra mile" for their customers. As part of the "Einstein" project, we have also developed a new process roadmap together with our employees which defines all the work processes with quality standards. In answer to the question "What would you like to improve?", superfluous checklists and tools have been done away with and scope for employees to act on their own initiative increased.

5. EFQM-certified processes

Evaluation by external assessors has led to internal optimisation. We more than fulfil the requirements for ISO certification and base our approach on the model of the European Foundation of Quality Management (EFQM) whereby all dimensions of the company are continuously analysed and optimised. After five strenuous years setting it up, this won us the "ESPRIX Award for Excellence" 2011.

6. Partnership with BELFOR

The reputation of a company also depends on the quality of its external service partners. These need to be able to implement our standards, processes and requirements internationally, which is why Zurich Switzerland has worked with BELFOR for years. Our close and successful cooperation helps us to reach our main goal, i.e. total customer satisfaction, even more efficiently.

WHAT COULD POSSIBLY GO WRONG?

At 2:30 in the morning, what could possibly go wrong? The Research and Development facility is closed for the night. All of the appropriate safety and security precautions are in place. The building is empty, except for tens of millions of dollars of high-tech equipment, a large inventory of chemicals, hours of on-going experiments, and invaluable research data and documents. A leading provider of nutrition products could never have predicted what was about to happen to their multi-million dollar, 55,000-square-foot R&D facility.

Without warning, the main sprinkler system pipe in the parking lot broke, sending a huge 30-foot flume of water skyrocketing into the air – and directly onto the roof of the facility. Before the water could be shut off, the roof drains were completely overwhelmed and the roof's main beam collapsed under the pressure. Water poured into the building, literally covering every square inch of the facility. "If the water had gushed just 15 degrees in a different direction, this would never have happened," said BELFOR Project Manager Steve Starr.

RED ALERT® relationship pays off

Thanks to an established RED ALERT® relationship with BELFOR, a committed management team, a very cooperative insurance carrier and some very quick thinking, all was not lost.

BELFOR got the call in the middle of the night, and the next day city inspectors deemed the building unsafe to enter. To prevent further damage to the contents inside, quick action was necessary. Because of BELFOR's relationship with the RED ALERT® client, and knowing that time was critical, BELFOR immediately initiated an emergency response plan. BELFOR worked with a local engineer and the local building department to shore up and stabilise the structure. Resources and equipment were mobilised on-site within hours, including temporary power generation and staging areas in the parking lot. The client* had two priorities – salvage as much of the research data and equipment as possible. Extreme humidity, shut-off ventilation, and a potentially hazardous environment created huge challenges for the BELFOR team. First

*The customer wishes to remain anonymous.

and foremost, safety was the most critical factor. In what was once a very sterile lab environment, BELFOR now found a potentially lethal concoction of fumes mixing and filtering throughout the air inside the building. Specialists from BELFOR Environmental were called to the site, and worked one-on-one with R&D scientists to identify, properly contain and dispose of all hazardous waste. "The quick response of our Environmental division reassured us that workers were not being put into a potentially hazardous situation. We were able to address the environmental issues promptly with our client and move forward with the recovery and restoration efforts," Starr explained.

With the environmental issues under control, attention quickly shifted to the contents inside the building. A significant amount of documents and research data detailing valuable chemical equations and formulas were retrieved. The damaged documents were inventoried and placed in a thermal vacuum freeze-dry chamber at the local BELFOR office. Over one million cubic feet of air was aggressively dehumidified using desiccant dehumidification equipment. This helped stabilise the environment and prevented further corrosion to high-tech lab equipment.

BELFOR teams in full PPE removed thousands of pieces of equipment from the building.

Tents were erected in the parking lot so that equipment could quickly be identified, evaluated, inventoried and decontaminated. Because of extreme conditions inside the building, hygienists on-site identified the formation of small mould spores. Crews ranging in size from 40-60 employees



Small cause - big impact: the water badly damaged the building's structures. Under extreme conditions, equipment, documents and data media were rescued and packaged into boxes for interim storage.

worked day and night in 12-hour shifts to dismantle or partially dismantle equipment, perform the necessary decontamination and mould remediation steps, and restore all salvageable pieces.

Custom crates for each piece of equipment were built on-site as well. BELFOR packed and transported the equipment to a temporary storage facility for safety. BELFOR also secured temporary climate controlled storage for chemical products removed from the building. Non-salvageable items were inventoried, removed from the building, sorted by waste stream and disposed of properly. The entire process took BELFOR less than 90 days to complete. "We were able to salvage equipment from the property that could have suffered significant damage had we not responded quickly. That quick response reduced the amount of secondary corrosion damage," said Starr.

Back in business

"Our client has a new R&D facility so we are now delivering the equipment, documents and other salvaged contents to them. With teamwork, cooperation and determination, we were able to achieve our goal of getting this R&D facility back in business as quickly as possible."

STEP BY STEP TOWARDS THE SOLUTION

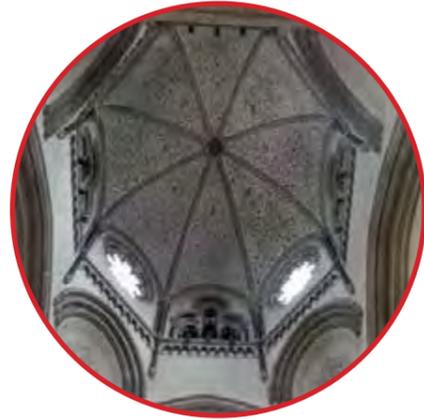
10 commandments of church restoration after soot damage.

1.



Property assessment The cause was an incorrectly connected electricity cable. The result was a fire in the sacristy of the Herz-Jesu church in Koblenz. The fire was less of a problem than the soot deposits.

2.



The findings It was as if a black curtain had been drawn over the walls of the large sacred rooms and everywhere smelled of soot. The fire residue had to be removed from large areas made from a wide variety of materials including stone walls, wooden ceilings, artistic stucco ornaments and decorative frescoes.

3.



The solution The Herz-Jesu church in Koblenz is a Unesco World Heritage Site. A particularly sensitive process was required, therefore, with practically no impact on the building. The Soot Removal Film, or SRF, offered the perfect solution.

4.



The preparatory work The versions of the SRF, manufactured exclusively by BELFOR, have been specially developed for fire restoration. A liquid latex film is applied which binds contaminants in an environmentally friendly way and removes them from the substrate. After explaining the process and weighing up the risks against the rewards, scaffolding was erected under conditions that were sometimes challenging due to the nature of the space.

5.



The test phase Test areas were used to identify any difficulties in advance so that the formulation of the solvent could be precisely adapted to the specific area of application. As the SRF process has the minimum impact on substrates and is also very flexible to use, no impairment was caused.

6.



The SRF order Thanks to its high viscosity, the material is easily applied onto the surfaces requiring restoration using specialist spraying equipment. The drying time and removal phase are customised according to the substrate being treated. This calls for precise logistics throughout the process.

7.



Peeling off The colour quality is retained after the dried SRF skin has been peeled off. There is no discolouration or stripping of colour. Only the soot particles are removed by the SRF and encapsulated in the material. The gentle penetration of the material is very impressive.

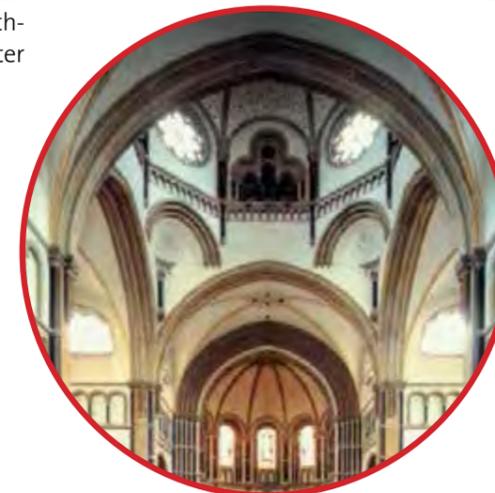
8.



The effect The previously dark surfaces are radiant again with exceptional shine. The latex film is very easily disposed of as normal waste, since no chemicals are used. This also results in huge cost savings.

9.

Elation For the parishioners of Koblenz, the Herz-Jesu church opened its doors to the faithful again on Christmas Eve, after months of restoration.



10.

The team After around three months, the Koblenz team leader Peter Nützl was able to report that the successful restoration of the Herz-Jesu church using the SRF process had been completed. The result is outstanding and the client is delighted.



LET THERE BE LIGHT!

Wiener Neustadt cathedral will soon be radiant again with its former glory.



“Fire damage in a huge building like the cathedral poses an extremely complex challenge for all the parties involved in the restoration.”

Fritz Foune, loss assessor



The nave had to be completely scaffolded.

The Baroque decorations were very quickly returned to their original shine.

Cathedral Provost Monsignor Karl Pichelbauer is delighted by the progress of the restoration work.

In the early evening on 6th March this year, the relief unit of the fire brigade was called out to a fire. The building that stood in flames was not just any building, but the cathedral itself, the town's landmark, visible from miles around. Large areas of the interior of the 13th century building with its two distinctive towers were contaminated with soot. Some damage was also caused by smoke gas, the heat of the fire and, not least, extinguishing water.

Well equipped for restoration work

“Fire damage in a huge building like the cathedral poses an extremely complex challenge for all the parties involved in the restoration,” said Fritz Foune, one of Austria's most renowned loss assessors. As a recognised expert, he was called in by the responsible insurer, Uniqua Versicherung AG. Due to the varied nature of the damage, a multidisciplinary team of specialists, under the supervision of the Bundesdenkmalamt (the Austrian national heritage agency), was commissioned with the restoration work. Altars, sculptures, paintings, choir stalls, metals and murals are each being cleaned by designated specialist firms. BELFOR is responsible for removing the soot damage. The Soot Removal Film process, abbreviated to SRF, for gentle removal of residues including greasy deposits performed extremely impressively in a trial. Incidentally, the parish has gained a fringe benefit from the 1,400 square metres of scaffolding required for the ongoing restoration work: damage sustained before the fire is also being repaired.

“Live” restoration

The cathedral remains open to the public during the restoration work, which means that anyone can go in and follow the progress of the work – albeit from a distance. All the work has to be complete by the end of September, when the Cardinal is due to hold a service in Wiener Neustadt cathedral to inaugurate the new Provost's Residence. Meanwhile, around 7,000 square metres of wall are being gradually covered with liquid latex. This material is environmentally friendly, can be used on different substrates, and binds the soot within a few hours. The film is then simply peeled off, and with it the contaminants. The success of the BELFOR measures can already be clearly seen in the front section of the damaged nave, and this will shortly be followed by the rear end of the cathedral. Cathedral Provost Monsignor Karl Pichelbauer becomes more relieved by the day, because it is important for the parish to have the cathedral “operational” again as soon as possible. “As well as the Holy Mass, the cathedral also hosts many events such as concerts and weddings,” explains Pichelbauer. “The cancellation of these events is seriously depleting the parish finances, and we are relying on voluntary donations.”

The six BELFOR employees still have a lot to do, but they are all certain that the deadline will be met.

RED-HOT RESPONSE

BELFOR Austria tackles fire damage at top speed.

On 6th January 2011, the Lafarge cement works in Mannersdorf in Austria caught fire. The cause was an electrical short circuit in the raw mill. Various electrical systems and two large engines were destroyed. The company fire brigade, supported by the voluntary fire brigades of the surrounding towns, began fighting the fire immediately. And when it came to repairing the damage, the response was no less rapid.



You must not drag your heels too long after a fire if you want to avoid consequential damage due to corrosion from extinguishing water, which is why damage reports do not sit on the back burner at BELFOR, but are immediately prioritised. The flames were hardly out when BELFOR Austria received the “red-hot” press report. Martin Salomon, Head of Technical Restoration, responded by return with an e-mail to the Lafarge corporate management team in Vienna. Four days later, he was standing on the site of the cement giant to carry out an initial inspection with the CEO of BELFOR Austria, Heimo Ernst Weiss, and a representative of Cunningham Lindsey, the loss adjuster of the insurance company AXA.

Better but not cheaper

All damage to the floors, walls and machines was carefully recorded. A detailed restoration quote with a time schedule was then drawn up. But how do you sell a service when there is a lower rival quote on the table, as was the case here? You convince the client on the basis of precision and efficiency, and in this case with exact prices per square metre and a hard-and-fast time frame. The fact that Cunningham Lindsey had already had good experiences with BELFOR in many

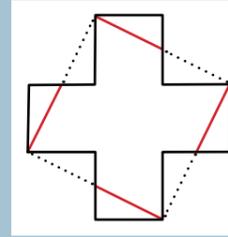
European countries helped to oil the wheels. The order was signed the very next day.

No time to lose

The very next day, 14th January, the restoration work on site began. 60 BELFOR personnel under the supervision of Manfred Haindl removed soot and debris and cleaned the walls and floors that had been marked by the fire. Because of the exceptionally high walls and silos, scaffolding had to be erected throughout the plant, which required a great deal of manual skill and a good head for heights. This meant that the safety measures that needed to be observed throughout the whole operation were particularly stringent. All the work was completed in less than six weeks to the extreme satisfaction of the Lafarge management – and the freshly restored plant resumed full operation.

Answers to the riddles

Stamps (page 7): The musician John Lennon does not belong to the set of researchers and inventors.



From a cross to a square:

House 5 = white / a Swiss / beer / Winfield / a dog
 House 4 = green / a German / coffee / Rothmans / a fish
 House 3 = red / a Brit / milk / Pall Mall / a bird
 House 2 = blue / an American / tea / Marlboro / a cat
 House 1 = yellow / an Italian / water / Dunhill / a man. Here is the complete, extended solution:

The Einstein riddle: The fish belongs to the German. Here is the complete, extended solution: the same size.

A divided nut cake: First, the cake is cut into two halves (viewed from above), which are then halved again so that you are left with 4 quarters. Now the cake is cut horizontally (viewed from the side) so you are left with 8 pieces of exactly the same size.

Number sequence: The number sequence is 3, 4, 6, 10, 18.

Where am I? On a children's merry-go-round number of inauthentic stones. Therefore: If the scales only display 17 grams, three stones must not be as presumed and sack 3 contains the phones.

Three lights and three switches: The answer is three: The grandfather turns one switch (1), waits for a while and switches it off again (2). Now he turns on another switch (3) and goes in to the cellar. One light is on, one is off and cold and the third is off and still warm.

Trace the figure:

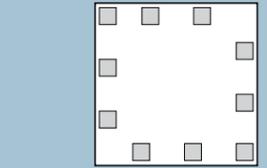
Where is the missing EURO? The 3 boys paid 15– EUR for the football. This means he only takes 5– EUR from the till. This means he only received 10– EUR for the football. The three boys first paid 15– EUR and then got 3– EUR back. This means the football cost 12– EUR. The difference between the amount taken by the shop assistant (10– EUR) and the price paid by the 3 boys (12– EUR) is 2– EUR. And that's what the shop assistant pays for the beer.

Those condemned to death: C gives the answer. He says: "I have a black hat on." As he sees his driver in front, who is wearing a white hat, there is only one other white hat available: if he himself were to have this white hat on, his backer would have seen this and concluded that he had inventors.

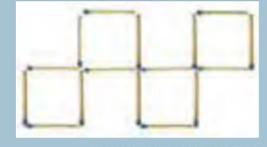
Trace the figure:



Sudoku:



The ten chairs:



A matchstick riddle:

Have hunting: It's about a grandfather, father and son.

Where am I? On a children's merry-go-round number of inauthentic stones. Therefore: If the scales only display 17 grams, three stones must not be as presumed and sack 3 contains the phones.

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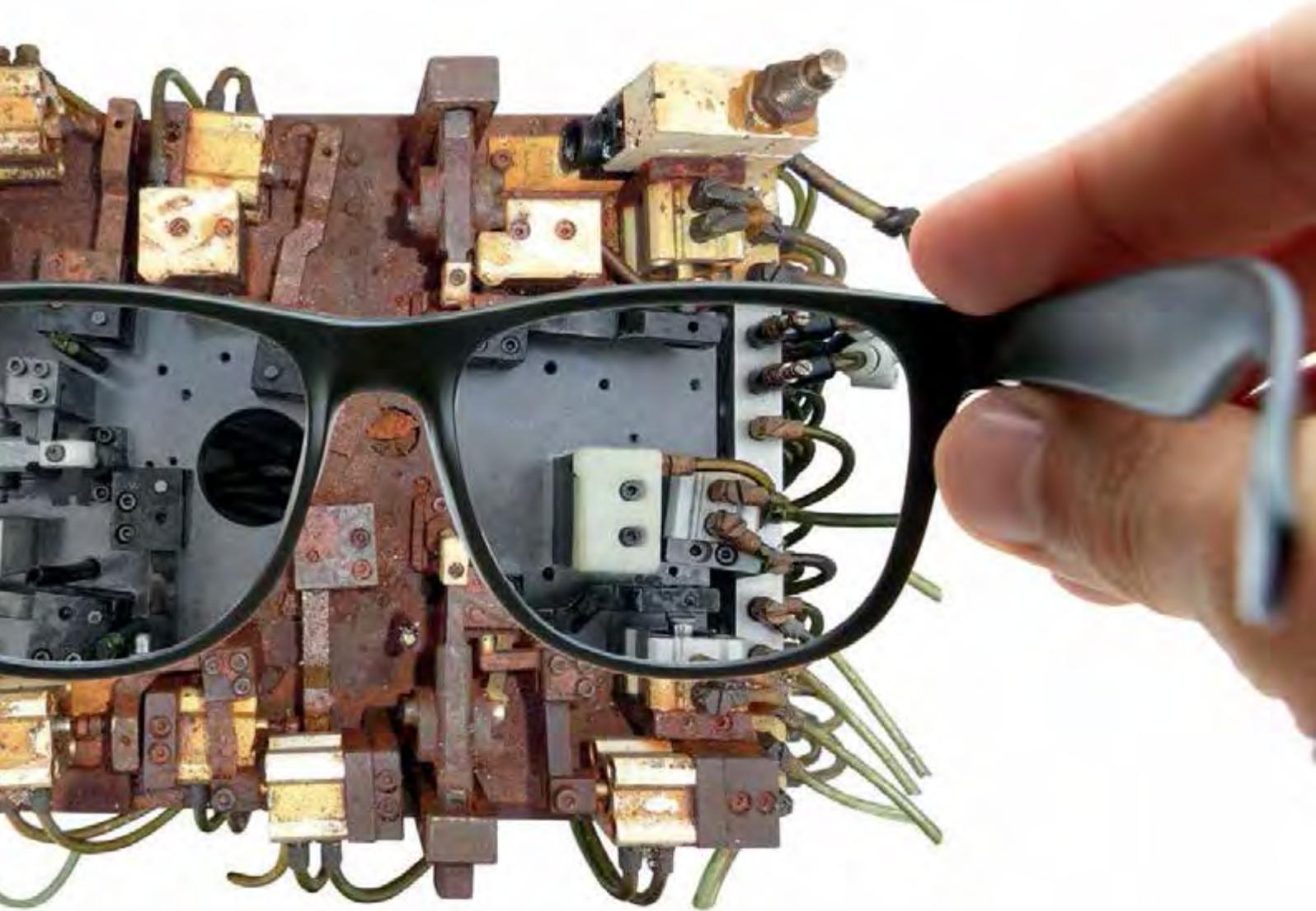
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**Where others see problems,
we see solutions.**



When damage strikes, everything looks different. Unless you see things from BELFOR's perspective. Our experts quickly work out what's going on and are able to instigate the right restoration measures right away. Our expertise is backed by over 30 years of experience in international damage management. After our work is done, everything looks different again. Just like it did before. Or often even better.