

**GREITER PEGGER KOFLER
& PARTNER**

RECHTSANWÄLTE

Maria-Theresien-Strasse 24
A-6020 Innsbruck
Austria

Dr. I v o G r e i t e r
Wirtschaftsmediator
Dr. F r a n z P e g g e r
Mag. rer. soc. oec.
Universitätsprofessor
Dr. S t e f a n K o f l e r
Dr. C h r i s t i a n Z a n g e r l e
Dr. N o r b e r t R i n d e r e r
Dr. H e r w i g F r e i
Dr. G e o r g H u b e r
LL.M., University Chicago
Attorney at Law, New York
akad. Europarechtsexperte
Dr. R a l f G e y m a y e r
Dr. E l k e P a n z l
Dr. N i k o l a T r ö t h a n

Tel. +43 (0) 512 57 18 11
Fax +43 (0) 512 58 49 25
+43 (0) 512 57 11 52

e-mail und homepage
info@greiter.lawfirm.at
www.greiter.lawfirm.at

**Conveyers used in ski schools
Dangers and risks from the legal point of view**

Congress - Rovinj

8th to the 12th of May 2004

**Dr. Georg Huber, LL.M. (Univ. of Chicago)
Lawyer in Innsbruck**

I. Number of accidents with conveyers increasing

1. Introduction

Since the end of the nineties the use of conveyers by ski schools has increased. According to estimations, alone in Tyrol, about 150 conveyers are in use in ski schools.

The conveyers are mostly used for children and beginners, i.e. for people who in general are not good skiers and who are not aware of the dangers involved.

As a consequence of this development the number of accidents related to the use of such conveyers is increasing, some of them taking a dramatic end.

I would like to give you some examples of cases judged by Austrian courts. They show where the main sources of danger in the use of conveyers are.

Please keep in mind that these examples probably only represent a fraction of the accidents, that actually happened. In all probability more accidents took place, but because no one was injured, they did not become public. Much more may have happened without injuries, so they get not known.

I am not aware if, or how many accidents take place outside of Austria.

2. Defective construction, missing warning signs

In the first example the accident did not happen in a ski school, but on a farm¹.

On the first of June 1998 a six year old girl's left hand got caught in the roll of an automatic egg conveyer. She was collecting eggs from the automatic egg conveyor on her parents' farm. All her fingers apart from her thumb had to be amputated.

There was no warning on the conveyer saying that only persons over 16 were allowed to operate it. There was also no instruction manual or directions for

¹) OGH 11.9.2003, 6 Ob 317/02i

use. The gap between the roll and the belt was about 3 cm wide and not covered. There was no emergency switch to turn the machine off.

3. The key left in the lock

On the 27th of February 2001 a six and an eight-year-old child from the Netherlands were playing on the practice slope of the ski school, while their parents were sitting outside on the terrace of a nearby hotel.

The ski school had a conveyer on its practice slope. When the children were playing the conveyer was unattended and not running, but the key to turn it on and off was in the lock. The assistant ski instructor in charge of the conveyer was on his lunch break.

Apparently the children turned on the conveyer and used it to get to the top of the practice slope standing on their bobs.

One of the children, a girl, fell when she was getting off. Her ski cap, hair and anorak got caught in the motor of the conveyer. The anorak got tighter around her neck and strangled her until she fainted.

The second child called for help and alerted nearby skiers. They switched the conveyer off and got the girl out. Her breathing had stopped by this time but after she was released it started again spontaneously.

The conveyer had been installed without the light barrier supplied by the manufacturer.

4. Lack of supervision, faulty assembly

Just a day later, on the 28th of February 2001 another accident occurred on a conveyer operated by a ski school.

Just before the end of the ski lesson a 3 year old child was using the conveyer to go up the slope on a round plastic bob-plate. At the end of the conveyor the boy got stuck between the belt of the conveyer and the protective casing. He suffered severe injuries.

The ski instructors on the slope did not notice the accident immediately, as they were not supervising the conveyer because they were busy tidying up. The accident occurred just before the end of the ski lesson.

The findings of the police showed that the contractor employed for the electrical installations had forgotten to connect the emergency flap. Only the light barrier and the emergency switches at both ends of the conveyer were installed.

5. Constructional defects, lack of supervision

About two years later, on the 12th of January 2003, another accident occurred in Austria in connexion with a conveyer.

On a conveyer that had been installed at a children's ski school without the approval of the authorities a 3 year old boy got stuck between the conveyer belt and its emergency bar

It seems that the bar activating the emergency switch did not react at all or reacted much too late and so the child's hand was pulled in between the conveyer belt and the emergency bar.

The child's mother told the police that there were a lot of children on the conveyer and that the ski instructors could not manage to help all the children get off the belt. That is why her son got pulled into the machinery.

Apparently there was only an emergency switch at the bottom of the conveyer. It was only activated when the ski instructors at the top of the belt began to yell and brought the accident to the attention of the instructor at the bottom.

The boy sustained contusions to his thumb and index finger.

6. Key left in the lock, constructional and other defects, lack of supervision

The most recent case occurred only a little over one month later, on the 26th of February 2003 at the same ski school. This accident resulted in the death of the child².

I would like to describe this case in more detail as it is a good example of how dangerous conveyors are and shows where the main sources of danger lie.

A five-year-old child from the Netherlands was brought to the ski school by its parents. The boy was put in the beginners' group. There were about 16 children in the group supervised by four people.

The ski school had a separate area for children with six conveyers. , Three of the conveyers were manufactured in Austria according to the required standards. The installation of these three conveyers had been approved by the authorities.

On the day of the accident there were not many children at the ski school, so not all the conveyers were running. However all the conveyers had been inspected that morning. Each one was switched on with a key and the emergency bar at the top of the conveyers were checked.

As it was not clear in the morning exactly which conveyers would actually be needed that day, all the keys were left in the locks. Due to this fact, anybody could switch on the conveyers.

At about 12.30 p.m. the five year old boy left his group and went unnoticed to conveyor belt No. 2, which was somewhat off to the side. The conveyor was running – although if it was not being used. Later it was not possible to determine who had turned it on.

There was no one supervising this conveyor as the ski school assumed that it was not running.

²) LG Feldkirch, 20 Hv 50/03v

The boy probably fell at the top of the conveyer. His clothes and hands got caught between the conveyer belt and the emergency bar. The emergency bar did not react and pulled the boy's arms and hands in between the conveyer belt and the emergency bar.

The boy was lying on his back. Therefore his clothes starting with the thick hood of his anorak got pulled into the conveyer and strangled him.

When he was discovered he was unconscious. He died the following night in the intensive care unit of a nearby hospital.

The conveyer was manufactured according to American plans by a Slovenian company, which usually makes conveyors for the transport of parcels, .

An emergency bar was built in as safety device. However its construction did not correspond to technical requirements and there was no light. Light barriers switch a conveyer off if a user stays in the exit area longer than normally expected.

According to the local legislation conveyers must be legally approved. This approval had not been obtained for the conveyor in question.

In addition, in the autumn preceding the accident, the competent authorities had asked the ski school to install a technical device ensuring an immediate switch off if a person remains in the exit area of the conveyor for more than 3 seconds (for instance by a light barrier).

This requirement was not fulfilled. The reason given by the ski school was that the conveyers were only used under supervision, so that they could be switched off at any time by the supervisors.

In the opinion of the ski school safety was therefore guaranteed.

The court and the technical expert interrogated by the court during the legal proceedings were of another opinion.

The technical expert described the construction of the conveyer as insufficient

The emergency bars were not constructed according to the required technical standards, and the light barrier, or an equivalent safety device controlling how long a person stayed in the exit area of the conveyor, was missing.

According to the findings of the experts, a supervisor cannot replace a light barrier or a similar technical device.

The court found the head of the ski school, the organization manager of the ski school and the ski instructor responsible for ski lessons for children, guilty of homicide caused by negligence.

In addition, all three of them were declared as liable for damages to the parents of the deceased child.

In addition to these three people, the ski school instructors were also charged by the state procurator. He claimed that they had breached their duty of supervision, because the boy was able to leave the group unnoticed.

The ski instructors, however, were acquitted because they were not found personally responsible. Subjectively spoken, they could not anticipate the danger posed by conveyor 2.

II. Sources of errors

1. Conclusions to be drawn from these examples

The examples show that many sources of error can lead to accidents with conveyors.

Sometimes one single reason is enough, but often several reasons coincide. Usually technical and constructional defects combined with negligent operation lead to accidents.

From my point of view the sources of danger can be divided into two groups:

- o Technical defects
- o Operational defects

2. Technical defects

Technical defects are defects on the conveyer itself.

For example:

- o Missing safety devices, e.g. missing light barriers or emergency switch-off devices;
- o Deficient safety devices, for instance the switch off bar reacts much too late or much too slowly so that parts of clothes, hair or hands can be pulled in between the conveyer belt and the exit platform or the gap between the conveyer belt and the exit platform is too wide;
- o Safety devices that do not work (failure of the emergency switch-off bar)
- o Material defects, such as the conveyor belt ripping and people falling through it.

3. Operational defects

These include:

- o Insufficient inspection, for example at the beginning of the ski season or the daily inspections;
- o Errors in maintenance or installation (for example the emergency bar is not connected or the terrain is too steep , insufficient devices to prevent slipping , etc.);
- o Keys left in locks;
- o No supervisors present;
- o Unskilled or inattentive supervisors;
- o No barriers along the ski piste (fences);
- o No inspections or checks when safety devices do not work (e.g. emergency bar does not react but the defect is not examined thoroughly);

III. Legal regulations in Austria

1. Obligation of approval?

In Austria the operation of cable cars is regulated by the Cable Car Act. Conveyers, however, are not covered by the term "cable cars" (§ 2 Cable Car Act)³. This means that no approval is required under this act.

The building code of the individual States could require an approval. But even this law does not subsume conveyers⁴.

An obligation of approval could possibly be derived from the "Veranstaltungsgesetzen"⁵ (law regulating the organisation of events).

As ski schools do not fall under the term "trade" as defined in the trade regulation, no obligation of approval may be derived from this law⁶.

The ski school law itself does not foresee obligatory approval. Ski school conveyers are usually declared as "training aids"(such as for example skis and snowboards) and therefore they can be operated without an approval or inspection.

For these reasons no certificate of approval is required, which could impose safety measures nor does an inspection of the facilities take place before the ski season starts.

Only the State of Vorarlberg defines conveyers as "structures" requiring approval according to the building code.

Sometimes conveyers are operated by cable car companies and put at the disposal of ski schools. In this case approval is required according to the trade regulation.

³) Cable Car Act 2003 (BGBl I 102/2003).

⁴) With the exception of the Vorarlberger Building Code.

⁵) The Tyrolean „Veranstaltungsgesetz“ 1982 foresees the approval of installations used at public events.

⁶) § 74f Trade Regulations (Gewerbeordnung)

2. Directives for the operation of conveyers

Regardless of the fact that approval is generally not obligatory, a group of Austrian technical experts from the various provinces (official experts for cable cars) formed a commission and worked out directives for “conveyers used as technical ascending devices in winter sport”.

Representatives of the various provincial governments as well as of the Bavarian TÜV, , the Swiss control board IKSS and representatives from the Cable Car Association and of conveyer manufacturers were involved.

Work on the directives started at the beginning of May 1998. At that time numerous accidents with conveyors had already taken place.

Since then, at the annual conference for technical experts for cable cars adjustments to the directives have been made.

The latest version of the directives is dated May 2003.

3. Legislative character of these directives

These directives have neither a legislative character nor the character of mandatory rules.

However courts – for instance in the case of the death of the boy by strangulation – consult these directives in order to evaluate the careful use and operation of conveyers.

This may be compared to the FIS- rules. FIS- rules are used by Austrian courts to determine liability in skiing accidents. A person who does not keep to the FIS- rules is generally considered negligent.

The same will probably be the case for these directives. Persons who do not operate conveyers in Austria in conformity with these regulations, may be breaching their obligation to exercise due care. This could lead to civil and/or criminal liability claims.

4. Content of directives

The directives are far too extensive to be included in full in this presentation. I would like to pick out some of the main points:

a) Technical requirements for conveyers

- o resistant materials;
- o correct dimensioning;
- o slope limited to 20%, no cross fall;
- o sufficient safety against slipping;
- o entrance and exit areas that are easy to vacate;
- o speed not surpassing 0,4 m/s;
- o breakage safety;
- o Belt surface made of non-slip material;
- o Devices to keep the belt free of snow and ice;
- o Device to ensure the belt cannot run;
- o Short stopping distance when the safety devices switch off the conveyer;
- o Injuries caused by bodily parts or clothing being pulled into the conveyor must be avoided;
- o Technical devices, which control the time a person remains in the exit area of the conveyer (the device must recognize a round object with a 10cm diameter – simulation of a child's head);
- o A main switch which can be locked (with a key);
- o Electrical safety devices;
- o Emergency switches in entrance and exit areas (red mushroom buttons)
- o emergency off device at the exit area (which cannot be impaired by snow);

a) Operational Requirements for conveyers

- o Barriers along the pistes;

- o Operation only in the presence of supervisors or with monitoring device (video);
- o Designation of a person responsible for operation;
- o Keeping of a daily operation journal;
- o Duty of notification of accidents and malfunctions of safety devices to the local authority and subsequent inspections;
- o Daily safety inspections before starting the conveyer;
- o Correct maintenance of the conveyer;
- o Annual main inspection the ski season

5. Other legislative regulations

Apart from the general regulations of the civil and criminal codes and the guidelines mentioned above, in particular other safety regulations in connection with the CE- mark are applicable.

These regulations contain technical requirements for the production of conveyers. They are therefore directed at the manufacturers and not so much at the ski schools.

The non-observance of these regulations results in the liability of the manufacturer.

Additionally, manufacturers and importers into the European Community are also liable under the Product Liability Act. For instance in the last example the conveyer was imported from Slovenia to Austria by the ski school.

Therefore it is quite possible that the ski school will be held liable as the importer of a faulty product. This liability according to the Product Liability Act is given regardless of fault.

II. What should ski school be aware of?

Conveyers will hardly disappear from use in modern ski schools. They are useful and helpful devices, especially for children's ski lessons.

But at the same time conveyors can be dangerous. Therefore, the main principle in the operation of ski must be “safety first”.

Which can and should be undertaken by ski schools to guarantee the greatest possible safety for their guests and others?

1. Safety begins with the choice of the device

When purchasing a conveyor one with the required certification, usually the CE- mark should be selected.

However, the CE- mark alone is no guarantee that the conveyor works properly or is constructed according to the latest technological developments.

Therefore, the buyer should definitely make sure that the conveyor possesses the correct safety devices, such as a switch- off bar, a light barrier and an emergency switch.

2. Safe installation

The installation of the conveyor must be carried out according to the plans: all parts – especially safety devices – must be installed.

Each time the conveyor is set up again there should be a general inspection by a trained person. All safety devices should also be checked during the inspection.

3. Daily inspection and maintenance

All conveyers must be inspected daily to make sure they function properly, especially as regards safety devices.

This inspection should take place before the belt is turned on and noted in an operation journal.

The conveyor must be maintained properly according to the operation instructions of the manufacturer.

4. Operations manager

Each ski school should designate one person responsible for the operation, inspection and maintenance of the conveyers.

This person has to keep an operation journal.

He or she should be trained appropriately. A technician is normally would probably be best for this position.

The dangers involved with the use of conveyers should be pointed out during the training. .

5. Supervisors

A conveyer must not be operated without supervision. The supervisor must make sure that an accident is noticed immediately and that all necessary measures are taken. This includes that the keys must not be left in the locks.

Supervisors must be thoroughly and periodically trained. They must be made aware of the dangers involved in the operation of a conveyer.

Training records should be in writing and available for consultation at any time (e.g. as part of the internal rules and regulations of the ski school).

6. Measures to be taken in cases of malfunction of a safety device

When a safety device malfunctions or accidents occur the conveyer must be thoroughly inspected by an expert or by the producer.

The conveyer must not be operated again before the fault is located and eliminated.