



MOBILE ICE RINKS FROM THE XPERTS



**XMAS MARKETS
GLACIAL SCENERIES
SPECTACULAR CITY & ARENA EVENTS**



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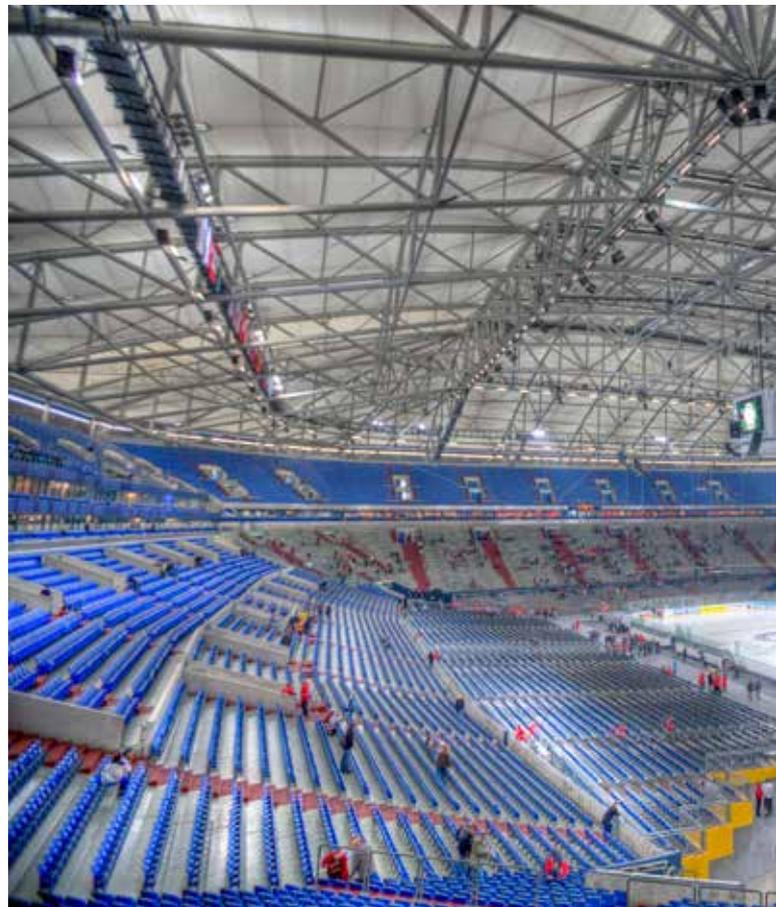
MOBILE ICE RINKS POWERED BY AST ... customized solutions

AST is a worldwide operating group of companies with several subsidiaries and associated companies and a success story of more than 30 years in professional and leisure sports. The core ideology of these companies focuses primarily on the quality and continuous development of their businesses and their products. Knowing the market's demands and requirements is the basic prerequisite for sustained success in this niche market - but fulfilling them day after day with great perseverance and passion is the real credo to which AST is committed with its range of products and services to its customers.

QUALITATIVELY DIVERSITY

Whether it is the realisation of a classic rental ice rink in the heart of an Advent or Christmas market, an extravagant ice landscape with over 9,000m², or the complete equipping of an ice sports stadium event for 70,000 spectators, AST mobile ice rinks have been the most chosen product for decades.

Through consistent improvements and customer-oriented further developments, we realize with our partners around the world and year after year about 300 rental ice rinks. All requirements regarding flexibility, shape, size and rental period are met ... above all, however, our customers are also enthusiastic.



YOUR ADVANTAGES

Our strength lies in bringing the often very different local and climatic conditions into harmony with the wishes and sometimes very demanding requirements of our customers. The perfect implementation of our mobile ice rink projects is therefore based on many years of experience and our solution-oriented approach:

„AST not only rents or sells mobile ice rinks - we provide our customers with a turnkey all-in ice rink infrastructure ... Perfection included“.

SCOPE OF SERVICES

The complete package of a mobile AST ice rink includes a number of additional services in addition to the classic „hardware“:

- personal and competent on-site consultation
- Definition of on-site requirements (connections)
- Project Management (ONE contact person)
- Visualization of the ice rink project
- Ice Rink Size optimized Refrigeration technology
- Enclosure of the cooling machines (as required)
- Connecting piping (ice rink/chiller)
- EPDM ice rink technology incl. ice field border
- Ice resurfacing machines and ice maintenance equipment (as required)
- Ice rink accessories (skates, skating aids, etc.)
- Transport of the complete ice rink equipment
- Installation by trained AST installation teams
- Commissioning of the mobile ice rink system
- qualitative ice build-up (spray rain / not flooded)
- Briefing of the ice rink operator
- Establishment of a hotline for the ice master
- Dismantling of the entire plant at the end of the ice rink operation period
- Provision of a defrost heater (if required)
- Return transport of the complete plant

OPTIONS

There is no question about it: for the „mobile ice rinks“ presented here in this catalogue, we offer our customers a wide variety of rental and purchase options. No matter whether it is a 1-day event or a rental period of three months. From economically attractive multi-year contracts to purchase after the rental period, we guarantee our customers absolutely flexible access.



OPERATING PRINCIPLE

The **resource-conserving** AST EPDM Ice Mat System

AST Ice Mats

The AST EPDM mats are rolled out side by side to one surface. An environmentally friendly antifreeze/water mixture is cooled to -7°C to -10°C by a refrigerating machine and pumped through the ice mats.

We use this very reliable technology for all our mobile ice rinks. Whether it is an ice rink for an ice hockey world championship or a Christmas market - the technology behind it is the same.



The temperature of the ice mats drops below freezing point and the water sprayed on freezes to an even ice surface.



Your advantages

The narrow tube layout of the AST ice mats enables an energy-transferring surface of 2 m^2 per m^2 of ice surface. This results in an uniform cold field and a homogeneous ice surface.

Due to the low overall construction of the AST ice rink, less water is required = energy saving. And by an optimal dimensioning of the chiller we keep the connection values low.

The AST ice rinks are configured according to the Tichelmann system. This guarantees optimum flow through all ice mats and uniform cooling of the entire ice rink. Due to their flexibility, the ice mats adapt perfectly to their substructure. This allows the construction of „adventure ice trails“ with gradients and curves.



MOBILE ICE RINK TECHNOLOGY

AST IceBox and AST SkateWay®

AST IceBox

The AST ice box consists of a stable, hot-dip galvanised steel construction with an aluminium cladding. The PE collector pipes are already integrated in the ice boxes. The collector pipes consist of flow and return pipes. The ice mats are permanently connected to them. For transport, the rolled up ice mats are stored on the ice boxes. Removable transport brackets allow easy stacking of the ice boxes for transport and storage.

The standard AST IceBoxes at a glance:

Width	2,5m
Mat length	20m (ice surface/Icebox 50m ²)
	30m (ice surface/Icebox 75m ²)
	40m (ice surface/Icebox 100m ²)

Special designs are possible in any size on customer request.



AST IceBox [Dimensions: 2500 x 1000 x 1145mm (L/B/H)]

AST SkateWay®

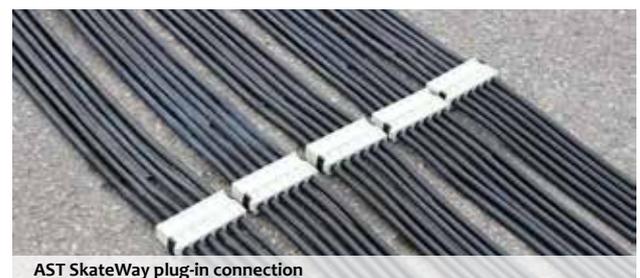
The AST SkateWay® system is a further development of the AST IceBox technology. The SkateWay® ice mats are clipped onto the so-called connection panels. This connection technology enables us to achieve the required flexibility in terms of width, length and shape of the ice rink. The width of the connection panels is selectable (0.5m / 1.0m or 2.5m) - the mat lengths of the AST Skateways are also selectable (10 / 20 or 30m).



AST SkateWay ice mats [Dimensions: 2210 x 770 x 800mm (L/B/H)]



AST SkateBox [Dimensions: 2500 x 960 x 430mm (L/B/H)]



AST SkateWay plug-in connection



AST **STANDARD** ICE RINKS

The charming attraction at the classic Advent and Christmas markets



Christmas markets all over the world are currently experiencing a real boom. Year after year they are getting bigger and bigger and are offering to their enthusiastic audience more and more attractions. At the heart of these Xmas markets, around 300 AST ice rinks throughout Europe provide a very special Christmas atmosphere and, above all, a joyful winter experience. And visitors in a good mood are always happy to buy!

The fact that this circumstance and the anticipation of the forthcoming Christmas season not only attracts tourists, but also the local population to the city centres during this time, where they do their Christmas shopping, has been recognized as a real advantage by innovative city marketing agencies and has developed into a real and highly lucrative business.

In many cases, customers benefit from renting mobile sales and storage huts, skate racks incl. dryers, skating aids and alpine curling game sets in addition to their skating rink. AST mobile ice rinks are freely configurable in their rental period, size, board type and layout as well as additional equipment. For ensuring best possible ice quality during the ice rink operation, an extensive fleet of ice resurfacing machines are at disposal which AST's customers are using with appreciation.



The AST Service Package

After definition of the relevant criteria, which are necessary for the elaboration of a serious skating rink offer: Ice rink size (L/W) / location details (in-/outdoor), condition of the surface (flat or with inclination) / geographical orientation (solar radiation, susceptibility to wind), desired ice field perimeter (wood, white or transparent board), requirements regarding ice maintenance (manual or mechanical), required ice rink accessories ... we provide our customers with a detailed offer. For advanced projects we suggest that an AST specialist inspects the proposed location on site.



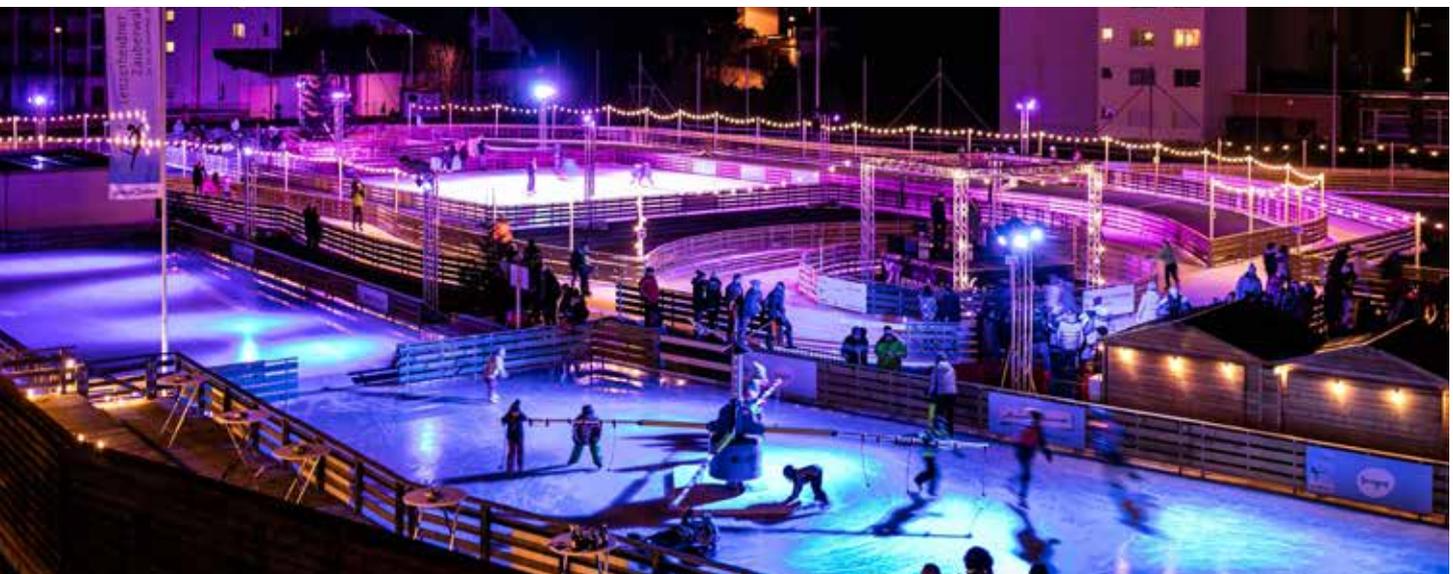
Assembling of an AST Ice Rink

- ◆ Delivery of the individual components
- ◆ Positioning of the ice boxes connected in series
- ◆ Rolling out the ice mat field
- ◆ Setting up - connecting the refrigeration equipment
- ◆ Filling the plant with antifreeze liquid
- ◆ Commissioning of the refrigerating machine and cooling the ice mat area
- ◆ Assembly of the ice rink boards (barrier)
- ◆ Spraying water onto the cooled mats
- ◆ We achieve the best ice quality by means of a layered ice build-up



AST **ADVENTURE** ICE RINKS

Glacial Sceneries featuring Winter Wonderlands



Many regions characterised by year-round tourism and, of course, many of the established winter sports centres in the Alps have decided, in the process of continuously developing their leisure facilities, to completely revise and use their existing public infrastructure for economically viable multiple use. AST has always been at the side of these city marketing and tourism agencies as a reliable provider of ideas and system solutions with the tried and tested concept of adventure ice rinks.

The primary aim of this concept is to offer visitors a well thought-out selection of theme, interest and, above all, age-specific ice rinks and to combine them with „AST SkateWay® „ (ice paths).

This means away from classic public skating in a given direction on a mostly overcrowded ice rink or towards being able to decide for yourself which direction to take.

Especially families with children who are in the process of perfecting their skills on the ice will find it much easier if they are provided with their own ice rink for this purpose. In this context, the risk of injury is also minimized.



The AST Service Package

The scope of services of our AST adventure ice rinks is absolutely identical to that of the AST standard ice rinks described above. Everything is just much bigger and more extensive. For this reason we attach great importance to an absolutely detailed visualization, which we define together with our customers in advance.

Particular attention is paid in these „winter fairy tales“ to a reliable refrigeration supply for the individual ice rink segments. Our customers therefore greatly appreciate our many years of experience and the refrigeration expertise of our engineers.





AST **EVENT** ICE RINKS

World sport championships, large scale ice events, Red Bull „Crashed Ice“



In order to be able to maintain its position as a reliable full-range supplier in the highly competitive professional sports segment in the long term, a large number of experience values and virtues are required. AST has earned this title over the years and this can justifiably be regarded as a unique characteristic of its approach.

AST has been a system and solution supplier for ice hockey, figure skating, curling, speed skating and curling world and European championships for over 20 years.

Since such competitions have a considerable reach and above all attract international media attention, the organisers and investors rely on the quality and functionality of the AST ice rink technology, the know-how and the uncompromising reliability of the AST personnel on site, especially for events of this size.

This is also the reason why we are regularly commissioned with the technical equipment for these premium events. This includes the highly spectacular Red Bull Crashed Ice World Championship (Ice Cross Downhill Championships) as well as Winter Classic events worldwide.



Ultimately, it is a perfectly coordinated mix of know-how, a sense of responsibility and coolness on the part of our engineers and staff, logistical refinement and, of course, the quality of the materials and products we use in these competitions. And it is precisely this functionality that has made us what we are today ... at home in professional sport.

An additional AST service for such large events is the professional 24-hour all-round support of the ice rinks and ice tracks by our event specialists. They take care of



the best ice quality during the event and keep the ice temperature at a constant level. In this way, we ensure and guarantee that these mass events become an absolute highlight in your event calendar.



ICE RINK ACCESSORIES

Skates, Skate assistants, Chalets & Co

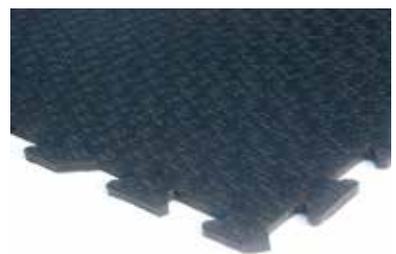
As your ice rink specialist and full-service provider, we are, in addition to the technical implementation of your ice rink, your competent partner for a very extensive range of selected accessories that you should not do without. Here we present you a small excerpt of possibilities how you can entertain and inspire your audience on the ice.



AST Skate-Racks



AST Skating assistants



AST Rubber flooring



AST Eisstock-Set



AST Chalets / sales huts



AST Ice resurfacing machines



AST Eisstock-Linings



AST Hockey goals



AST Skate sharpening tools

The complete program of our ice rink accessories can be found at: www.ast.at. If you are interested in buying these items, we invite you to visit our webshop: www.ast-shop.net.





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