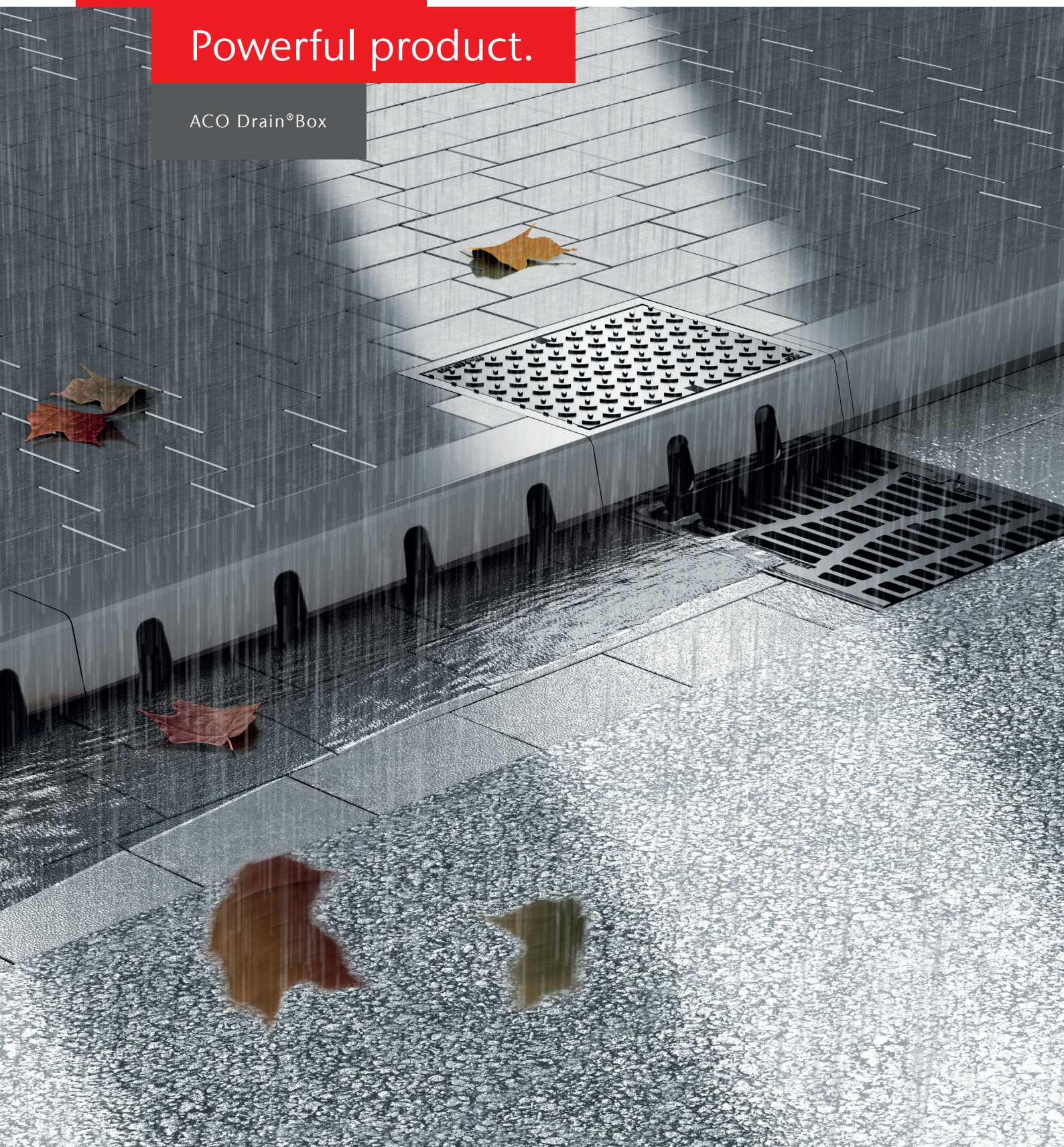


Heavy rainfall.

Powerful product.

ACO Drain®Box





## Flooding hotspots during heavy rainfall

Global climate change is altering the pattern of regional precipitation. Heavy rainfall events occur more and more frequently and lead to flooding in cities and cause great damage.

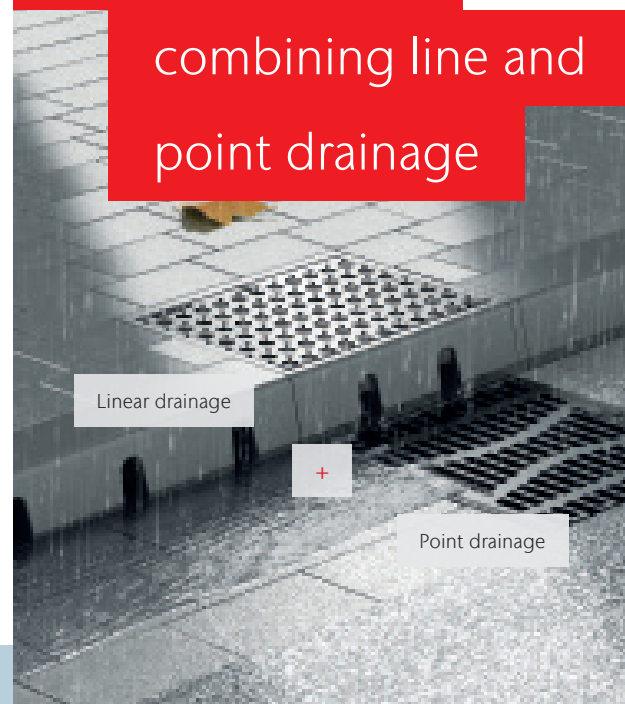


### A dangerous situation

The amount of water that can be absorbed by a single gully is limited by various factors. If a lot of water reaches the gully at the same time, a large proportion either flows over the gully or past it. This increases the inflow to the nearest road gully and thus leads to a wide body of water, which in turn causes the water to back up into the road surface. The risk of accidents is extremely high at these critical points. Silt buckets which are full of leaves and dirt increase the risk.

ACO Drain<sup>®</sup>Box.

combining line and point drainage

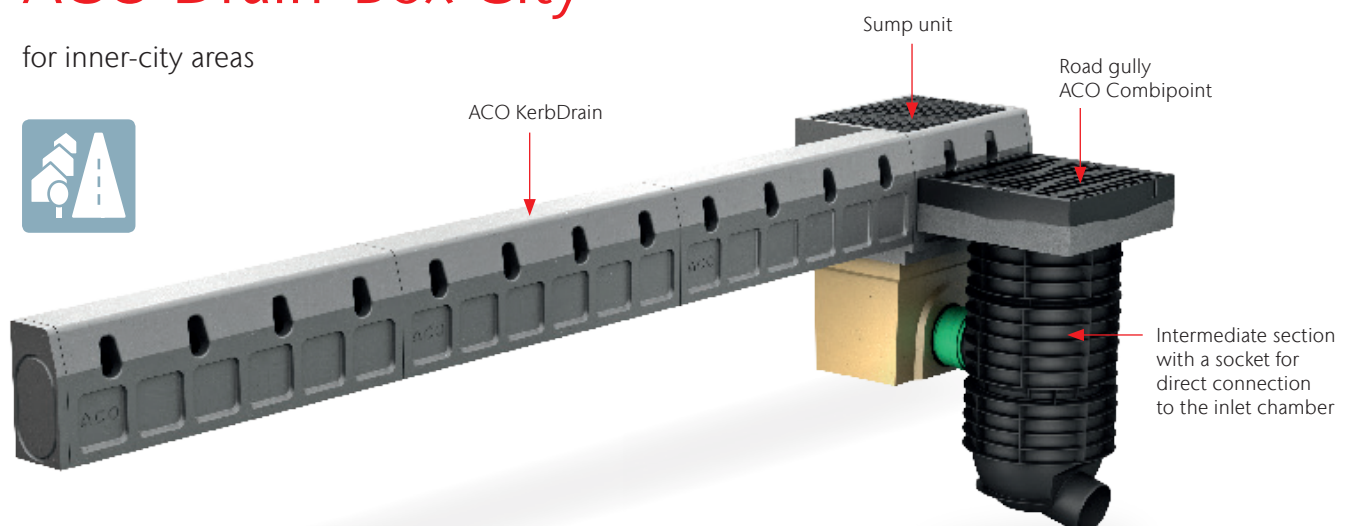


### The solution - ACO Drain<sup>®</sup>Box

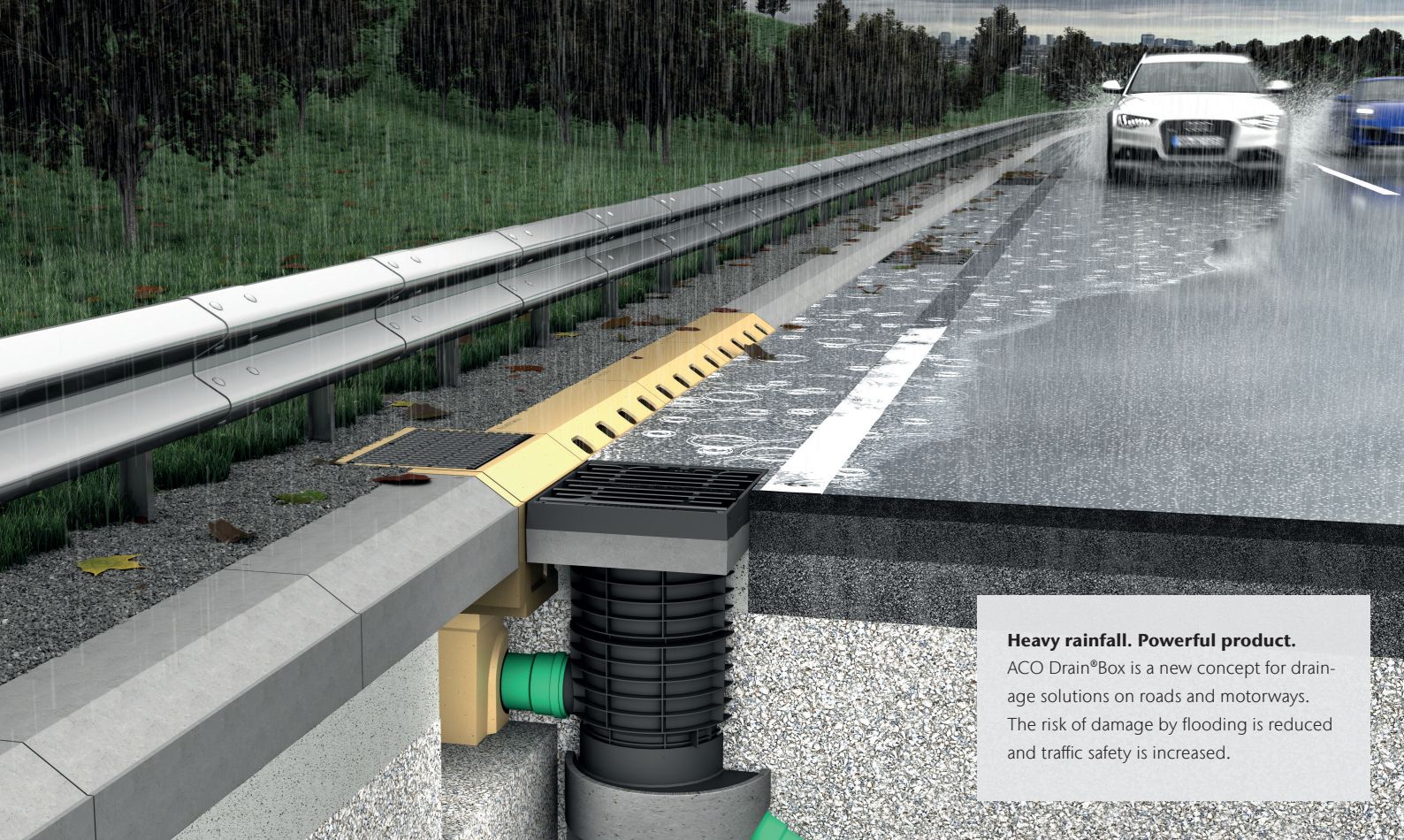
ACO Drain<sup>®</sup>Box is the new solution module for dangerous flooding hotspots. The special feature is the combination of linear and point drainage. Up stream the gully, the lateral openings of the kerb channel along the kerb absorb part of the incoming water. With just a few metres of ACO KerbDrain, a significant hydraulic performance improvement is achieved. The connection of the kerb channel with the gully is made via the sump unit. Suitable for retrofitting, renovation and new construction projects.

## ACO Drain<sup>®</sup>Box City

for inner-city areas







**Heavy rainfall. Powerful product.**

ACO Drain®Box is a new concept for drainage solutions on roads and motorways.

The risk of damage by flooding is reduced and traffic safety is increased.

**Advantages of the ACO Drain®Box**

- increased hydraulic performance by combining line and point drainage
- operational safety due to additional silt bucket.
- compatibility with existing road connections.
- more traffic safety
- less damage from flooding

**Hydraulic Example calculation**

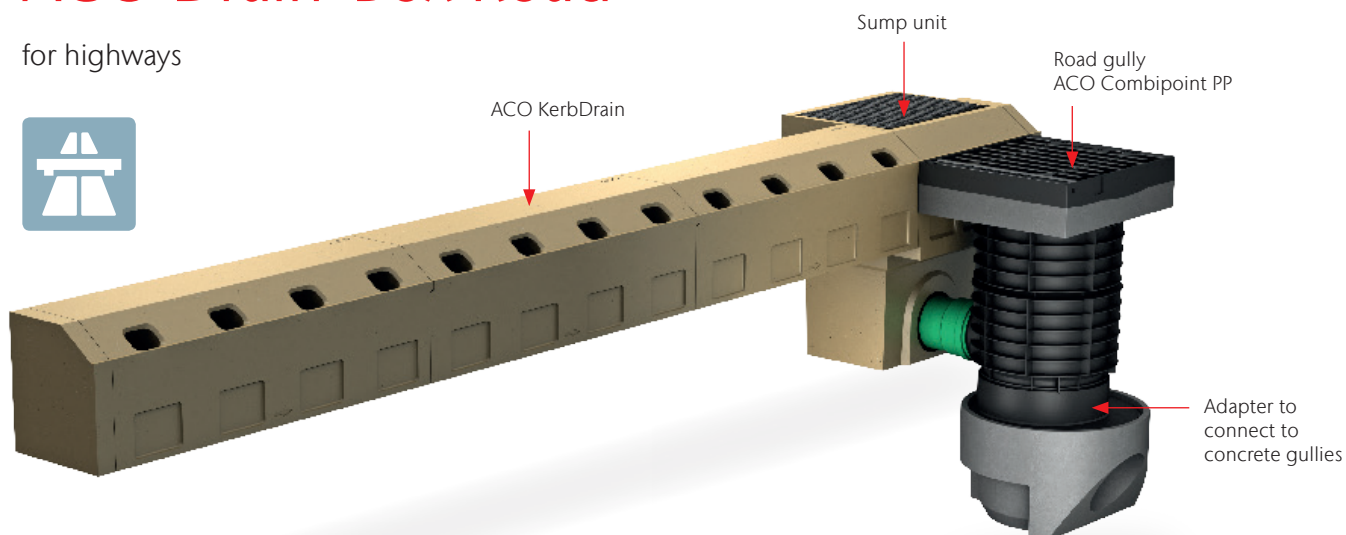
- 2.0 % Longitudinal gradient
- connected surface = 400 m<sup>2</sup> according to RAS-Ew
- runoff coefficient = 0.9 according to RAS-Ew
- city of Braunschweig rainfall rain intensity 0 110l (s\*ha)
- runoff Q = 3.96 l/s
- 3 metre KerbDrain



**min. 23,5% less hydraulic load for the road gully**

# ACO Drain®Box Road

for highways





Every ACO product supports  
the ACO system chain



- 
- Drainage channels
  - Road and yard gullies
  - Gully tops
  - Manhole covers
  - Rainwater treatment
  - Infiltration and attenuation
  - Pump shafts
  - Flow control systems
  - Tree protection
  - Amphibian protection
- 

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