PRODUCT OVERVIEW



Channel drainage systems Point drainage Rainwater management and treatment Cable supply channels

www.birco.com

A BRAND CONCEIVED FOR FUTURE GENERATIONS

Global, sustainable and digital system solutions



At BIRCO, we are driven by the vision of a future that is also worth living for our grandchildren. People and the environment are at the centre of our work, because we are convinced that the responsible use of water is the key to this future. In view of the challenges posed by climate change and global crises, we are focussing on innovation and holistic solutions to sustainably protect and use water as a resource.

THIS OBJECTIVE CHARACTERISES OUR FOUR CORE PROMISES:

Personal customer care, a focussed service orientation, unconditional reliability and high quality standards for our work and products. Our expertise in the areas of water management, drainage, infiltration, treatment, storage and groundwater protection forms the foundation of these brand promises and motivates us to continuously innovate.

The result is a comprehensive portfolio of products and solutions that is unrivalled in Germany both in breadth and depth. With our far-reaching expertise, we develop system solutions that will not only prevail today, but also tomorrow and secure a prosperous future for our grandchildren.



THE BIRCO SYSTEM FINDER

DRAINAGE CHANNELS

	CIV	IL ENGINEERI	NG	GROUNDWATER PROTECTION								
	BIRCOsir® NW 100 – 200 AS	BIRCOsir® Rail track drainage	BIRCOprofil	BIRCOsir® NW 320 – 1000	BIRCOmassiv	BI	IRCOmax-i®	BIRCOprotect	BIRCOsolid® channel	BIRCOsolid® slot channel	BIRCOport	BIRCOdicht
	Page 23	Page 25	Page 27	Page 29/31	Page 33		Page 35	Page 37	Page 39	Page 40	Page 41	Page 43
Application area	C	3	-						P		P	1
Roads	++	+	+	++	+		++					
Industrial areas	+	+		+	++		++	+	++	++	+	+
Commercial areas	++	+	+	+	++		++		++	++		++
Logistics areas	+	+		+	++		++	+	++	++	++	+
Hall construction	+	+	+	++	++		+	+	+			+
Chemical industry				+	+		+	+	+	+	+	++
Airports airside				+	++		++	+	++	++	++	+
Ports				+	++		++	+	++	++	++	+
Agriculture	+			++	+			++				+
Residential / office building	+											
Underground park. garages	+		++									
Multi-storey park. garages			++									
Train stations	+	++	++	+								
Landscaping	+											
Urban design	++		+	++			++					
Private areas	+											
Facades / terraces												

Mark: + suitable, + + recommanded

DRAINAGE CHANNELS

				4					100		
	URBAN PLANNING AND LANDSCAPING						URBAN PLA	URBAN PLANNING AND LANDSCAPING			
	BIRCOplus	BIRCOslim®	BIRCOlight® with steel angles	BIRCOlight [®] with DI angles	BIRCOlight triloc®	BIRCOlight® Facade draina	BIRCO ge parksafe®	BIRCO Slotted steel covers	BIRCOtopline®	BIRCOprofil	
	Page 45	Page 47	Page 49	Page 51	Page 53	Page 55	Page 57	Page 59	Page 61	Page 63	
Application area				1		and the second s			K	A Start	
Roads			++	++	+		+			+	
Industrial areas			+	+							
Commercial areas			+	+	+		+			+	
Logistics areas											
Hall construction		+	+	+	+		+			+	
Chemical industry											
Airports airside											
Ports											
Agriculture			+	+							
Residential / office building	+	+	+	+	+	+	+	+	++		
Underground park. garages		+	+	+			++			++	
Multi-storey park. garages							++			++	
Train stations		+	+	++	+		+	+		++	
Landscaping	++	++	++	++	++		+	+	++		
Urban design			++	++	++		+	++		+	
Private areas	++	++	+	+	+		+	+	++		
Facades / terraces						++	+	+	++		

Mark: + suitable, + + recommanded

POINT DRAINAGE

	CIVIL ENGI- NEERING	GROUND- WATER PROTECTION	URBAN PLAN	NNING AND LA	NDSCAPING
	BIRCOsir® Point drainage	BIRCOdicht Point drainage	BIRCOplus Point drainage	BIRCOlight® Point drainage	BIRCOtopline Outlet elements
	Page 67	Page 69	Page 71	Page 73	Page 75
Application area	0	-		•	0
Roads					
Industrial areas	+	+		+	
Commercial areas	+	++		+	
Logistics areas	+	+			
Hall construction		+		+	
Chemical industry		++			
Airports airside	+	+			
Ports	+	+			
Agriculture	+	+			
Residential / office building	+		+	+	++
Underground park. garages					
Multi-storey park. garages					
Train stations	+			++	
Landscaping			++	++	
Urban design	++			++	
Private areas			++	++	++
Facades / terraces					++

RAINWATER MANAGEMENT

	TREATMENT						
	BIRCOprime® evo	BIRCOprime®	BIRCOpur®	BIRCO hydropoint®	BIRCO hydroshark		
	Page 79	Page 81	Page 83	Page 85	Page 87		
Application area	C.	100		F	T		
Roads	++	++	++	++	++		
Industrial areas	++	+	++	++	++		
Commercial areas	++	+	++	++	++		
Logistics areas	++	+	++	++	++		
Hall construction			+	+	++		
Chemical industry							
Airports airside	++	+	+	+	+		
Ports	++	+	+	+	+		
Agriculture							
Residential / office building			+	+	++		
Underground park. garages							
Multi-storey park. garages							
Train stations	+	+	+	+	+		
Landscaping							
Urban design	++	+	++	++	++		
Private areas			+	+	+		
Facades / terraces		Sec. 2					

Mark: + suitable, + + recommanded

RAINWATER MANAGEMENT

	INFILTRATION	RETENTION		
	BIRCOpur®	BIRCO max-i® Page 35		
	Page 83			
Application area				
Roads	++	++		
ndustrial areas	++	++		
Commercial areas	++	++		
ogistics areas	++	++		
Hall construction	+	+		
Chemical industry		+		
Airports airside	+	++		
Ports	+	++		
Agriculture				
Residential / office building	+			
Jnderground park. garages				
Aulti-storey park. garages				
rain stations	+	+		
andscaping				
Jrban design	++	++		
Private areas	+			
acades / terraces				

Mark: + suitable, + + recommanded

CABLE SUPPLY CHANNELS

	_				
	SUPPLY				
	BIRCOcanal® Supply	BIRCOcanal® Energy Infrastructure			
	Page 95	Page 95			
Application area	T.	T.			
Roads	+				
Industrial areas	++				
Commercial areas	+				
Logistics areas	+	+			
Hall construction	++	+			
Chemical industry					
Airports airside					
Ports					
Agriculture					
Residential / office building	+	+			
Underground park. garages	++	++			
Multi-storey park. garages					
Train stations	+				
Landscaping					
Urban design		++			
Private areas		+			
Facades / terraces					

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OVERVIEW OF LOAD CLASSES Products that fit your requirements Classification acc. to EN 1423

LOAD CLASSES AND APPLICATION RANGE (max.) WALKABLE | CLASS A 15 + Areas without traffic + Pedestrians / cyclists + Private areas / green spaces LIGHT TRAFFIC | CLASS B 125 + Pedestrians + Car parks + Delivery vans **CLASS C 250** + Curbs + Road shoulders C 250 + Parking lots **CLASS D 400** + Roadways (also pedestrian roads) + Pedestrian zones D 400 + Parking lots **CLASS E 600** + Industry . + Military + Heavy wheel loads E 600 **CLASS F 900** ... + Air traffic surfaces + Ports F 900 CLASS SLW 60*

+ Urbanisme

+ Industry + Airports, ports

* Can be driven on by heavy goods vehicles with a total weight of 60 tonnes

SLW 60



The word 'sustainability' cannot be comprehensively and accurately explained by a simple definition. Since it is often mentioned, but is rarely accompanied by a

HOW WE USE IT:

For **BIRCO**, the term sustainability is focussed on the present and the future and

Our in-house and site experts offer service support with planning, calculations and on-site installation.

PROJECT MANAGEMENT AND SERVICES

Competent support for your project.

Design, advice and calculation

Customised design, tailor-made support



Individual planning support

- + Personalised advice with decades of experience
- + Optimised concepts
- + Hydraulic calculation
- + Customised cuts
- + Construction phase planning
- + Support with tenders
- + Download of tender texts, CAD data, installation and maintenance instructions

AUDI Münchsmünster 1.5 km BIRCOpur®

Always there for you

Packed and delivered on time



Service for a quick project and construction progress

- + Ex factory cutting and drilling services
- + Installation plans
- + Quick delivery
- + Construction supervision
- + Coordinated delivery schedules
- + Suitable installation aids
- + Clear installation instructions
- + Care and maintenance instructions
- + Quick reordering of spare parts

BIRCO direct contact +49 (0) 7221 5003-1120

MASSIVELY VERSATILE – THE IDEAL SOLUTION FOR EVERY REQUIREMENT

Well-designed drainage systems play a crucial role in modern construction, especially in industrial and urban development, by effectively collecting and draining rainwater to prevent flooding and water damage.

BIRCO, as one of the leading system providers for surface drainage in Europe, offers an unrivalled range of drainage solutions and channel systems for every conceivable application.

Whether you are faced with the challenge of coping with high rainfall or heavy loads, are looking for the perfect drainage system for gardening and landscaping or are on the lookout for aesthetically pleasing façade channels for building construction – we have the solution for you. Optimised for your individual requirements and needs.

Quality and excellence made in Germany.

DRAINAGE CHANNELS

Büsum harbour area



BIRCOsir[®] NW 100 – 200 AS

Stability and diversity also for Type I installation

Drainage systems for load areas with safety and architectural requirements. Large selection and planning possibilities

- + NW 100 300 with and without inbuilt fall, shallow channels
- + Anchoring system NW 200
- + Installation lengths: 0.50, 1.00, 1.50 and 2.00 metres
- + Broad range of gratings
- + Powerful outfall units with high drainage performance
- + Load class: A 15 D 400 as Type I
- + Load class: A 15 F 900 as Type M

Note: In nominal width 200 also available as a guiding system for the visually impaired (see page 103)



Industrial harbour

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CIVIL ENGINEERING

BIRCOsir[®] Rail track drainage

Reliable water drainage in rail traffic



Quick absorption of surface water from the rail and track area

- + Rail profile 49 E 1/54 E3 (2-part) and 57 R 1/67 R 1 (3-part), track width 1435 mm
- + Channel: BIRCOsir NW 100
- + Track drainage pockets on both sides to absorb the track water and dirt particles
- + Integrated channel base sleeve for connection to the NW 100 drainage pipe
- + 8 M12/A2 bolts per metre
- + Load class: A 15 E 600



Railway station Liège / Belgium

BIRCOprofil

Low height – Maximum performance

For areas with low installation heights

- + Width 160 and 196 mm
- + Installation height: 50 and 75 mm
- + Installation lengths: 0.50, 1.00, 3.00 metres
- + Stainless steel V2A, V4A or galvanised steel
- + Anchoring system through special channel form and mounting anchor
- + Load class: A 15 C 250, E 600 can be achieved by following appropriate instructions



Harbour area Leucate / France

BIRCOsir[®] NW 320 – 520



BIRCOhyperbola construction form

In areas with a high volume of traffic where substances hazardous to water such as hydrocarbons, grease and weak acids accumulate

- + Product approved by the German Institute for Building Technology (DIBt) (no. Z-74.4-181)
- + Resistant to mildly aggressive media
- + With continuous anchoring system
- + Lengths: 0.50 and 1.00 metre
- + Large retention volume, self-cleaning effect
- Gratings with shift protection and 8 M12 bolts per metre
- + Load class: A 15 D 400 Type I
- + Load class: A 15 F 900 Type M
- + Outfall unit under channel
- + Outfall unit (1- or 2-piece), also as shut-off outfall unit (1-piece)



Shallow channels

BIRCOsir[®] NW 1000

Stability and variety



Shallow channel with high retention capacity

- + NW 1000
- + Large retention volume
- + Reinforced grade C 40/50 concrete
- + Length: 2.00 metres
- + Hot-dipped galvanised solid steel angles for combi-fastening system
- + 8 bolts per metre
- + With cast-in anchor sleeves for mechanical installation
- + Reservation for sealing joint
- + CE-compliant
- + Load class: A 15 D 400



Toll barriers



BIRCOmassiv



Designed for maximum load

Reinforced concrete channels for the drainage of surfaces subject to extreme stress

- + NW 170 and 220
- + Lengths: 1.50 and 3.00 metres
- + Continuous anchoring system
- + Very stable channel made of reinforced C 60/75 concrete
- + Surface protection in hot-dip galvanised steel
- + Shift protection of the gratings and 8 M12 bolts per metre
- + ASR performance test passed (Alkali-Silica Reaction)
- + Officially certified (German certificate No. Z-74.4-182)
- + CE-compliant
- + Load class: A 15 F 900 Type I



BIRCOmax-i®

RETENTION

Maximum retention volume and stability with the Type I installation (self-stability)

Innovative drainage concept for the Type I installation

- + NW 220, 320, 420, 520, various installation heights
- + Installation lengths: 1.50 and 3.00 metres
- + Continuous anchoring system
- + Retention volume of up to 512 liters per metre
- + Very stable channel design with reinforcement
- + High-quality C 60/75 concrete
- + 5 mm DI angles with surface protection and shift protection of the grating
- + BIRCO safety joint
- + ASR performance test passed
- + Officially certified (German certificate No. Z-74.4-160)
- + Load class: A 15 F 900 Type I



Groundwater protection on industrial sites

GROUNDWATER PROTECTION

BIRCOprotect

Guaranteed protection of groundwater even under heavy loads

In areas with a high volume of traffic where substances hazardous to water such as hydrocarbons and grease accumulate

- + NW 100-200
- + Installation lengths: 0.50 and 1.00 metres
- + With and without inbuilt falls
- + Officially certified, performant outfall units (for NW 100 200)
- + ASR performance test passed (Alkali-Silica Reaction)
- + Officially certified (German certificate No. Z-74.4-34)
- + CE-compliant
- + Load class: A 15 F 900

Note: From NW 320 we offer the BIRCOsir® in large nominal widths with official DIBt approval.





BIRCOsolid[®] Channels

Optimal impermeability – Maximum stability

Reinforced concrete channels for drainage

of mildly aggressive substances

- + Channels NW 150, 200, 300
- + Officially approved (No. Z-74.4-33)
- + Installation lengths: 1.00, 1.50 and 4.00 metres
- + ASR performance test passed (Alkali-Silica Reaction)
- + Performant outfall units
- + Also available as outfall unit with shut-off valve
- + Load class: A 15 F 900

Note: You need surface protection of the concrete edge? Then take a look at our BIRCOmassiv with official DIBt approval.



BIRCOsolid[®] concrete slot channels

Monolithic concrete channel for fast installation



WITH ADVICE AND GUIDANCE AT YOUR SIDE:

Interested in our BIRCOsolid[®] slot channels? If you would like to find out more, please do not hesitate to contact your area sales manager at BIRCO directly. We will be pleased to answer your questions and to advise you so that you can find the optimum solution for your project.

BIRCOport

Monolithic reinforced concrete channel for airports and ports

GET IN TOUCH WITH OUR EXPERTS:

Interested in our BIRCOport[®] concrete channels? If you would like to find out more, please do not hesitate to contact your area sales manager at **BIRCO** directly. We will be pleased to answer your questions and to advise you so that you can find the optimum solution for your project.

Seveso-type plants



BIRCOdicht

For the drainage of hazardous substances



Channel with PEHD lining. For the safe disposal of aggressive substances

- + NW 150-300
- + Lengths: 2.00 metres, corner elements and T-fittings
- + With and without inbuilt fall
- + PEHD lining
- + PEHD edge with outer lining
- + PP lining available on demand
- + Performant outfall units available for each nominal width, also as shut-off outfall unit or point drainage
- + Officially approved (German certificate No. Z-74.4-52)
- + CE-compliant
- + Load class: A 15 F 900



Driveway Private property

BIRCOplus

The drainage channel for garages and courtyard entrances

Easy installation – reliable performance – many years of stability

- + NW 100
- + Installation lengths: 0.50 and 1.00 metres
- + Channels with and without inbuilt fall
- + Performant outfall units
- + Concrete edges covered by gratings
- + Ideal for private construction projects
- + CE-compliant
- + Load class: A 15 C 250



BIRCOslim – the lightweight channel with strong features

URBAN PLANNING AND LANDSCAPING

BIRCOslim®

Light and handy



- + Channel system: NW 100 and 150, without slope, NW 100 also available as shallow channel
- + Lengths: 0.50 and 1.00 metre
- + Continuous anchoring system
- + BIRCOhyperbola form for long-lasting stability
- Steel angles with zinc/aluminium/magnesium coating (Magnelis[®]) for best corrosion resistance (significantly better than galvanised steel). Self-regeneration effect for cut edges, scratches and slight surface damage
- + Range of gratings made of galvanised steel and black dip-coated DI
- + With shift protection of the gratings
- + Load class: A 15 C 250

Central Station, Berlin



BIRCOlight[®] with steel angles

Aesthetic design and easy handling



Aesthetic linear drainage

- + NW 100 AS and 150 AS, with and without inbuilt fall, also available as shallow channel
- + Lengths: 0.50 and 1.00 metre
- + High-quality grade C 40/50 concrete
- + With anchoring system (AS)
- + 4 mm solid steel frame
- + Numerous gratings available
- + Performant outfall units
- + CE-compliant
- + Load class: A 15 E 600



A new design without compromising on quality



BIRCOlight[®] with DI angles



New design – proven quality

The perfect extension of the BIRCOlight[®] range

- + Channel system: NW 100, 150 and 200
- + Lengths: 0.50 and 1.00 metre
- + High quality C 40/50 concrete
- + With anchoring system
- + Without crossbars
- + DI gratings with longitudinal bars and double-slotted gratings
- + Galvanised steel gratings
- + CE-compliant
- + Load class NW 100/150: A 15 E 600
- + Load class NW 200: A 15 D 400



BIRCOlight triloc[®] with quick-fastening system

URBAN PLANNING AND LANDSCAPING

BIRCOlight triloc®

User-friendly fastening system for more possibilities



- + NW 100, NW 150 and NW 200
- + Channels with and without inbuilt fall
- + 4 mm solid steel frame
- + Installation lengths: 0.50 and 1.00 metres
- + Performant outfall units
- + Slotted DI gratings with BIRCOtriloc[®] quick-fastening system
- + Optionally also with bolt connection / retrofit bolt connection possible
- + Load class: A 15 D 400



Facade drainage

BIRCOlight® Facade drainage

Collection of run-off water and foundation protection

Drainage of suspended facades

- + Channel system: NW 100
- + Length: 1.00 metre
- + Jamb cover
- + Protection against standing water by direct discharge of rainwater via the facade baffle plate into the channel
- + Galvanised steel grating to be bolted on
- + Capacity: large drainage volume, fast drainage
- + Optics: enhancement of the facade without concrete edge or intermediate surface covering
- + High performance outfall unit
- + Load class: A 15 B 125



Drainage of parking decks



URBAN PLANNING AND LANDSCAPING

BIRCOparksafe[®]

The drainage solution with low height and maximum efficiency

Elegant, quiet and efficient – the new BIRCOparksafe® for multi-storey and underground car parks

- + Channel in 160 mm width without internal slope, with and without outlet
- + Length: 1.00 metre
- + Sturdy concrete channel with low weight (approx. 14 kg/pc.)
- + Anti-slip surface
- + UV-resistant and abrasion-resistant, resistant to frost and de-icing salt
- + Barrier-free
- + 100% recyclable
- + Load class: C 250



Drainage of squares

BIRCO Slotted steel covers



The invisible drainage solution

Symmetrical and asymmetrical slotted steel covers

- + For channels NW 100, 150 AS and 200
- + Installation lengths: 0.50 and 1.00 metres
- + Stainless steel V2A/304, V4A/316 or galvanized steel 1.5/4 mm thick
- + Different connection heights up to 200 mm
- + Double slots as a special solution
- + Access covers for cleaning or maintenance
- + Load class 1.5 mm: A 15 C 250
- + Load class 4 mm: A 15 E 600



Drainage of facades and terraces

BIRCOtopline[®]

The user-friendly steel channel



Flexible and barrier-free facade drainage

- + Widths 100, 130 and 160 mm, heights 50 and 75 mm
- + Installation lengths: 0.50, 1.00, 3.00 meters
- + Height-adjustable through screw-on feet
- + Galvanized steel, stainless steel (V2A) on request
- + Pre-perforated drainage openings (0.50 m channels)
- + Single-sided perforation
- + Pre-fabricated 90° angle elements
- + Installation from above thanks to clip system
- + Anti-slip surface nubs
- + Complies with the updated German flat roof guideline and DIN 18040 for barrier-free construction
- + Load class: pedestrian / wheelchair accessible



Parking garage

BIRCOprofil

Low height – Maximum performance



For areas with low installation heights

- + Width 160 and 196 mm
- + Installation lengths: 0.50, 1.00, 3.00 meters
- + Installation height: 50 and 75 mm
- + Stainless steel V2A, V4A or galvanized steel
- + Float guard due to special channel form and mounting bars
- + Various gratings available
- + Load class: A 15 C 250
- + Up to E 600 possible by following appropriate instructions



THE PINPOINT SOLUTION FOR MODERN CONSTRUCTION PROJECTS

Point drainage, as the name suggests, refers to the targeted collection and drainage of surface water at specific points. In contrast to conventional linear drainage, where water is collected along a line or channel, point drainage focuses on specific areas that require efficient water drainage.

Advantages of the BIRCO point drainage systems

Efficiency: Rapid drainage of water, prevents water accumulation and flooding.

Flexibility: Can be used in different environments and projects.

Aesthetics: Neat integration into the overall design of landscape and construction projects.

POINT DRAINAGE

Point drainage



CIVIL ENGINEERING

BIRCOsir[®] Point drainage



Design drainage to the point

Illustration: BIRCOsir® Point drainage 40/40

For point drainage of areas and squares that require the best drainage performance and high load safety

- + Two sizes: 30/30 and 40/40 cm
- + High-quality C 40/50 concrete
- + With solid steel frame, stainless steel frame (V2A) on request
- + Gratings with 2 or 4 bolt connections or Easylock fastenings
- + Load class: A 15 E 600



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BIRCOdicht Point drainage

A safety system that gets to the point

Outfall units with shut-off valves and point drainage for the safe collection and retention of highly aggressive substances

- + High-quality C 40/50 concrete
- + Shut-off outfall units or point drainage
- + Shut-off outfall unit with manual shut-off valve, shut-off valve with pneumatic actuator on request
- + With solid steel frame (can be removed)
- + Channel connection up to NW 300
- + Gratings with 4 bolt connections (black dip-coated, galvanized, stainless steel, GRP)
- + PEHD lining, PP lining on request
- + Shut-off outfall unit officially approved (German certificate No. Z-74.4-52)
- + Load class: A 15 F 900





Acid storage area

Point drainage of public spaces

BIRCOplus Point drainage

Simple and sturdy point drainage



Illustration: BIRCOplus Point drainage 30/30

Point drainage made easy

- + 19/19 outfall unit set with DI or mesh grating
- + 30/30 outfall unit set with mesh grating, with significantly reduced weight
- + High-quality C 40/50 concrete, without frame
- + 1-piece units
- + Incl. silt bucket, internal odour trap and socket for pipe connection
- + Load class: A 15 B 125 and light vehicles


Point drainage with DI elements



BIRCOlight® Point drainage



Drainage of squares with high-quality DI elements

New design possibilities for squares and other surfaces

- + 30/30 cm point drainage
- + High-quality C 40/50 concrete
- + Cathodic-coated DI frame
- + Set with clamped-on DI grating
- + 1-piece unit
- + PP silt bucket
- + DN 110 odour trap for PVC pipe connection
- + Integrated socket for DN 110 pipe connection
- + Load class: A 15 B 125



Point drainage and gratings for terrace construction

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WITT

North



Point drainage in different heights



Steel point drainage in terrace construction

- + Two sizes: 25/25 and 40/40 cm
- + Galvanised steel
- + Perforated on all sides
- + With thread for screw feet for stepless height adjustment (4 pcs.)
- + Load class: pedestrians / wheelchair-accessible



SUSTAINABLE AND DECENTRALISED SOLUTIONS FOR THE FUTURE

At a time when urbanisation is advancing rapidly and is accompanied by problems such as increasing soil compaction and urban densification, BIRCO provides comprehensive solutions for sustainable and digital water management.

Specially designed to meet the challenges of heavy rainfall and droughts, our systems seamlessly integrate treatment functions, infiltration and retention of rainwater.

Take a step into the future of urban infrastructure with BIRCO today – with innovative solutions that aim to solve urban problems while supporting the water cycle in a way that is as close to nature as possible.

RAINWATER MANAGEMENT

The perfect combination of sedimentation & filtration

remainment

TREATMENT

BIRCOprime[®] evo

The 2-in-1 rainwater treatment system



- + NW 520, height: 1200 mm
- + Length: 4500 mm
- + Solids (AFS 63) and particulate-bound pollutants are removed
- + Sedimentation chambers with weirs
- + The rainwater that has been freed of solids is channelled through the filter granulate. Adsorption and precipitation remove dissolved organic and inorganic pollutants from the water
- + Filter replacement intervals of up to 5 years (depending on pollutant loads and connected area)
- + Operator-friendly maintenance and cleaning thanks to the modular system design / near-surface access
- + Quick installation, pre-assembly at the factory and installation according to type I (according to DIN1433)
- + Load class: A 15 F 900

Particle sedimentation directly in the drainage channel



TREATMENT

BIRCOprime[®]

Direct and sustainable rainwater treatment

Compact particle sedimentation system

- + NW 520, height: 1200 mm
- + Length: 4.50 meters
- + High-quality C 60/75 concrete
- + Connected area up to 7000 m²
- + Compact water treatment installation through sedimentation in the drainage channel
- + Sedimentation chambers with weirs
- + Outlet variants: vertical and horizontal
- Proven cleaning performance based on the DIBt test principles, in accordance with DWA-M 153 and DWA-A 102
- + Factory assembly enables quick installation according to Type I
- + Load class: A15 F 900



Rainwater treatment and purification

TREATMENT

INFILTRATION

BIRCOpur®

Rainwater treatment system with integrated sedimentation and filtration stages

Pre-treatment of rainwater according to regulations

- + NW 300 AS (AS: Anchoring System)
- + Length: 1.00 meter
- + High-quality C 40/50 concrete
- + Connectable surface of at least 20 m² per linear metre
- + Modular 2-stage filter system
- + Best value for the assessment method according to DWA-M 153: flow rate 0.15
- + DWA-A 102 compliant, connectable surface 100 m²
- + Suitable for the treatment of surfaces according to category III (according to DWA-A102, particle retention according to parameter AFS63)
- + Officially approved (German certificate No. Z-84.2-10)
- + Load class: A 15 F 900

Note: Also available as BIRCOpur[®] readyset or as BIRCOpur[®] direct.

Efficient filtration of rainwater in a concrete chamber

TREATMENT

BIRCOhydropoint®



The system for semi-centralised rainwater treatment

Hydrodynamic separator

- + Combination of sedimentation and filtration (upflow process)
- + Connectable area up to 3250 m² depending on individual system / degree of contamination
- + Removes heavy metals, mineral oil hydrocarbons, polycyclic aromatic hydrocarbons and microplastics
- + Flow rate value according to DWA-M 153: 0.2 (type D11/D12)
- + Various filter cartridges
- + Easy inspection and maintenance
- + DWA approvals for the Hydropoint 1000 and 1500
- + DWA-A 102 compliant



Efficient sedimentation of rainwater in a manhole

TREATMENT

BIRCOhydroshark

Compact sedimentation system set in a concrete chamber



Rainwater treatment system based on the principle of the hydrodynamic separator

- + Compact sedimentation system set in a concrete chamber
- + Available in 6 sizes
- + Hydrodynamic separator
- + Removal of solids (AFS) through physical treatment
- + No height difference between inlet and outlet
- + Installation under traffic areas
- + Easy inspection and maintenance
- Connectable area of up to 22500 m², depending on the individual system and degree of contamination



THE ECONOMICAL SOLUTION FOR MODERN INFRASTRUCTURE

At a time when precision and adaptability are at the centre of infrastructure planning, BIRCO brings innovations that make the difference. With our ultra-flexible BIRCOcanal[®] supply system, we provide the answer to the complex requirements of modern urban development and industry.

BIRCOcanal[®] stands for customised efficiency in production facilities, public spaces and wherever sustainable infrastructure is required. From the seamless integration of electric charging points to the design of sustainable energy infrastructure with hydrogen-carrying pipes. BIRCO provides you with the complete range of possibilities.

CABLE SUPPLY CHANNELS

Page 89

Aluminium foundry in Balzhausen, Germany



SUPPLY

BIRCOcanal

The cable supply channel



For the reliable laying of pipes and hoses in heavily used and stressed areas

- + NW 100 1000
- + 320, 420 and 520 with DI Hexagon[®] cover
- + Lenghts: 1.00 and 2.00 meter
- + High-quality C 40/50 concrete
- + With solid steel angles for fastening the covers or with lateral steel protections for laying reinforced concrete covers
- + Cast-in mounting rails type 28/15 (from NW 200)
- + Also suitable for drainage
- + Load class: A 15 E 600 or SLW 60, reinforced concrete cover in accordance with EN 1991-2 (traffic loads on bridges) Load model 1
- + Type I installation possible up to D 400



Visual highlights made of stainless steel, galvanised steel, DI or bamboo. High performance and added functional value as with our guide gratings for the visually impaired. This is what modern drainage systems have to offer.

FUNCTIONALITY AND DESIGN OF GRATINGS

Strasbourg harbour



DI gratings

Load stability with the best hydraulic values



Form-fit design

- + Different widths (NW 100 NW 1000)
- + Length: 0.5 metres
- + Black dip-painted
- + Up to 8 bolt fastening per metre, alternatively Easylock
- + Different design versions
- + Individual designs, such as ornaments, shapes, logos, possibility to match the architecture (note minimum quantities)
- + Also available with cathodic coating (BIRCOcolor)
- + Mitre cuts to specified angles (BIRCO factory service)
- + Anti-slip surface
- + Load class: A 15 F 900

Railway station platform



Long-lasting corrosion protection with high load stability



High-quality hot dip galvanising up to 70 microns

- + Different widths
- + Lengths: 0.5 and 1.00 metres
- + Up to 4 bolt fasteners / Easylocks per cover
- + Different design versions, some with anti-slip surface
- + Also available with cathodic coating
- + Load class: pedestrians E 600



Stainless steel gratings

Elegant solutions for facade and terrace construction



Highlights for architects

- + Different widths
- + Lengths: 0.5 and 1.00 metres
- + Adjustments possible ex works
- + Stainless steel V2A/304, V4A/316
- + Different design versions
- + Load class: A 15 E 600

Perfect for designing terraces





Bamboo covers

A natural material that combines elegance and durability

- + Suitable for BIRCOtopline[®] 160
- + Fire protection class Bfl-s1 according to EN 13501-1
- + Durability class 1 (EN 350)
- + Simply inserted into the channel walls
- + Profiled surface
- + Also available: teak-coloured maintenance oil and special bamboo cleaner
- + For pedestrians / wheelchair users

Guiding systems in public places



Blind guide system gratings

The brilliant combination of drainage and control system



Barrier-free planning, building and draining with a certified system

- + Gratings with tactile guiding stripes and attention fields
- + In combination with the channel system BIRCOsir® NW 200 AS
- + Suitable for conventional concrete slabs
- + Contrasting color selection possible
- + 3-sense principle
- + Compliant with DIN 32984 2020-12
- + Certified according to DIN 18040-3 (eligible for funding in Germany) and DIN 329756
- + Anti-slip surface
- + Load class: A 15 D 400





BIRCOdesign – Cast iron gratings

"Honeycomb" New construction in Stuhr – Germany

"Fish"

Germany

Eckernförde –

"Butterflies" St. Quentin – France

Customised grating

Customised grating with logo Berlin – Germany

with emblem Cologne – Germany

Powder-coated gratings

BIRCOcolor

Colours for your gratings

Exceptional individuality

- + Free choice of powder coating colours according to RAL
- + Metallic colours available
- + For all BIRCO DI and steel gratings
- + Also for steel channels and slot angles
- + UV-resistant
- + High corrosion resistance
- + Resistant to de-icing salts and low aggressive liquids
- + Alternative to stainless steel
- + 25 year climate chamber tested
- + Optional repair kit available for touching up

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Yours sincerely