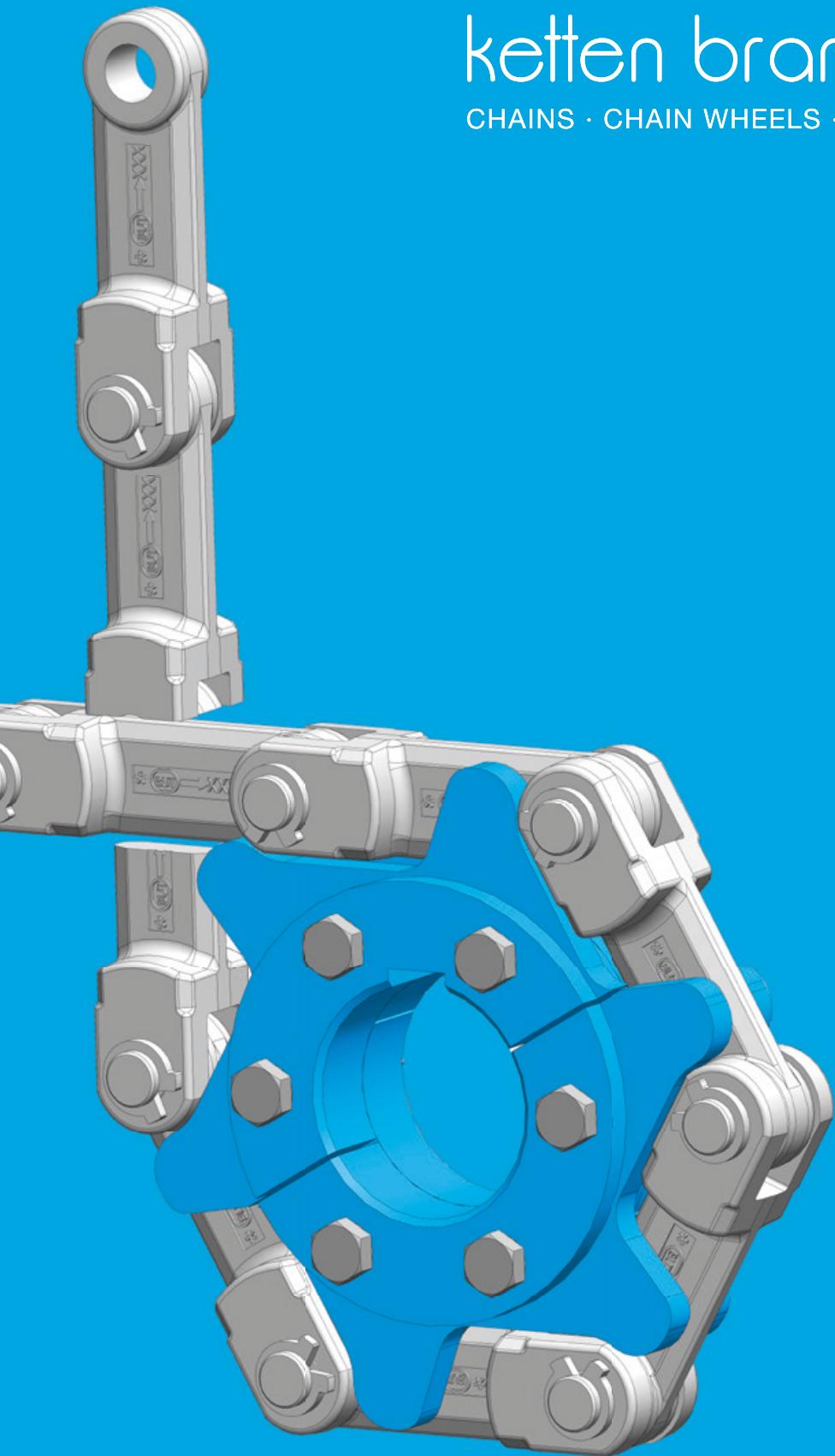
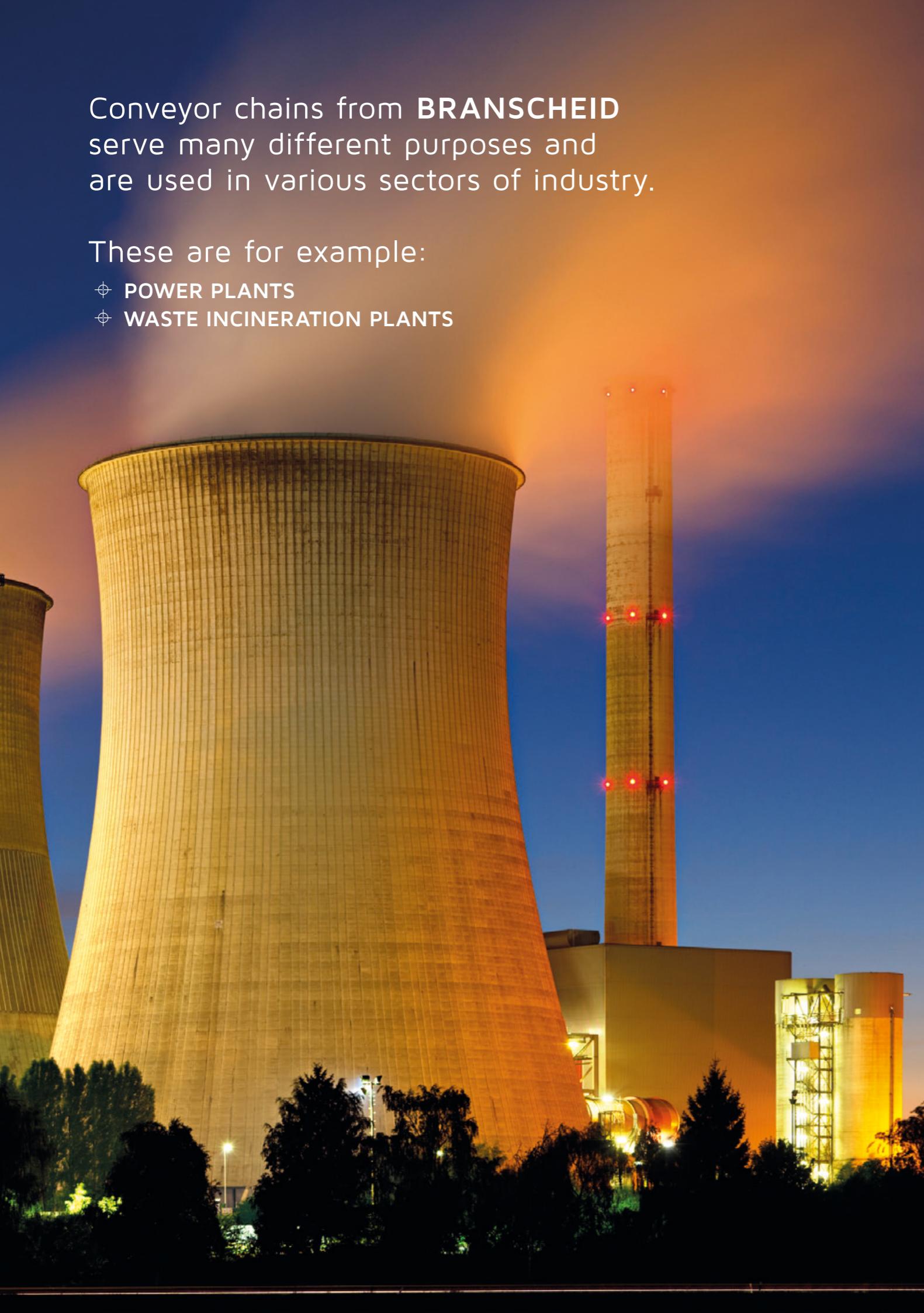


ketten branscheid

CHAINS · CHAIN WHEELS · APRON FEEDERS





Conveyor chains from **BRANSCHIED**
serve many different purposes and
are used in various sectors of industry.

These are for example:

- ❖ POWER PLANTS
- ❖ WASTE INCINERATION PLANTS





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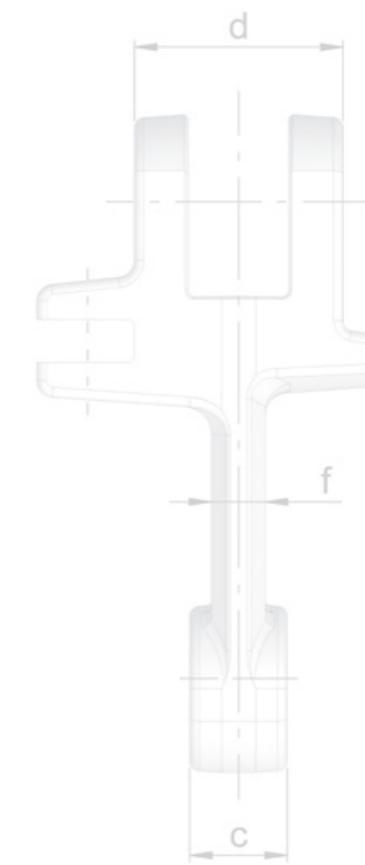
DEAR CUSTOMERS, DEAR PROSPECTIVE CUSTOMERS



In 1938 our great grandfather laid the foundation stone for the globally operating BRANSCHIED-GROUP. Today, in the fourth generation, we combine tradition and innovation to supply top-quality products. We still manufacture exclusively in Germany and can rely on our employees' long years of experience, as well as on our cutting-edge technical equipment.

In order to meet our own very high quality standard down to the last detail, we took over the forging company Köllmann & Vorländer in 2007. The companies within the BRANSCHIED-GROUP are now among the leading companies in their branch.

One aspect that has been constant since the company was founded and will continue to be so into the future, is that the focus of our work remains firmly on meeting our customers' wishes.





OUR HISTORY, OUR COMPANIES



1938

Founding of the single-member company Wilhelm BRANSCHIED

1970

Company is continued by Paul-Willi BRANSCHIED

1980

Founding of the company P.W. BRANSCHIED GmbH by Paul-Willi BRANSCHIED and Wilfried BRANSCHIED

1987

Extension of our production halls

2002

Construction of a new administration building and additional extension of our production halls

2006

Company is renamed Ketten BRANSCHIED GmbH

2007

The drop forge Köllmann & Vorlaender is purchased, company name is changed to BRANSCHIED Umformtechnik GmbH & Co. KG

2008

Comprehensive modernisation and extension of the drop forge

KETTEN BRANSCHIED GMBH

Employees

More than 50 skilled workers and salaried employees

average length of employment

13 years

Production area

5.500 m²

Certification:

ISO 9001:2008

BRANSCHIED UMFORMTECHNIK GMBH & CO. KG

Employees

More than 20 skilled workers and salaried employees

average length of employment

10 years

Production area

4.700 m²

Certification:

ISO 9001:2008, Certification as Q1 supplier for the German railway supply industry, Manufacturer-related production qualification (HPQ), AD 2000-data sheet W0, DGR 97/23 EG

QUALITY FEATURES



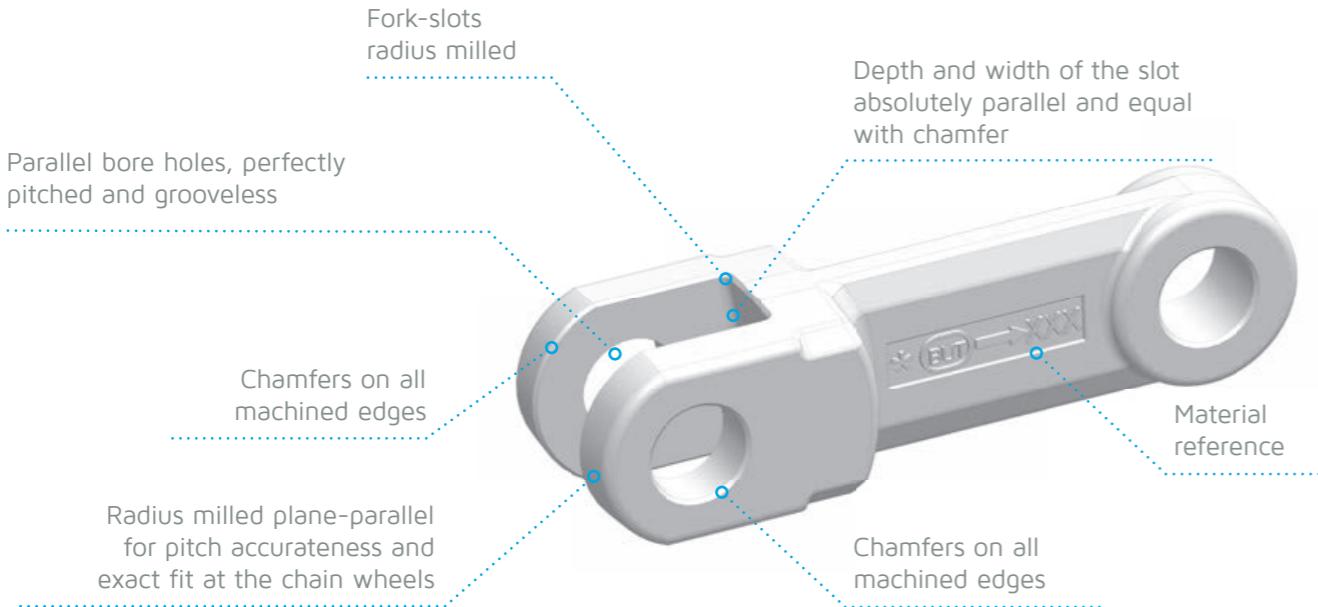
BRANSCHIED QUALITY:

Essence of experience, care, precision and high tech

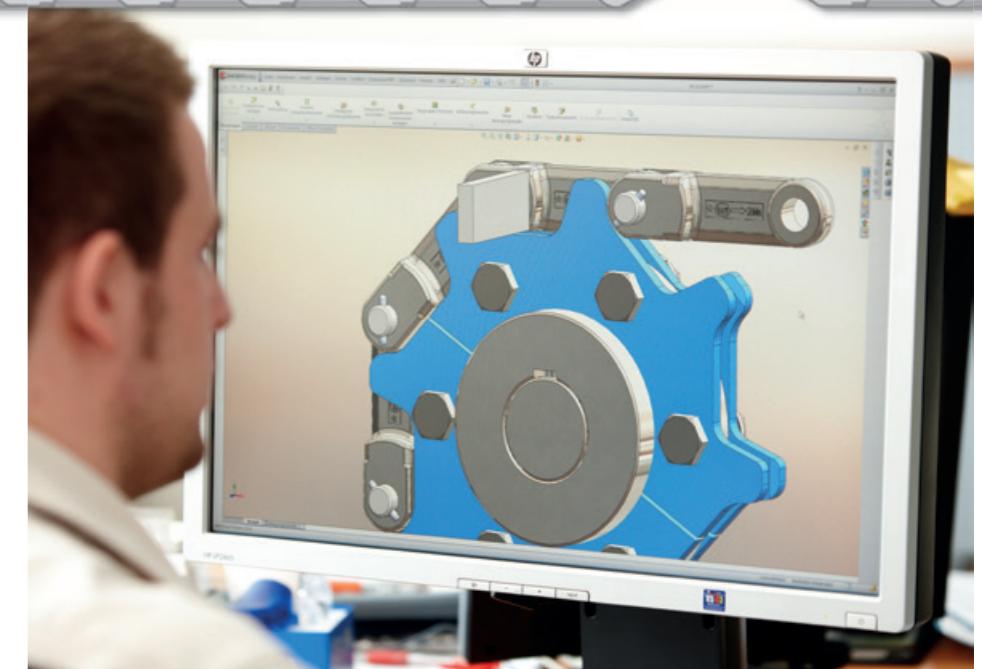
The wear resistance and tensile strength of a chain depends on the quality of all its single components, an optimum combination of materials and the suitability of the materials for the purpose of application. We produce custom-made high-performance products of the very highest quality by treating all components with the same technical precision and care.

By the way, chain links from BRANSCHIED can be easily identified by the embossed forged BUT/B sign and the transport direction arrow.

That way you can be sure to have a piece of German quality in use. As a matter of course we work up your chains or regenerate your apron conveyor chains if possible.



CONSULTING, SERVICE AND ENGINEERING



In addition to a professional consulting by our office staff, a flexible support by our field staff is an essential part of our quality policy. In close cooperation with our customers we develop concepts to raise operating times and thereby avoid unscheduled downtimes and prolong revision cycles. This policy often results in considerable savings for our customers. In addition the requirement analysis is assisted and amended by our own, in-house laboratory.

Here we can accomplish comprehensive bend- and tensile tests, detailed material analyses, structural examinations as well as crack- and hardness tests.

State-of-the-art equipment and specially trained professionals guarantee a specific quote, based on your individual requirements. In cooperation with our engineering department, equipped with the latest 3D-CAD/CAM Software, we can reach production stage within the shortest time.

MACHINING

Radius milled plane-parallel
for pitch-accuracy and
exact fit at the chain wheels

To fulfill our high quality standards we use state-of-the-art CNC controlled machining centers. Furthermore we only employ highly qualified professionals. Motivation and frequent professional seminars are essential parts of our quality policy and therefore guarantee the permanent high BRANSCHIED-QUALITY of all our products.

A special quality feature of the BRANSCHIED-CHAINS is the mechanical machining of the contact surfaces of the chain links to perfectly fit the tooth flanks of the chain wheels.

The accurate fit of chain and chain wheel in the area of power transmission is an essential factor in gaining the longest possible service life of both wheel and chain.

Therefore the outer radii of the fork heads of all BRANSCHIED chain links are milled plane-parallel. This guarantees a laminar and correct fit of these chain areas to the flanks of the chain wheels.

BENEFIT FROM THE ADVANTAGES OF OUR UNCOMPROMISING

QUALITY POLICY:

- ❖ Exact adherence to material specifications
- ❖ Parallel bore holes, perfectly pitched and grooveless
- ❖ Radii on the fork head milled plane-parallel
- ❖ Slots in the fork and forged on cams are all the same width, parallel, smooth and symmetrically arranged
- ❖ Chamfers on all the machined edges
- ❖ In-house magnetic crack detection tests

WELDING PROCEDURES



To optimize the welded connection between chain link and flight we use a customized flash-butt welding machine with integrated deburring device according to DIN 44752. Flash-butt welding is a computer-aided welding procedure with parameter-logging. As impairment of the chain links, caused by irregular preheating that could lead to crack formation is precluded this is the technical optimal solution.

This procedure creates a uniform material structure of the chain link and the welded flight. That way both parts form a single uniform unit. Additionally all weld seams are normalized after deburring.

Based on the specific requirements we also use autogenous welding or gas-shielded welding (e.g. MIG/MAG welding). As wear protection for operation in very abrasive environments we additionally use deposit welding for our chain links to ensure the longest possible service-life of the chain.

BRANSCHIED UMFORMTECHNIK (BUT)



Branscheid Umformtechnik GmbH & Co. KG – or BUT for short is a certified supplier to demanding customers such as the German railway supply industry, manufacturers of agricultural machinery, pipelines or mining and mechanical engineering companies.

Since comprehensive modernisation and extension work in 2008, our company has been producing forged parts weighing between 0.3 and 25 kg at its state-of-the art plant.

We also deliver completely mechanically processed components. All the services from workpiece design and crafting of the dies – supported by 3D CAD/CAM – through manufacturing the forged parts to quality assurance are all performed on our premises. A wide range of six forging hammers from renowned German manufacturers guarantee flexibility and adherence to deadlines.

BUT SERVICES INCLUDE:

- ❖ Design
- ❖ Forging
- ❖ Sandblasting
- ❖ Mechanical processing
- ❖ Surface treatment



C omputer-controlled hydraulic

double acting hammers, induction furnaces that are completely computer-controlled, Finite Element Analyses (FEA) and comprehensive checks at all the manufacturing phases guarantee the renowned BRANSCHIED-QUALITY.

Whether you need large series or small quantities: BRANSCHIED Umformtechnik GmbH & Co. KG can deliver your products in all standard materials as well as in high-alloy austenitic materials and special materials (duplex/superduplex/alloy).

Drop-forged solutions also guarantee additional safety and reliability. The metal forming process improves material properties as follows:

- ❖ Increased values for material strength and ductility in all spatial axes through the fibre flow along the contour of the forged blank
- ❖ Greater core density in the material

If it is safety and reliability you need, you should prefer a drop-forged solution

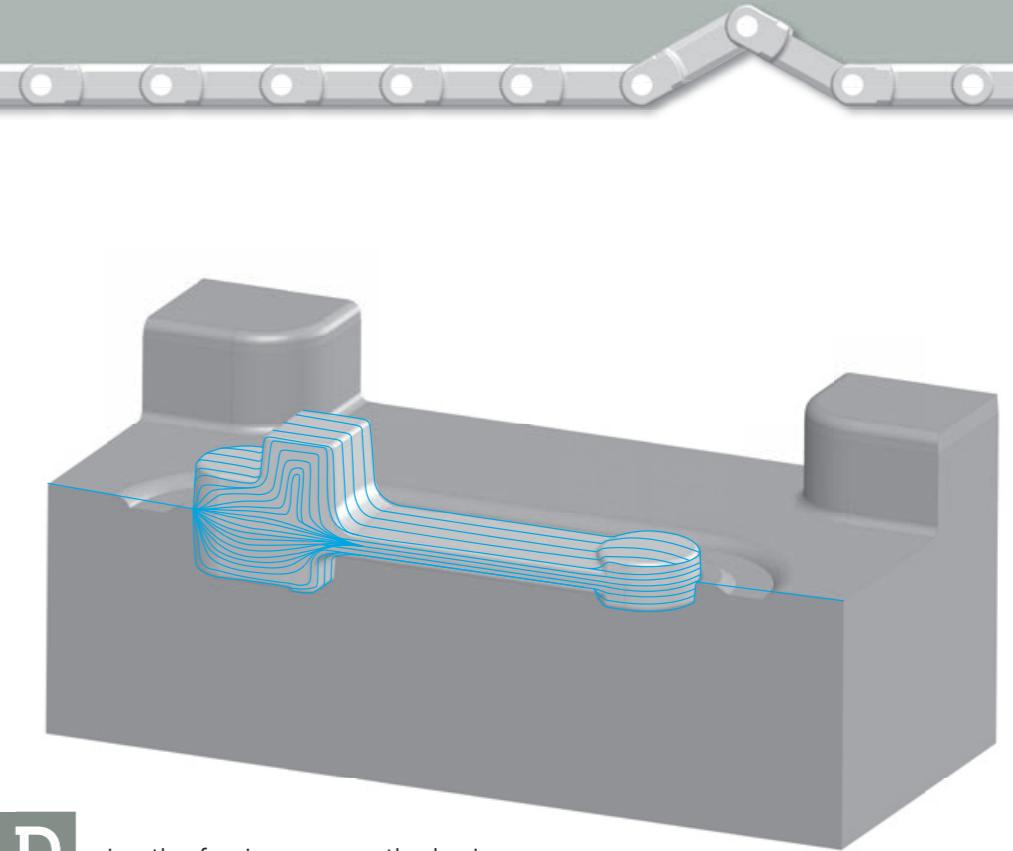
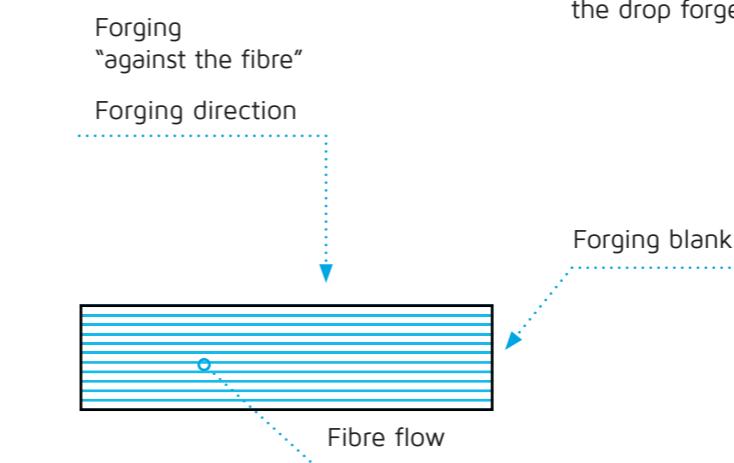
KETTEN BRANSCHIED AND BUT, IDEAL PARTNERS



The BRANSCHIED company group provides you with complete solutions from a single source. The close cooperation between our companies guarantees optimal speed and flexibility and helps you to avoid unnecessary downtimes.

BENEFIT FROM THE EFFICIENT COOPERATION BETWEEN SUITABLE PARTNERS:

- ❖ Increased manufacturing depth with 100% influence on quality, from the production of blanks to the completely processed component
- ❖ Extension of the product range from forged blanks to finished components
- ❖ In-house design of the forged blank guarantees a blank close to the final contour, thus minimising later machining costs
- ❖ Flexible and short delivery deadlines even in the case of special wishes since blanks are produced on the premises
- ❖ Flexible batch sizes



During the forging process the basis for the high quality of the ready machined chain link is set. In relation to cast iron parts drop forged parts generally feature a higher core-density and almost identical strength values in all spatial axes. However, the most important feature is the fibre flow of the drop forged part.

Material fibres are imaginary lines of force responsible for composite and therefore rigidity along the forging contour. Our chain links are exclusively drop forged horizontal and "against the fibres". That means the lines of force exactly and consistently apply to the contour of the forging blank. This guarantees a very high tensile strength and breaking load of the drop forged chain link.

AREAS OF APPLICATION



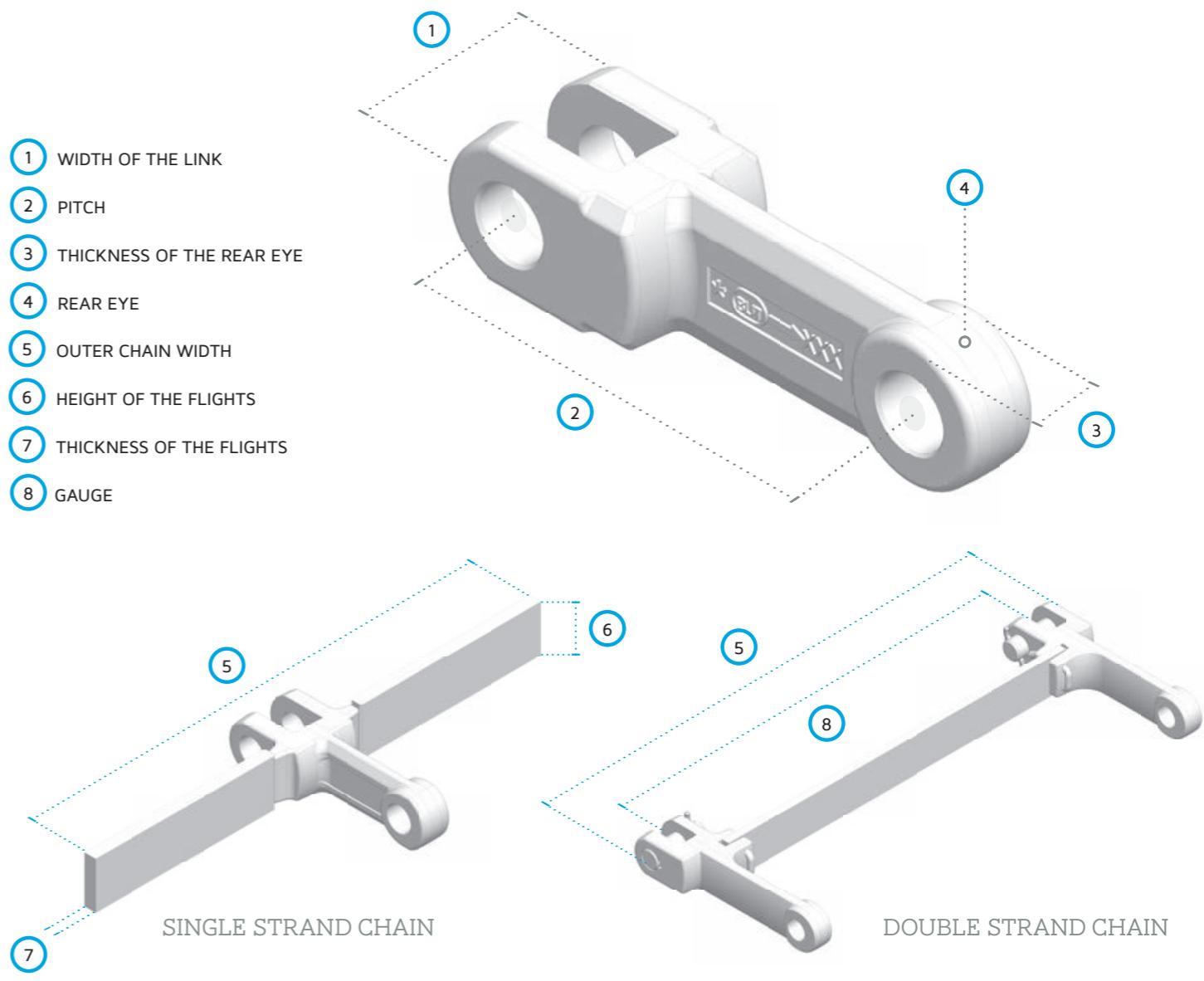
The areas of application for products from Ketten BRANSCHIED GmbH and BRANSCHIED Umformtechnik GmbH & Co. KG are extremely versatile. A selection of the branches that rely on BRANSCHIED-QUALITY:

- ❖ Oil mills
- ❖ Paper industry
- ❖ Parts for the German railway supply industry
- ❖ Plant engineering
- ❖ Power suppliers
- ❖ Recycling industry
- ❖ Refineries
- ❖ Re-handling operations
- ❖ Salt works
- ❖ Sewage treatment plants
- ❖ Steel mills
- ❖ Waste incineration
- ❖ Waste sorting
- ❖ Waste treatment
- ❖ Woodworking industry
- ❖ Compost plants
- ❖ Construction materials industry
- ❖ Extractive industry
- ❖ Fertilizer industry
- ❖ Food industry
- ❖ Glass industry
- ❖ Gypsum plants
- ❖ Lime works
- ❖ Mechanical engineering
- ❖ Mining
- ❖ Agriculture
- ❖ Animal feed industry
- ❖ Cement industry
- ❖ Chemical industry
- ❖ Clay works
- ❖ Coal-fired power stations

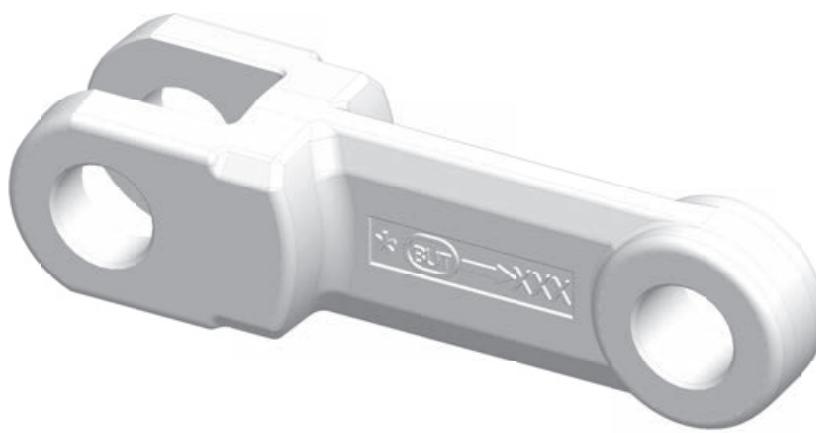
TECHNICAL DEFINITIONS

To be able to respond even faster to your inquiries and to optimize the quotation process, please find below a list of the most important definitions used to describe a drop forged link chain.

- 1 WIDTH OF THE LINK
- 2 PITCH
- 3 THICKNESS OF THE REAR EYE
- 4 REAR EYE
- 5 OUTER CHAIN WIDTH
- 6 HEIGHT OF THE FLIGHTS
- 7 THICKNESS OF THE FLIGHTS
- 8 GAUGE



DROP FORGED LINK CHAINS

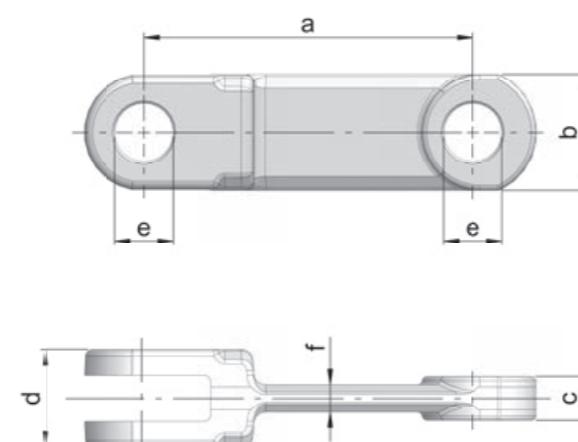


In the following you can find our wide manufacturing program of drop forged chain links for all areas of application. The mentioned breaking loads of the chain links are theoretical average values, based on standard design and standard hardness without bushes.

According to our concept "German quality from a single source" all chain links are forged in our own drop forge BRANSCHIED Umformtechnik GmbH & Co. KG (BUT).

Consequently we are able to rely totally on our own in-house forging. All chain links from BRANSCHIED can be easily identified by the embossed forged BUT/B sign and the transport direction arrow.

Additionally we would be glad to produce completely new designs of custom chain links in close cooperation with BRANSCHIED Umformtechnik. Contact us and we will find a cost-efficient solution, custom-made according to your needs.



SINGLE STRAND FORGED LINK NORMAL DESIGN

a x b x c	d	e	f	Weight [kg]	20MnCr5	C 45	42CrMo4
102x36x08	24	14	6,5	0,30	110	140	190
102x36x14	31	14	8	0,50	180	240	320
125x36x13	30	16	10	0,55	160	200	280
142x40x14	31	18	10	0,80	180	240	320
142x40x20	46	22	14	1,00	200	280	380
142x40x29	62	22	16	1,50	300	400	550
142x44x22	49	25	10	1,10	250	330	450
142x45x44	90	25	23	2,10	550	700	960
142x50x19	42	25	12	1,20	290	380	520
142x50x19	42	25	12	1,10	290	380	520
142x50x25	54	25	16	1,50	410	490	680
142x50x29	62	25	16	1,80	500	580	800
150x50x16	36	25	14	1,10	260	320	440
160x50x21	55	25	17	1,80	350	420	570
160x50x25	50	25	12	1,40	410	490	680
200x40x20	44	22	16	1,70	220	280	390
200x50x25	59	25	17	1,90	410	490	680
200x50x25	55	25	15	1,90	410	490	680
200x60x30	70	30	18	3,30	600	710	990
215x75x31	70	30	20	4,50	900	990	1300
216x72x25	58	35	20	4,60	650	740	1000
220x75x31	70	35	20	4,70	900	990	1300
250x60x30	69	30	20	5,10	600	710	990
250x72x32	84	42	30	6,00	850	940	1250
260x75x30	65	35	20	6,50	950	1000	1400
260x75x30	70	35	20	5,40	950	1000	1400
300x70x40	82	35	19	4,90	900	1100	1500
300x70x40	82	27	19	5,40	900	1100	1500
315x80x42	92	40	30	8,70	1100	1300	1800

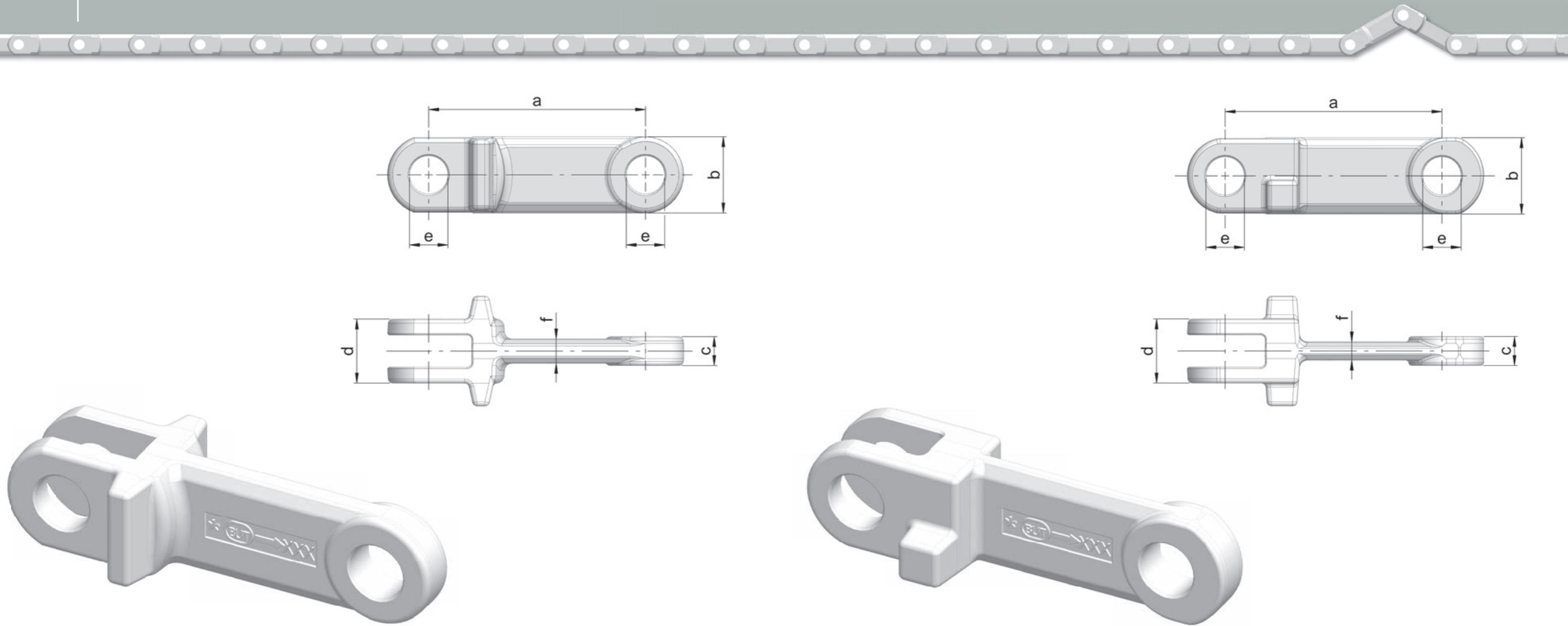
Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
110	140	190
180	240	320
160	200	280
180	240	320
200	280	380
300	400	550
250	330	450
550	700	960
290	380	520
290	380	520
410	490	680
500	580	800
260	320	440
350	420	570
410	490	680
410	490	680
600	710	990
900	990	1300
650	740	1000
900	990	1300
600	710	990
850	940	1250
950	1000	1400
950	1000	1400
900	1100	1500
900	1100	1500
1100	1300	1800

Breaking loads based on standard hardness without bushes, theoretical average values in kN

DROP FORGED LINK CHAINS



SINGLE STRAND FORGED LINK WITH FLAT CAM

a x b x c	d	e	f	Weight [kg]
142x50x19	42	25	16	1,40
142x50x25	54	25	16	1,70
142x50x29	62	25	16	1,80
160x40x20	46	20	12	2,00
200x60x25	54	30	16	2,50
250x60x24	52	30	17	3,10
260x78x35	77	32	20	5,80

Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
290	380	520
410	490	680
500	580	800
250	320	440
530	600	820
450	570	790
1100	1280	1700

Breaking loads based on standard hardness without bushes, theoretical average values in kN

SINGLE STRAND FORGED LINK WITH SQUARE CAM

a x b x c	d	e	f	Weight [kg]
142x50x19	42	25	12	1,70
142x50x25	54	25	16	2,10
142x50x29	62	25	16	1,70
160x50x25	50	25	12	1,50
200x65x30	65	30	17	3,10
200x70x30	63	30	15	3,80
250x72x32	72	30	18	5,90
260x76x35	77	30	20	5,10

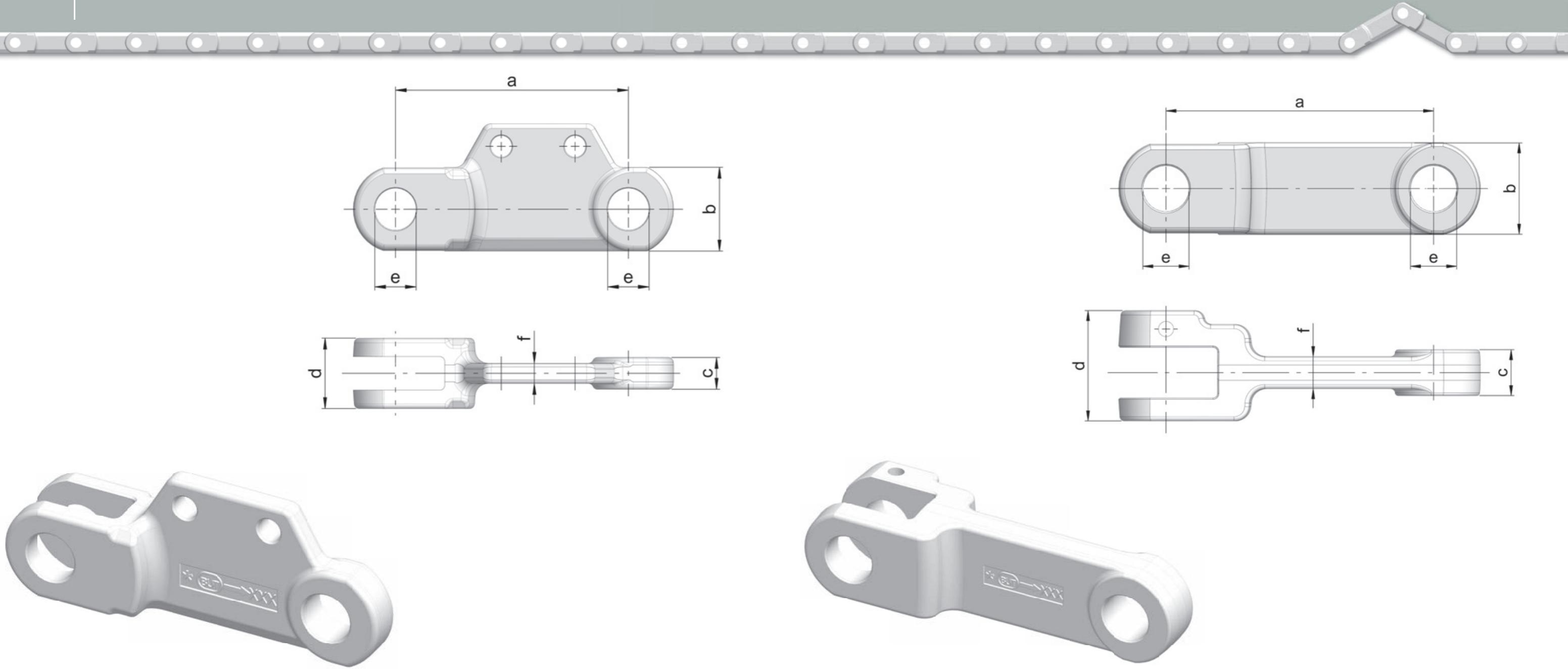
Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
290	380	520
410	490	680
500	580	800
410	490	680
750	840	1150
750	840	1150
850	940	1250
1100	1280	1700

Breaking loads based on standard hardness without bushes, theoretical average values in kN

DROP FORGED LINK CHAINS



SINGLE STRAND FORGED LINK WITH ENHANCEMENT

a x b x c	d	e	f	Weight [kg]
142x50x19	42	25	12	1,30
142x50x29	62	25	12	2,80
160x45x20	68	25	12	1,80
160x55x25	80	25	12	2,00

Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
290	380	520
500	580	800
300	360	500
500	580	790

Breaking loads based on standard hardness without bushes, theoretical average values in kN

SINGLE STRAND FORGED LINK WITH DOWEL PIN LOCKING

a x b x c	d	e	f	Weight [kg]
175x60x30	72	30	21	2,80
216x60x29	66	30	16	4,30
250x70x30	78	35	16	6,40
250x70x45	93	35	36	5,80

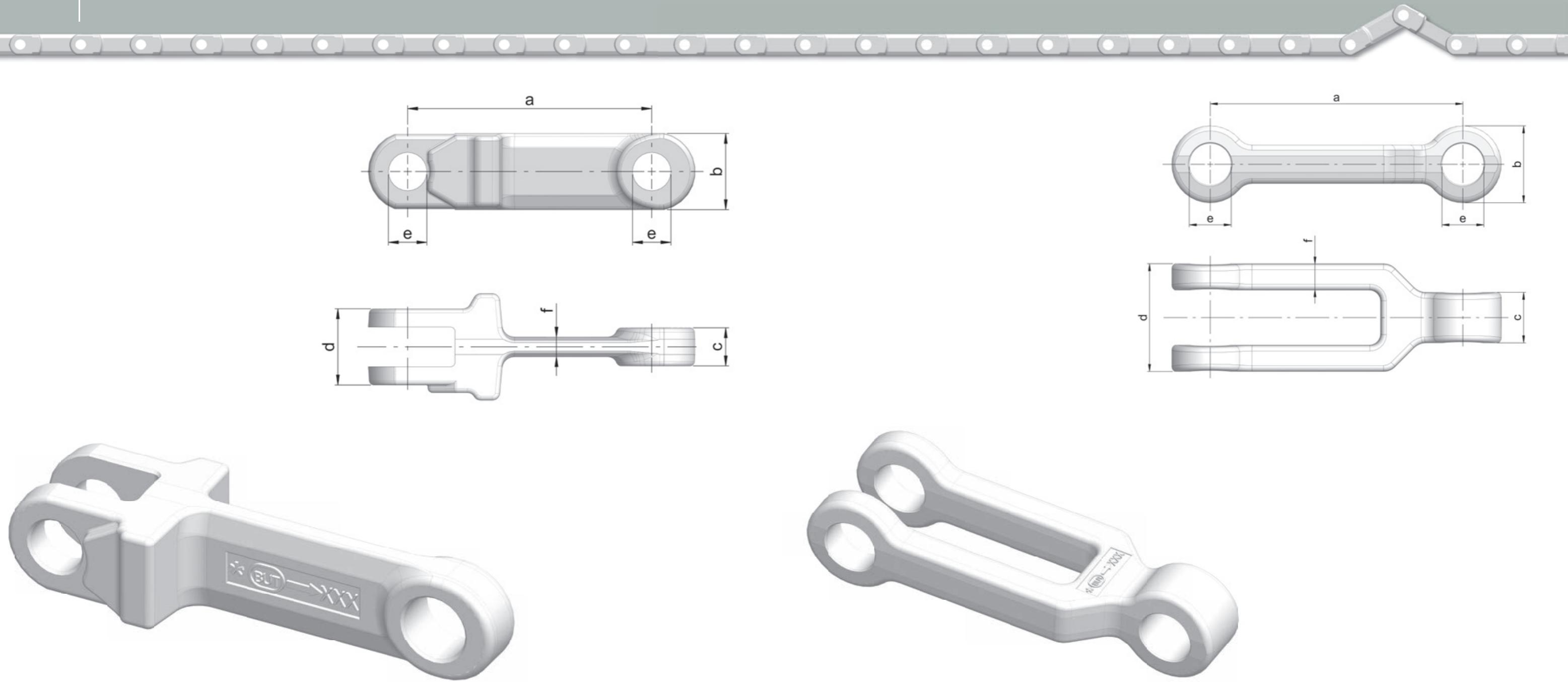
Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
600	710	990
680	780	1050
750	840	1150
1150	1250	1700

Breaking loads based on standard hardness without bushes, theoretical average values in kN

DROP FORGED LINK CHAINS



SINGLE STRAND FORGED LINK WITH LOCK AGAINST ROTATION

a x b x c	d	e	f	Weight [kg]
142x40x19	43	20	12	1,0
160x50x25	50	25	13	1,8
200x50x25	50	25	13	2,0
200x55x28	55	28	14	2,3

Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
180	270	370
410	490	680
410	490	680
500	600	800

Breaking loads based on standard hardness without bushes, theoretical average values in kN

FORGED LINKS FOR APRON CONVEYOR CHAINS

a x b x c	d	e	f	Weight [kg]
135x47x64	126	25	29	1,20
150x54x34	77	30	20	1,40
160x60x38	80	30	18	1,70
160x70x38	80	30	18	2,90
230x70x46	97	40	24	4,00

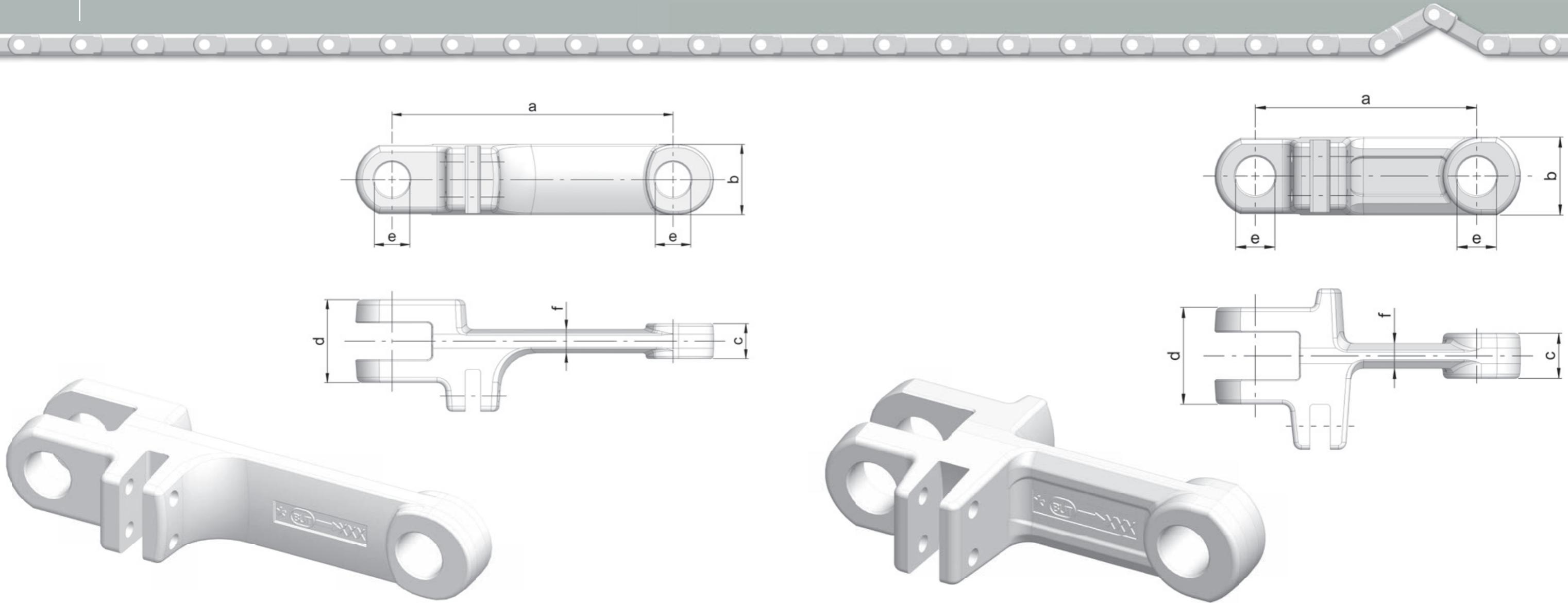
Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
1000	1400	1400
750	1050	1050
900	1200	1200
1200	1650	1650
1250	1700	1700

Breaking loads based on standard hardness without bushes, theoretical average values in kN

DROP FORGED LINK CHAINS



DOUBLE STRAND FORGED LINK WITH CAM

a x b x c	d	e	f	Weight [kg]
150x50x25	52	25	16	1,70
160x52x20	45	25	16	1,80
200x50x25	59	25	17	2,40
200x50x25	52	25	12	2,00
200x60x30	66	30	20	3,60
200x60x34	66	30	20	3,40
250x50x25	59	25	17	2,50
250x60x30	69	30	20	4,00
250x60x30	69	30	20	3,80
315x80x40	88	40	24	13,00

Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
410	490	680
300	400	560
410	490	680
410	490	680
600	710	990
700	800	1100
410	490	680
600	710	990
600	710	990
1150	1300	1700

Breaking loads based on standard hardness without bushes, theoretical average values in kN

DOUBLE STRAND FORGED LINK WITH CAM AND SCRAPER

a x b x c	d	e	f	Weight [kg]
142x50x19	42	25	12	1,60
142x50x29	62	25	16	2,10
160x50x21	55	25	17	2,10
200x40x20	46	20	14	1,50

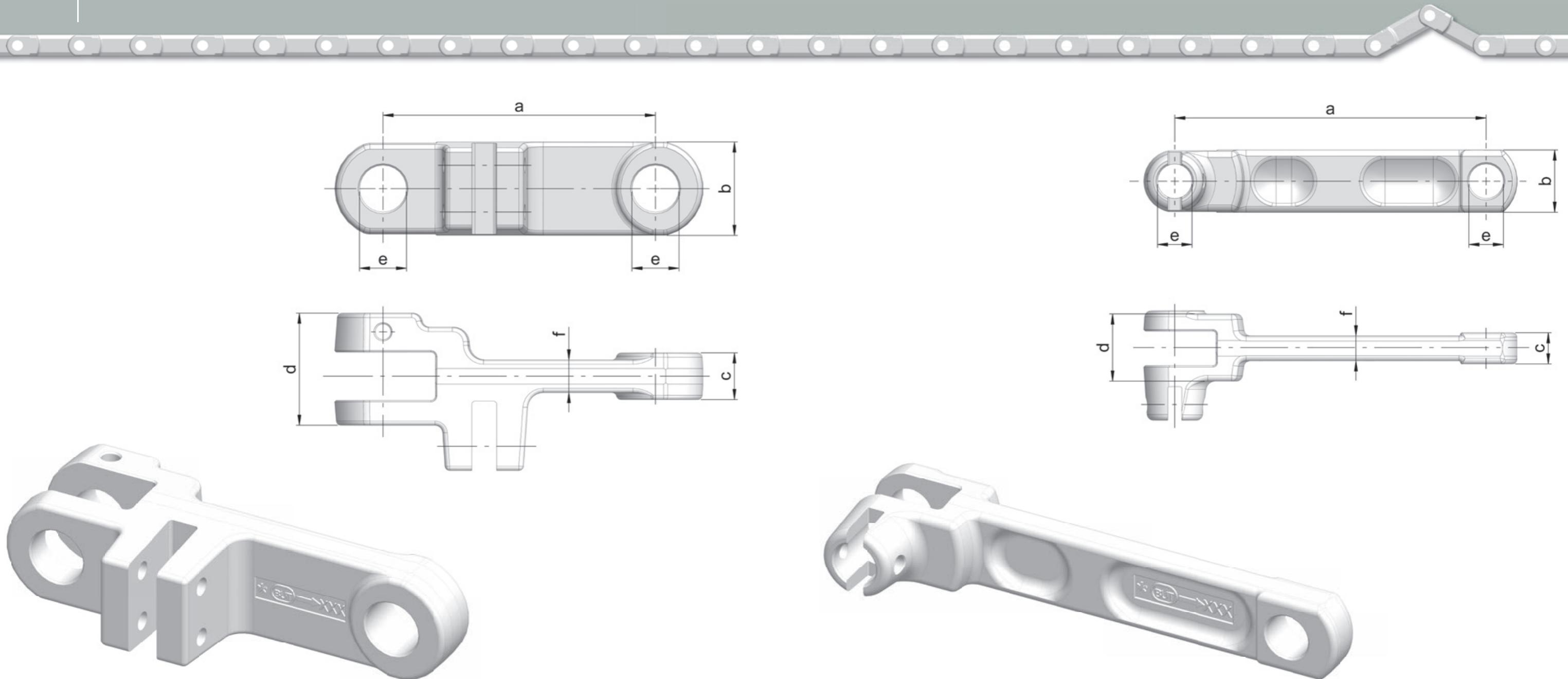
Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
290	380	520
500	580	800
350	420	570
200	280	380

Breaking loads based on standard hardness without bushes, theoretical average values in kN

DROP FORGED LINK CHAINS



DOUBLE STRAND FORGED LINK WITH DOWEL PIN LOCKING

a x b x c	d	e	f	Weight [kg]
175x60x30	72	30	21	3,30
200x60x30	74	30	24	3,50
250x70x45	93	35	36	6,80

Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
600	710	990
600	710	990
1150	1250	1700

Breaking loads based on standard hardness without bushes, theoretical average values in kN

DOUBLE STRAND FORGED LINK WITH ROUND CAM

a x b x c	d	e	f	Weight [kg]
200x40x20	43	22	16	1,20
200x50x25	50	25	20	2,70
250x60x30	60	30	25	3,50
250x70x30	70	35	25	4,30
250x80x43	85	40	24	8,10
250x100x50	105	40	20	9,60

Not listed dimensions or materials e.g. corrosion- and acid- or highly heat resistant materials can be offered on request

BREAKING LOADS

20MnCr5	C 45	42CrMo4
200	280	390
300	440	600
500	600	990
650	750	1050
1350	1800	
	2000	2700

Breaking loads based on standard hardness without bushes, theoretical average values in kN

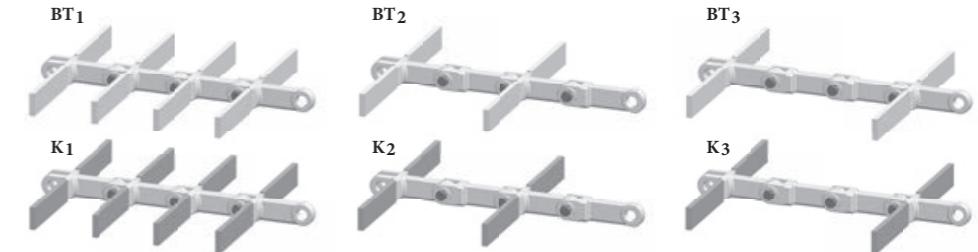
FLIGHT ATTACHMENT CONFIGURATIONS



„T“-TYPE FLIGHT ATTACHMENTS FOR HORIZONTAL CONVEYING
(SINGLE STRAND)

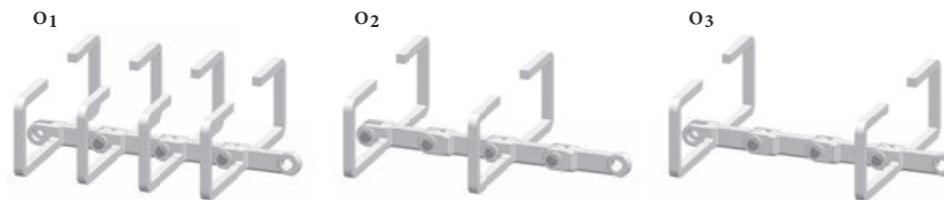
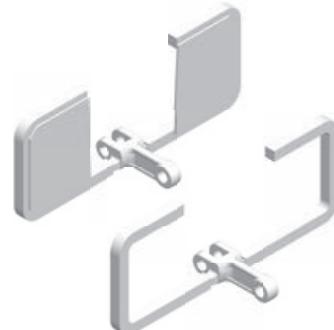


„BT“-TYPE FLIGHT ATTACHMENTS FOR HORIZONTAL AND SLIGHTLY INCLINED CONVEYING
(SINGLE STRAND)

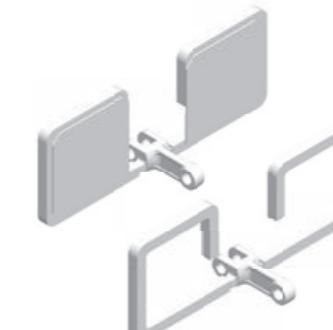


„K“-TYPE FLIGHT ATTACHMENTS FOR HORIZONTAL AND SLIGHTLY INCLINED CONVEYING (SINGLE STRAND WITH PLASTIC FLIGHT ATTACHMENTS)

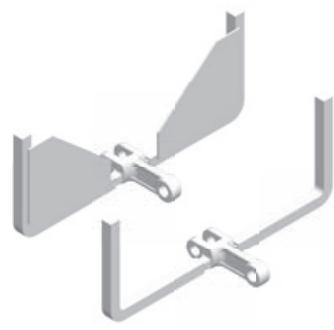
„O“-TYPE FLIGHT ATTACHMENTS FOR HORIZONTAL, INCLINED AND VERTICAL CONVEYING (SINGLE STRAND WITH OR WITHOUT STEEL PLATE)



„OO“-TYPE FLIGHT ATTACHMENTS FOR HORIZONTAL, INCLINED AND VERTICAL CONVEYING
(SINGLE STRAND WITH OR WITHOUT STEEL PLATE)



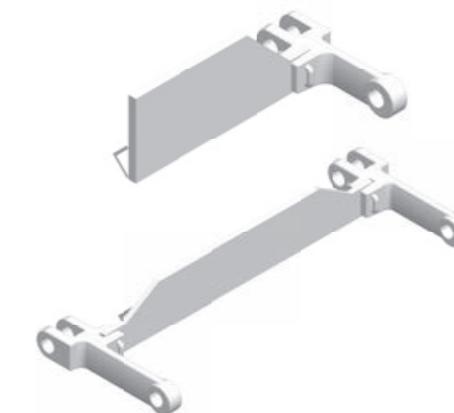
„U“-TYPE FLIGHT ATTACHMENTS FOR HORIZONTAL AND INCLINED CONVEYING (SINGLE STRAND WITH OR WITHOUT STEEL PLATE)



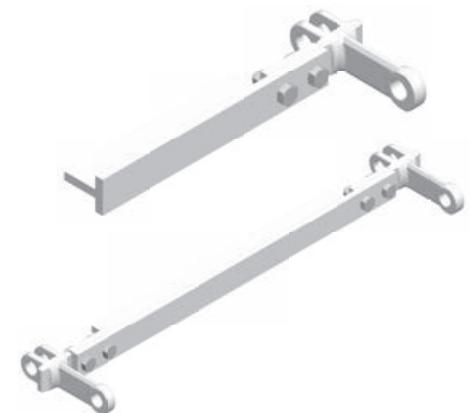
FLIGHT ATTACHMENT
STANDARD DESIGN
(DOUBLE STRAND)



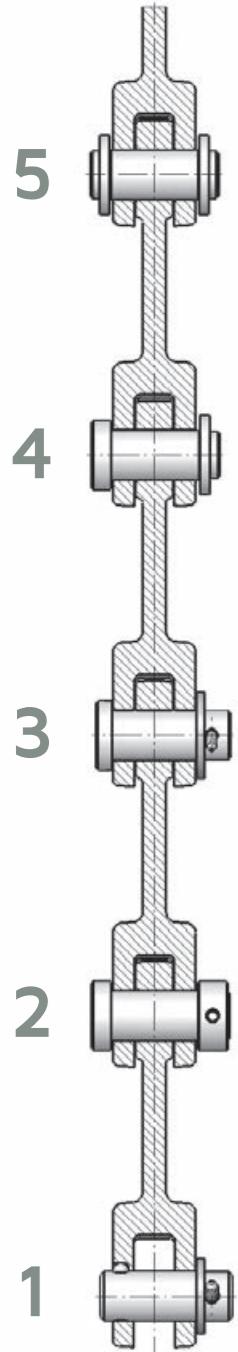
FLIGHT ATTACHMENT
ENHANCED DESIGN WITH BRACKET
(DOUBLE STRAND)



FLIGHT ATTACHMENT
WITH ADDITIONAL WELDED FLAT STEEL
(DOUBLE STRAND)



FITTING ACCESSORIES



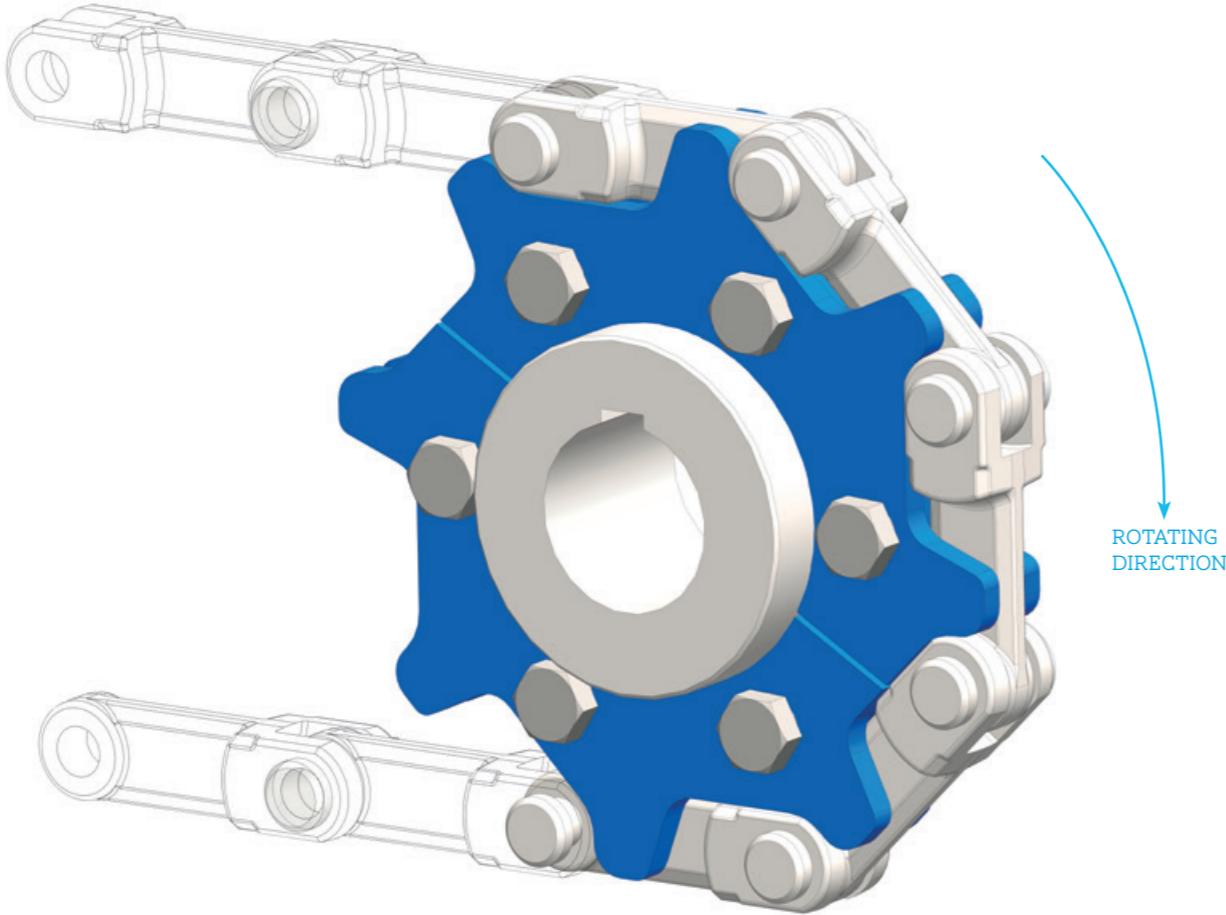
In consideration of the various system-dependent requirements, we develop the optimal material combination of chain link, pin and fasteners in close cooperation with our customers.

Just like all other components of our conveyor chains, the connecting pins are manufactured in our own workshop and therefore guarantee an end-product of the very highest quality.

Below are listed some common examples of connecting pins. Our technical staff are of course available to assist in finding the best possible solution for your particular requirements.



CHAIN WHEELS



Chain wheels from BRANSCHIED are normally made of material C 45 with flame- or inductive hardened tooth flanks. Naturally, for special applications the whole range of available steel grades can be used.

As a special quality feature the teeth-contour of our chain wheels is not only flame cut but also accurately CNC contour milled. Together with the plane-parallel milled radii on the fork head this results in a perfect fit between chain link and chain wheel that has a positive effect on the service life of the single components.

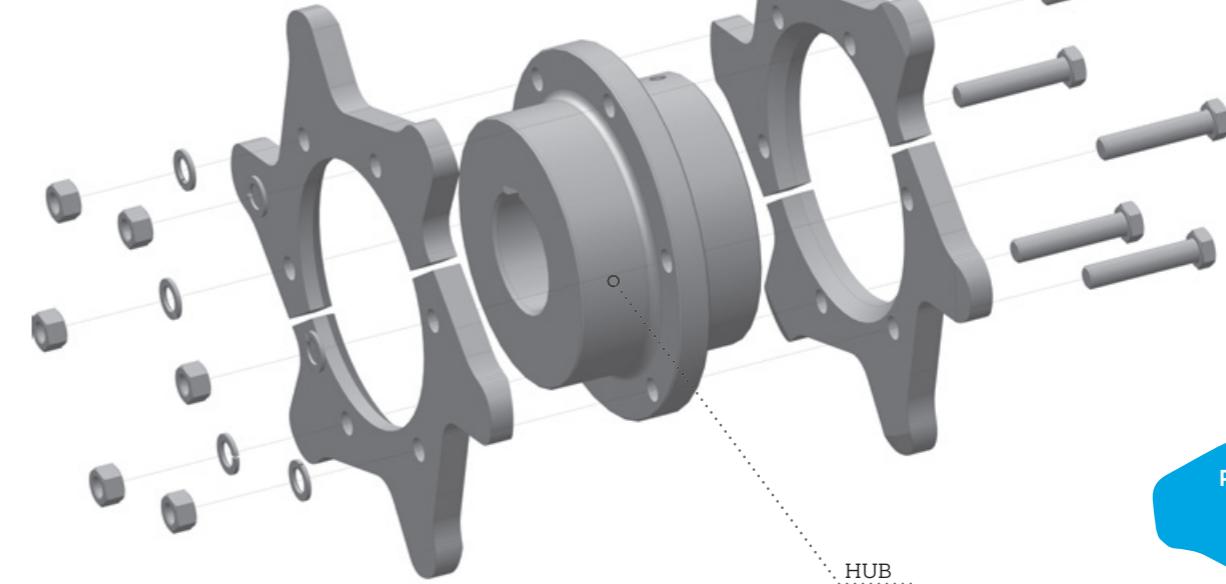
1 Chain wheel consists of:

- ❖ 1 Hub
- ❖ 2 Sprocket discs (left and right)

Fasteners

1 Sprocket disc set consists of:

- ❖ 2 Sprocket discs (left and right)



FORMULA TO
CALCULATE THE
PITCH CIRCLE DIAMETER

$$D = \frac{P}{\sin \frac{180^\circ}{Z}}$$

Pitch circle diameter D [mm]

Teeth Z =	Pitch P									
6	102	125	142	160	175	200	230	250	260	315
7	204,00	250,00	284,00	320,00	350,00	400,00	460,00	500,00	520,00	630,00
8	235,09	288,10	327,28	368,76	403,33	460,95	530,10	576,19	599,24	726,00
9	266,54	326,64	371,06	418,10	457,30	522,63	601,02	653,28	679,41	823,13
10	298,23	365,48	415,18	467,81	511,67	584,76	672,48	730,95	760,19	921,00
11	330,08	404,51	459,52	517,77	566,31	647,21	744,30	809,02	841,38	1019,36
12	362,05	443,68	504,02	567,91	621,16	709,89	816,38	887,37	922,86	1118,08
13	394,10	482,96	548,65	618,19	676,15	772,74	888,65	965,93	1004,56	1217,07
14	426,22	522,32	593,36	668,57	731,25	835,72	961,07	1044,65	1086,43	1316,25
	458,38	561,74	638,14	719,03	786,44	898,79	1033,61	1123,49	1168,43	1415,60

MATERIALS TABLE

The range of available steel grades used by our company extends from general-purpose constructional steel over case hardening steel and tempering steel to corrosion- and acid resistant or highly heat-resistant steel. In close cooperation with the customer we suggest the ideal combination of materials according to the specific area of application.

Trust us and you will benefit from our long years of experience when optimizing your chain. Below is a list of the most common materials used in our workshop including standard hardness values. Of course, we also produce customer-specific from all available steel grades. Let us know your requirements and together we will find the best possible solution.

DROP FORGED CHAIN LINKS

Material reference	Material No	Standard hardening	Standard hardening value	Standard hardening depth
STANDARD QUALITIES				
C 15	1.0401	Case hardening	58-60 HRc	0,8-1,0 mm
C 45	1.0503	Härdning and tempering	800-900 N/mm ²	Through
20 Mn Cr 5	1.7147	Case hardening	58-60 HRc	0,8-1,0 mm
18 Cr Ni 8	1.5920	Case hardening	60-62 HRc	0,8-1,0 mm
42 Cr Mo 4	1.7225	Härdning and tempering	1100-1300 N/mm ²	Through
CORROSION- AND ACID-RESISTANT MATERIAL				
X 5 Cr Ni 18-10 (V 2 A)	1.4301	-		
X 6 Cr Ni Mo Ti 17-12-2 (V 4 A)	1.4571	-		
X 46 Cr 13	1.4034	Inductive hardening	50-55 HRc	1,5-2,0 mm
X 39 Cr Mo 17-1	1.4122	Inductive hardening	49-52 HRc	1,5-2,0 mm
X 5 Cr Ni Cu Nb 16-4	1.4542	Precipitation hardening	410-470 HB	Through
HIGHLY HEAT-RESISTANT				
X 10 Cr Al Si 7 (up to 800°C)	1.4713	-		
X 15 Cr Ni Si 20-12 (up to 1200°C)	1.4828	-		

PINS

Material reference	Material No	Standard hardening	Standard hardening value	Standard hardening depth
STANDARD QUALITIES				
16 Mn Cr 5	1.7131	Case härdning	58-60 HRc	0,8-1,0 mm
15 Ni Cr 13 (former 14 Ni Cr 14)	1.5752	Case hardening	60-62 HRc	0,8-1,0 mm
18 Cr Ni 8	1.5920	Case hardening	60-62 HRc	0,8-1,0 mm
C 45	1.0503	Inductive hardening	58-62 HRc	1,5-2,0 mm
42 Cr Mo 4	1.7225	Inductive hardening	54-56 HRc	1,5-2,0 mm
CORROSION- AND ACID-RESISTANT MATERIAL				
X 46 Cr 13	1.4034	Inductive hardening	50-55 HRc	1,5-2,0 mm
X 39 Cr Mo 17-1	1.4122	Inductive hardening	49-52 HRc	1,5-2,0 mm
X 105 Cr Mo 17	1.4125	Inductive hardening	60-62 HRc	1,5-2,0 mm

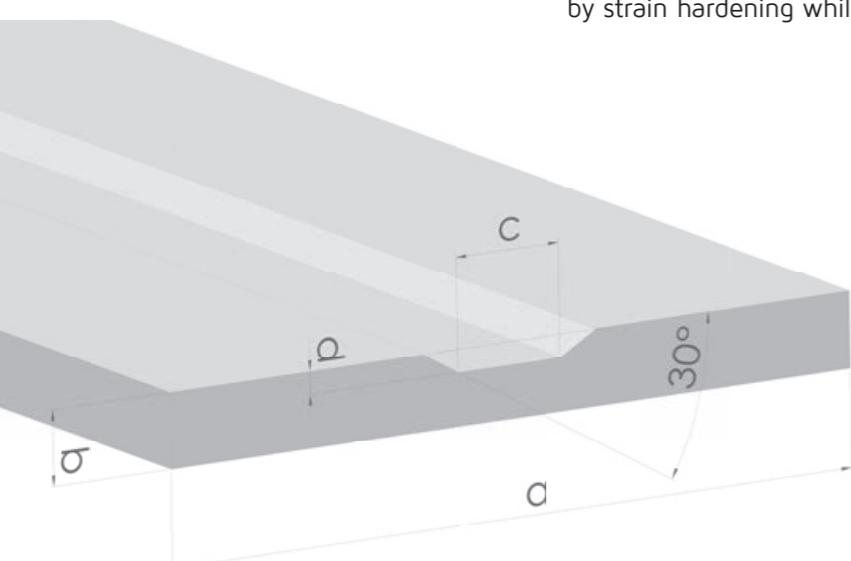
FLIGHT ATTACHMENTS

Material reference	Material No
STANDARD QUALITIES	
S 235 JR (former St 37-2)	1.0038
S 355 J2 (former St 52-3)	1.0577
C 45	1.0503
Hardox	
Creusabro	
CORROSION- AND ACID-RESISTANT MATERIAL	
X 5 Cr Ni 18-10 (V 2 A)	1.4301
X 6 Cr Ni Mo Ti 17-12-2 (V 4 A)	1.4571
HIGHLY HEAT-RESISTANT	
X 10 Cr Al Si 7 (up to 800°C)	1.4713
X 15 Cr Ni Si 20-12 (up to 1200 °C)	1.4828

BUSHES

Material reference	Material No	Standard hardening	Standard hardening value
STANDARD QUALITIES			
C 67 S	1.1231	Härdning and tempering	420-500 HV
51 Cr V 4	1.8159	Härdning and tempering	410-500 HV
CORROSION- AND ACID-RESISTANT MATERIAL			
X 10 Cr Ni 18-8	1.4310		
X 46 Cr 13	1.4034	Vacuum hardening	42-49 HRc
X 7 Cr Ni Al 17-7	1.4568	Precipitation hardening	400-480 HV

WEARING RAILS



Our wearing rails are made of manganese steel X120Mn12 (1.3401). The austenitic structure of this steel results in its very high ductile values. As the hardness of this steel ranges between 200 – 220 HB in its basic state the value reaches up to 600 HB by strain hardening while in use.

So it only gets harder in the stress range, but stays break-proof and ductile in all other areas.

Technical characteristics:

- ❖ Material: 1.3401 (X 120 Mn 12)
- ❖ Heat treatment: quenching / solution annealing
- ❖ Surface: unmachined
- ❖ Ends: cropped (hot-sheared) / cut, deburred
- ❖ Straightness: 4 mm / m
- ❖ Surface quality class: B according to EN 10221

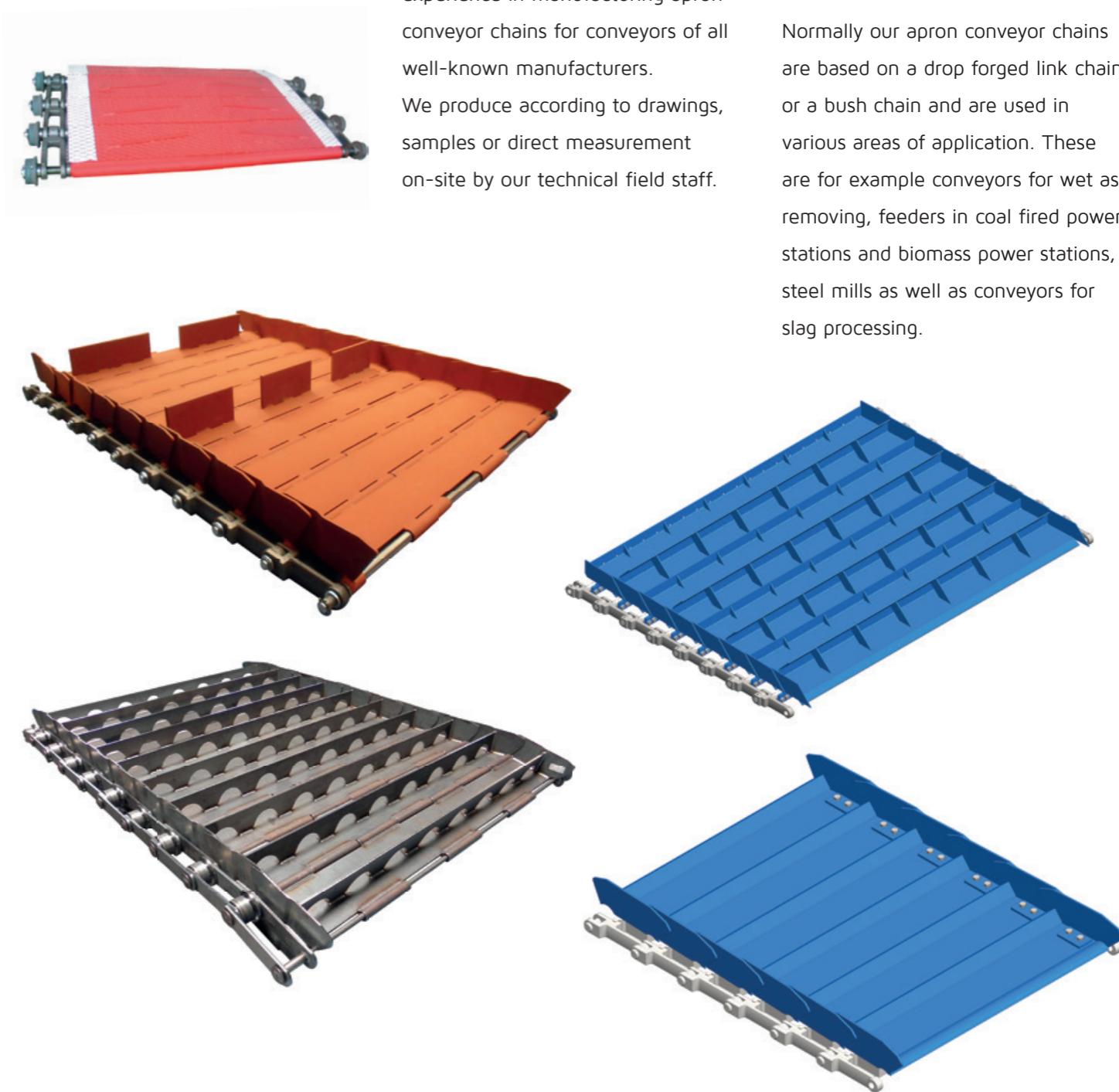
USUALLY THE FOLLOWING DIMENSIONS OF WEARING RAILS ARE AVAILABLE ON STOCK:

a [mm]	b [mm]	c [mm]	d [mm]	kg/m
35	10	5	2	2,75
40	10	5	2	3,14
40	20	5	2	6,28
50	10	5	2	3,93
50	20	5	2	7,85
60	10	6	3	4,71
60	20	6	3	9,42
70	10	15	3	5,50
70	20	15	3	10,99
100	10	15	3	7,85

APRON CONVEYOR CHAINS

We can rely on long-time practical experience in manufacturing apron conveyor chains for conveyors of all well-known manufacturers. We produce according to drawings, samples or direct measurement on-site by our technical field staff.

Normally our apron conveyor chains are based on a drop forged link chain or a bush chain and are used in various areas of application. These are for example conveyors for wet ash removing, feeders in coal fired power stations and biomass power stations, steel mills as well as conveyors for slag processing.

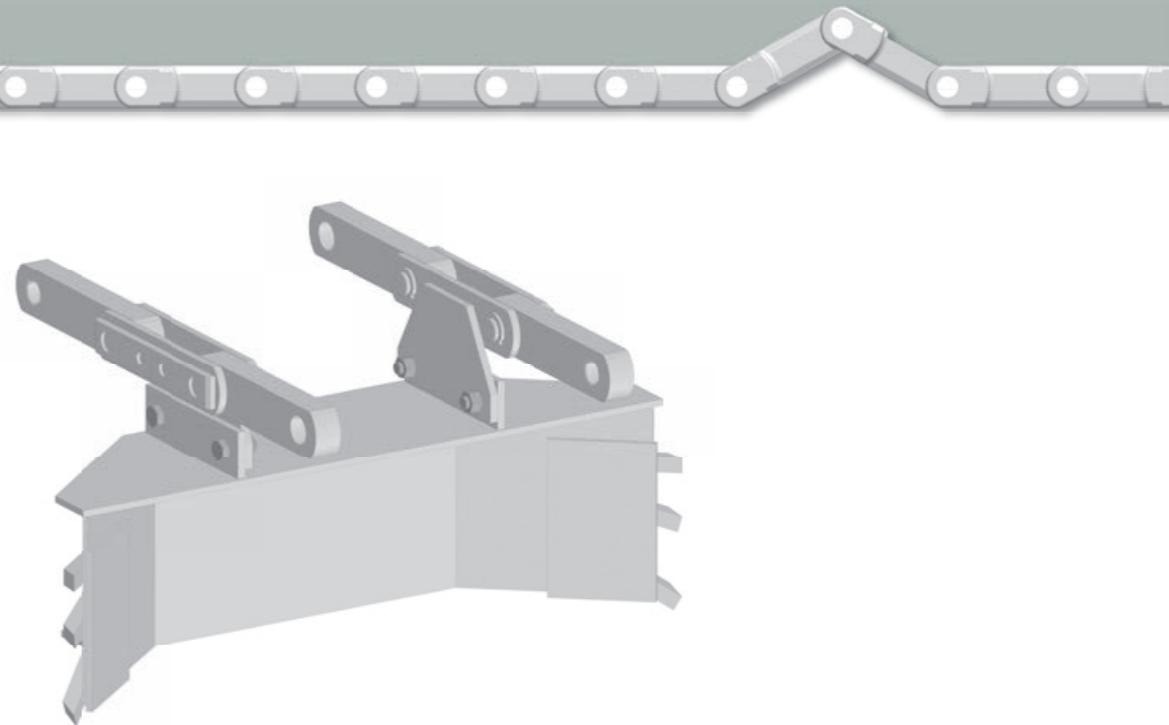




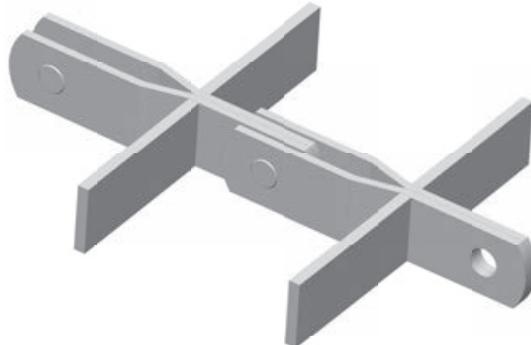
LINK-PLATE CHAINS, FORK LINK CHAINS AND BLOCK CHAINS

BASED ON DIN 15263

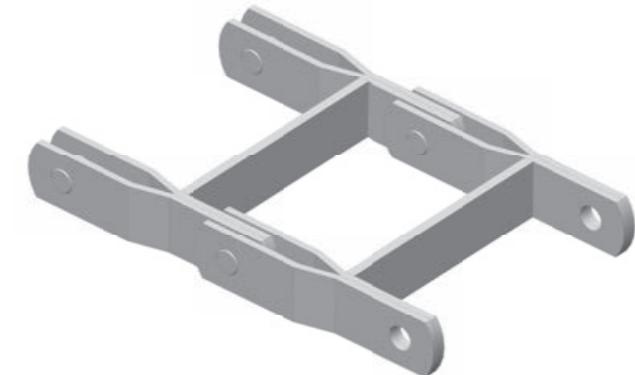
In addition to our production range we offer custom-made link-plate chains, fork link chains and block chains based on DIN 15263. Contact us and we will be glad to submit you an individual proposal.



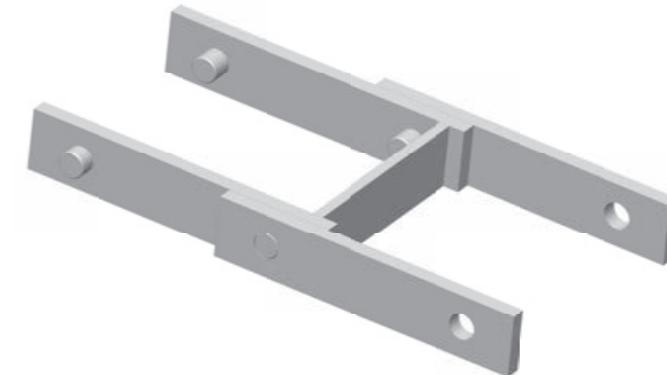
SINGLE STRAND FORK LINK CHAIN



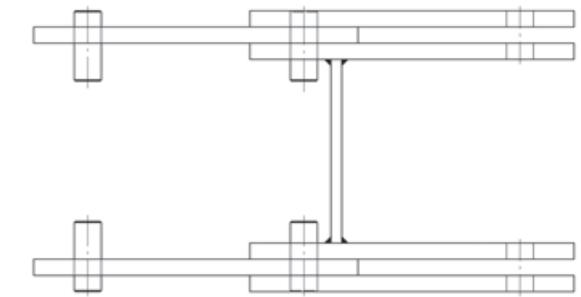
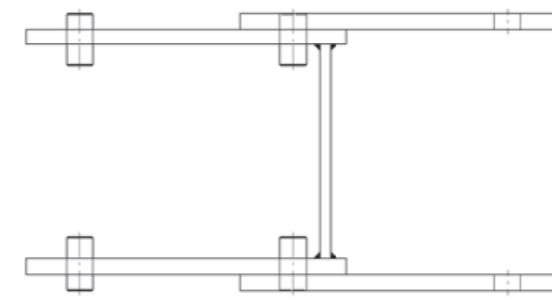
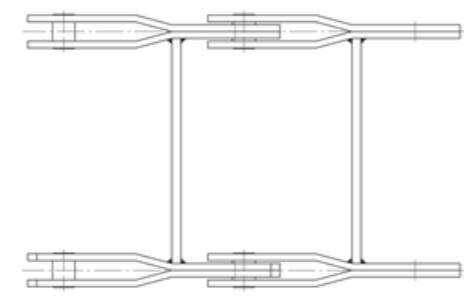
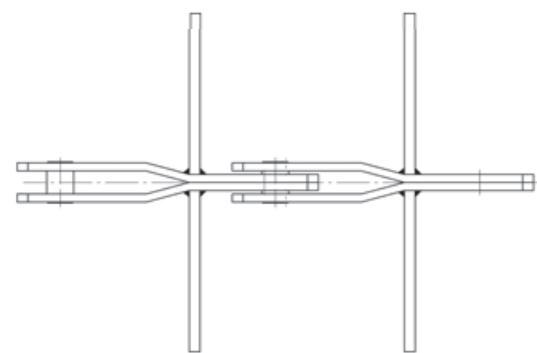
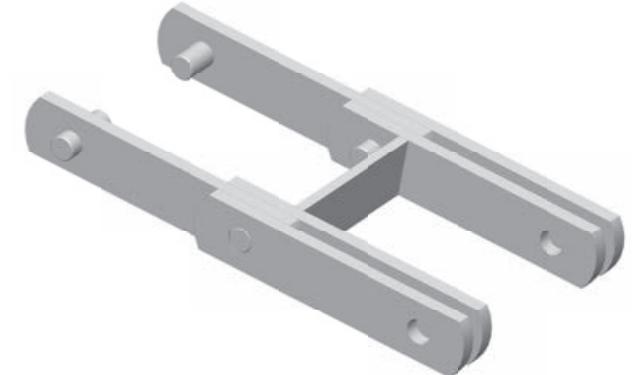
DOUBLE STRAND FORK LINK CHAIN



LINK PLATE CHAIN



BLOCK CHAIN

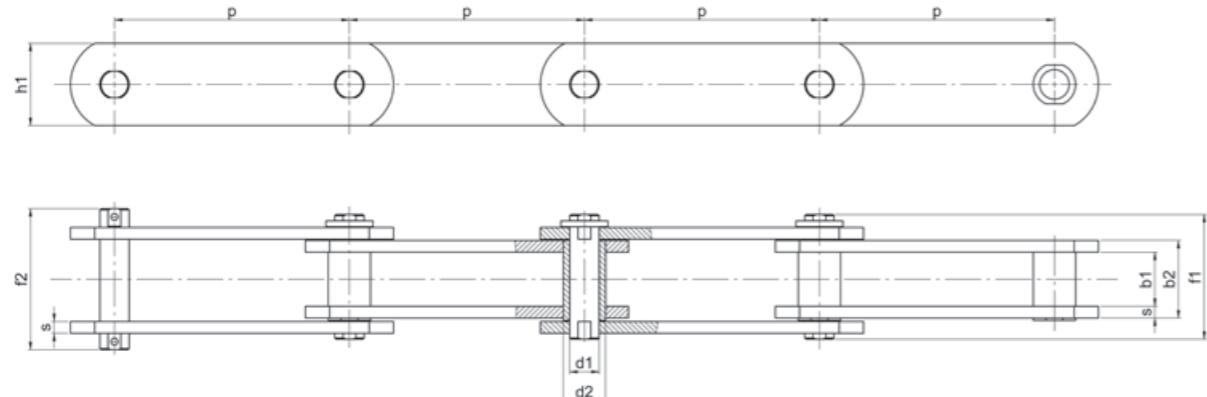


CONVEYOR CHAINS WITH SOLID PINS

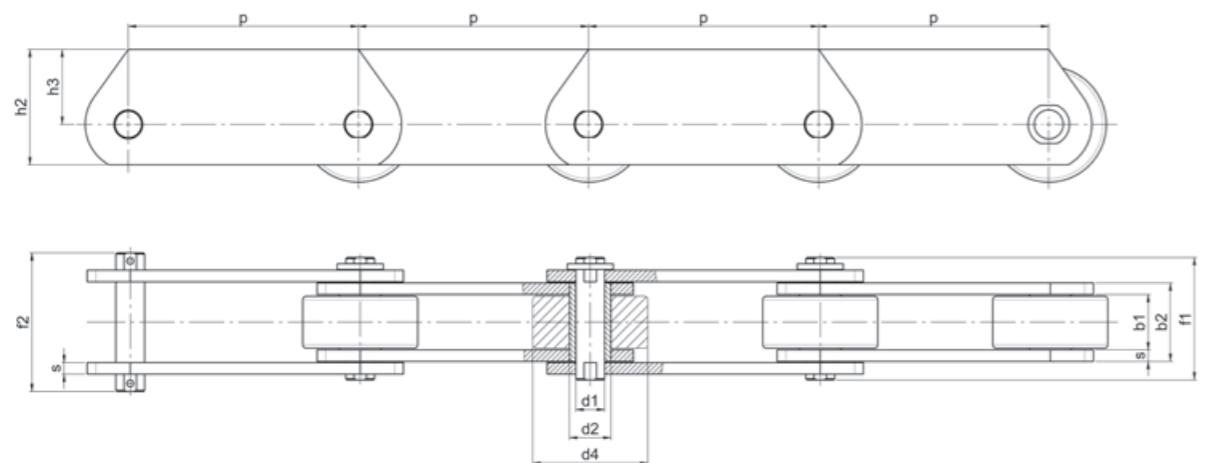
ACCORDING TO DIN 8167 – ISO 1977



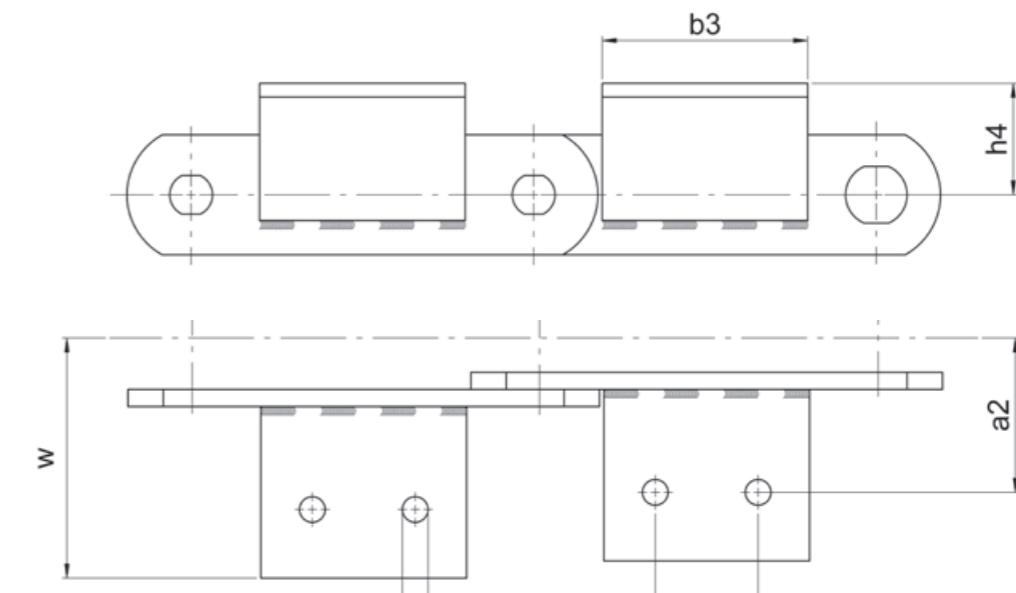
CONVEYOR CHAIN WITH SOLID PINS



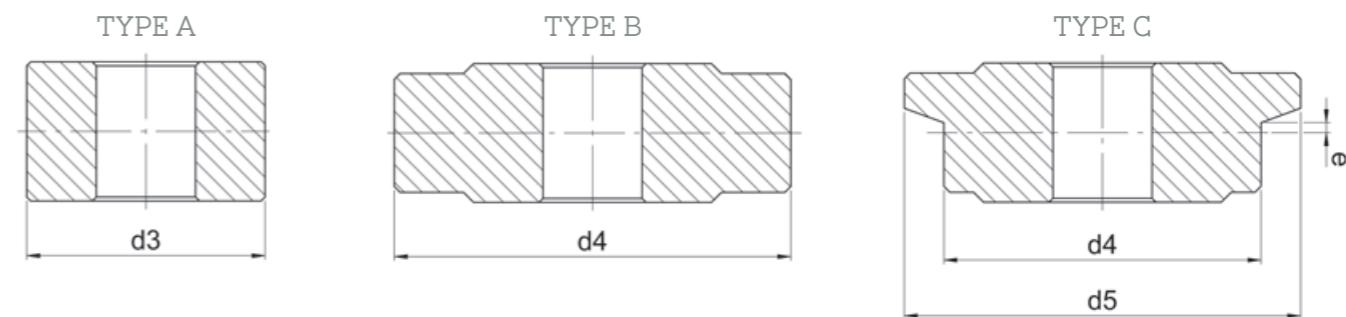
DEEP LINK CONVEYOR CHAIN



MOUNTING PLATE



ROLLERS



Type	p [mm] min.	b_1 [mm] max.	b_2 [mm]	d_1 [mm] without	d_2 [mm] without	d_3 [mm] Type A	d_4 [mm] Type B	d_4 / d_5 [mm] Type C	e [mm]	f_1 [mm]	f_2 [mm]	h_1 [mm]	s [mm]	Bearing- area A [cm ²]	F_B [N] min.	a_1 [mm]	a_2 [mm]	b_3 [mm] max.	d_6 [mm] max.	h_2 [mm]	h_3 [mm]	h_4 [mm]	w [mm] max.	Angle profile [mm]	without [kg/m]	Type A [kg/m]	Type B [kg/m]	Type C [kg/m]
M 20	40	16	22	6	9	12,5	25	25/30	4	31,2	36,2	18	2,5	1,32	20 000	—	27	14	6,6	25	16	16	42	—	1,08	1,44	2,61	2,81
M 20	50	16	22	6	9	12,5	25	25/30	4	31,2	36,2	18	2,5	1,32	20 000	—	27	14	6,6	25	16	16	42	—	1,01	1,29	2,23	2,39
M 20	63	16	22	6	9	12,5	25	25/30	4	31,2	36,2	18	2,5	1,32	20 000	20	27	35	6,6	25	16	16	42	25 x 20 x 3	0,99	1,23	2,00	2,13
M 20	80	16	22	6	9	12,5	25	25/30	4	31,2	36,2	18	2,5	1,32	20 000	35	27	50	6,6	25	16	16	42	25 x 20 x 3	0,90	1,07	1,67	1,77
M 20	100	16	22	6	9	12,5	25	25/30	4	31,2	36,2	18	2,5	1,32	20 000	50	27	65	6,6	25	16	16	42	25 x 20 x 3	0,86	1,00	1,47	1,55
M 20	125	16	22	6	9	12,5	25	25/30	4	31,2	36,2	18	2,5	1,32	20 000	50	27	65	6,6	25	16	16	42	25 x 20 x 3	0,82	0,98	1,32	1,38
M 20	160	16	22	6	9	12,5	25	25/30	4	31,2	36,2	18	2,5	1,32	20 000	50	27	65	6,6	25	16	16	42	25 x 20 x 3	0,80	0,89	1,19	1,24

CONVEYOR CHAINS WITH SOLID PINS

ACCORDING TO DIN 8167 – ISO 1977



Type	p [mm] min.	b_1 [mm] max.	b_2 [mm]	d_1 [mm]	d_2 [mm] without	d_3 [mm] Type A	d_4 [mm] Type B	d_4 / d_5 [mm] Type C	e [mm]	f_1 [mm]	f_2 [mm]	h_1 [mm]	s [mm]	Bearing- area A [cm ²]	F_B [N] min.	a_1 [mm]	a_2 [mm]	b_3 [mm] max.	d_6 [mm] max.	h_2 [mm]	h_3 [mm]	h_4 [mm]	w [mm] max.	Angle profile [mm]	without [kg/m]	Type A [kg/m]	Type B [kg/m]	Type C [kg/m]
M 28	50	18	25	7	10	15	30	30/36	4,5	35,2	40,2	20	3	1,75	28 000	—	32	20	9	30	20	20	50	-	1,54	1,82	3,32	3,52
M 28	63	18	25	7	10	15	30	30/36	4,5	35,2	40,2	20	3	1,75	28 000	—	32	20	9	30	20	20	50	-	1,42	1,64	2,84	3,00
M 28	80	18	25	7	10	15	30	30/36	4,5	35,2	40,2	20	3	1,75	28 000	25	32	45	9	30	20	20	50	20 x 30 x 3	1,32	1,50	2,44	2,57
M 28	100	18	25	7	10	15	30	30/36	4,5	35,2	40,2	20	3	1,75	28 000	40	32	60	9	30	20	20	50	20 x 30 x 3	1,24	1,38	2,13	2,23
M 28	125	18	25	7	10	15	30	30/36	4,5	35,2	40,2	20	3	1,75	28 000	65	32	85	9	30	20	20	50	20 x 30 x 3	1,18	1,30	1,90	1,98
M 28	160	18	25	7	10	15	30	30/36	4,5	35,2	40,2	20	3	1,75	28 000	65	32	85	9	30	20	20	50	20 x 30 x 3	1,13	1,22	1,69	1,75
M 28	200	18	25	7	10	15	30	30/36	4,5	35,2	40,2	20	3	1,75	28 000	65	32	85	9	30	20	20	50	20 x 30 x 3	1,10	1,17	1,54	1,59
M 40	63	20	28	8,5	12,5	18	36	36/42	4,5	40,2	47,2	25	3,5	2,38	40 000	—	35	20	9	35	22,5	25	56	-	2,24	2,57	4,47	4,70
M 40	80	20	28	8,5	12,5	18	36	36/42	4,5	40,2	47,2	25	3,5	2,38	40 000	20	35	40	9	35	22,5	25	56	30 x 30 x 3	1,98	2,25	3,75	3,95
M 40	100	20	28	8,5	12,5	18	36	36/42	4,5	40,2	47,2	25	3,5	2,38	40 000	40	35	60	9	35	22,5	25	56	30 x 30 x 3	1,91	2,12	3,32	3,47
M 40	125	20	28	8,5	12,5	18	36	36/42	4,5	40,2	47,2	25	3,5	2,38	40 000	65	35	85	9	35	22,5	25	56	30 x 30 x 3	1,81	1,98	2,93	3,06
M 40	160	20	28	8,5	12,5	18	36	36/42	4,5	40,2	47,2	25	3,5	2,38	40 000	65	35	85	9	35	22,5	25	56	30 x 30 x 3	1,71	1,85	2,60	2,71
M 40	200	20	28	8,5	12,5	18	36	36/42	4,5	40,2	47,2	25	3,5	2,38	40 000	65	35	85	9	35	22,5	25	56	30 x 30 x 3	1,64	1,75	2,35	2,42
M 40	250	20	28	8,5	12,5	18	36	36/42	4,5	40,2	47,2	25	3,5	2,38	40 000	65	35	85	9	35	22,5	25	56	30 x 30 x 3	1,60	1,68	2,16	2,23
M 56	63	24	33	10	15	21	42	42/50	6	47,2	56,2	30	4	3,3	56 000	—	44	22	11	45	30	30	70	-	3,32	3,83	6,93	7,26
M 56	80	24	33	10	15	21	42	42/50	6	47,2	56,2	30	4	3,3	56 000	—	44	22	11	45	30	30	70	-	3,01	3,41	5,86	6,20
M 56	100	24	33	10	15	21	42	42/50	6	47,2	56,2	30	4	3,3	56 000	25	44	50	11	45	30	30	70	40 x 40 x 4	2,79	3,11	5,07	5,34
M 56	125	24	33	10	15	21	42	42/50	6	47,2	56,2	30	4	3,3	56 000	30	44	75	11	45	30	30	70	40 x 40 x 4	2,60	2,87	4,43	4,65
M 56	160	24	33	10	15	21	42	42/50	6	47,2	56,2	30	4	3,3	56 000	85	44	110	11	45	30	30	70	40 x 40 x 4	2,44	2,64	3,87	4,04
M 56	200	24	33	10	15	21	42	42/50	6	47,2	56,2	30	4	3,3	56 000	85	44	110	11	45	30	30	70	40 x 40 x 4	2,34	2,50	3,49	3,63
M 56	250	24	33	10	15	21	42	42/50	6	47,2	56,2	30	4	3,3	56 000	85	44	110	11	45	30	30	70	40 x 40 x 4	2,25	2,37	3,16	3,27
M 80	80	28	39	12	18	25	50	50/60	7	55,2	64,2	35	5	4,68	80 000	—	48	22	11	50	32,5	35	80	-	4,65	5,29	9,35	9,95
M 80	100	28	39	12	18	25	50	50/60	7	55,2	64,2	35	5	4,68	80 000	—	48	22	11	50	32,5	35	80	-	4,27	4,79	8,03	8,50
M 80	125	28	39	12	18	25	50	50/60	7	55,2	64,2	35	5	4,68	80 000	50	48	75	11	50	32,5	35	80	40 x 40 x 4	3,97	4,38	6,98	7,35
M 80	160	28	39	12	18	25	50	50/60	7	55,2	64,2	35	5	4,68	80 000	85	48	110	11	50	32,5	35	80	40 x 40 x 4	3,70	4,03	6,05	6,35
M 80	200	28	39	12	18	25	50	50/60	7	55,2	64,2	35	5	4,68	80 000	125	48	150	11	50	32,5	35	80	40 x 40 x 4	3,51	3,77	5,39	5,63
M 80	250	28	39	12	18	25	50	50/60	7	55,2	64,2	35	5	4,68	80 000	125	48	150	11	50	32,5	35	80	40 x 40 x 4	3,37	3,57	4,87	5,06
M 80	315	28	39	12	18	25	50	50/60	7	55,2	64,2	35	5	4,68	80 000	125	48</td											

CONVEYOR CHAINS WITH SOLID PINS
ACCORDING TO DIN 8167 – ISO 1977



Type	p [mm] min.	b_1 [mm] max.	b_2 [mm]	d_1 [mm]	d_2 [mm] without	d_3 [mm] Type A	d_4 [mm] Type B	d_4 / d_5 [mm] Type C	e [mm]	f_1 [mm]	f_2 [mm]	h_1 [mm]	s [mm]	Bearing- area A [cm ²]	F_B [N] min.	a_1 [mm]	a_2 [mm]	b_3 [mm] max.	d_6 [mm] max.	h_2 [mm]	h_3 [mm]	h_4 [mm]	w [mm] max.	Angle profile [mm]	without [kg/m]	Type A [kg/m]	Type B [kg/m]	Type C [kg/m]
M 160	100	37	52	18	25	36	70	70/80	8,5	73,3	88,3	50	7	9,36	160 000	—	62	30	14	70	45	45	100	50 x 50 x 6	9,70	11,20	19,50	20,40
M 160	125	37	52	18	25	36	70	70/80	8,5	73,3	88,3	50	7	9,36	160 000	—	62	30	14	70	45	45	100	50 x 50 x 6	8,85	10,10	16,70	17,50
M 160	160	37	52	18	25	36	70	70/80	8,5	73,3	88,3	50	7	9,36	160 000	50	62	80	14	70	45	45	100	50 x 50 x 6	8,15	9,12	14,30	14,90
M 160	200	37	52	18	25	36	70	70/80	8,5	73,3	88,3	50	7	9,36	160 000	85	62	115	14	70	45	45	100	50 x 50 x 6	7,56	8,33	12,50	13,00
M 160	250	37	52	18	25	36	70	70/80	8,5	73,3	88,3	50	7	9,36	160 000	145	62	175	14	70	45	45	100	50 x 50 x 6	7,22	7,82	11,10	11,50
M 160	315	37	52	18	25	36	70	70/80	8,5	73,3	88,3	50	7	9,36	160 000	145	62	175	14	70	45	45	100	50 x 50 x 6	6,88	7,38	9,95	10,30
M 160	400	37	52	18	25	36	70	70/80	8,5	73,3	88,3	50	7	9,36	160 000	145	62	175	14	70	45	45	100	50 x 50 x 6	6,57	6,95	9,00	9,25
M 160	500	37	52	18	25	36	70	70/80	8,5	73,3	88,3	50	7	9,36	160 000	145	62	175	14	70	45	45	100	50 x 50 x 6	6,36	6,68	8,35	8,52
M 224	125	43	60	21	30	42	85	85/100	10	86,3	99,3	60	8	12,60	224 000	—	70	35	18	90	60	55	114	60 x 60 x 8	13,10	14,90	26,60	27,80
M 224	160	43	60	21	30	42	85	85/100	10	86,3	99,3	60	8	12,60	224 000	—	70	35	18	90	60	55	114	60 x 60 x 8	11,90	13,30	22,40	23,40
M 224	200	43	60	21	30	42	85	85/100	10	86,3	99,3	60	8	12,60	224 000	65	70	100	18	90	60	55	114	60 x 60 x 8	11,10	12,20	19,50	20,30
M 224	250	43	60	21	30	42	85	85/100	10	86,3	99,3	60	8	12,60	224 000	125	70	160	18	90	60	55	114	60 x 60 x 8	10,30	11,20	17,10	17,70
M 224	315	43	60	21	30	42	85	85/100	10	86,3	99,3	60	8	12,60	224 000	190	70	225	18	90	60	55	114	60 x 60 x 8	9,78	10,50	15,10	15,70
M 224	400	43	60	21	30	42	85	85/100	10	86,3	99,3	60	8	12,60	224 000	190	70	225	18	90	60	55	114	60 x 60 x 8	9,30	9,86	13,50	13,90
M 224	500	43	60	21	30	42	85	85/100	10	86,3	99,3	60	8	12,60	224 000	190	70	225	18	90	60	55	114	60 x 60 x 8	8,97	9,40	12,30	12,60
M 224	630	43	60	21	30	42	85	85/100	10	86,3	99,3	60	8	12,60	224 000	190	70	225	18	90	60	55	114	60 x 60 x 8	8,67	9,02	11,30	11,60
M 315	160	48	70	35	36	50	100	100/120	10,5	100,3	120,3	70	10	17,5	315 000	—	80	35	18	100	65	65	125	70 x 70 x 9	18,30	20,50	34,40	36,10
M 315	200	48	70	35	36	50	100	100/120	10,5	100,3	120,3	70	10	17,5	315 000	50	80	85	18	100	65	65	125	70 x 70 x 9	16,70	18,60	29,60	31,00
M 315	250	48	70	35	36	50	100	100/120	10,5	100,3	120,3	70	10	17,5	315 000	100	80	135	18	100	65	65	125	70 x 70 x 9	15,60	17,10	25,90	27,10
M 315	315	48	70	35	36	50	100	100/120	10,5	100,3	120,3	70	10	17,5	315 000	155	80	190	18	100	65	65	125	70 x 70 x 9	14,60	15,80	22,90	23,70
M 315	400	48	70	35	36	50	100	100/120	10,5	100,3	120,3	70	10	17,5	315 000	155	80	190	18	100	65	65	125	70 x 70 x 9	13,90	14,80	20,30	21,20
M 315	500	48	70	35	36	50	100	100/120	10,5	100,3	120,3	70	10	17,5	315 000	155	80	190	18	100	65	65	125	70 x 70 x 9	13,30	14,10	18,50	19,10
M 315	630	48	70	35	36	50	100	100/120	10,5	100,3	120,3	70	10	17,5	315 000	155	80	190	18	100	65	65	125	70 x 70 x 9	12,80	13,40	16,90	17,40

CONVEYOR CHAINS WITH SOLID PINS
ACCORDING TO DIN 8167 – ISO 1977

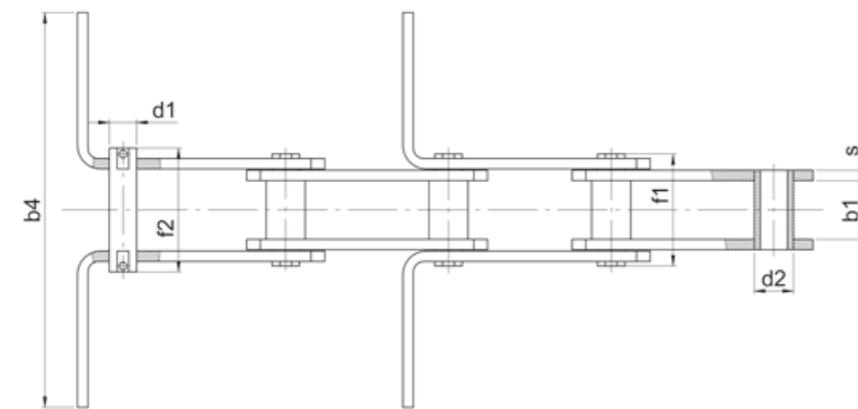
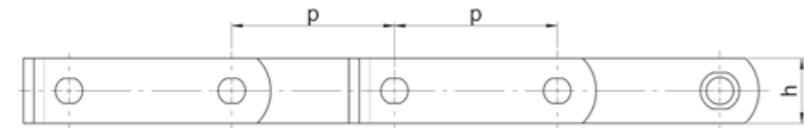


Type	p [mm] min.	b_1 [mm] max.	b_2 [mm]	d_1 [mm]	d_2 [mm] without	d_3 [mm] Type A	d_4 [mm] Type B	d_4 / d_5 [mm] Type C	e [mm]	f_1 [mm]	f_2 [mm]	h_1 [mm]	s [mm]	Bearing- area A [cm ²]	F_B [N] min.	a_1 [mm]	a_2 [mm]	b_3 [mm] max.	d_6 [mm] max.	h_2 [mm]	h_3 [mm]	h_4 [mm]	w [mm] max.	Angle profile [mm]	without [kg/m]	Type A [kg/m]	Type B [kg/m]	Type C [kg/m]
M 450	200	56	82	30	42	60	120	120/140	11,5	117,3	141,3	80	12	24,6	450 000	—	90	40	18	120	80	75	140	70 x 70 x 9	24,20	27,50	46,00	47,80
M 450	250	56	82	30	42	60	120	120/140	11,5	117,3	141,3	80	12	24,6	450 000	85	90	125	18	120	80	75	140	70 x 70 x 9	22,40	25,00	39,80	41,40
M 450	315	56	82	30	42	60	120	120/140	11,5	117,3	141,3	80	12	24,6	450 000	155	90	195	18	120	80	75	140	70 x 70 x 9	20,90	22,90	34,70	36,00
M 450	400	56	82	30	42	60	120	120/140	11,5	117,3	141,3	80	12	24,6	450 000	240	90	280	18	120	80	75	140	70 x 70 x 9	19,70	21,30	30,60	31,50
M 450	500	56	82	30	42	60	120	120/140	11,5	117,3	141,3	80	12	24,6	450 000	240	90	280	18	120	80	75	140	70 x 70 x 9	18,70	20,10	27,50	28,20
M 450	630	56	82	30	42	60	120	120/140	11,5	117,3	141,3	80	12	24,6	450 000	240	90	280	18	120	80	75	140	70 x 70 x 9	18,00	19,00	24,90	25,50
M 450	800	56	82	30	42	60	120	120/140	11,5	117,3	141,3	80	12	24,6	450 000	240	90	280	18	120	80	75	140	70 x 70 x 9	17,40	18,20	22,80	23,30
M 630	250	66	96	36	50	70	140	140/170	14,5	136,3	159,3	100	14	34,56	630 000	—	115	50	24	140	90	90	190	100 x 100 x 12	34,80	39,60	62,80	65,70
M 630	315	66	96	36	50	70	140	140/170	14,5	136,3	159,3	100	14	34,56	630 000	100	115	150	24	140	90	90	190	100 x 100 x 12	32,20	35,40	54,30	56,50
M 630	400	66	96	36	50	70	140	140/170	14,5	136,3	159,3	100	14	34,56	630 000	190	115	240	24	140	90	90	190	100 x 100 x 12	30,30	32,70	47,80	49,50
M 630	500	66	96	36	50	70	140	140/170	14,5	136,3	159,3	100	14	34,56	630 000	300	115	350	24	140	90	90	190	100 x 100 x 12	28,40	30,40	42,40	43,80
M 630	630	66	96	36	50	70	140	140/170	14,5	136,3	159,3	100	14	34,56	630 000	300	115	350	24	140	90	90	190	100 x 100 x 12	27,10	28,70	38,30	39,30
M 630	800	66	96	36	50	70	140	140/170	14,5	136,3	159,3	100	14	34,56	630 000	300	115	350	24	140	90	90	190	100 x 100 x 12	26,00	27,20	34,70	35,60
M 630	1000	66	96	36	50	70	140	140/170	14,5	136,3	159,3	100	14	34,56	630 000	300	115	350	24	140	90	90	190	100 x 100 x 12	25,20	26,20	32,20	32,90
M 900	250	78	112	44	60	85	170	170/210	17	157,3	179,3	120	16	49,28	900 000	—	140	60	30	180	120	110	240	120 x 120 x 15	51,20	58,00	100,00	106,00
M 900	315	78	112	44	60	85	170	170/210	17	157,3	179,3	120	16	49,28	900 000	65	140	125	30	180	120	110	240	120 x 120 x 15	47,00	52,30	85,70	90,20
M 900	400	78	112	44	60	85	170	170/210	17	157,3	179,3	120	16	49,28	900 000	155	140	215	30	180	120	110	240	120 x 120 x 15	43,50	47,70	74,00	77,40
M 900	500	78	112	44	60	85	170	170/210	17	157,3	179,3	120	16	49,28	900 000	240	140	300	30	180	120	110	240	120 x 120 x 15	40,80	44,20	65,30	68,10
M 900	630	78	112	44	60	85	170	170/210	17	157,3	179,3	120	16	49,28	900 000	240	140	300	30	180	120	110	240	120 x 120 x 15	38,80	41,40	58,10	60,40
M 900	800	78	112	44	60	85	170	170/210	17	157,3	179,3	120	16	49,28	900 000	240	140	300	30	180	120	110	240	120 x 120 x 15	36,90	39,00	52,20	51,70
M 900	1000	78	112	44	60	85	170	170/210	17	157,3	179,3	120	16	49,28	900 000	240	140	300	30	180	120	110	240	120 x 120 x 15	35,50	37,20	47,70	49,10

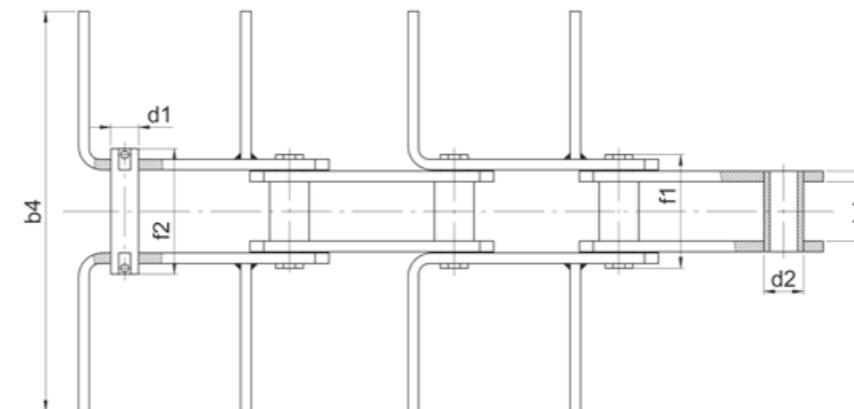
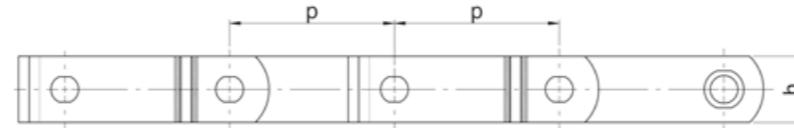
TROUGH CONVEYOR CHAINS
ACCORDING TO DIN 8167



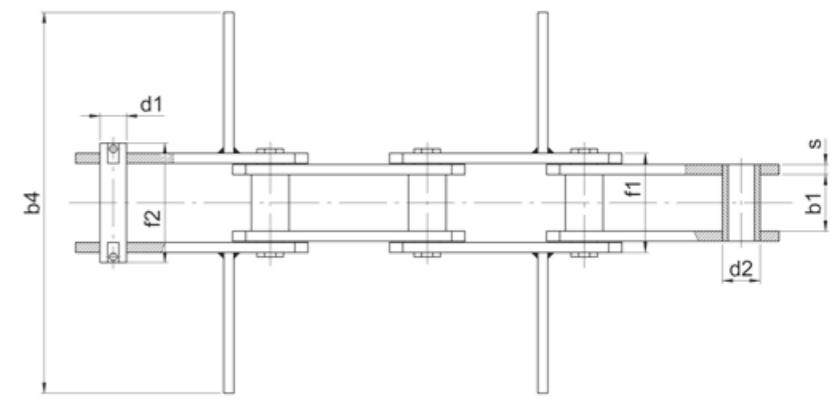
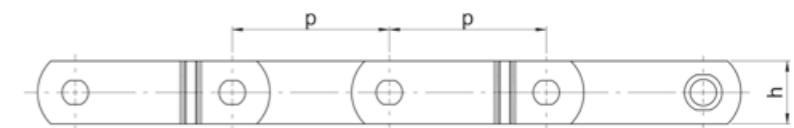
TYPE A



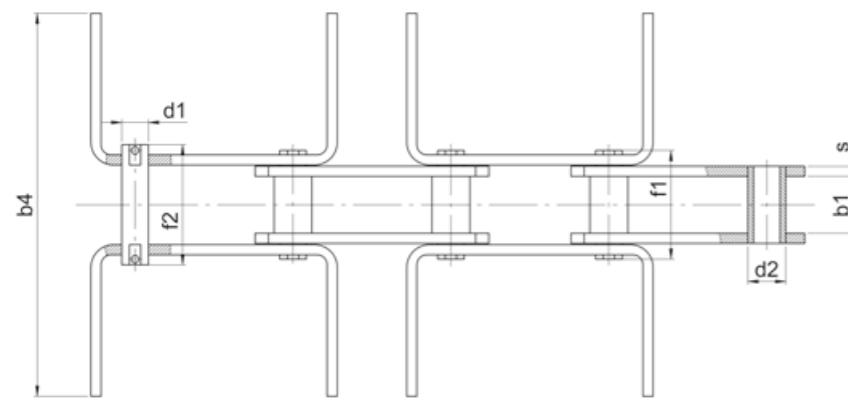
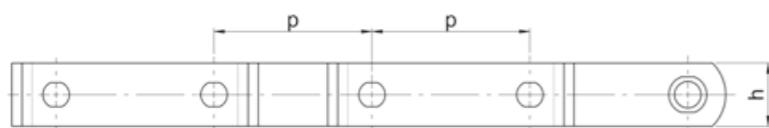
TYPE B



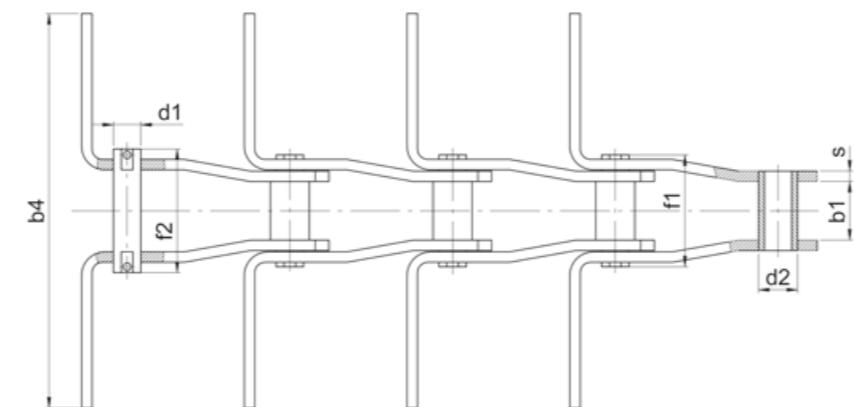
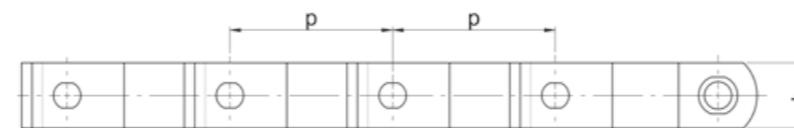
TYPE C



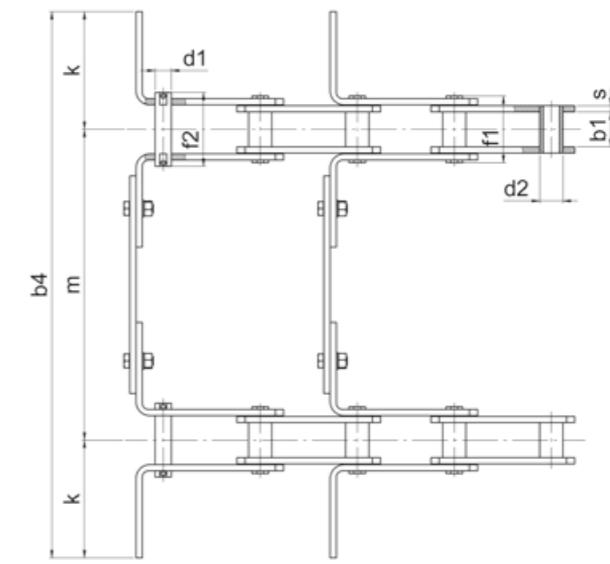
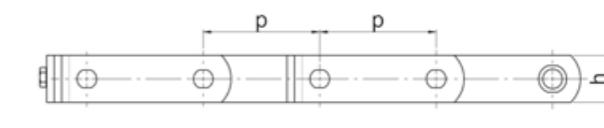
TYPE D



TYPE E



TYPE F



TROUGH CONVEYOR CHAINS

ACCORDING TO DIN 8167

Type	p [mm]	b ₁ [mm] min.	b ₂ [mm] max.	d ₁ [mm]	d ₂ [mm] without	d ₃ [mm] Type A	e [mm]	f ₁ [mm]	f ₂ [mm]	h [mm]	s [mm]	Bearing area A [cm ²]	F _B [N] min.
M 20	40	16	22	6	9	12,5	4	31,2	46,2	18	2,5	1,32	20 000
M 20	50	16	22	6	9	12,5	4	31,2	46,2	18	2,5	1,32	20 000
M 20	63	16	22	6	9	12,5	4	31,2	46,2	18	2,5	1,32	20 000
M 20	80	16	22	6	9	12,5	4	31,2	46,2	18	2,5	1,32	20 000
M 20	100	16	22	6	9	12,5	4	31,2	46,2	18	2,5	1,32	20 000
M 20	125	16	22	6	9	12,5	4	31,2	46,2	18	2,5	1,32	20 000
M 20	160	16	22	6	9	12,5	4	31,2	46,2	18	2,5	1,32	20 000
M 28	50	18	25	7	10	15	4,5	35,2	40,2	20	3	1,75	28 000
M 28	63	18	25	7	10	15	4,5	35,2	40,2	20	3	1,75	28 000
M 28	80	18	25	7	10	15	4,5	35,2	40,2	20	3	1,75	28 000
M 28	100	18	25	7	10	15	4,5	35,2	40,2	20	3	1,75	28 000
M 28	125	18	25	7	10	15	4,5	35,2	40,2	20	3	1,75	28 000
M 28	160	18	25	7	10	15	4,5	35,2	40,2	20	3	1,75	28 000
M 28	200	18	25	7	10	15	4,5	35,2	40,2	20	3	1,75	28 000
M 40	63	20	28	8,5	12,5	18	4,5	40,2	47,2	25	3,5	2,38	40 000
M 40	80	20	28	8,5	12,5	18	4,5	40,2	47,2	25	3,5	2,38	40 000
M 40	100	20	28	8,5	12,5	18	4,5	40,2	47,2	25	3,5	2,38	40 000
M 40	125	20	28	8,5	12,5	18	4,5	40,2	47,2	25	3,5	2,38	40 000
M 40	160	20	28	8,5	12,5	18	4,5	40,2	47,2	25	3,5	2,38	40 000
M 40	200	20	28	8,5	12,5	18	4,5	40,2	47,2	25	3,5	2,38	40 000
M 40	250	20	28	8,5	12,5	18	4,5	40,2	47,2	25	3,5	2,38	40 000
M 56	63	24	33	10	15	21	6	47,2	56,2	30	4	3,3	56 000
M 56	80	24	33	10	15	21	6	47,2	56,2	30	4	3,3	56 000
M 56	100	24	33	10	15	21	6	47,2	56,2	30	4	3,3	56 000
M 56	125	24	33	10	15	21	6	47,2	56,2	30	4	3,3	56 000
M 56	160	24	33	10	15	21	6	47,2	56,2	30	4	3,3	56 000
M 56	200	24	33	10	15	21	6	47,2	56,2	30	4	3,3	56 000
M 56	250	24	33	10	15	21	6	47,2	56,2	30	4	3,3	56 000
M 80	80	28	39	12	18	25	7	55,2	64,2	35	5	4,68	80 000
M 80	100	28	39	12	18	25	7	55,2	64,2	35	5	4,68	80 000
M 80	125	28	39	12	18	25	7	55,2	64,2	35	5	4,68	80 000
M 80	160	28	39	12	18	25	7	55,2	64,2	35	5	4,68	80 000
M 80	200	28	39	12	18	25	7	55,2	64,2	35	5	4,68	80 000
M 80	250	28	39	12	18	25	7	55,2	64,2	35	5	4,68	80 000
M 80	315	28	39	12	18	25	7	55,2	64,2	35	5	4,68	80 000

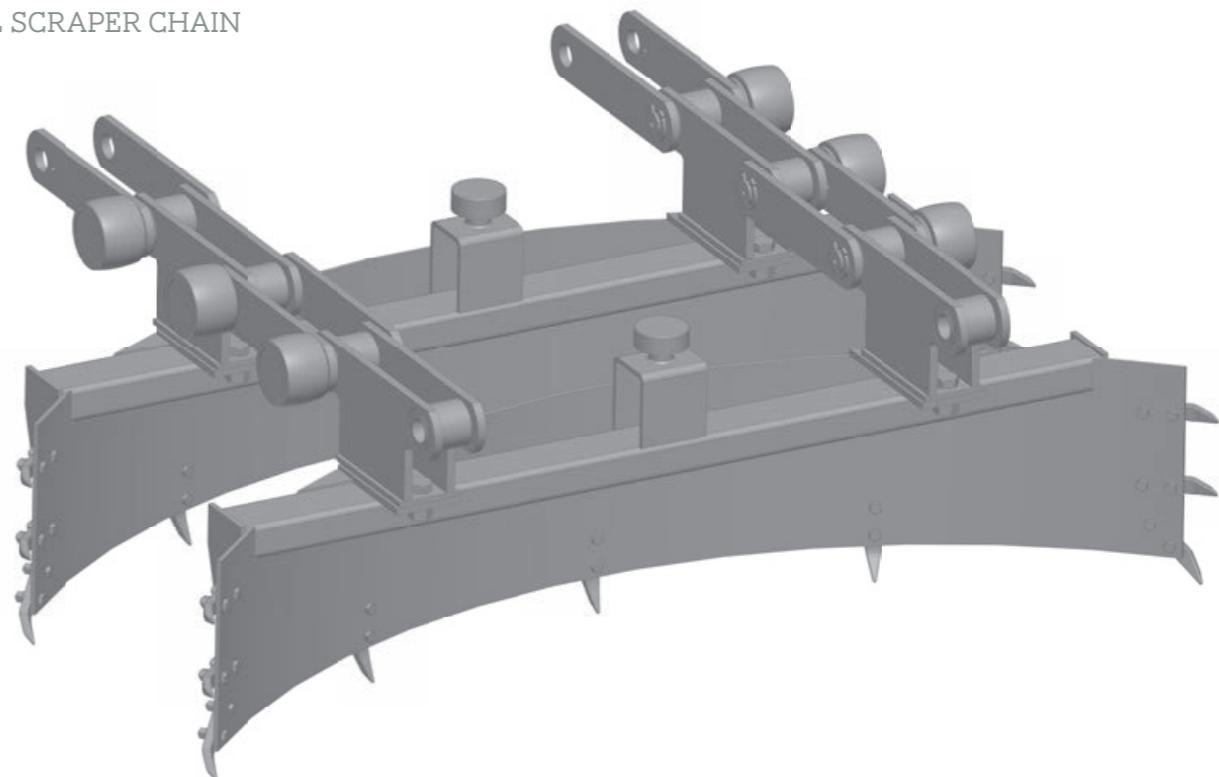
Type	p [mm]	b ₁ [mm] min.	b ₂ [mm] max.	d ₁ [mm]	d ₂ [mm] without	d ₃ [mm] Type A	e [mm]	f ₁ [mm]	f ₂ [mm]	h [mm]	s [mm]	Bearing area A [cm ²]	F _B [N] min.
M 112	80	32	45	15	21	30	7,5	64,2	75,2	40	6	6,75	112 000
M 112	100	32	45	15	21	30	7,5	64,2	75,2	40	6	6,75	112 000
M 112	125	32	45	15	21	30	7,5	64,2	75,2	40	6	6,75	112 000
M 112	160	32	45	15	21	30	7,5	64,2	75,2	40	6	6,75	112 000
M 112	200	32	45	15	21	30	7,5	64,2	75,2	40	6	6,75	112 000
M 112	250	32	45	15	21	30	7,5	64,2	75,2	40	6	6,75	112 000
M 112	315	32	45	15	21	30	7,5	64,2	75,2	40	6	6,75	112 000
M 112	400	32	45	15	21	30	7,5	64,2	75,2	40	6	6,75	112 000
M 160	100	37	52	18	25	36	8,5	73,2	88,3	50	7	9,36	160 000
M 160	125	37	52	18	25	36	8,5	73,2	88,3	50	7	9,36	160 000
M 160	160	37	52	18	25	36	8,5	73,2	88,3	50	7	9,36	160 000
M 160	200	37	52	18	25	36	8,5	73,2	88,3	50	7	9,36	160 000
M 160	250	37	52	18	25	36	8,5	73,2	88,3	50	7	9,36	160 000
M 160	315	37	52	18	25	36	8,5	73,2	88,3	50	7	9,36	160 000
M 160	400	37	52	18	25	36	8,5	73,2	88,3	50	7	9,36	160 000
M 160	500	37	52	18	25	36	8,5	73,2	88,3	50	7	9,36	160 000
M 224	125	43	60	21	30	42	10	86,3	99,3	60	8	12,6	224 000
M 224	160	43	60	21	30	42	10	86,3	99,3	60	8	12,6	224 000
M 224	200	43	60	21	30	42	10	86,3	99,3	60	8	12,6	224 000
M 224	250	43	60	21	30	42	10	86,3	99,3	60	8	12,6	224 000
M 224	315	43	60	21	30	42	10	86,3	99,3	60	8	12,6	224 000

TROUGH CONVEYOR CHAINS

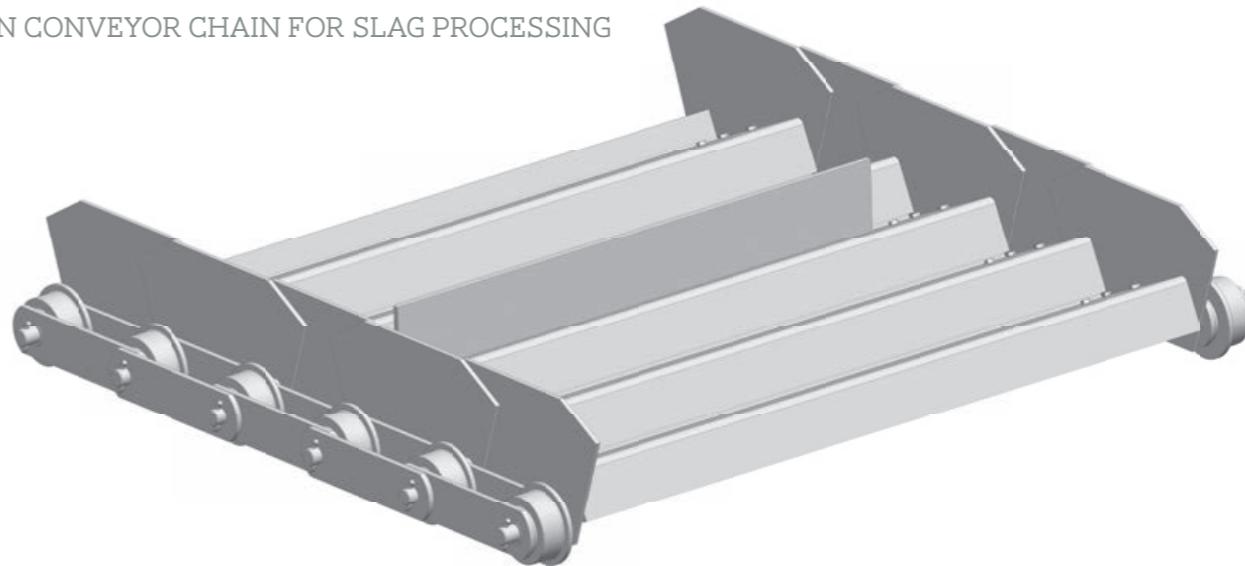
ACCORDING TO DIN 8167

Type	p [mm]	b ₁ [mm] min.	b ₂ [mm] max.	d ₁ [mm]	d ₂ [mm] without	d ₃ [mm] Type A	e [mm]	f ₁ [mm]	f ₂ [mm]	h [mm]	s [mm]	Bearing area A [cm ²]	F _B [N] min.
M 450	200	56	82	30	42	60	11,5	117,3	141,3	80	12	24,6	450 000
M 450	250	56	82	30	42	60	11,5	117,3	141,3	80	12	24,6	450 000
M 450	315	56	82	30	42	60	11,5	117,3	141,3	80	12	24,6	450 000
M 450	400	56	82	30	42	60	11,5	117,3	141,3	80	12	24,6	450 000
M 450	500	56	82	30	42	60	11,5	117,3	141,3	80	12	24,6	450 000
M 450	630	56	82	30	42	60	11,5	117,3	141,3	80	12	24,6	450 000
M 450	800	56	82	30	42	60	11,5	117,3	141,3	80	12	24,6	450 000
M 630	250	66	96	36	50	70	14,5	136,3	159,3	100	14	34,56	630 000
M 630	315	66	96	36	50	70	14,5	136,3	159,3	100	14	34,56	630 000
M 630	400	66	96	36	50	70	14,5	136,3	159,3	100	14	34,56	630 000
M 630	500	66	96	36	50	70	14,5	136,3	159,3	100	14	34,56	630 000
M 630	630	66	96	36	50	70	14,5	136,3	159,3	100	14	34,56	630 000
M 630	800	66	96	36	50	70	14,5	136,3	159,3	100	14	34,56	630 000
M 630	1000	66	96	36	50	70	14,5	136,3	159,3	100	14	34,56	630 000
M 900	250	78	112	44	60	85	17	157,3	179,3	120	16	49,28	900 000
M 900	315	78	112	44	60	85	17	157,3	179,3	120	16	49,28	900 000
M 900	400	78	112	44	60	85	17	157,3	179,3	120	16	49,28	900 000
M 900	500	78	112	44	60	85	17	157,3	179,3	120	16	49,28	900 000
M 900	630	78	112	44	60	85	17	157,3	179,3	120	16	49,28	900 000
M 900	800	78	112	44	60	85	17	157,3	179,3	120	16	49,28	900 000
M 900	1000	78	112	44	60	85	17	157,3	179,3	120	16	49,28	900 000

PORTAL SCRAPER CHAIN



APRON CONVEYOR CHAIN FOR SLAG PROCESSING

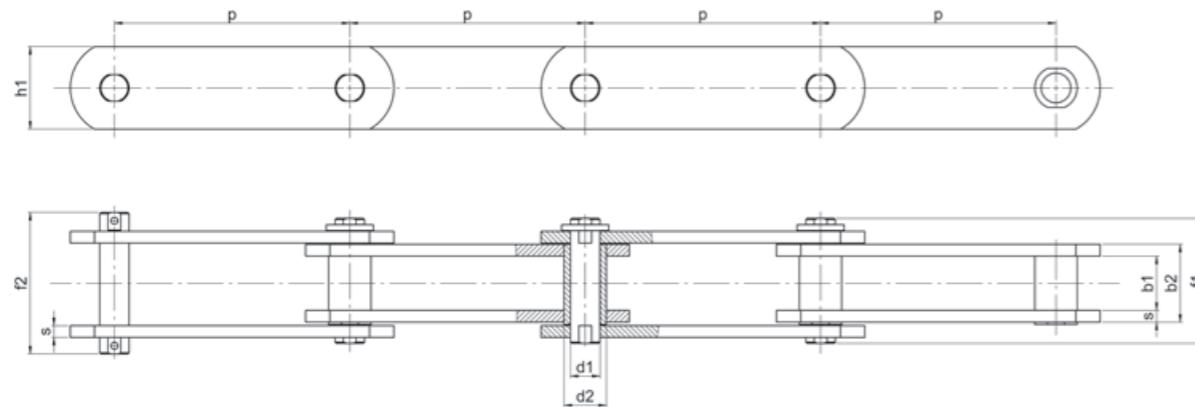


CONVEYOR CHAINS WITH SOLID PINS

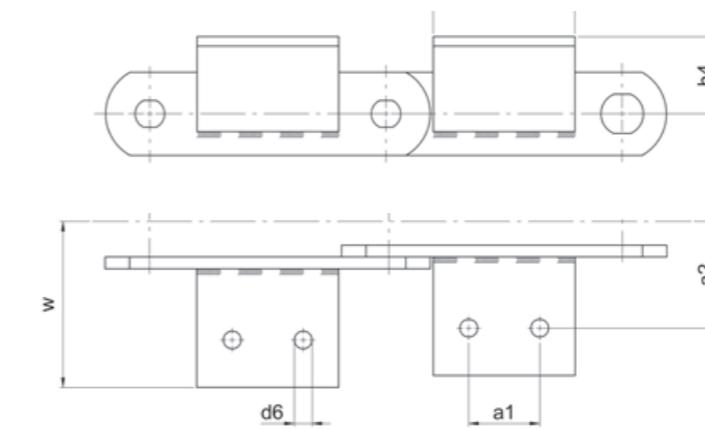
ACCORDING TO DIN 8165



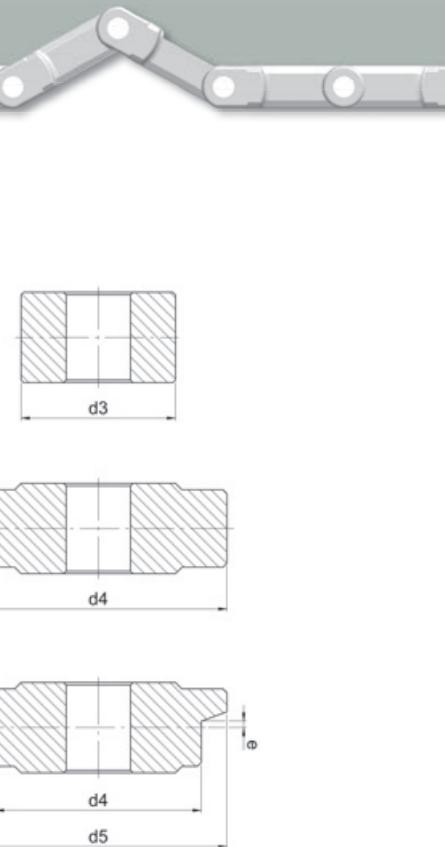
CONVEYOR CHAIN WITH SOLID PINS



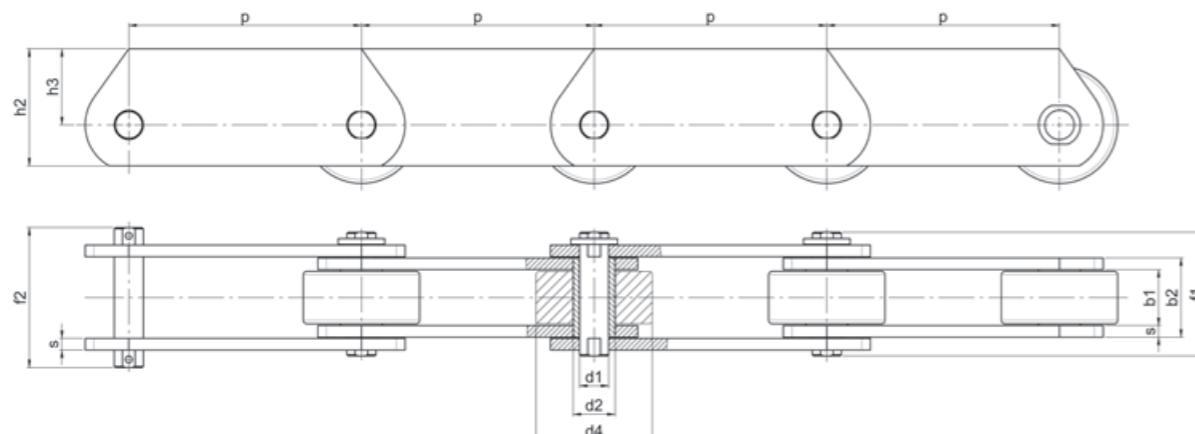
MOUNTING PLATE



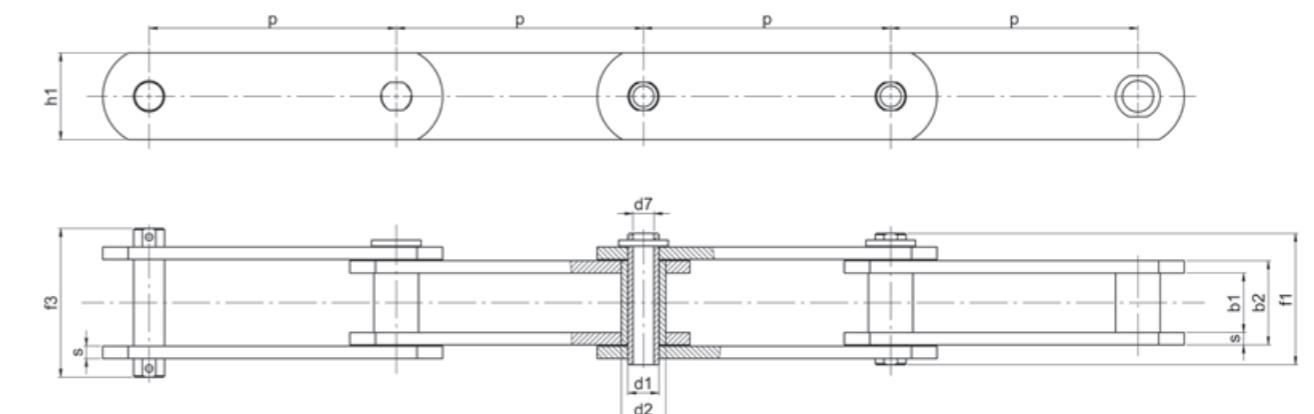
ROLLERS



DEEP LINK CONVEYOR CHAIN



CONVEYOR CHAINS WITH HOLLOW PINS



Type	p [mm]	b ₁ [mm] min.	b ₂ [mm] max.	d ₁ [mm]	d ₂ [mm] without	d ₃ [mm] Type A	d ₄ [mm] Type B	d ₄ / d ₅ [mm] Type C	d ₇ [mm] min.	e [mm]	f ₁ [mm]	f ₂ [mm]	f ₃ [mm]	h ₁ [mm]	h ₂ [mm]	h ₃ [mm]	Bearing area A [cm ²]	F _B [N] min.	F _{Bh} [N] min.	a ₁ [mm]	a ₂ [mm] max.	b ₃ [mm] max.	d ₆ [mm]	h ₄ [mm]	w [mm] max.	Angle profile	without [kg/m]	Type A [kg/m]	Type B [kg/m]	Type C [kg/m]	
FV 40	40	18	25	10	15	20	32	—	—	4	36	43	—	26	3	35	22	2,5	40 000	—	—	—	—	—	—	—	—	2,59	3,04	4,68	—
FV 40	50	18	25	10	15	20	32	—	—	4	36	43	—	26	3	35	22	2,5	40 000	—	—	25	25	6,4	20	49	—	2,34	2,70	4,06	—
FV 40	63	18	25	10	15	20	32	40/48	—	4	36	43	—	26	3	35	22	2,5	40 000	—	—	25	31	6,4	20	49	—	2,08	2,36	3,43	4,65
FV 40	80	18	25	10	15	20	32	40/48	—	4	36	43	—	26	3	35	22	2,5	40 000	—	—	25	40	6,4	20	49	—	1,91	2,14	3,02	4,01
FV 40	100	18	25	10	15	20	32	40/48	—	4	36	43	—	26	3	35	22	2,5	40 000	—	30	25	50	6,4	20	49	—	1,76	1,94	2,60	3,38

CONVEYOR CHAINS WITH SOLID PINS

ACCORDING TO DIN 8165



Type	p [mm]	b ₁ [mm] min.	b ₂ [mm] max.	d ₁ [mm]	d ₂ [mm] without	d ₃ [mm] Type A	d ₄ [mm] Type B	d ₄ / d ₅ [mm] Type C	d ₇ [mm] min.	e [mm]	f ₁ [mm]	f ₂ [mm]	f ₃ [mm]	h ₁ [mm]	s [mm]	h ₂ [mm]	h ₃ [mm]	Bearing area A [cm ²]	F _B [N] min.	F _{Bh} [N] min.	a ₁ [mm]	a ₂ [mm]	b ₃ [mm] max.	d ₆ [mm] max.	h ₄ [mm]	w [mm] max.	Angle profile [mm]	without [kg/m]	Type A [kg/m]	Type B [kg/m]	Type C [kg/m]
FV 63	63	22	31	12	18	26	40	—	8	5	44	54	44	30	4	40	25	3,72	63 000	45 000	—	34	40	8,4	30	50	—	5,72	4,17	6,08	—
FV 63	80	22	31	12	18	26	40	50/60	8	5	44	54	44	30	4	40	25	3,72	63 000	45 000	—	34	40	8,4	30	50	30 x 30 x 4	4,67	3,72	5,29	6,00
FV 63	100	22	31	12	18	26	40	50/60	8	5	44	54	44	30	4	40	25	3,72	63 000	45 000	30	34	50	8,4	30	50	30 x 30 x 4	4,35	3,37	4,57	5,60
FV 63	125	22	31	12	18	26	40	50/60	8	5	44	54	44	30	4	40	25	3,72	63 000	45 000	40	34	60	8,4	30	50	30 x 30 x 4	3,87	3,03	3,97	4,82
FV 63	160	22	31	12	18	26	40	50/60	8	5	44	54	44	30	4	40	25	3,72	63 000	45 000	50	34	70	8,4	30	50	30 x 30 x 4	3,50	2,73	3,48	4,13
FV 90	63	25	36	14	20	30	48	—	10	6,5	52	61	51,2	35	5	45	27,5	5,04	90 000	63 000	—	—	—	—	—	—	—	5,72	6,87	10,00	—
FV 90	100	25	36	14	20	30	48	63/73	10	6,5	52	61	51,2	35	5	45	27,5	5,04	90 000	63 000	30	40	50	8,4	35	63	40 x 40 x 5	4,67	5,40	7,37	9,59
FV 90	125	25	36	14	20	30	48	63/73	10	6,5	52	61	51,2	35	5	45	27,5	5,04	90 000	63 000	40	40	60	8,4	35	63	40 x 40 x 5	4,35	4,93	6,51	8,29
FV 90	160	25	36	14	20	30	48	63/73	10	6,5	52	61	51,2	35	5	45	27,5	5,04	90 000	63 000	50	40	70	8,4	35	63	40 x 40 x 5	3,87	4,32	5,56	6,95
FV 90	200	25	36	14	20	30	48	63/73	10	6,5	52	61	51,2	35	5	45	27,5	5,04	90 000	63 000	60	40	80	8,4	35	63	40 x 40 x 5	3,50	3,86	4,85	5,96
FV 90	250	25	36	14	20	30	48	63/73	10	6,5	52	61	51,2	35	5	45	27,5	5,04	90 000	63 000	65	40	85	8,4	35	63	40 x 40 x 5	3,47	3,76	4,55	5,44
FV 112	100	30	43	16	22	32	55	72/87	11	7,5	61	70	60,2	40	6	50	30	6,88	112 000	82 000	30	50	50	11	30	68	40 x 40 x 6	6,11	7,06	10,50	14,30
FV 112	125	30	43	16	22	32	55	72/87	11	7,5	61	70	60,2	40	6	50	30	6,88	112 000	82 000	40	50	65	11	30	68	40 x 40 x 6	5,85	6,61	9,39	12,40
FV 112	160	30	43	16	22	32	55	72/87	11	7,5	61	70	60,2	40	6	50	30	6,88	112 000	82 000	50	50	75	11	30	68	40 x 40 x 6	5,26	5,85	8,03	10,40
FV 112	200	30	43	16	22	32	55	72/87	11	7,5	61	70	60,2	40	6	50	30	6,88	112 000	82 000	65	50	90	11	30	68	40 x 40 x 6	5,00	5,47	7,30	9,13
FV 112	250	30	43	16	22	32	55	72/87	11	7,5	61	70	60,2	40	6	50	30	6,88	112 000	82 000	80	50	105	11	30	68	40 x 40 x 6	4,72	5,10	6,49	8,02
FV 140	100	35	48	18	26	36	60	—	12	9	66	79	65,3	45	6	60	37,5	8,64	140 000	105 000	30	50	55	11	45	80	50 x 50 x 7	7,38	8,69	13,30	—
FV 140	125	35	48	18	26	36	60	—	12	9	66	79	65,3	45	6	60	37,5	8,64	140 000	105 000	40	50	65	11	45	80	50 x 50 x 7	6,78	7,80	11,50	15,70
FV 140	160	35	48	18	26	36	60	—	12	9	66	79	65,3	45	6	60	37,5	8,64	140 000	105 000	50	50	75	11	45	80	50 x 50 x 7	6,56	7,36	10,20	13,50
FV 140	200	35	48	18	26	36	60	—	12	9	66	79	65,3	45	6	60	37,5	8,64	140 000	105 000	65	50	90	11	45	80	50 x 50 x 7	5,82	6,46	8,77	11,40
FV 140	250	35	48	18	26	36	60	—	12	9	66	79	65,3	45	6	60	37,5	8,64	140 000	105 000	80	50	105	11	45	80	50 x 50 x 7	5,48	5,99	7,85	9,96
FV 180	125	45	63	20	30	42	70	—	14	13	85,5	99	84,8	50	8	70	45	12,6	180 000	135 000	35	64	63	13	45	90	50 x 50 x 7	10,70	12,50	19,20	—
FV 180	160	45	63	20	30	42	70	100/120	14	13	85,5	99	84,8	50	8	70	45	12,6	180 000	135 000	50	64	80	13	45	90	50 x 50 x 7	9,72	11,20	16,30	22,20
FV 180	200	45	63	20	30	42	70	100/120	14	13	85,5	99	84,8	50	8	70	45	12,6	180 000	135 000	65	64	95	13	45	90	50 x 50 x 7	9,12	10,00	14,40	19,10
FV 180	250	45	63	20	30	42	70	100/120	14	13	85,5	99	84,8	50	8	70	45	12,6	18												

CONVEYOR CHAINS WITH SOLID PINS

ACCORDING TO DIN 8165

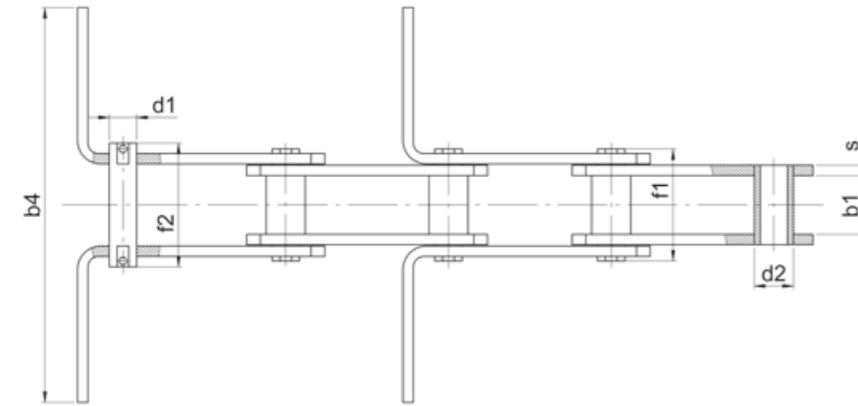
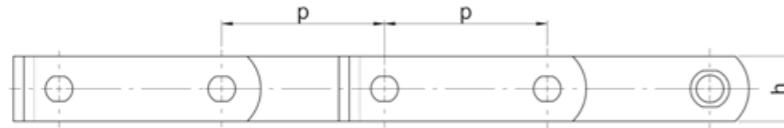


Type	p [mm]	b ₁ [mm] min.	b ₂ [mm] max.	d ₁ [mm]	d ₂ [mm] without	d ₃ [mm] Type A	d ₄ [mm] Type B	d ₄ / d ₅ [mm] Type C	d ₇ [mm] min.	e [mm]	f ₁ [mm]	f ₂ [mm]	f ₃ [mm]	h ₁ [mm]	s [mm]	h ₂ [mm]	h ₃ [mm]	Bearing area A [cm ²]	F _B [N] min.	F _{Bh} [N] min.	a ₁ [mm]	a ₂ [mm]	b ₃ [mm] max.	d ₆ [mm] max.	h ₄ [mm]	w [mm] max.	Angle profile [mm]	without [kg/m]	Type A [kg/m]	Type B [kg/m]	Type C [kg/m]
FV 315	160	65	87	30	42	60	90	—	20	18	117	130	113,3	70	10	90	55	26,1	315 000	240 000	—	85	50	13	60	124	70 x 70 x 9	20,04	24,51	35,67	—
FV 315	200	65	87	30	42	60	90	140/170	20	18	117	130	113,3	70	10	90	55	26,1	315 000	240 000	65	85	95	13	60	124	70 x 70 x 9	18,24	21,82	30,74	43,59
FV 315	250	65	87	30	42	60	90	140/170	20	18	117	130	113,3	70	10	90	55	26,1	315 000	240 000	80	85	110	13	60	124	70 x 70 x 9	16,79	19,65	26,79	37,07
FV 315	315	65	87	30	42	60	90	140/170	20	18	117	130	113,3	70	10	90	55	26,1	315 000	240 000	100	85	130	13	60	124	70 x 70 x 9	15,53	17,80	23,46	31,62
FV 315	400	65	87	30	42	60	90	140/170	20	18	117	130	113,3	70	10	90	55	26,1	315 000	240 000	100	85	130	13	60	124	70 x 70 x 9	14,56	16,35	20,81	27,23
FV 400	160	70	96	32	44	60	100	—	22	20	130	148	127,3	70	12	90	55	30,72	400 000	320 000	—	95	50	17	65	131	70 x 70 x 11	24,16	28,52	45,58	—
FV 400	200	70	96	32	44	60	100	150/185	22	20	130	148	127,3	70	12	90	55	30,72	400 000	320 000	60	95	100	17	65	131	70 x 70 x 11	21,91	25,40	39,05	56,11
FV 400	250	70	96	32	44	60	100	150/185	22	20	130	148	127,3	70	12	90	55	30,72	400 000	320 000	80	95	120	17	65	131	70 x 70 x 11	20,17	22,96	33,88	47,53
FV 400	315	70	96	32	44	60	100	150/185	22	20	130	148	127,3	70	12	90	55	30,72	400 000	320 000	100	95	140	17	65	131	70 x 70 x 11	18,73	20,95	29,61	40,44
FV 400	400	70	96	32	44	60	100	150/185	22	20	130	148	127,3	70	12	90	55	30,72	400 000	320 000	100	95	140	17	65	131	70 x 70 x 11	17,56	19,31	26,12	34,66
FV 500	160	80	106	36	50	70	110	—	26	21	140	160	138,3	80	12	100	60	38,16	500 000	400 000	—	100	50	17	70	146	80 x 80 x 12	30,04	37,18	58,90	—
FV 500	200	80	106	36	50	70	110	—	26	21	140	160	138,3	80	12	100	60	38,16	500 000	400 000	50	100	90	17	70	146	80 x 80 x 12	27,04	32,75	50,13	—
FV 500	250	80	106	36	50	70	110	160/195	26	21	140	160	138,3	80	12	100	60	38,16	500 000	400 000	80	100	120	17	70	146	80 x 80 x 12	24,65	29,22	43,12	55,48
FV 500	315	80	106	36	50	70	110	160/195	26	21	140	160	138,3	80	12	100	60	38,16	500 000	400 000	100	100	140	17	70	146	80 x 80 x 12	22,68	26,30	37,34	47,14
FV 500	400	80	106	36	50	70	110	160/195	26	21	140	160	138,3	80	12	100	60	38,16	500 000	400 000	100	100	140	17	70	146	80 x 80 x 12	21,06	23,91	32,60	40,33
FV 630	200	90	116	42	56	80	120	—	30	22	152	169	149,3	100	12	120	70	48,72	630 000	520 000	—	115	50	17	80	171	100 x 100 x 12	36,45	45,22	67,25	—
FV 630	250	90	116	42	56	80	120	170/210	30	22	152	169	149,3	100	12	120	70	48,72	630 000	520 000	70	115	110	17	80	171	100 x 100 x 12	32,93	39,95	57,57	76,20
FV 630	315	90	116	42	56	80	120	170/210	30	22	152	169	149,3	100	12	120	70	48,72	630 000	520 000	100	115	140	17	80	171	100 x 100 x 12	30,02	35,59	49,57	64,36
FV 630	400	90	116	42	56	80	120	170/210	30	22	152	169	149,3	100	12	120	70	48,72	630 000	520 000	100	115	140	17	80	171	100 x 100 x 12	27,65	32,04	43,05	54,69

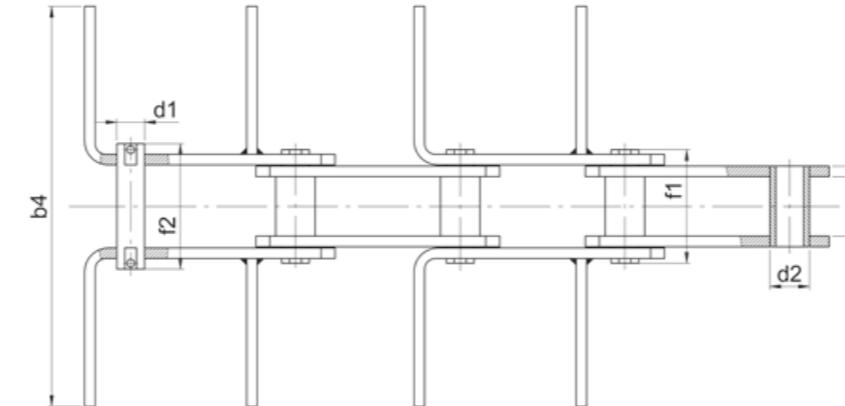
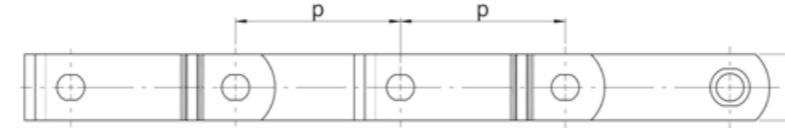
TROUGH CONVEYOR CHAINS
ACCORDING TO DIN 8165



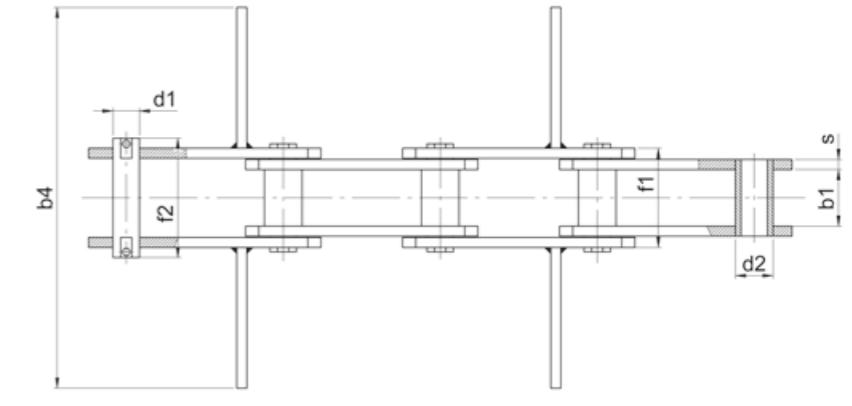
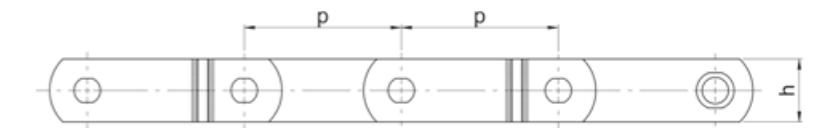
TYPE A



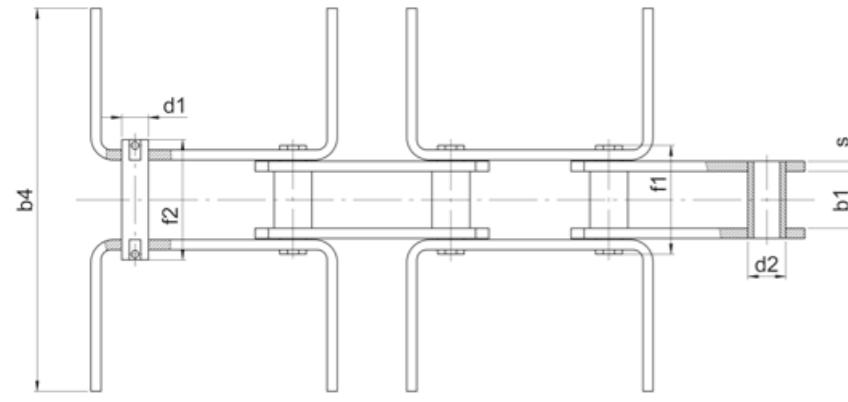
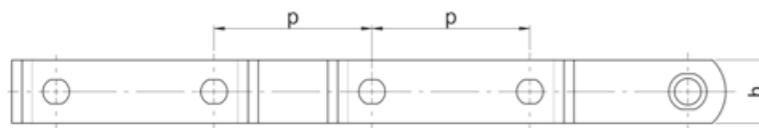
TYPE B



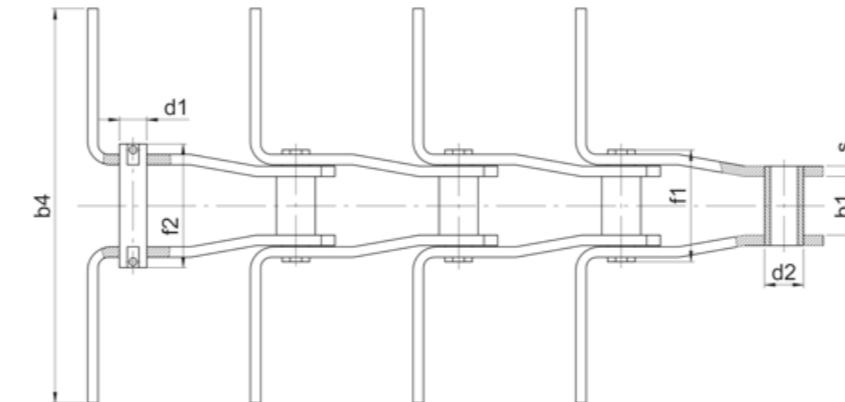
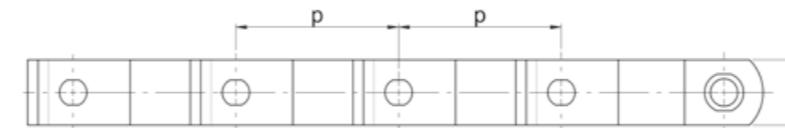
TYPE C



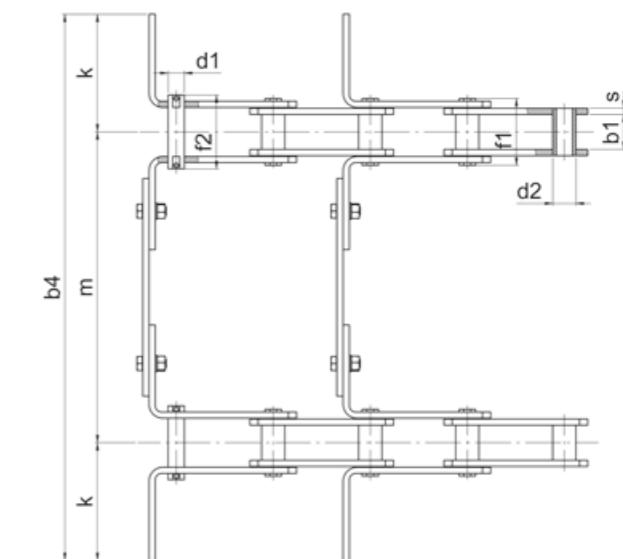
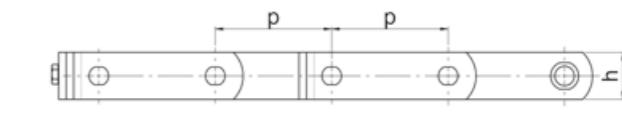
TYPE D



TYPE E



TYPE F



TROUGH CONVEYOR CHAINS

ACCORDING TO DIN 8165

Type	p [mm]	b ₁ [mm] min.	b ₂ [mm] max.	d ₁ [mm]	d ₂ [mm] without	d ₃ [mm] Type A	e [mm]	f ₁ [mm]	f ₂ [mm]	h [mm]	s [mm]	Bearing area A [cm ²]	F _B [N] min.
FV 40	40	18	25	10	15	20	4	36	43	26	3	2,5	40 000
FV 40	63	18	25	10	15	20	4	36	43	26	3	2,5	40 000
FV 40	100	18	25	10	15	20	4	36	43	26	3	2,5	40 000
FV 63	63	22	31	12	18	26	5	44	54	30	4	3,72	63 000
FV 63	100	22	31	12	18	26	5	44	54	30	4	3,72	63 000
FV 63	125	22	31	12	18	26	5	44	54	30	4	3,72	63 000
FV 63	160	22	31	12	18	26	5	44	54	30	4	3,72	63 000
FV 90	63	25	36	14	20	30	6,5	52	61	35	5	5,04	90 000
FV 90	100	25	36	14	20	30	6,5	52	61	35	5	5,04	90 000
FV 90	125	25	36	14	20	30	6,5	52	61	35	5	5,04	90 000
FV 90	160	25	36	14	20	30	6,5	52	61	35	5	5,04	90 000
FV 90	200	25	36	14	20	30	6,5	52	61	35	5	5,04	90 000
FV 90	250	25	36	14	20	30	6,5	52	61	35	5	5,04	90 000
FV 112	100	30	43	16	22	32	7,5	61	70	40	6	6,88	112 000
FV 112	125	30	43	16	22	32	7,5	61	70	40	6	6,88	112 000
FV 112	160	30	43	16	22	32	7,5	61	70	40	6	6,88	112 000
FV 112	200	30	43	16	22	32	7,5	61	70	40	6	6,88	112 000
FV 112	250	30	43	16	22	32	7,5	61	70	40	6	6,88	112 000
FV 140	100	35	48	18	26	36	9	66	79	45	6	8,64	140 000
FV 140	125	35	48	18	26	36	9	66	79	45	6	8,64	140 000
FV 140	160	35	48	18	26	36	9	66	79	45	6	8,64	140 000
FV 140	200	35	48	18	26	36	9	66	79	45	6	8,64	140 000
FV 140	250	35	48	18	26	36	9	66	79	45	6	8,64	140 000
FV 140	315	35	48	18	26	36	9	66	79	45	6	8,64	140 000
FV 180	125	45	63	20	30	42	13	85,5	99	50	8	12,6	180 000
FV 180	160	45	63	20	30	42	13	85,5	99	50	8	12,6	180 000
FV 180	200	45	63	20	30	42	13	85,5	99	50	8	12,6	180 000
FV 180	250	45	63	20	30	42	13	85,5	99	50	8	12,6	180 000
FV 180	315	45	63	20	30	42	13	85,5	99	50	8	12,6	180 000
FV 180	400	45	63	20	30	42	13	85,5	99	50	8	12,6	180 000

Type	p [mm]	b ₁ [mm] min.	b ₂ [mm] max.	d ₁ [mm]	d ₂ [mm] without	d ₃ [mm] Type A	e [mm]	f ₁ [mm]	f ₂ [mm]	h [mm]	s [mm]	Bearing area A [cm ²]	F _B [N] min.
FV 250	125	55	73	26	36	50	15	97,5	113	60	8	18,98	250 000
FV 250	160	55	73	26	36	50	15	97,5	113	60	8	18,98	250 000
FV 250	200	55	73	26	36	50	15	97,5	113	60	8	18,98	250 000
FV 250	250	55	73	26	36	50	15	97,5	113	60	8	18,98	250 000
FV 250	315	55	73	26	36	50	15	97,5	113	60	8	18,98	250 000
FV 250	400	55	73	26	36	50	15	97,5	113	60	8	18,98	250 000
FV 315	160	65	87	30	42	60	18	117	130	70	10	26,1	315 000
FV 315	200	65	87	30	42	60	18	117	130	70	10	26,1	315 000
FV 315	250	65	87	30	42	60	18	117	130	70	10	26,1	315 000
FV 315	315	65	87	30	42	60	18	117	130	70	10	26,1	315 000
FV 315	400	65	87	30	42	60	18	117	130	70	10	26,1	315 000
FV 400	160	70	96	32	44	60	20	130	148	70	12	30,72	400 000
FV 400	200	70	96	32	44	60	20	130	148	70	12	30,72	400 000
FV 400	250	70	96	32	44	60	20	130	148	70	12	30,72	400 000
FV 400	315	70	96	32	44	60	20	130	148	70	12	30,72	400 000
FV 400	400	70	96	32	44	60	20	130	148	70	12	30,72	400 000
FV 500	160	80	106	36	50	70	21	140	160	80	12	38,16	500 000
FV 500	200	80	106	36	50	70	21	140	160	80	12	38,16	500 000
FV 500	250	80	106	36	50	70	21	140	160	80	12	38,16	500 000
FV 500	315	80	106	36	50	70	21	140	160	80	12	38,16	500 000
FV 500	400	80	106	36	50	70	21	140	160	80	12	38,16	500 000
FV 630	200	90	116	42	56	80	22	152	169	100	12	48,72	630 000
FV 630	250	90	116	42	56	80	22	152	169	100	12	48,72	630 000
FV 630	315	90	116	42	56	80	22	152	169	100	12	48,72	630 000
FV 630	400	90	116	42	56	80	22	152	169	100	12	48,72	630 000
FV 630	500	90	116	42	56	80	22	152	169	100	12	48,72	630 000

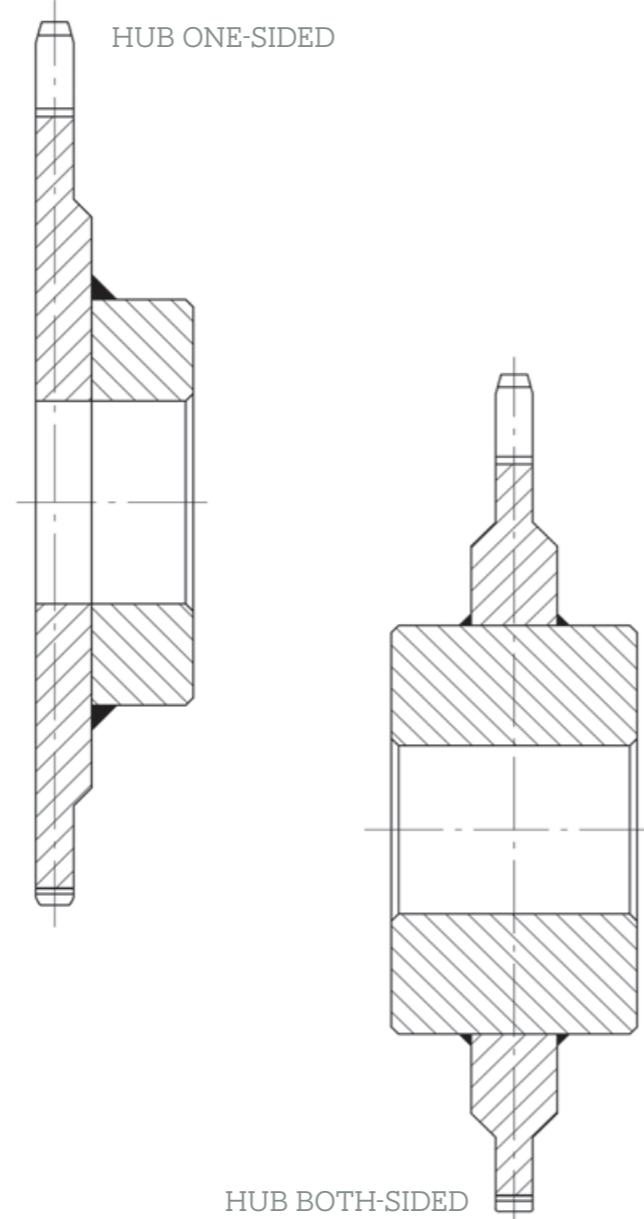
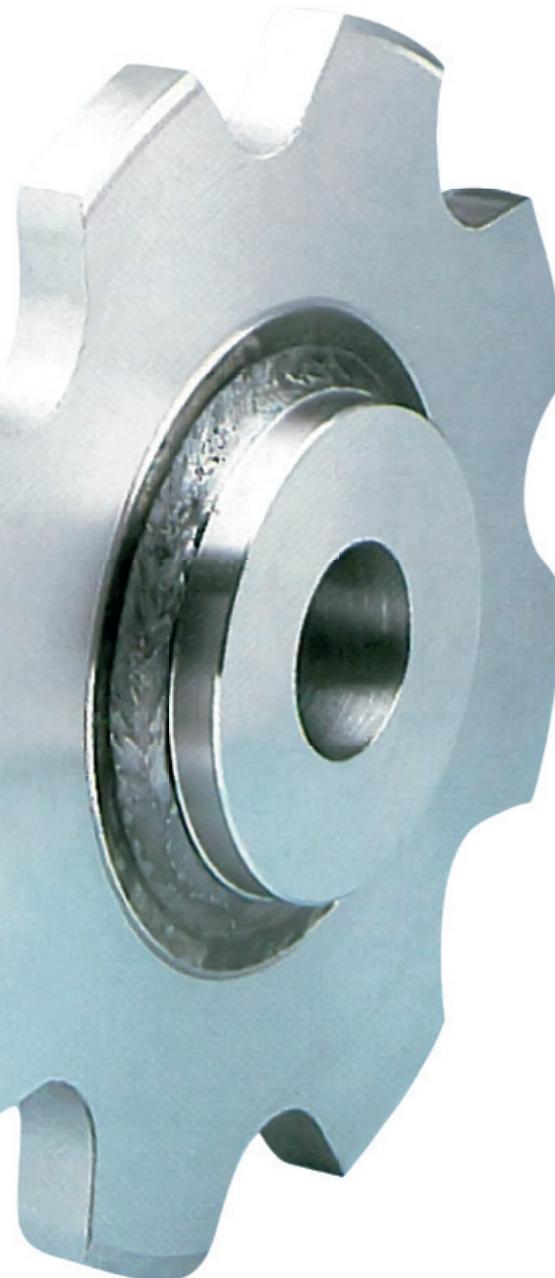
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CHAIN WHEELS FOR CONVEYOR CHAINS ACCORDING TO DIN 8165 AND DIN 8167

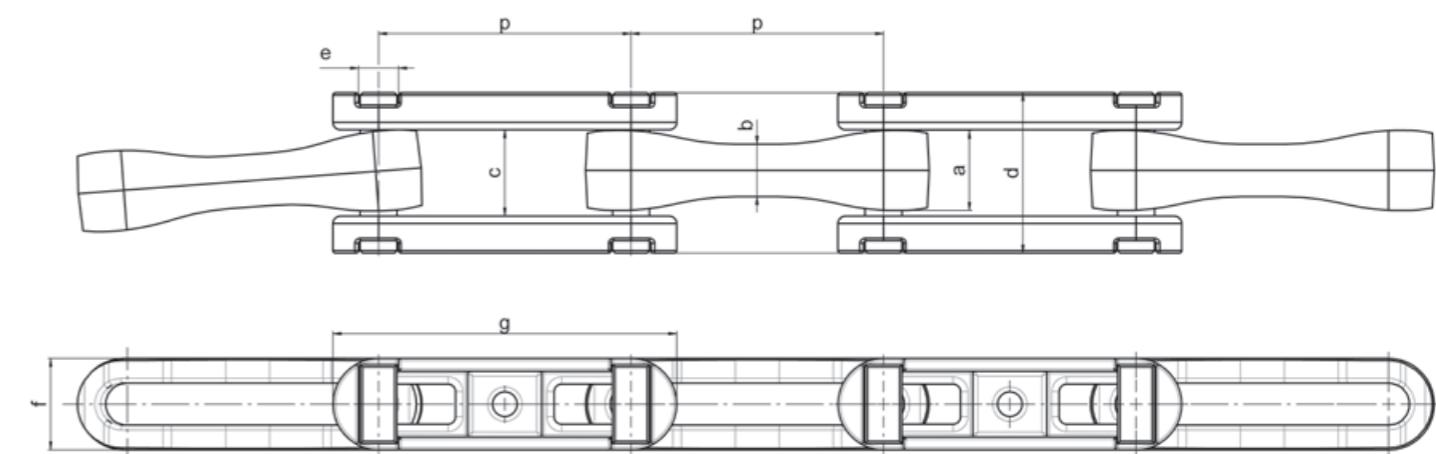
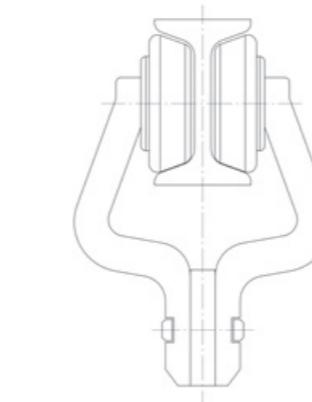
DROP FORGED RIVETLESS CHAINS



Additional to our conveyor chains according to DIN 8165 and DIN 8167 we also produce suitable chain wheels. Please feel free to contact us for an individual quotation.



TROLLEYS FOR
RIVETLESS CHAINS



Type	Pitch p [mm]	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	g [mm]	Breaking load min. [N]	Breaking load (practical) [N]	Weight [kg/m]	Hardening process Härdning and tempering
2"	51,10	12,00	9,50	12,60	27,70	6,60	18,50	69,00	27.000	28.000	1,20	Chain Link: 1000 - 1100 N/mm ²
3"	76,60	18,80	13,30	19,50	47,00	12,70	28,30	105,00	98.000	100.000	2,80	Pins: 1160 - 1300 N/mm ²
4"	102,40	25,40	16,50	26,20	58,00	16,20	37,00	138,00	187.000	220.000	4,70	
6"	153,20	32,50	21,30	33,90	80,00	22,30	52,00	208,00	320.000	385.000	9,00	



ROUND LINK CHAIN SYSTEMS FOR CONVEYORS

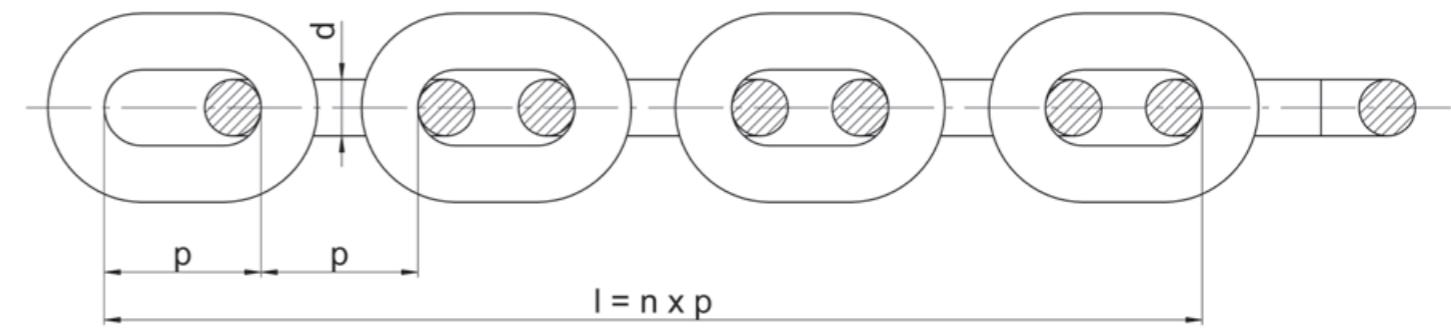
ROUND LINK CHAINS ACCORDING TO DIN 764, DIN 766 AND DIN 22252

Besides the already mentioned chain systems we offer a complete range of round link chains and mounting components, chain locks, connection links, buckets, fasteners etc. for horizontal, inclined- or vertical conveyors.

As an extension of our product range
we have included below an overview

of the most common sizes according to DIN 764, DIN 766 and DIN 22252.

We can deliver these chains true to gauge (e.g. for toothed rollers or grip discs) as well as not true to gauge. Any sizes not mentioned in the table or special grades, e.g. hardened design can also be offered. Further information upon request.



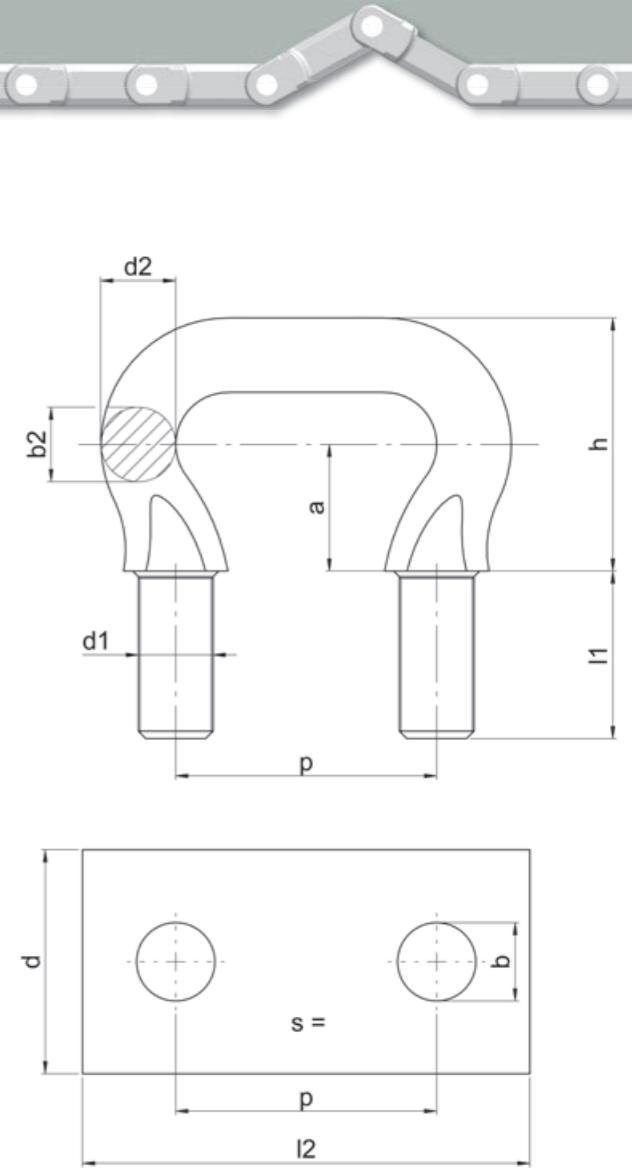
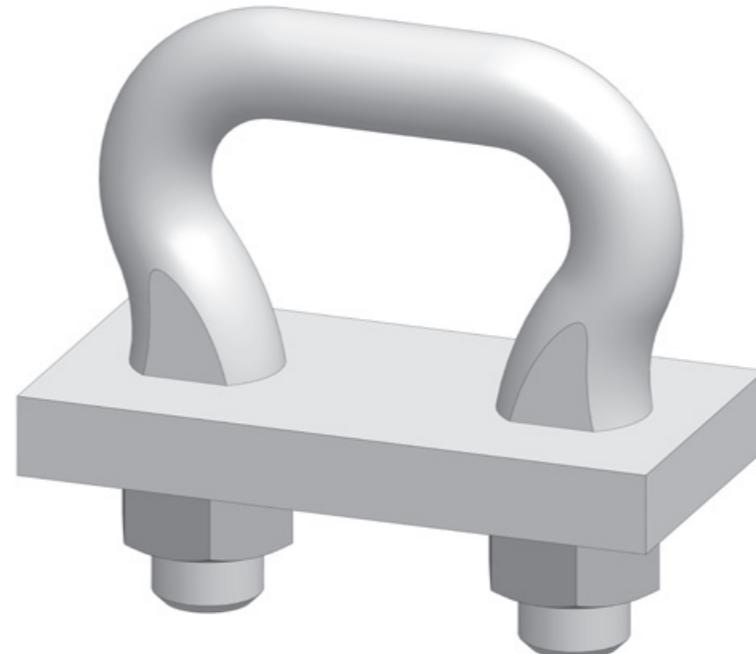
ROUND LINK CHAINS ACCORDING TO DIN 764, DIN 766 AND DIN 22252

CHAIN SHACKLES

ACCORDING TO DIN 745 AND DIN 5699

Additional to the round link chains mentioned earlier we are able to offer our customers chain shackles according to DIN 745 and DIN 5699. Our chain shackles are forged of material C 45 (material number 1.0503) by default and then high-tensile hardened and tempered.

Afterwards the inner curves of the shackles are inductive hardened. Additional to our standard dimensions listed below we will be pleased to offer you chain shackles in special designs (e.g. with conical collar) or in special qualities. Further information upon request.



CHAIN SHACKLES ACCORDING TO DIN 745 AND DIN 5699

DIN	Pitch p [mm]	b ₂ [mm]	d ₂ [mm]	d ₁ [mm]	h [mm]	a [mm]	l ₁ [mm]	l ₂ [mm]	d [mm]	s [mm]	b [mm]
5699	35	10	12	M10	43	23	25	65	30	5	10,5
745	45	11,5	14	M10	40	20	25	75	30	5	10,5
5699	45	13	15	M12	53	28	30	75	30	5	13
745	56	15	18	M12	50	25	32	95	40	6	13
5699	56	16	18	M14	64	34	35	95	40	6	15
745	63	18	21	M16	60	30	40	110	40	6	17
5699	63	18	21	M16	71	37	40	110	40	6	17
745	70	20	23	M20	68	34	45	120	50	6	21
5699	70	20	23	M20	80	42	45	120	50	6	21
745	80	23	26	M20	74	37	45	130	50	6	21
5699	80	23	26	M20	89	47	45	130	50	6	21

DIN	Pitch p [mm]	b ₂ [mm]	d ₂ [mm]	d ₁ [mm]	h [mm]	a [mm]	l ₁ [mm]	l ₂ [mm]	d [mm]	s [mm]	b [mm]
745	91	26	29	M24	86	43	55	150	60	8	25
5699	91	26	29	M24	99	52	55	150	60	8	25
745	105	30	34	M24	100	50	55	165	60	8	25
5699	105	30	34	M24	114	60	55	165	60	8	25
745	126	36	40	M30	118	59	70	200	70	10	31
5699	126	36	40	M30	134	71	65	200	70	10	31
5699	136	39	44	M36	146	76	75	220	80	12	37
745	147	42	46	M30	136	68	70	220	70	10	31
745	147	42	46	M36	136	68	85	230	80	12	37
5699	147	42	47	M36	157	81	75	230	80	12	37

FLIGHT ATTACHMENTS FOR ROUND LINK CHAINS

(FOR WELDING OR SCREW CONNECTION)

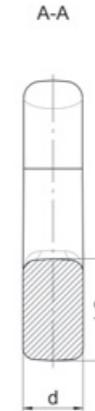
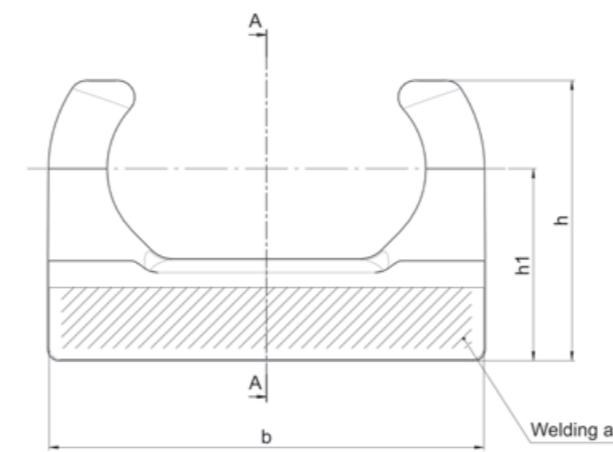
Flight Attachments are used to easily install scrapers to endless chain strands. They allow a variable arrangement of the scrapers in the chain strand and are also appropriate for reverse operation.

Even under the roughest conditions flight attachments achieve a very long service-life. The attachments are installed to the loose chain strand.

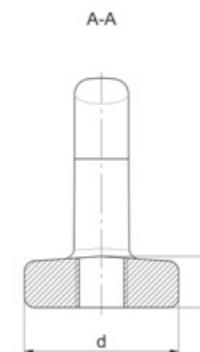
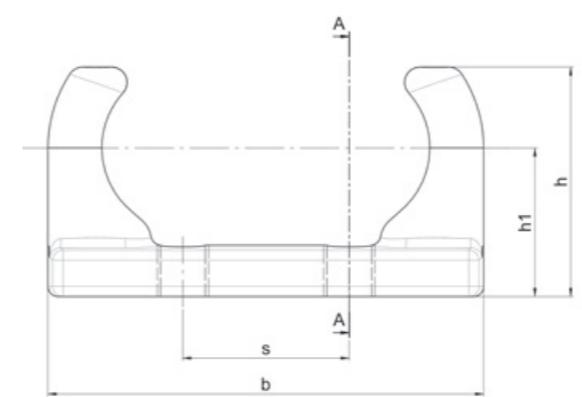
According to their design they secure themselves automatically as the chain is put under tension.

BRANSCHIED-ATTACHMENTS are high-tensile drop forged of material 16 Mn Cr 5 (material number 1.7131). They are available with forged plate at the head end and threaded holes for screwing to the scrapers or in weld-on design. Both versions are highly wear-resistant case hardened (except the welding area of the weld-on design).

FLIGHT ATTACHMENT TYPE BSM1



FLIGHT ATTACHMENT TYPE BSM2



FLIGHT ATTACHMENTS FOR ROUND LINK CHAINS (FOR WELDING OR SCREWING)

Suitable for chain d x p [mm]	Width b [mm]	Height h [mm]	h1 [mm]	Web width h2 [mm]	Thickness d [mm]	Gauge s [mm]	Thread	Screw-on	Weld-on
14 x 50	112	57	38	12	40	45	M12	Yes	No
14 x 50	110	73	50	25	16	-	-	No	Yes
16 x 64	145	76	48	15	50	52	M16	Yes	No
16 x 64	135	83	59	30	19	-	-	No	Yes
19 x 75	170	85	58	20	60	65	M20	Yes	No
19 x 75	156	100	69	36	21	-	-	No	Yes
22 x 86	195	100	68	20	70	71	M20	Yes	No

Suitable for chain d x p [mm]	Width b [mm]	Height h [mm]	h1 [mm]	Web width h2 [mm]	Thickness d [mm]	Gauge s [mm]	Thread	Screw-on	Weld-on
22 x 86	182	115	80	40	25	-	-	No	Yes
26 x 100	230	110	72	20	80	85	M20	Yes	No
26 x 100	214	135	92	45	30	-	-	No	Yes
30 x 120	270	130	85	25	90	98	M24	Yes	No
30 x 120	252	160	110	55	35	-	-	No	Yes
34 x 136	310	150	98	30	100	110	M27	Yes	No
34 x 136	282	177	122	60	38	-	-	No	Yes

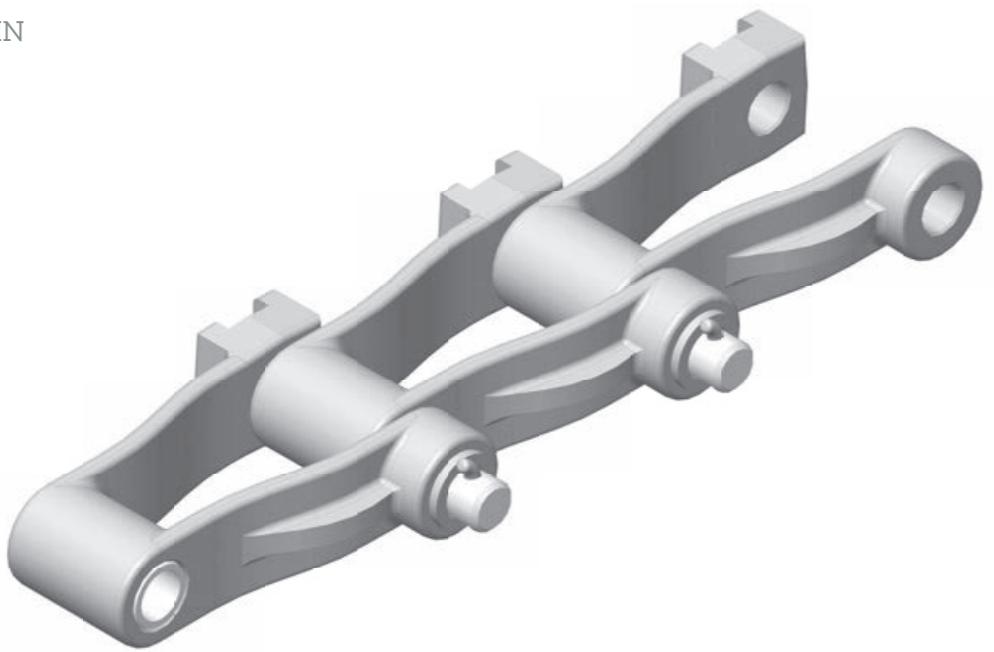


SPECIAL CHAINS

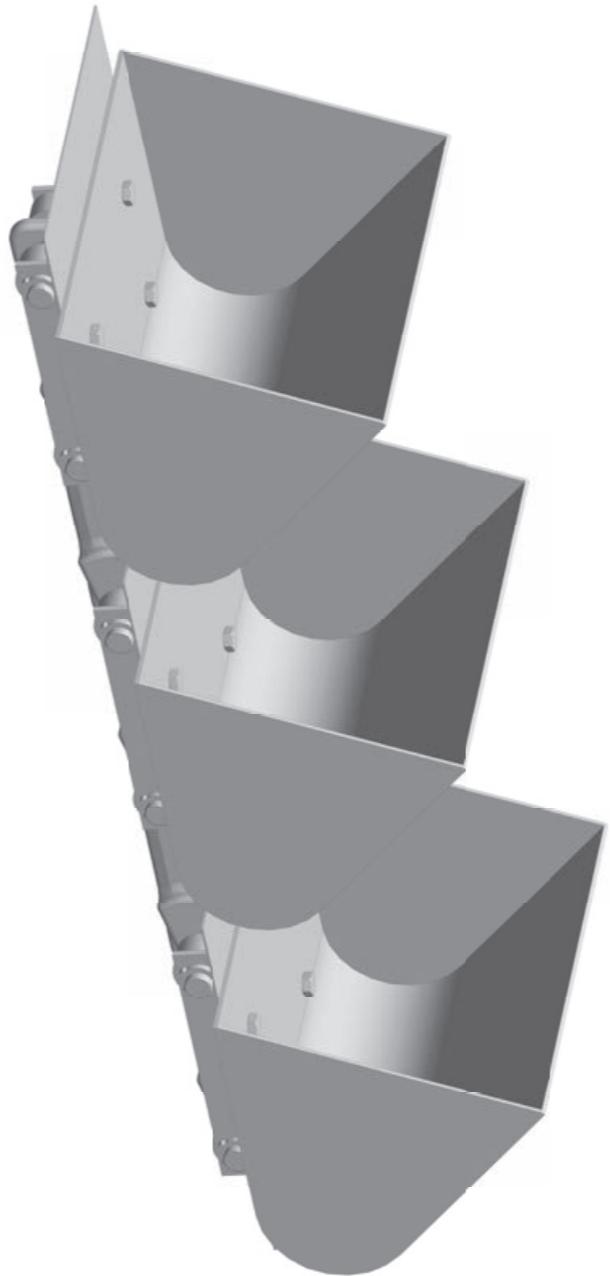
Over the past 75 years, we have expanded our production range continuously in order to best meet our customers requirements.

On the following pages are just a few examples of our specially manufactured chains. Please feel free to contact us for an individual quotation.

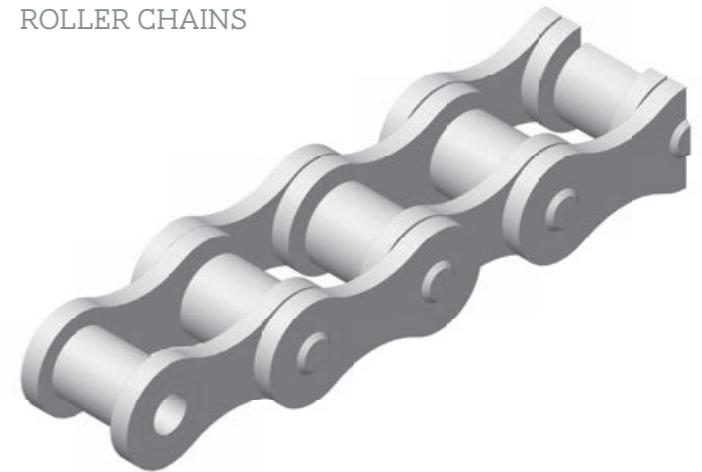
PINTLE CHAIN



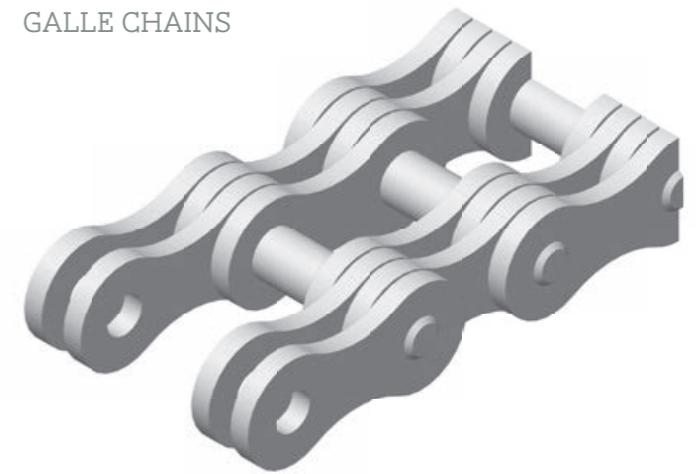
BUCKET CHAINS WITH BUCKETS



ROLLER CHAINS



GALLE CHAINS



SPECIAL ACCESSORIES

We are constantly expanding our broad delivery range with various types of special accessories and spare parts for conveyors.

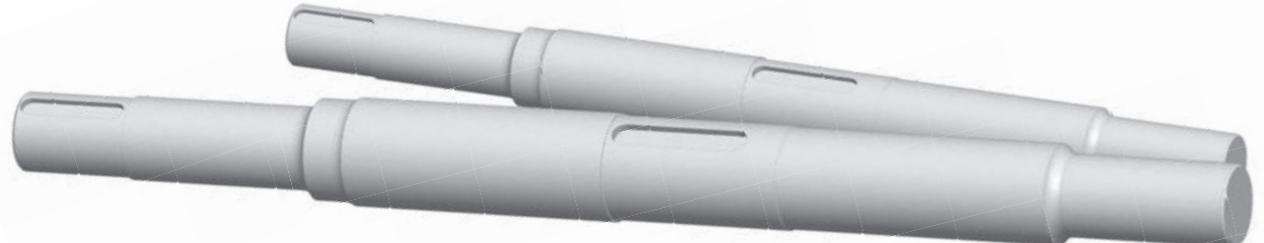
Here are some examples:

- ❖ Drive and return chain
- ❖ sprocket shafts
- ❖ Beater bars for coal mills etc.
- ❖ Hammers for Silos e.g. for the cement industry or power plants
- ❖ Chain strippers and cleaning devices
- ❖ Buckets for bucket elevators in various sizes, designs and material qualities
- ❖ Pleated membranes for shaft / trough sealing
- ❖ Scraper rakes and teeth

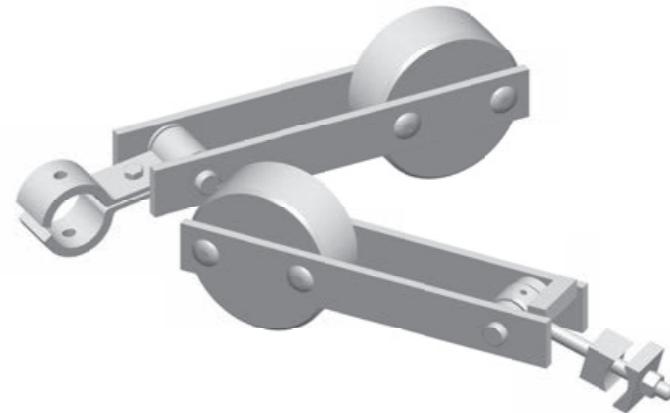
SCRAPER TEETH



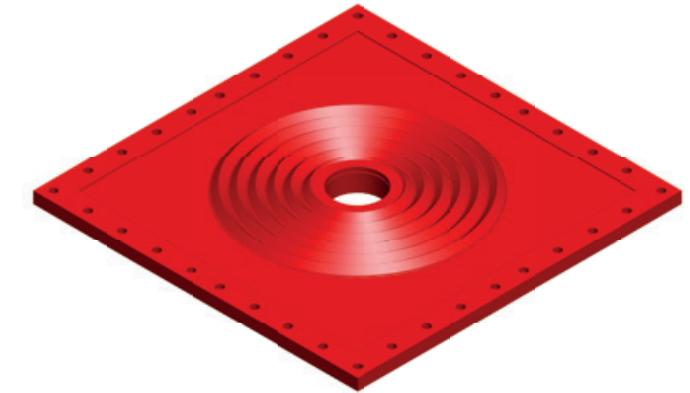
DRIVE AND RETURN CHAINS
SPROCKET SHAFTS



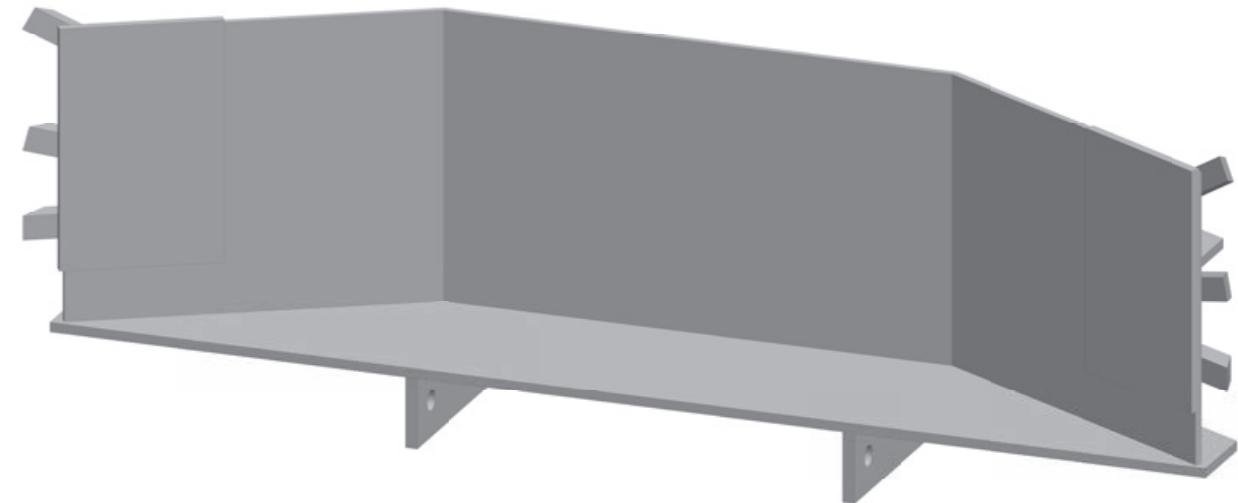
HAMMERS



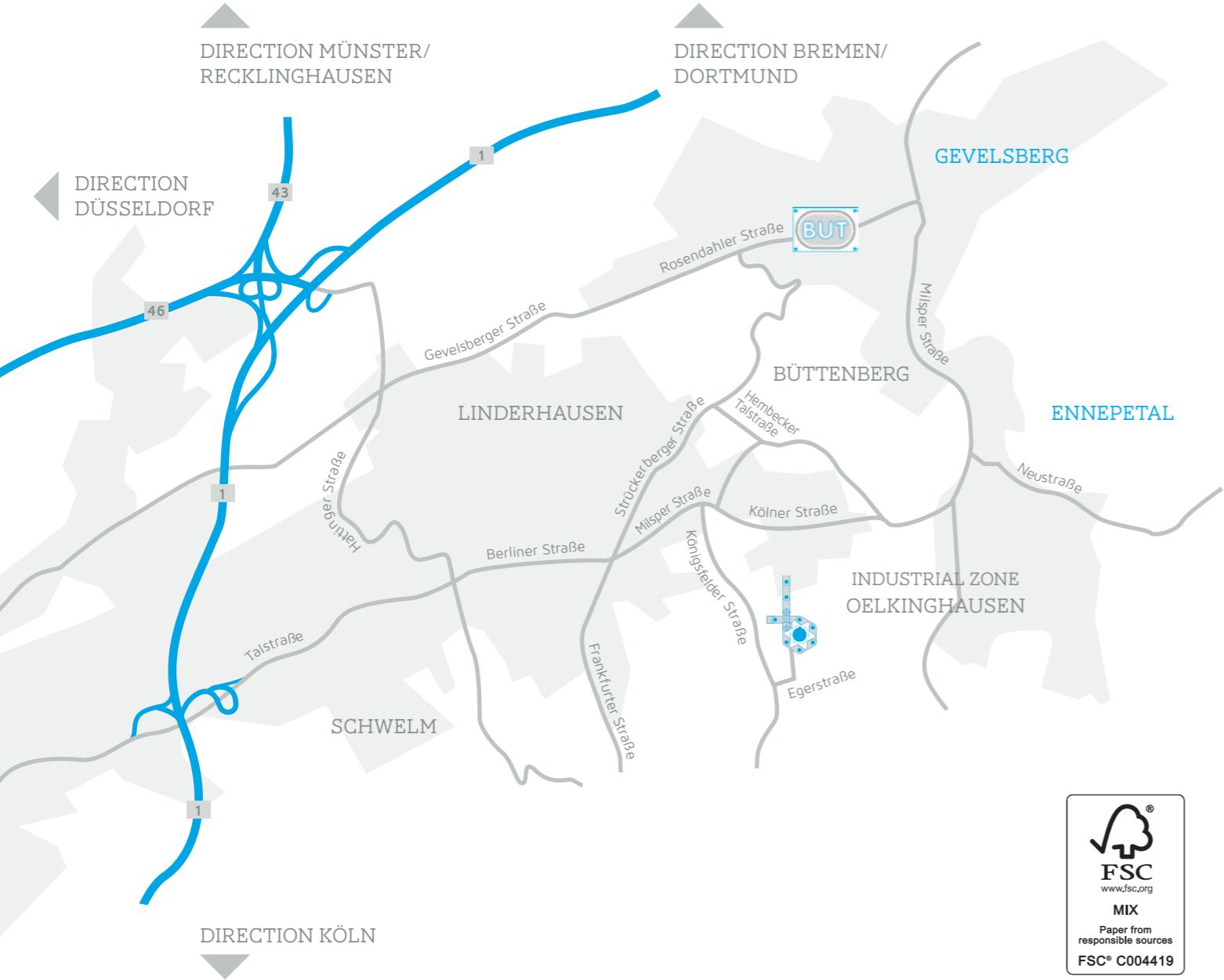
PLEATED MEMBRANES



SCRAPER RAKES



CONTACT AND DIRECTIONS



Did we arouse your interest and you would like to experience the BRANSCHEID quality concept by yourself? As part of our ongoing "Customer Relations Programme" we like to offer each of our customers the unique opportunity to become acquainted with the complete production process of our products.

During an informative and personal tour of our company, experienced staff will be at your disposal to answer any questions concerning our quality-orientated production process and our state-of-the-art machinery. You are welcome to experience "German quality from a single source" from the forging blank to the ready assembled chain. The whole team is looking forward to your visit.

KETTEN BRANSCHEID GMBH UND BRANSCHEID UMFORMTECHNIK GMBH & CO. KG



Ketten BRANSCHEID GmbH
Egerstraße 6
58256 Ennepetal (Germany)
Phone: +49 (0)2333 / 98 58 - 0
Fax: +49 (0)2333 / 98 58 - 20
E-Mail: ketten@branscheid.com
Internet: www.kettenbranscheid.com



BRANSCHEID Umformtechnik GmbH & Co. KG
Rosendahler Straße 34-36
58285 Gevelsberg (Germany)
Phone: +49 (0)2332 / 55 30 89 - 0
Fax: +49 (0)2332 / 55 30 89 - 40
E-Mail: info@branscheid-umformtechnik.com
Internet: www.branscheid-umformtechnik.com

Flexible solutions from **BRANSCHIED**
allow the use of our conveyor chains
in all kinds of industry.

These are for example:

- ⊕ STEEL MILLS
- ⊕ ALL KINDS OF BULK HANDLING



