

# CATALOGUE



*Principal Products*

# *Product* GROUP



**TRANSMISSION CHAINS**

**TRANSMISSION CHAINS  
ADAPTED FOR CONVEYING**



**LEAF CHAINS**

**CHAINS  
FOR AGRICULTURAL  
APPLICATIONS**



**CONVEYOR CHAINS**

**WHEELS AND SPROCKETS**



# HISTORY

1890

1900

1940

1960

1970

1980

1990

2000

2010

**1895** : PEUGEOT started manufacture of chains in Saint Siméon de Bressieux (Isère)

**1904** : DARBILLY Chain (Seine)

**1920** : VERJOUX Production plant in Verrières de Joux (Doubs)

**1946** : Creation of the mechanical transmissions Company SEine Doubs ISere (Peugeot group), hence SEDIS

**1972** : Creation of the UK branch SEDIS Co Limited

**1993** : Acquisition of ERGE (founded in 1937)

**1994** : Acquisition of SEBIN (founded in 1866)

**2002** : Creation of S2CI (Société de Commercialisation de Composants Industriels)

**2010** : Became a part of the MURUGAPPA Group

**2013** : Opening of SEDIS SERVICE (installation, maintenance and rehabilitation of conveyors on sites)

**2014** : Creation of the Italian branch SEDIS SERVICE CENTER

**2016** : Creation of SEDIS GmbH in Germany  
Opening of a SEDIS SERVICE CENTER in Birmingham, UK

## A DYNAMIC INTERNATIONAL FRENCH COMPANY



**2** FACTORIES  
IN FRANCE

**3** BRANCHES  
IN EUROPE

MORE THAN  
**100**  
DISTRIBUTORS

IN  
**48** COUNTRIES

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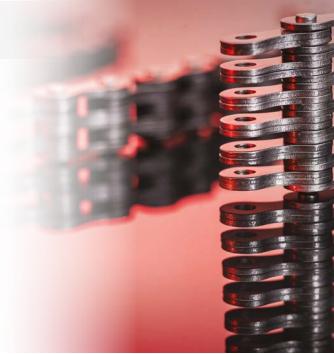
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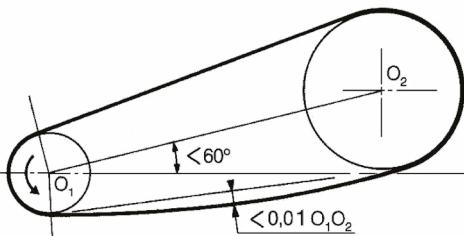
## PRACTICAL ADVICE

The reliability and longevity of a chain, whatever its application, depends not only on its own qualities and characteristics, but also on the care given to the design of the installation as a whole, as well as to its construction, lubrication and maintenance.

### GENERAL DESIGN OF THE INSTALLATION

#### 1 – TRANSMISSION

The centerline of the sprockets  $O_1O_2$  should be horizontal or have a small inclination to the horizontal,



Where the angle of inclination exceeds  $60^\circ$ , and where a vertical drive cannot be avoided, precautions must be taken to ensure proper chain-to-sprocket gearing on the power sprocket,

- The tensioned strand of the chain should preferably be on the top,
- The number of sprocket teeth should be selected from the standard range whenever possible. The normal transmission ratio must not exceed  $1/8$ . Allow for two chain drives in series for higher ratios. It is preferable if the number of sprocket teeth and the number of links are prime numbers,
- Provide shaft center adjustment to ensure that the slack section of the chain is around 1% of the drive centers, provide a further 3% adjustment to compensate for chain wear.
- Tension: initially, the chain will not require any tensioning. But, in certain applications: reciprocation drive direction, frequent stop/start operations... it is necessary to have a tensioning force on the slack strand that does not exceed 10% of the driving force on the tight strand. This can be automatically adjusted or periodically regulated manually. When either the motor torque or the driven machine loading are irregular, in addition to providing a tensioning device on the slack strand, it may be necessary to mount a guiding device on the tight strand to control vibration.

In general, it is preferable, despite introducing correcting coefficients into your calculations, to adhere to the basic principles already outlined. These include: drive shaft centers, neither too short nor too long ; a drive ratio of about  $3/1$  ; a drive sprocket having about 25 teeth ; and ideally simplex chain, but if multiplex, with a minimum multiplicity.

#### 2 – LIFTING WITH LEAF CHAINS

- In case where two or more chains work in parallel, the forces should be well distributed between them, generally by using adjustable fixing clevises to compensate for the dispersion of chain length and the other tolerances in the installation.
- All the fixing devices (clevises, pins, compensator, etc.) must have a strength at least equal to that of the chain.
- It is preferable that the linear speed of the chain is less than  $0,5 \text{ m/s}$ .
- The dimensions of the reversing rollers should satisfy the standard ISO 4347 giving some precise details such as: the diameter of the minimum support  $D_f > 5 p$ .

European regulations do however make it possible to reduce the diameter to 3 times the pitch, but by risking quicker wear of the chain and the roller/wheel. Under these conditions, the definition of the installation is the responsibility of the machine manufacturer.

- The hardness of the roller/wheel should be able to resist wear caused by pivoting under the load of the chain plates at the moment of its arrival on the roller and when it leaves. As a guide, the hardness should be somewhere between 300 et 400 HB.

Using roller chains in lifting, please consult us. It is to be noted however, that in the majority of cases multiplex chains should be planned for.

### 3 – CONVEYING

- Number of teeth per wheel: conveyor chains generally have a pitch large enough to enable accessories to be fitted to the plates, hence the designer will want to reduce the number of teeth on the wheel in order to limit its dimensions. The polygonal effect becomes noticeable when the wheel contains 12 teeth or less, or perhaps more when the rotation speed is significantly high. For particular cases consult us.
- Adjustment of shaft center: The shaft center should be adjustable in order to make chain assembly simpler, to adjust the slack on a section of chain, and its tension, and finally so as to be able to keep up with the normal lengthening of the chain over the duration of its life time. A screwed tensioning device is usually used but automatic systems can equally be employed.



#### Warning !

**the chain must not be stretched; an excess of tension will lead to accelerate wear of the chain and eventually of the bearing surface. The tensile force should not exceed 1% of the ultimate tensile strength of the chain.**

- Strand supports and guides: the tensioned strand which generally carries the load is supported by a guiding surface while sliding or rolling. Flanged rollers should be used when the shaft center distance is large or when there is a transversal force.

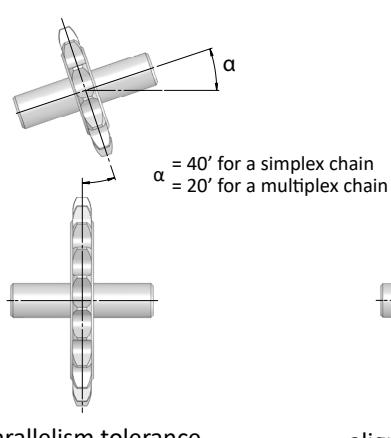
• The catenary strand can be supported by sliding because it sees less load. The only case where no support is needed is when the pitch circle diameter is small, because then the catenary force becomes prohibitive for the large pitch diameter. In any case, the slack should not exceed 0,4% of the shaft center. This condition can result in a tension force that is too great, if the chain strand is not supported.

- Engagement of the two chain strands on the wheels should be carried out with extreme care: the rail guide should be perfectly aligned with the teeth and should be rounded off at the end of the guide in order to facilitate chain entry.

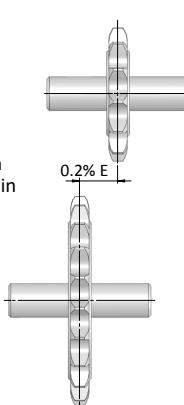
## DRIVE ACCURACY

### 1 – TRANSMISSION

- Defects in shaft parallelism should be less than 40' for a simplex chain and 20' for a multiple row chain.
- Defects in alignment must be less than 0,2% out of line of the shaft centers. This limit falls to 0,1% for rapid transmissions. If it is impossible to avoid transverse shaft movement, the sprockets must be aligned in a median position.



parallelism tolerance



alignment tolerance

Sprocket alignment is especially important for multiple strand chains, because of their reduced transverse flexibility.

The consequences of geometry defects are:

- A noisy and vibrating transmission,
- A side wearing of the sprocket teeth and/or the chain inner plates,
- Stresses which may lead to the complete destruction of the chain,
- Improper distribution of the forces on the chain plates when resistance and particularly fatigue limit can be considerably reduced.
- Sprocket teeth concentricity and runout tolerances lies within limits laid down by the standard ISO 606 and should not be altered by assembly (for example when keying a sprocket to a shaft).
- The rigidity of assembly should be such that sprockets alignment and shaft parallelism are not affected by driving forces of the chain when operating.

# PRACTICAL ADVICE

## 2 – LIFTING

- Defects in the alignment and parallelism of fixings and counter motion apparatus should be reduced as much as possible.

## 3 – CONVEYING

- **Defects in wheel alignment** (with  $b_1$  : inner width of the inner link of the chain) :
  $b_1 \div 2$  for lengths below 10 meters      and       $b_1$  for lengths above 10 meters
- **Defects in the parallelism of tooth plane:** The wheels must be parallel ( $< 40'$ ).
- When two chains are working in parallel and are joined together with cross bars or with accessories, the chains should be ordered **MATCHED**.

# LUBRICATION

## 1 – THE ROLE OF LUBRICATION

- To introduce lubricating fluid between contacting surfaces (pin/bush, pin/plate, bush/roller, inner linkplate/outer linkplate, etc.) to reduce wear and to avoid joint seizure.
- To protect the chain against corrosion.
- To reduce noise by introducing the lubricant between surfaces subject to shock loading.
- To transfer heat, generally by contacting moving components.

## 2 – FACTORY LUBRICATION LUB+ ALLOWS:

The chain to be protected against corrosion until it is installed by the user, provided it is not exposed to the elements. Pre-lubrication remains effective six months for chains stored under shelter. It should be complemented with lubrication by the user's maintenance department as soon as the drive is started up. Note pre-lubrication is compatible with all mineral oils. We are able to propose suited lubrications depending on your specific constraints.

## 3 – LUBRICATION METHOD

This should be chosen according to the criteria and characteristics of the installation, depending on its use. There are 4 main ways of applying lubrication:

- 1- manual lubrication (by brush or oil can),
- 2- continuous drip feed lubrication,
- 3- chain passing through an oil tank,
- 4- pressure lubrication by spraying (with filtering and oil cooling if necessary).

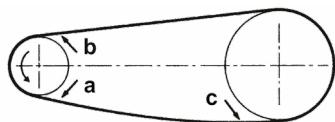
In power transmission, any of these four methods can be used, although the choice depends on the type and speed of the chain. When lifting or conveying, manual or continuous drip lubrication is usually employed, although automatic brushes can equally be used.



## 4 – FREQUENCY OF LUBRICATION

Quantity of lubricant and frequency of lubrication should be established with care and according to the specifications of lubricant and lubrication devices manufacturers.

## 5 – WHERE LUBRICATING ?



a and c : recommended areas

- **Longitudinally**, in an area where the chain load is low in order to help the lubricant penetration,
- **Transversally**, between the plates to feed the lubricant towards the joints and between the inner plates, the rollers and the wheels.

## 6 – SUITABLE LUBRICANTS ACCORDING TO OPERATING CONDITIONS

In general a good quality clean mineral oil, free from detergent is suitable. Its viscosity must suit the ambient temperature shown in the table hereafter.

Temperature (°C)	Recommended viscosity: ISO VG (Cst)
-15 < T < 0	15 to 32
0 < T < 50	46 to 150
50 < T < 80	220 to 320

The operator must achieve a compromise between a low viscosity lubricant which would centrifuge off the chain without properly lubricating it, and a substance with too high viscosity, which would prevent the lubricant reaching contacting surfaces.

**For special cases, and in particular where lubrication is impossible, please contact us.**

**Unless recommended by us, the use of grease is completely prohibited.**

## PRODUCT IMPLEMENTATION – SAFETY

### 1 – STORAGE, HANDLING

The storage of products before their assembly onto the installation should be such that their initial quality is retained. In particular, the following rules must be obeyed:

- Keep products away from a damp, corrosive or dusty atmosphere or where they may come into contact with harmful chemicals,
- Protect against mechanical damages or accidents,
- Do not exceed the stipulated storage period suitable with the original factory lubrication (read 3.2)

The product should be handled with care, and operators should be advised on how to avoid its deterioration. In particular, shocks and forces applied perpendicular to the linkplates can cause kinks in the chain.

### 2 – ASSEMBLY

Before using the chain, it must be ensured that the quality of the installation conforms to advice given here above (read 1 – general design of the installation). When all the checks have been made, adjust chain length.

When assembling, the following safety rules should be obeyed:

- Wear safety glasses, safety gloves and safety shoes.
- Remove motor fuses, clamp motor starters of I.C. engines etc., to ensure no accidental premature start up.
- Use suitable, good quality tools.

In addition, the following applies to all chain drive installations:

- Take care when unrolling the chain, not to twist it.
- Chain must be properly handled to protect the chain itself or some of its components from damage.
- Transverse forces during assembly must be controlled by guides to avoid deforming the chain.
- Place the connecting link on the slack strand and take notice to fit it the right way.
- Do not fit new links into a worn chain or a new chain onto worn sprockets.
- When a link is damaged, replace it completely, and not just the damaged part. Change any link which may have been accidentally heated by a blow lamp or torch near the chain.

# PRACTICAL ADVICE

## 3 – OPERATION

### Before starting-up, check:

- the connecting link assembly, the fitting of spring clips with the closed end pointing in the direction of chain travel, that nuts are properly tightened and that there are no tight joints.
- the absence of nuts, tools and spanners on the chain or trapped in the installation.

### Upon starting-up:

- start off slowly and gradually, keeping a close watch during the first revolution or first cycle of the process,
- run the drive under a light load or none at all for a while,
- check the complete drive after a few hours or days of use,
- check that the forces on the chain are like those in the calculation used for the chain selection,
- The state and position of the lubricant nozzles should be checked. The color and degree of lubricant contamination enables the efficiency of the lubricant to be measured, and also whether it is sufficient and when it should be renewed. If this is the case, apply once again or empty the installation using a lubricant of the same quality or superior quality. First it is necessary to get rid of the lubricant and clean the chain in order to get rid of deposits of dirty oil which could prevent the lubricant from penetrating the contacting surfaces (between the plates).

## MAINTENANCE

In a well assembled construction that is correctly lubricated, maintenance is restricted to ensuring that the whole assembly and lubrication methods remain satisfactory.

### Periodic check:

- The installation geometry, and particularly the sprocket alignment and tooth wear,
- The state of the chain, particularly to detect traces of rubbing indicating a geometrical failure or accidental structural contact and to assess the amount of wear:
  - wear of the chain articulations is measured directly by its length (using a measuring instrument or a control ruler), either by appreciation or measurement of its slack or moving the tensioning device,
  - wear of the linkplates of leaf chains,
  - wear of the rollers and wheels.
- If necessary, find out the cause of wear and rectify it. If it is necessary to change a sprocket or a chain due to excessive wear (more than 2% for the length of a chain, or more than 5% for the height of the plate), then it is better to change both the chain and sprocket or rollers at the same time.



### Warning !

**Given the high resistance of its components, the chain is susceptible to being weakened by hydrogen. Oxidising and corrosive environments must therefore be avoided.**

**An acidic environment is also to be avoided at all costs. The most stringent precautions should be taken when removing grease from the chain.**

**All superficial treatments to the chain, and in particular electrolytic treatents, are to be avoided.**

**For these types of environments, consult us for an eventual solution.**

## CHAIN LENGTH ADJUSTMENT - SHORTENING

If the installation does not involve adjusting the shaft center of the slack section, chain adjustment should be carried out either at the beginning, or after normal wear has occurred. Leaf chains and conveyor chains do not contain offset link.

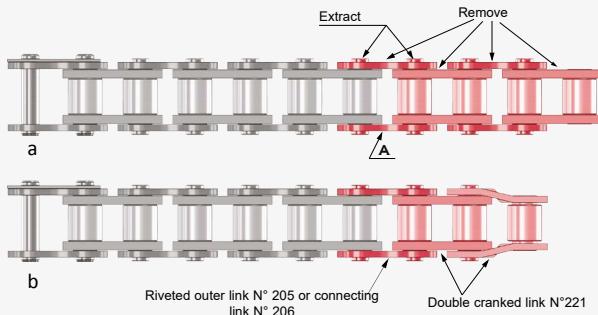
Read directly «chains with an even number of pitches».

### Chains with an even number of pitches

#### **SHORTENING BY ONE PITCH**

- **Chain up to and including 25,4 mm pitch.**

first remove four pitches of chain from one end, that is two inners and twoouters by extracting outer link A (Fig.a). Then fit a double offset link N°221, a spring clip connecting link N° 206 or a riveting outer link N°205 (Fig.b).



- **Chain with a pitch of 31,75 mm or above.**

first remove two pitches of chain from one end, that is one inner and one outer link by extracting the outer link A (Fig.c). Then fit a single offset link (Fig.d).



#### **SHORTENING BY TWO PITCHES**

Remove two pitches from one end, that is an inner and outer link by extracting the outer link A.



### Chains with an odd number of pitches

#### **SHORTENING BY ONE PITCH**

- **Chain of pitch up to and including 25,4mm:**

The chain ends with an offset link. Remove the cranked link.



- **Chain with pitch of 31,75mm or above:**

The chain ends with a single offset link which also serves as a connecting link. Extract the the outer link A and replace it with a connecting link N° 209 to reassemble the chain.



#### **SHORTENING BY TWO PITCHES**

- **For all chains.**

Extract one inner link removing the outer link at the opposite end of the offset link.

**NOTE:** Leaf chains and conveyor chains don't have any crank links, as a consequence they are only concerned by the shortening of 2 pitches.



# SEDIS RANGES



## DELTA® HR

FOR SEVERE WORKING CONDITIONS  
(ABRASION, SHOCKS, JERKS)

BS & ASA chains with high resistance to abrasion and wear:

### TECHNICAL SPECIFICATIONS:

- DELTA® articulations
- Shot peened plates
- Preformed bi-conic bushes
- Solid rollers
- Chains pre-tensioned at 30-45% of the breaking load
- New generation pre-lubrication with technical wax from 12.7mm to 25.4mm pitch (08B to 16B)
- Other chains are pre-lubricated with initial plant lubrication



### SERVICES:

- **Technical assistance** (analysis of the customer's specifications, definition and recommendation)
- **Adaptations** (attachments, extended pins...) and development of **specific products** on request
- **Matched pairs** on request for chains working in parallel
- Lubrication with **food wax** on request
- Cut and manufacture of **chains of any length**
- Many references **available in stock**

## DELTA® TITANIUM 2

RESISTANCE IN CORROSIVE ENVIRONMENTS

BS & ASA chains with high resistance to abrasion, wear and corrosion:

### TECHNICAL SPECIFICATIONS:

- DELTA® Articulations
- Shot peened plates and coated with a GEOMET® treatment
- Solid rollers coated with a GEOMET® treatment
- Chains pre-tensioned at 30-45% of the breaking load
- New generation pre-lubrication with technical wax from 12.7mm to 25.4mm pitch (08B to 16B)
- Other chains are pre-lubricated with initial plant lubrication



### SERVICES:

- **Technical assistance** (analysis of the customer's specifications, definition and recommendation)
- **Adaptations** (attachments, extended pins...) and development of **specific products** on request
- **Matched pairs** on request for chains working in parallel
- Lubrication with **food wax** on request
- Cut and manufacture of **chains of any length**
- Many references **available in stock**

## CHAINES VERTES

(«Green» chains) A MAINTENANCE-FREE RANGE

### TECHNICAL SPECIFICATIONS:

#### LUB FREE VERTE chains:

Anticorrosion BS chains from 12.7mm to 25.4mm pitch with sintered bushes:

- Pins with hard surface treatment
- Nickel plated plates and solid rollers
- Sintered bushes
- Dry, non-abrasive ambience
- Sprocket with treated and lubricated teeth



### SERVICES:

- **Technical assistance** (analysis of the customer's specifications, definition and recommendation)
- **Adaptations** (attachments, extended pins...) and development of **specific products** on request
- **Matched pairs** on request for chains working in parallel
- Cut and manufacture of **chains of any length**
- Many references **available in stock**

#### DELTA® VERTE® chains:

BS anticorrosion chains with composite bushes of 12.7mm pitch, and from 31.75mm to 25.4mm pitch

- DELTA® Articulations
- Shot peened and GEOMET® treated plates
- GEOMET® treated solid steel rollers (or in composite on demand)
- Composite bushes admitting functioning in water or humid environments
- Sprocket with treated and lubricated teeth



## ALPHA Premium

A HIGH QUALITY CHAIN WITH PROVEN RESULTS

High Quality BS and ASA chains :

### TECHNICAL SPECIFICATIONS:

- Case hardened articulations
- Shot peened plates
- BS chains: Preformed bi-conic bushes
- ASA chains : Solid bushes
- Solid rollers
- Chains pre-tensioned at 30-45% of the breaking load
- New generation pre-lubrication with technical wax from 12.7mm to 25.4mm pitch (08B to 16B)
- Other chains are pre-lubricated with initial plant lubrication



### SERVICES:

- **Technical assistance** (analysis of the customer's specifications, definition and recommendation)
- **Adaptations** (attachments, extended pins...) and development of **specific products** on request
- **Matched pairs** on request for chains working in parallel
- Lubrication with **food wax** on request
- Cut and manufacture of **chains of any length**
- Many references **available in stock**

## ALPHA Premium STAINLESS STEEL

AN IMPROVED RANGE FOR BETTER WEAR RESISTANCE AND HIGHER BREAKING LOADS !

These chains are designed to work in a food application, or in aggressive chemical environments :

### TECHNICAL SPECIFICATIONS:

#### From 08B to 16B :

- Pins and plates in stainless steel series 300
- Solid bushes in stainless steel series 300
- Extruded rollers in stainless steel series 300
- Chains pre-lubricated with H1 food wax or other lubrication on request

#### Other chains of the range :

- Articulations and plates in Stainless steel series 300
- Solid rollers in stainless steel series 300
- Chains without initial lubrication or lubrication on request



### SERVICES:

- **Technical assistance** (analysis of the customer's specifications, definition and recommendation)
- **Adaptations** (attachments, extended pins...) and development of **specific products** on request
- **Matched pairs** on request for chains working in parallel
- Cut and manufacture of **chains of any length**
- Many references **available in stock**



## RECORD®

SEDIS EXPERTISE FOR YOUR STANDARD APPLICATIONS

Chains BS & ASA :

### TECHNICAL SPECIFICATIONS:

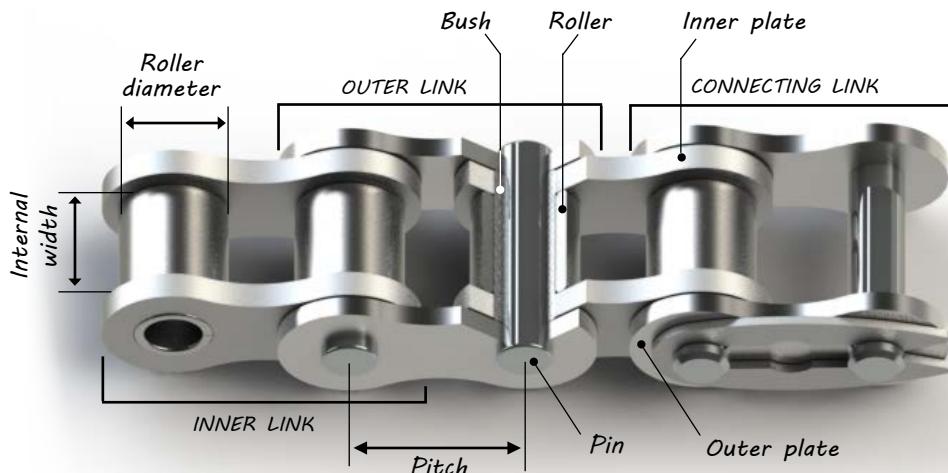
- Shot peened plates
- Solid cold extruded roller
- Chains pre-tensioned at 30% of the breaking load
- Chains pre-lubricated with initial plant lubrication



### SERVICES:

- Chains cut **in any length**
- Many references **available in stock**

## CONSTITUENT PARTS OF POWER TRANSMISSION ROLLER CHAIN



## MANUFACTURING

**SEDIS** chains, both standard and non-standard, are made of:

- **High quality steels:** dimensions and adapted chemical composition for the different chain parts
- **The most efficient manufacturing processes:**
  - Special technique for the production of bushes improving the chain wear resistance (**SEDIS** know-how)
  - Plates produced by multi-stage processing tools ensuring a regular pitch (**SEDIS** technology)
- **Adequate mechanical and heat treatments of chain parts:**
  - Shot peening
  - Surface finishing
  - Case hardening, carbonitriding, quenching, tempering ...
  - DELTA® treatment
  - Freezing treatment
  - Corrosion protection coatings (GEOMET, zinc, nickel plating, ...)

## QUALITY



**SEDIS** is certified ISO 9001 since 1989:

- First chain manufacturer in the world to be certified ISO 9001
- Eleventh French company to be certified ISO 9001

Certified ISO 9001:2015 by Bureau Veritas

A sign of confidence for our customers

The **Sedis** chains are constructed with special specifications in order to fit with a wide range of industrial applications. They are designed in order to:

- 1- Resist to **WEAR** (Elongation)
- 2- Resistance to **FATIGUE** (progressive plate breaking) and to **TRACTION** (brutal load breaking of plates or bearing pins)
- 3- Resist to **CORROSION**
- 4- Use **WITHOUT LUBRICATION**

SEDIS uses the most efficient manufacturing processes, special steels and appropriate mechanical treatments, heat treatments and thermochemical treatments to be able to offer its clients products which are perfectly adapted to a wide range of industrial applications.

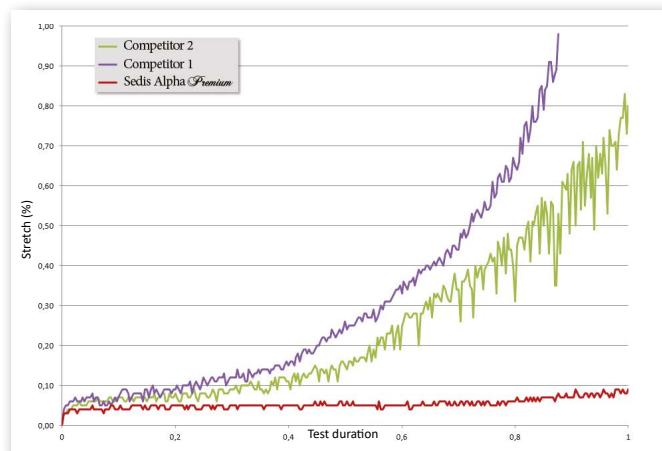
## WEAR (ELONGATION)

A new generation wax for our Alpha *Premium* and DELTA® range

SEDIS has selected for their Delta® and Alpha *Premium* core range (from 12.7mm to 25.4mm pitch) a new **high performance wax** offering an **enhanced anti-wear protection**, and which can work at a temperature from -30°C to 130°C.

This wax which has a thick viscosity not in use, liquefy in operation to be perfectly spread in the articulations (thixotropic specification of wax). It then **limits frictions and allows much longer lubrication intervals compared to a standard lubrication** (less losses of lubricant by ejection). It also allows the SEDIS chains to have a much higher wear resistance than competitors' chains).

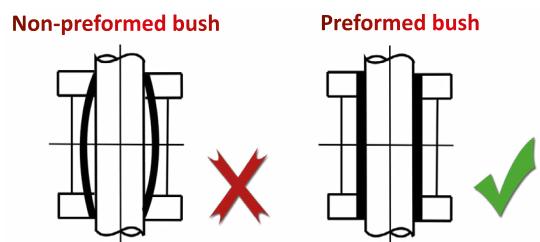
During maintenance, our wax is compatible with usual chain lubricants.



Wear of a SEDIS Alpha Premium ASA 50-1 compared to two competitors' chains

## Preformed bi-conic bushes

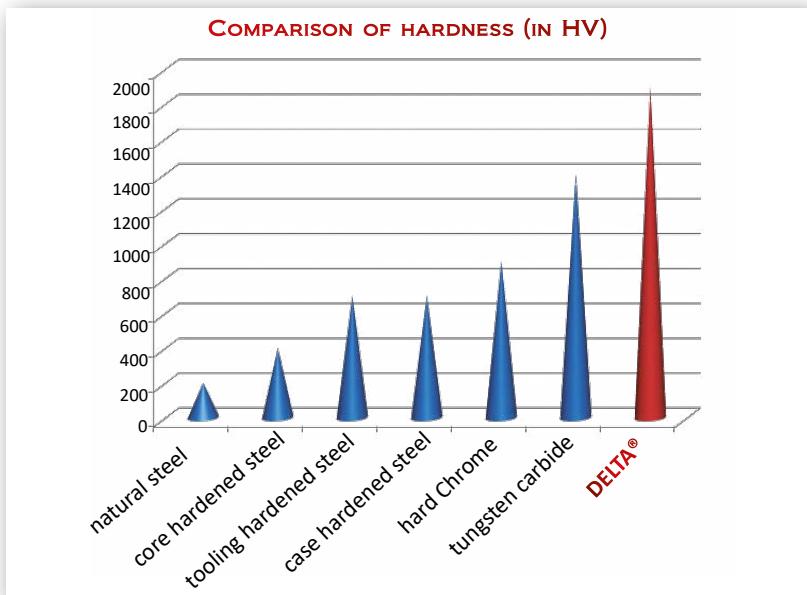
We use **preformed bi-conic** bushes on our chains. Contrary to non-preformed bushes which undergo a "barrel" distortion, the working surface of preformed bushes is increased for a **uniform distribution of mechanical loads**, what improves wear resistance (see drawing on the right).



## SEDIS SPECIFICATION

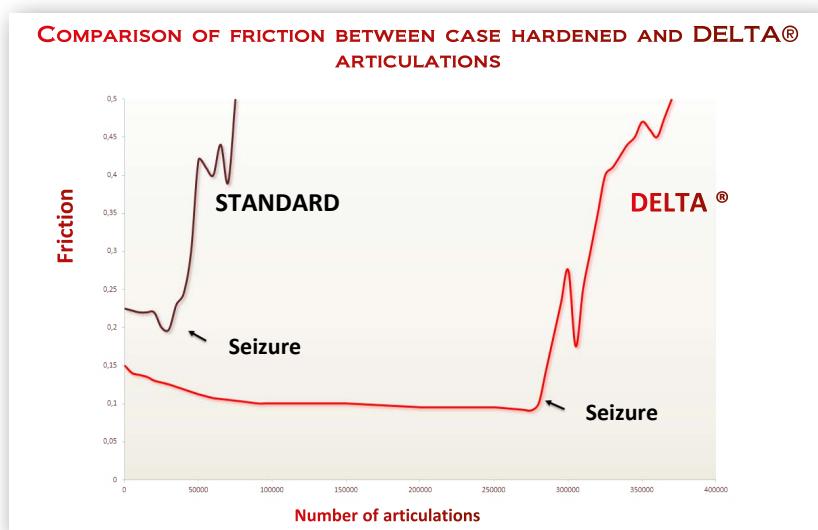
### DELTA<sup>®</sup> range and DELTA<sup>®</sup> treatment:

The thermo-chemical treatment invented and realized by SEDIS results in very high resistance against wear and oxidation of the articulation. This resistance is achieved thanks to the surface hardness of the DELTA<sup>®</sup>treated articulations which is much higher than hardness obtained by usual case hardening (see graph below).



**SEDIS  
IS THE ONLY  
MANUFACTURER TO  
MASTER ANTI-WEAR  
TREATMENTS ON  
LARGE DIAMETER  
PINS**

The friction coefficient of DELTA<sup>®</sup>HR articulations is lower than the one of standard articulations (case hardening, carbonitriding, ...). The hardness and the particular chemical affinity of DELTA<sup>®</sup>HR articulations **delay the appearance of seizure** (see figure below).



Thanks to the higher hardness, a low coefficient of friction and a compatible chemical affinity, DELTA<sup>®</sup> HR have a **longer lifetime compared to standard chains**, especially in severe applications (abrasion, shocks, jerks...) These particular specifications allow DELTA<sup>®</sup> chains to **transmit superior powers**.

## FATIGUE & TENSILE BREAKING

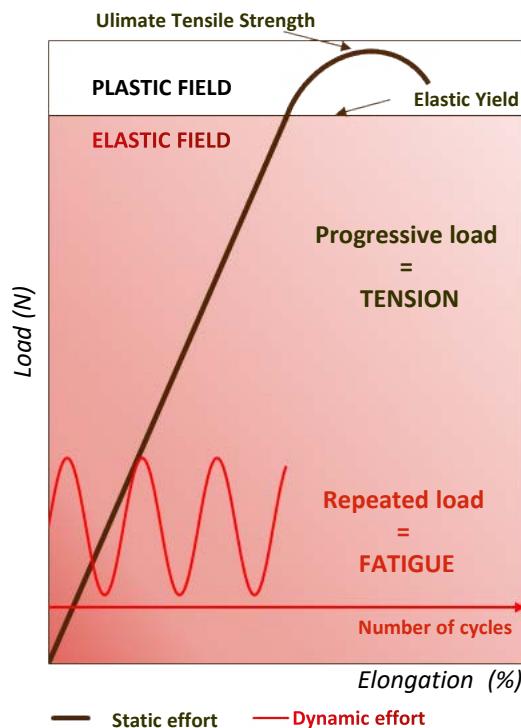
During normal operating, chains are working in the elastic field (see figure A below). The chain is held in tension in a repeated way under an effort located in an elastic level (red curve in figure A). The consequence of such sollicitation is the creation and propagation of cracks in the area where the maximum stresses are located (red zones in figure D below).

The SEDIS ALPHA Premium et DELTA® HR chains are designed in order to combat fatigue thanks to the use of:

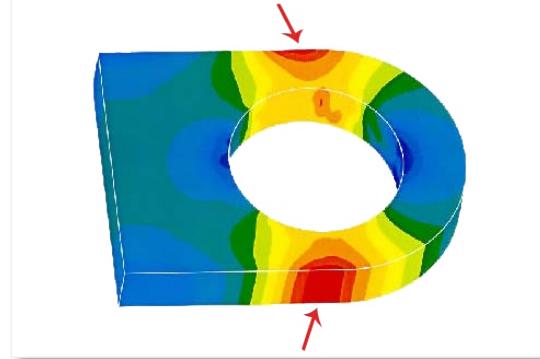
- special steels chosen according to special chemical and mechanical specifications,
- optimised heat treatments to obtain the maximum plate strength as well as the plate ductility to combat fatigue,
- plate Shot Peening to also improve plate fatigue strength. The shot peening allows the creation of compressive stresses in the plates to avoid the creation and propagation of fatigue cracks (see figure C below).

The shot peening is a projection of steel balls on chain plate with controlled intensity and speed. It allows an improvement of an extra 20% fatigue strength of plates.

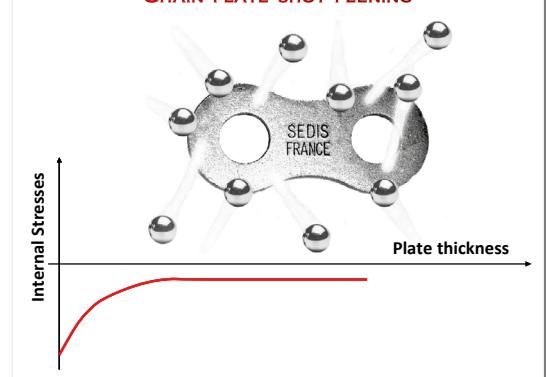
**FIGURE A**  
REPEATED LOAD VS PROGRESSIVE LOAD



**FIGURE B**  
STRESSES IN A CHAIN PLATE UNDER TENSION



**FIGURE C:**  
CHAIN PLATE SHOT PEENING



Thanks to a rigorous selection of material, heat treatments and shoot peening done on our Alpha Premium and Delta® chains:

Resistance to traction is on average 20% higher to ISO norms  
Performances in terms of resistance to shocks and fatigue are HIGHER TO THE BEST CHAINS IN THE WORLD

## SEDIS SPECIFICATIONS

### CORROSION

#### The chains ALPHA Premium **STAINLESS STEEL**

Alpha Premium Stainless steel chains are manufactured with high quality stainless steels. Stainless steel having quite a poor mechanical resistance compared to carbon steel, the chains wear more quickly and have a rather short lifetime. That's why Sedis has integrated to their range specific treatments which enable to get **stainless steel with increase surface hardness**. The Alpha Premium BS STAINLESS STEEL chain offers therefore **an increased breaking load up to 33%** compared to the previous range, and up to **20% more than the other quality chains** of the market.

Wear resistance has also been improved especially thanks to the integration of **solid bushes** and to an **initial H1 food lubrication**. Tests have demonstrated that it allows to **reduce wear by 2** compared to a top range stainless steel chain.

For more demanding applications, and in particular when an important **resistance to traction is needed**, these chains can be substituted by **DELTA® TITANIUM 2** chains, which benefit from the **DELTA® treatment** against wear, and the **GEOMET® treatment against corrosion**. However, in case of direct contact with food or cleaning products as foams, solvents, oxidants, it is advised to consult us in order to select with you the most adapted product to your application.

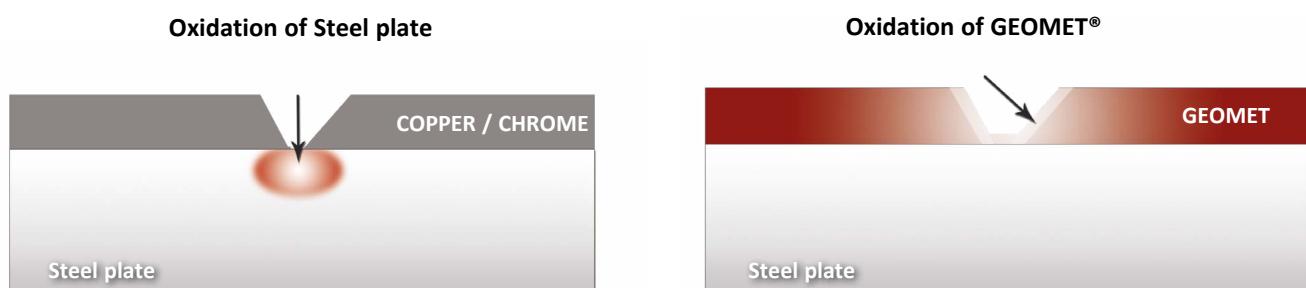
#### DELTA® TITANIUM 2 chains and GEOMET® treatment

The **DELTA® TITANIUM 2** chains are designed on the basis of **DELTA® HR** chains which are characterized by **very high resistance to wear and abrasion**. On top of that, the constitutive metallic components are **protected against corrosion** thanks to a protecting **GEOMET** coating.

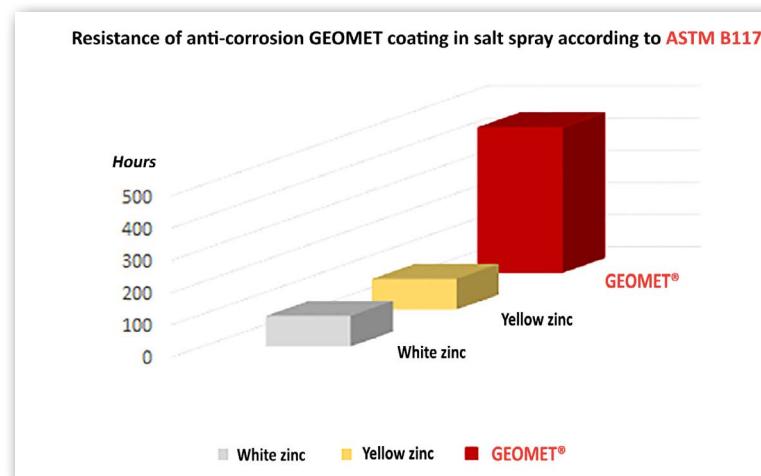
**GEOMET®** is a water-based coating composed of layers of zinc and aluminum, **100% hexavalent chrome free**. It guarantees protection of metallic surfaces by:

- **Barrier effect:** the superposition of slices of zinc and aluminum constitutes an excellent barrier between the steel substrate and the corrosive environment.
- **Sacrificial protection:** Zinc oxidizes instead of steel.

On the below figure, we can compare the cathodic protection of **GEOMET®** with the total protection of coatings like Chrome or Copper or any other material nobler than iron.



In the conditions of test in salt spray, GEOMET® treatment used on DELTA® TITANIUM 2 chains has much longer resistance to corrosion. Indeed red rust only appears after 450 hours compared to 100 hours for bi-chromate zinc plated chains (see figure below).



Thanks to their superior resistance to wear, they guarantee **a much longer lifetime** than a stainless steel chain. DELTA® TITANIUM 2 chains should be preferably used in neutral ambiance (pH between 5 and 9). The temperature range of use is between -30 and 130°. We have solutions for different temperatures, don't hesitate in consulting us for further information.

### THE ADVANTAGES OF THE TREATMENT

- Maximum protection in thin layer*
- Control of the coefficient of friction*
- Absence of Hydrogen embrittlement*



**NOTE: In order to ensure optimum protection against corrosion of DELTA® TITANIUM 2 chains it is strictly forbidden:**

- DELTA® TITANIUM chains are not compatible with **stainless steel sprockets**. They can be used with carbon steel, zinc-plated, bi-chromate zinc-plated sprockets or sprockets with **GEOMET®** protection (consult us).
- DELTA® TITANIUM chains are not compatible with any attachments or **other additional elements made from stainless steel or containing copper** (bronze, brass).
- DELTA® TITANIUM chains are not compatible with **chain guides made from stainless steel, brass or other materials containing Copper**.

# SEDIS SPECIFICATIONS

## LUBRICATION FREE

In a number of applications where lubrication of the chain is difficult or even impossible, SEDIS brings the solution with their lubrication-free VERTE® chains. A standard chain will have a limited lifetime if it is not properly lubricated. The solution is therefore **lubrication-free chains**, which works without any oil added externally.

They allow:

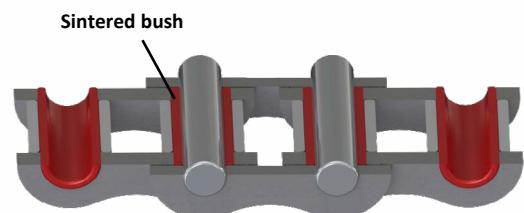
- **To avoid lubrication maintenance** when it is difficult or impossible for different reasons (shapes, inaccessibility...),
- **To avoid risk of oil projection** which can damage the transported items,
- **To operate in humid environments** (especially for DELTA VERTE® chains)
- **To limit the risk of fire** if oil can be in contact with flame or products at high temperature (like escalators),
- **To diminish the risk of pollution** by lubrication,
- **To reduce the maintenance global costs** (economy of the maintenance system)

### LUBE FREE VERTE CHAIN:

The principle of lubrication free is based on the use of **sintered bush** which is impregnated with oil, allowing the dispensing of oil during the functioning of the chain. The pins undergo a hard surface treatment, the rollers are solid and the components are nickel-plated against corrosion.

The chain is used in the following conditions:

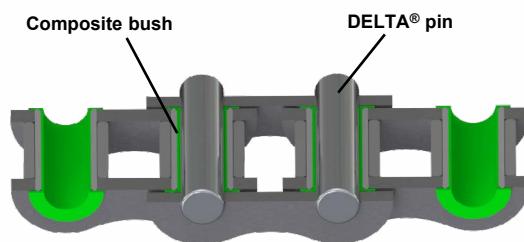
- 1- Temperature of use: between -5° and 80°C
- 2- Non abrasive & non humid environment
- 3- Treated and greased sprockets



LUB FREE VERTE Chain

### DELTA® VERTE CHAINS (GREEN CHAIN):

The principle of non lubrication is based on the use of **composite bush** inserted between bearing pin and steel bush. The composite bush is made of self lubricant solid material which allows the chain to operate without oil. The bearing pin is **DELTA®** and the other metallic parts (plates, steel bush and roller) are protected against corrosion using the **GEOMET** coating.



DELTA® VERTE chain

The chain is used in the following conditions:

- 1- Temperature of use: between -30° and 80°C  
(consult us for temperatures above 80°C as composite is specific and admissible pressures are different)
- 2- Functioning in a humid environment or in presence of water
- 3- Treated and greased sprockets
- 4- Non abrasive environment, with a PH between 5 and 9.
- 5- In the case where the **DELTA®VERTE** chain is used in conveying (loaded rollers), consult us for the use of composite rollers in place of steel rollers

**NOTE: for an optimum protection against corrosion of DELTA VERTE® chains:**



- **DELTA® TITANIUM** chains are not compatible with **stainless steel** sprockets. They can be used with in carbon steel, zinc-plated, bi-chromate zinc-plated sprockets or sprockets with **GEOMET®** protection (consult us). **Use preferably heat treated teeth.** Do not forget to lubricate the sprockets in use to avoid rapid wear. In some cases, it is possible to use sprockets or screwed teeth made of plastic material when the sprocket lubrication is forbidden. Consult us.
- **DELTA® TITANIUM** chains are not compatible with any attachments or other additional elements made from **stainless steel or containing copper** (bronze, brass).
- **DELTA® TITANIUM** chains are not compatible with **chain guides made from stainless steel, brass or other materials containing Copper.**

# ROLLER CHAINS



**sedis** 









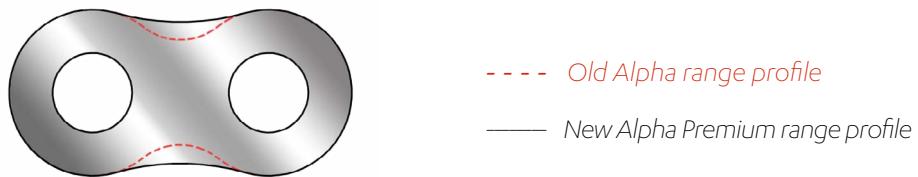
## ALPHA Premium ASA chains

*Our chain Alpha Premium ASA has been entirely designed to be the most advanced one of its generation.*

THE MOST  
EFFICIENT CHAIN IN THE  
MARKET IN TERMS OF  
RESISTANCE TO FATIGUE

## UNEQUALLED RESISTANCE TO FATIGUE

Our Research & Development department has developed a **new plate profile** which has been optimized by widening the narrow waist to reduce the constraints on the plate's holes when the chain undergoes repeated loads in operation. This technological advance gives to our new Alpha Premium ASA chain an **unprecedented resistance to fatigue and increased breaking loads** (+ 15% on average compared to standards).



**Solid bushes**, made with the most innovative techniques of bush forming, provide a **perfect fitting** in the plates, improving therefore the resistance to fatigue of the chains

The plates are **shoot peened**, what allows the creation of compressive constraints on the surface, in order to fight initiation and spread of fatigue cracks, **improving the resistance to fatigue of the plates by 20%**.

Design of our Alpha Premium ASA chains allows to have **reduced play** between articulations, contributing also to improve resistance to fatigue.

## REINFORCED RESISTANCE TO WEAR

The **new wax**, with an anti-wear and **anti-corrosion protection**, allows to **limit frictions** by liquefying in operation, thanks to a better penetration in the articulations.

The pins have been conceived with carefully selected steels and heat treatments which help obtaining **high hardness and resistance**.





## THE CONNECTING LINKS

Availability of the links:

BS CHAIN TYPE B	ANSI CHAIN TYPE A
--------------------	----------------------



N° 205

### OUTER LINK TO BE RIVETED

This link is composed of 2 riveted pins on an outer plate. The other plate is fitted by force on the pins which extremities are riveted after assembly of the plate.

X

X



N° 206

### SPRING CLIP CONNECTING LINK

2 pins are riveted on an outer plate. The loose plate is maintained by a special spring clip. The unopened part of the spring clip must be oriented in the rotation way of the chain. For BS chains, these links are supplied with Delta® pins for a better resistance to wear.

X  
(≤31,75mm)

X  
(≤ 25,4mm)



N° 208

### COTTERED CONNECTING LINK

Used from 1" pitch (25,4mm) for Delta® chains and from 1.1/4" pitch (31.75mm) in Alpha Premium version. It can be "loose-fit" or "press-fit" type for type B chains.

X  
(≥ 31,75mm)

X  
(≥ 31,75mm)



N° 209

### CONNECTING LINK WITH SELF LOCKING NUTS

The pins' extremities are threaded to fit a self-locking nut. The play on the loose plate is suppressed by the pin conic ambit (SEDIS specificity).

X  
(≥ 31,75mm)

## THE CRANKED LINKS



N° 216

### SINGLE CRANKED COTTERED LINK

Used to obtain a chain with an odd number of pitches from ½" (12.7mm) pitch. These links have removable pins.

X

X



N° 217

### SINGLE CRANKED LINK SELF LOCKING NUTS

Used to obtain a chain with an odd number of pitches. The play on the loose plate is suppressed by the pin conic ambit. The assembly is more reliable than the 216 crank link.

X  
(≥ 31,75mm,  
except 76,2)



N° 221

### DOUBLE CRANKED LINK

Used to obtain a chain with an odd number of pitches. It is composed of an inner link and a cranked link linked by a riveted pin. For BS chains, these links are supplied with Delta® pins for a better resistance to wear.

X  
(≤ 38,10mm)

# TRANSMISSION CHAINS ADAPTED FOR CONVEYING



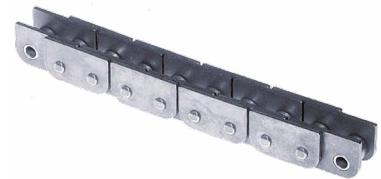
**sedis** 



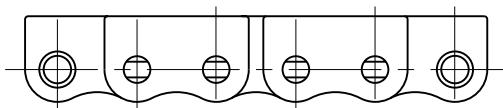
## CHAINS WITH DEEP LINK SIDE PLATES - Derived from ISO 606

## APPLICATIONS

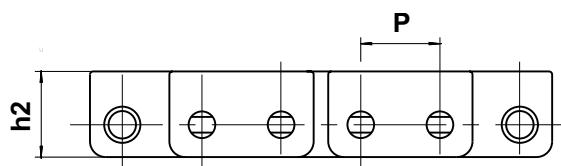
These chains allow load to be conveyed directly on the side plate. Eg. bricks, tiles, building materials, ... For this type of use, it is recommended to use DELTA®.



WAISTED PLATES

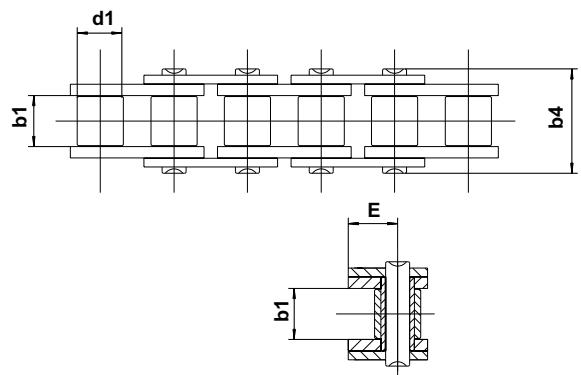


STRAIGHT SIDE PLATES



Dimensions in mm

References	ISO 606	SEDIS	Pitch P	VERSIONS		Plate shape	d1 max.	b1 min.	b4 max.	h2	E	UTS kN
				ALPHA Premium	DELTA® HR							
10B-1	10N	15,875	x	x	Waisted	Waisted	10,16	6,50	16,4	18,0	11,1	23
10B-1	11N	15,875	x	x	Waisted	Waisted	10,16	9,65	19,0	18,0	11,1	23
12A-1	60-1	19,05	x	x	Straight	Straight	11,91	12,65	25,4	22,3	14,1	38



## CONVEYOR BELT CHAINS

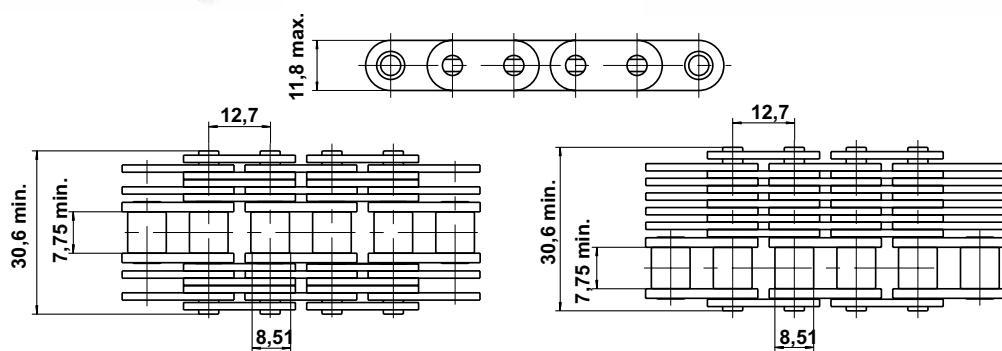
These chains called "belt" chains are always derived from chains with straight side plates. They retain the same characteristics to the nearest lateral dimension. They can be of the lateral type (with plates) with one or two sides. The basis may be a simple, duplex or triplex chain.

## APPLICATIONS

In light handling, for conveying loads placed directly on the chain and accumulated.  
The number of plates limits the contact pressure and hence the marking of parts.



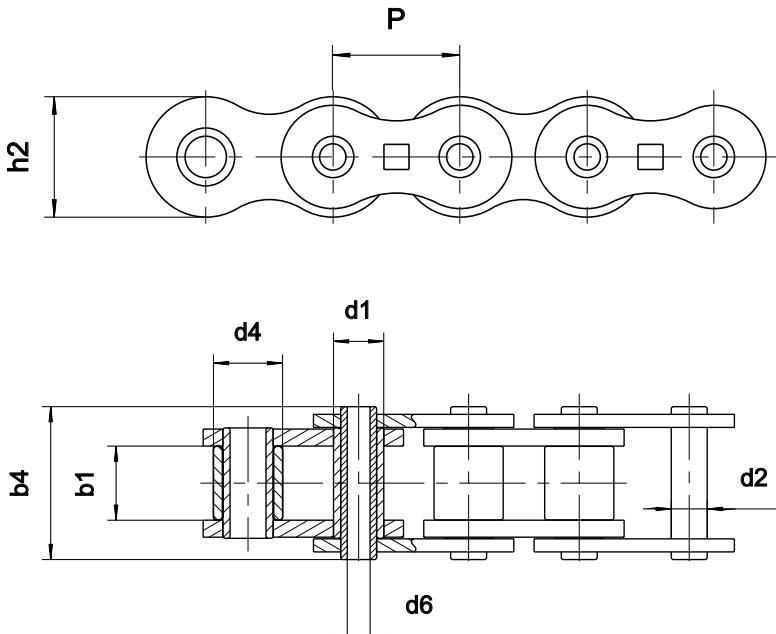
e.g.: basic chain 7NNE



## HOLLOW BEARING PIN CHAINS

### APPLICATIONS

In light handling, small conveyors usually using two parallel chains  
Examples: transport of sprays, of toothpaste, packaging machinery

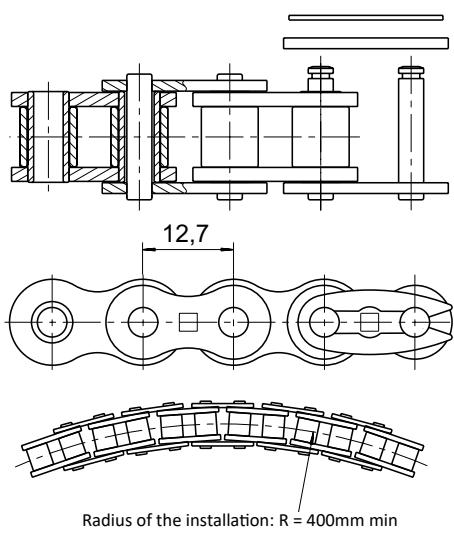


References	ISO 606	SEDIS	Pitch <i>P</i>	GAMME SEDIS			<i>d1</i> max.	<i>d4</i> max.	<i>b1</i> min.	<i>b4</i> max.	<i>d2</i> max.	<i>d6</i> min.	<i>h2</i> max.	Nominal bearing surface mm <sup>2</sup>	Ultimate Tensile Strength				Mass per meter kg
				ALPHA Premium	ALPHA Premium INOX	DELTA® HR	DELTA Titanium 2								<i>Alpha Premium</i> min. kN	<i>Alpha Premium INOX</i> min. kN	<i>Delta® HR</i> min. kN	<i>DELTA TITANIUM 2</i> min. kN	
08B-1	7C40	12,7	x				8,51		7,75	16,50	6,55	4,00	11,80	73	11,1				0,58
08B-1	7C45	12,7	x				8,51		7,75	16,50	6,55	4,50	11,80	73	11,1				0,53
12B-1	13C	19,05	x				12,07		11,68	23,00	8,25	6,10	18,30	128	24,0				1,07
12B-1	80C	25,4	x				15,88		15,87	32,60	11,58	8,05	24,00	260	41,2				2,00
SEDIS Special chains	5508-03	25,4	x	(1)			17,10	19,90	35,70	11,11	8,20	20,80	292	44,0	15,0				2,40
	5508-06	25,4	x	(1)			14,11		19,90	35,70	11,11	8,20	20,80	292	44,0				2,30
	A55BC	41,75	x	(1)	x	x	17,10	19,90	35,70	11,11	8,20	21,65	292	26,5	17,6	49,0	49,0		1,43
	A155TS	41,75	x				17,10	19,90	35,70	11,11	8,20	25,26	292	49,0					1,90
	ZC50B50	50,8	x				22,51		19,00	46,60	17,10	12,50	32,00	540	60,0				3,70
	ZC50S50	50,8	x				29,34	19,00	46,60	17,10	12,50	32,00	540	60,0					4,50
	ZC60B60	60	x				22,51	19,00	46,60	17,10	12,50	32,00	540	60,0					3,40
	ZC60S60	60	x				29,34	19,00	46,60	17,10	12,50	32,00	540	60,0					4,00
	S800	80	x				29,00	31,00	53,10	17,10	12,50	40,00	660	70,0					5,30

(1): Possibility to manufacture Stainless steel version. Consult us for dimensions.

Other conveyor chains with hollow bearing pin: MC27, MC55, MC56, MC110, MC112 (See Conveyor Chains Catalogue).

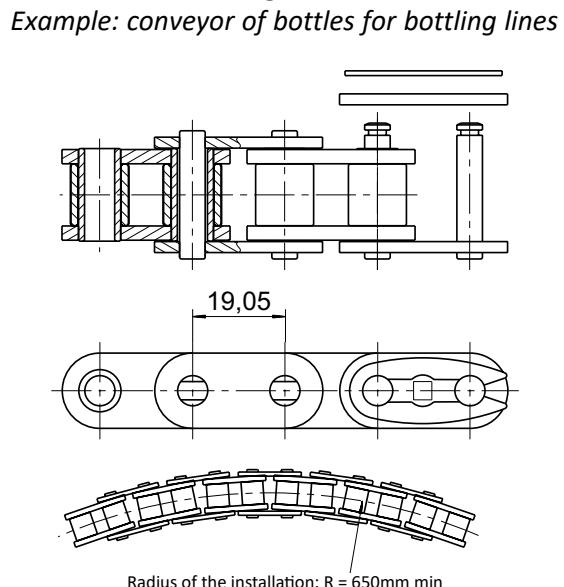
**CHAIN 7N (08B-1)**  
drawing: 5272-74



Average chain pitch =  
12,94mm

To be used with the sprockets of 7N  
chain with 17 teeth maximum

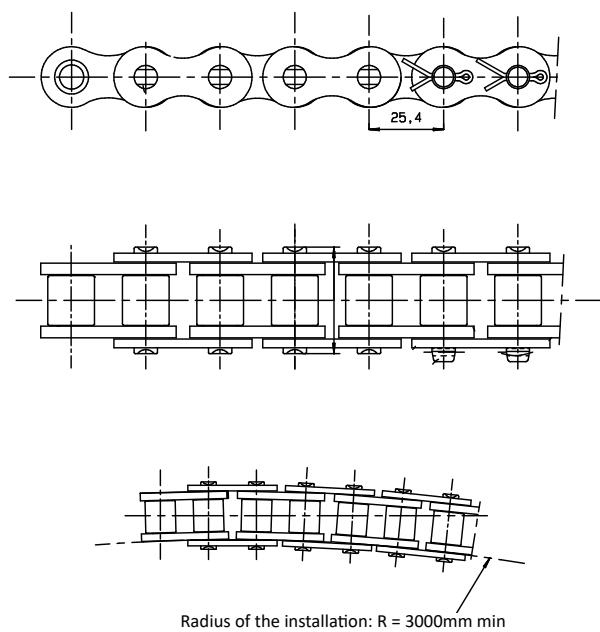
**CHAIN 60-1NE (12A-1)**  
drawing: 5312-53



Average chain pitch =  
19,3mm

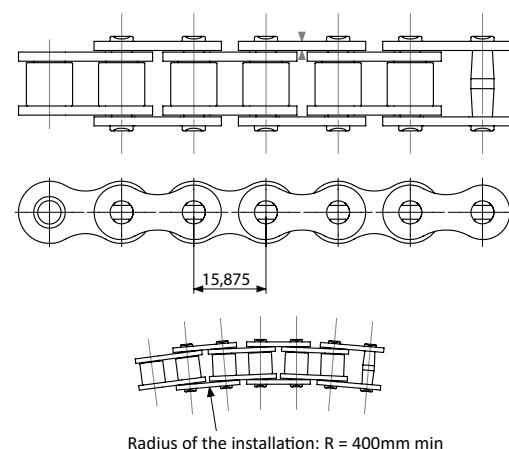
To be used with the sprockets of 60-1NE  
chain with 17 teeth maximum

**CHAIN 15T (16B-1)**  
drawing: 5811-32



**CHAIN 50-1**

**«BARREL» SHAPED PINS**  
drawing: 5245-58



80-1 version with «barrel» shaped pins: 5294-33



## CHAINS WITH EXTENDED BEARING PINS - comply with ISO 606

## APPLICATIONS

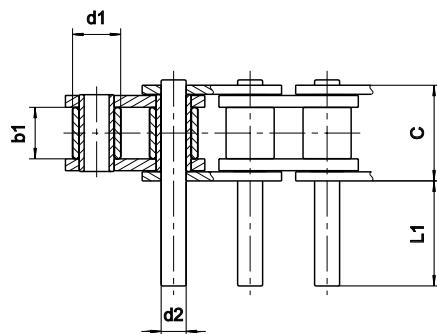
Light conveyor, to transfer parts to different workstations, conveyors, indexing mechanisms and lifting installations.

**DESPATCH POSSIBLE WITHIN 48 HOURS**  
for highlighted references  
**50M MAXIMUM** (consult us)

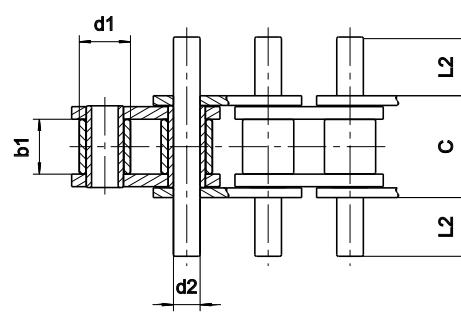


The main advantage of this type of conveyor chain is that the effort is applied without torque in the center of the chain.  
These pins are fitted on request according to the chosen position to be specified when ordering.

## OFF-SET



## SYMETRICAL



Dimensions in mm

ISO 606	SEDIS	Pas	SEDIS RANGE					d1 max.	b1 min.	C max.	d2 max.	L1				L2															
			ALPHA Premium	ALPHA Premium INOX	DELTA® HR	DELTA Titanium 2	VERTE					L1	L2	L3	L4	L5															
068-1	3N	9,525	x		x	x	(1)	6,35	5,77	11,01	3,28	11,1	21,7			5,8	11,1														
088-1	7N	12,7	x	x	x	x	(1)	8,51	7,75	14,43	4,45	3,5	15,2	29,2		2,2	8,1	15,1													
108-1	11N	15,875	x	x	x	x	(1)	10,16	9,65	16,95	5,08	4,3	11,2	17,8	21	24,8	34,4	39,1	2,6	6,1	9,4	11,0	12,9	17,7	20,0						
128-1	13N	19,05	x	x	x	x	(1)	12,07	11,65	19,75	5,72	10,4	14,1	20,9	40,5		5,8	7,6	11,0	20,8											
168-1	15T	25,4	x	x	x	x	(1)	15,88	17,02	32,09	8,28	8,7	18,7	21,9	33,3	65	98,4	130,3	194	5,0	10,0	11,6	17,3	33,2	49,9	65,8	97,6				
208-1	17T	31,75	x	x	x	x	(2)*	19,05	19,56	36,80	10,19	6,6	10,3	14,0	21,5	25,4	38,4	54,4	74,9	4,2	6,0	7,9	11,6	13,6	20,1	28,1	38,3				
248-1	18T	38,1	x	x	x	x	(2)*	25,40	25,40	48,72	14,63	11,7	16,9	37,4	51,1	58,3	79,7	99,5	341,4	6,8	9,4	19,7	26,5	30,1	40,8	50,7	171,7				
288-1	20T	44,45	x		x	x	(2)*	27,94	30,95	60,00	15,90	22,0	48,1	62,5	122,4			12,1	25,2	32,4	62,3										
328-1	22T	50,8	x		x	x	(2)*	29,21	30,95	58,62	17,81	19,5	61,8	44,2	69,0	120,7	179,3	294,6		10,9	32,1	23,3	35,7	61,5	90,8	148,7					
408-1	23T	63,5	x		x	x	(2)*	39,37	38,10	72,70	22,89	30,0	62,2	76,4	149,0	221,4	294,4		16,5	32,6	39,7	76,0	112,2	148,7							
488-1	24T	76,2	x		x	x		48,26	47,70	91,40	29,22	35,5	95,7	186,9				19,4	49,5	95,1											

(1): References in Lub Free. In DELTA® VERTE please consult us

(2): Only available in DELTA® VERTE (consult us with specifications)

\* The pin diameter is different. Please consult us.

To know chains' UTS, see tables on pages 18 and 19.

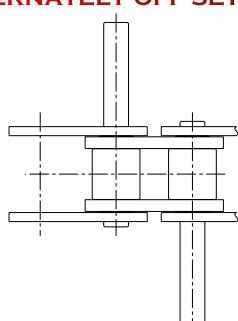
## Other possibilities:

- Execution on double strand chains
- Execution on ANSI - American series

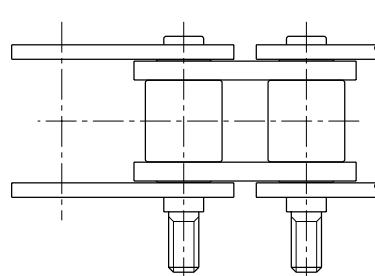
## MATCHING POSSIBLE FOR HIGHER ACCURACY

## OTHER SPECIAL EXTENDED PINS

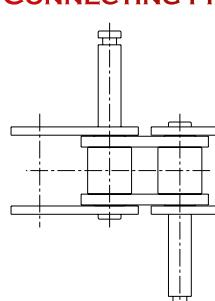
## ALTERNATELY OFF-SET PINS



## THREADED PINS



## CONNECTING PINS









## CHAINS WITH SPECIAL ATTACHMENTS TYPE "Z"

Attachments with long holes fitted with chains which complies with ISO 606

## APPLICATIONS

Conveyors, mounting on transport systems using 2 chains in parallel.

MATCHING POSSIBLE FOR HIGHER ACCURACY

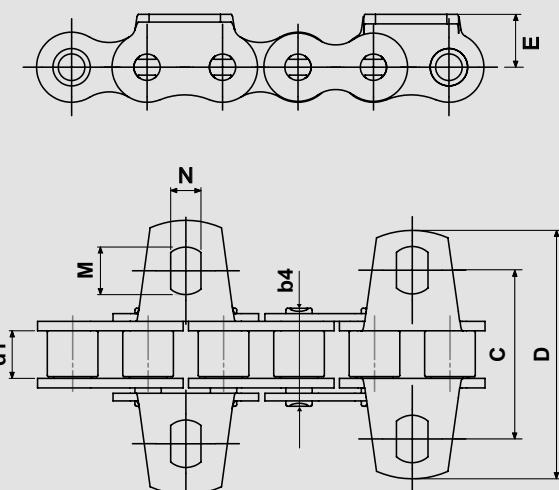


DESPATCH POSSIBLE WITHIN 48 HOURS

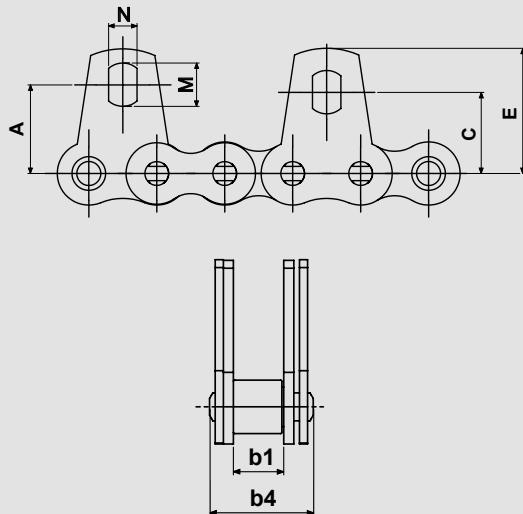
for highlighted references

50M MAXIMUM (consult us)

K1\*



M1



Dimensions in mm

References		Pitch mm	SEDIS RANGE					d1 max.	b1 min.	b4 max.	A nom.	C nom.	D max.	E nom.	M min.	N min.	
ISO 606	SEDIS		ALPHA Premium	ALPHA Premium INOX	DELTA® HR	DELTA TITANIUM 2	VERTE CHAINS										
<b>K1 attachment on OUTER link</b>																	
08B-1	7N	12,7	x	x	x	x	(1)	8,51	7,75	16,6			28,5	45,3	9,2	8	5,2
<b>K1 attachment on INNER link</b>																	
08B-1	7N	12,7	x	x	x	x		8,51	7,75	16,6			28,5	42	9,2	8	5,2
<b>M1 attachment on OUTER link</b>																	
08B-1	7N	12,7	x	x	x	x	(1)	8,51	7,75	16,6	16,6	15,2	45,3	23,4	8	5,2	
<b>M1 attachment on INNER link</b>																	
08B-1	7N	12,7	x	x	x	x		8,51	7,75	16,6	16,6	15,2	42	23,4	8	5,2	

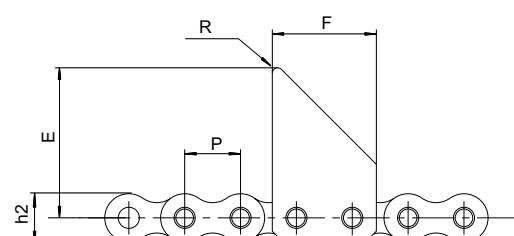
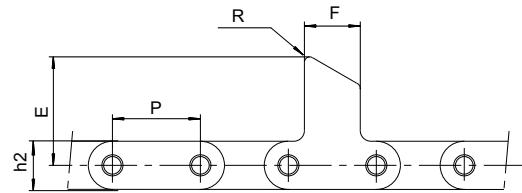
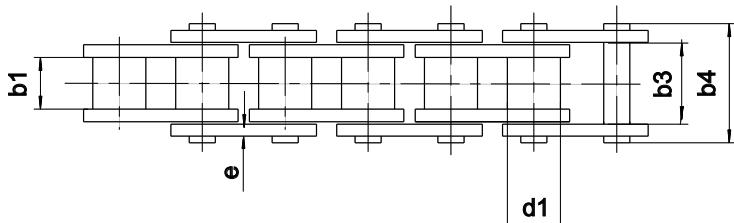
(1): References in Lub Free. In DELTA® VERTE please consult us

To know the chains' UTS, see tables on pages 18 &amp; 20

\* Assembly of K1 attachments every 2 pitches minimum

## ANGLED VERTICAL PLATE CHAINS

## EXAMPLES OF MANUFACTURING



Dimensions in mm

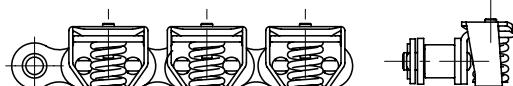
SEDIS References	<i>P</i>	<i>d1</i> max.	<i>b1</i> min.	<i>b3</i> min.	<i>b4</i> max.	<i>h2</i> max.	<i>e</i> nom.	<i>E</i> max.	<i>F</i> max.	<i>R</i> max.	Minimum Breaking load <i>kN</i>
<i>Straight side plates</i>											
5310-04	63,5	25,40	25,33	38,05	53,1	32,0	5	76	50	4	180
5310-05	63,5	25,40	25,33	38,05	53,1	32,0	5	134	50	4	180
<i>Waisted plates</i>											
17T	31,75	19,05	19,56	29,15	40,5	25,4	3,5	82	58	3	105
18T	38,1	25,40	25,4	38,05	53,1	32,3	5	76	75	4	180

**DELTA®**, **DELTA® TITANIUM** and **DELTA® VERTE** versions are also available, consult us.

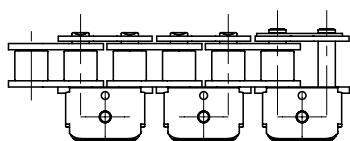
All shapes and dimensions possible. Please consult us.

## GRIPPER CHAINS

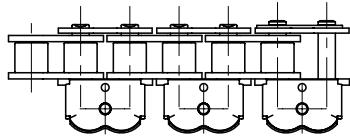
## TYPE 1



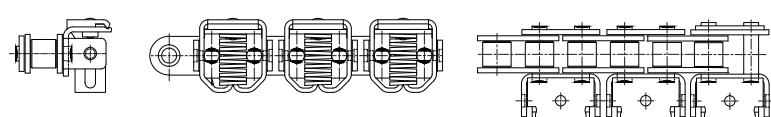
## STRAIGHT CLAMP DESIGN



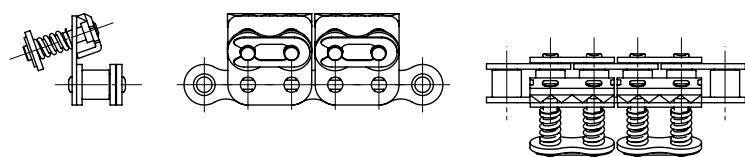
## HEART CLAMP DESIGN



## TYPE 2



## TYPE 3

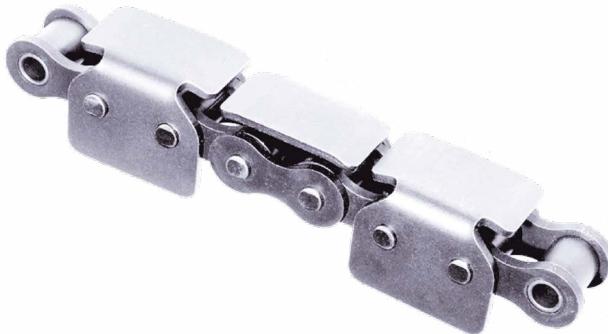


- Springs available with 50N or 100N resistance
- Different shapes of stainless steel grippers available
- Delta® Titanium 2 or nickel-plated versions
- Pitches of 12.7mm and of 15.875mm

Large range of gripper chains. Please consult us.

## APPLICATIONS

These chains are usually used for small conveyors using two chains moving on a rail guided by rollers and vertical lugs.



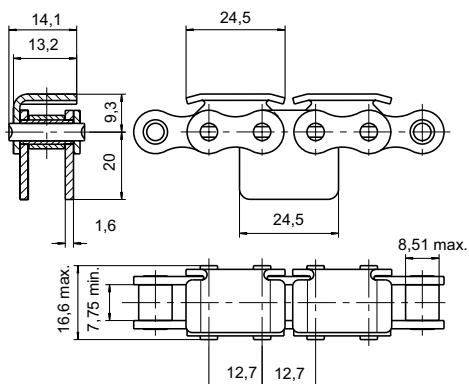
This type of chain is ideal for conveying components which can be accumulated on the conveyor, the chain continuing movement while the parts slide on the "flanged" attachments.

E.g. conveying motor vehicle parts.

Duplex and triplex chains also available

**CHAIN 7N (08B-1) (DRAWING: 5272-70)**

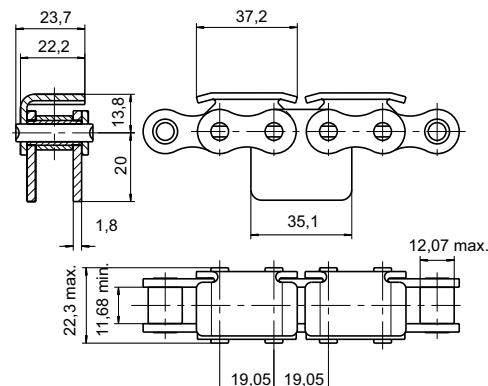
UTS min. = 18.2 kN



Vertical guide plates on request

**CHAIN 13N (12B-1) (DRAWING 5268-27)**

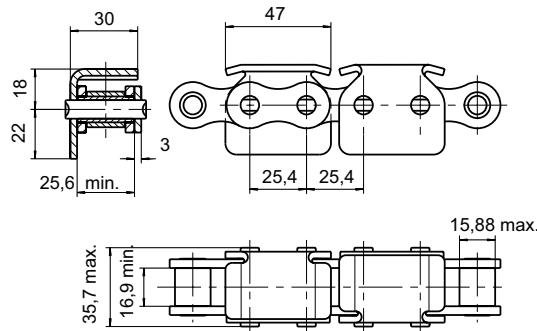
UTS min. = 30.5 kN



Vertical guide plates on request

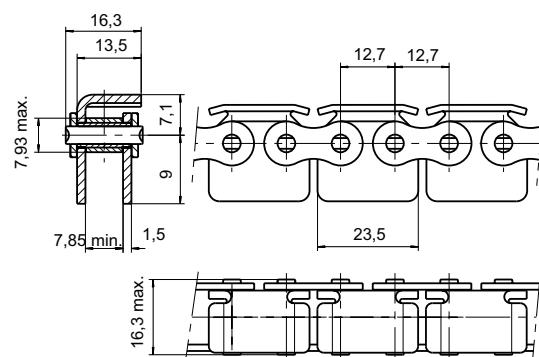
**CHAIN 15T (16B-1) (DRAWING 5288-03)**

UTS min. = 66 kN



**CHAIN 40-1 (08A-1) (DRAWING 5415-08)**

UTS min. = 16.5 kN



## CHAINS WITH V-SHAPED PLATES

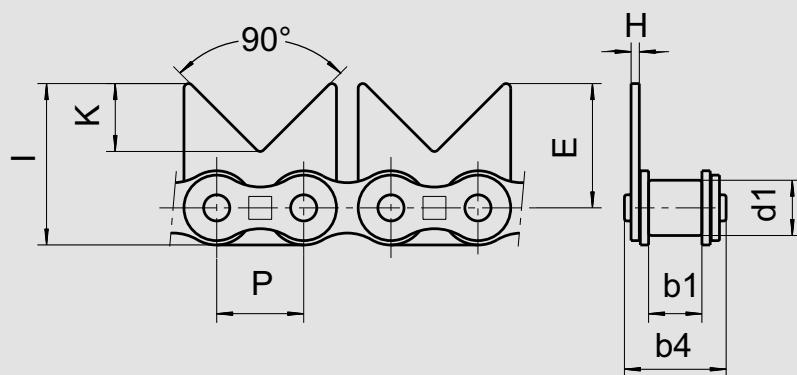
- Derived from ISO 606

### APPLICATIONS

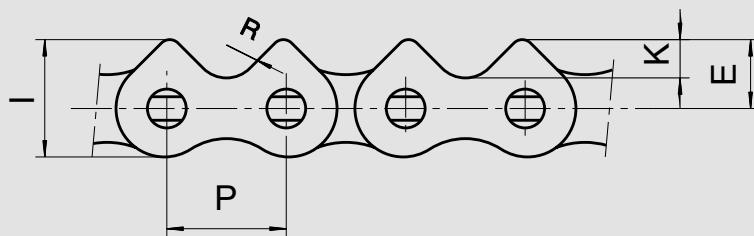
Conveying of cylindrical parts placed directly on the "V" plates.



**TYPE 1**



**TYPE 2**



Dimensions in mm

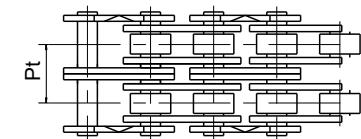
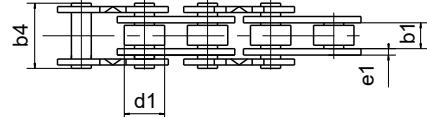
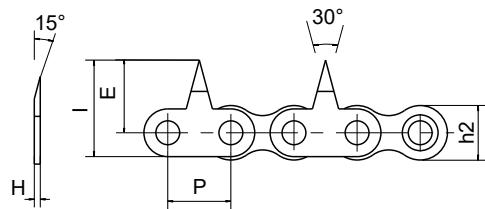
ISO 606	SEDIS	Pitch P	VERSIONS			d1 max.	b1 min.	b4 max.	V type	E	H	I	K	R	Minimum Breaking load kN
			ALPHA Premium	DELTA® HR	DELTA TITANIUM 2										
081	4L	12,7	x	x	x	7,70	3,30	8,65	1	16,25	1,2	21,25	11,0	.	8,0
	5T	12,7	x			7,76	5,00	12,30	1	16,25	1,0	20,35	11,0	.	11,6
12 B-1	13N	19,05	x	x	x	12,07	11,68	22,30	1	28,00	1,8	36,00	16,0	.	30,5
16 B-1	15T	25,4	x	x	x	15,88	17,02	35,10	2	14,50	3,0	24,80	6,5	7	66,0
20 B-1	17T	31,75	x	x	x	19,05	19,56	40,50	2	18,10	3,9	30,70	8,6	10	105,0
32B-1	22T	50,80	x	x	x	29,21	30,95	70,10	2	30,00	6,0	51,05	16,1	13	270,0

## CHAINS WITH SPIKE ATTACHMENTS - Derived from ISO 606

## APPLICATIONS

These chains are usually used for feeding plastic sheets on thermoforming machines and bubble packing machines.

MATCHING POSSIBLE FOR HIGHER ACCURACY



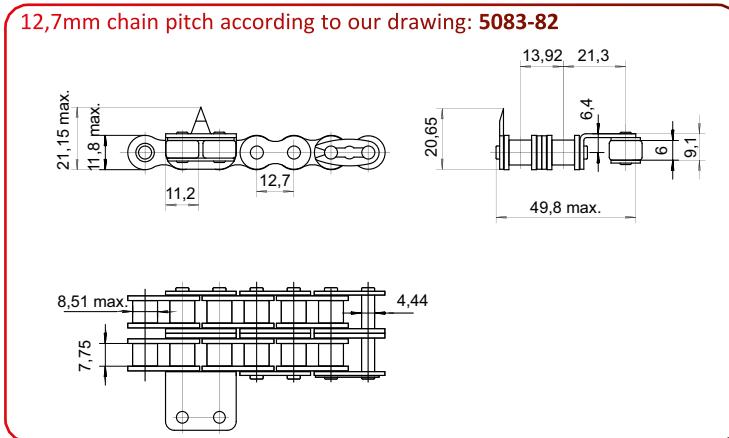
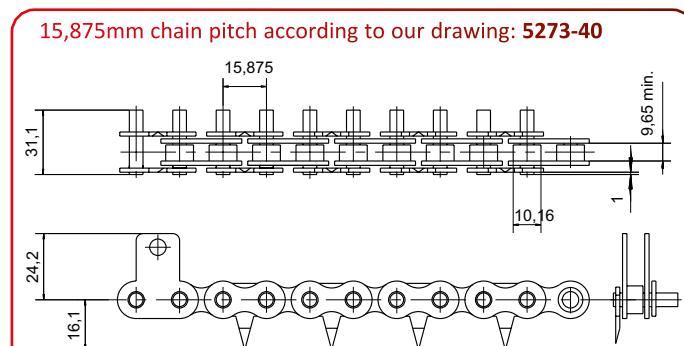
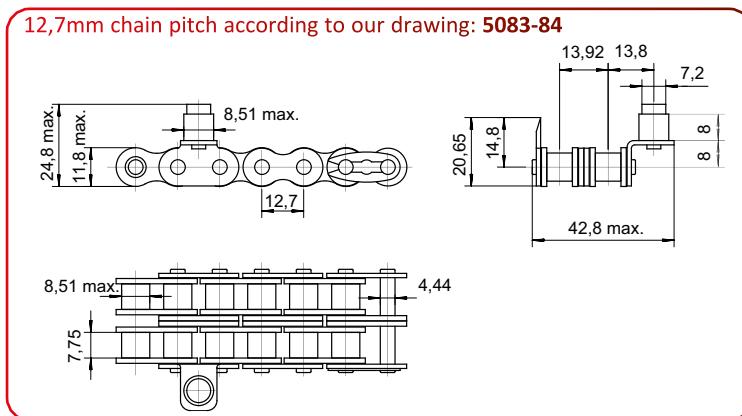
Dimensions in mm

ISO 606	SEDIS	Pitch <i>P</i>	SEDIS RANGE			<i>d<sub>1</sub></i>	<i>b<sub>1</sub></i>	<i>b<sub>4</sub></i>	<i>Pt</i>	<i>e<sub>1</sub></i>	<i>E</i>	<i>h<sub>2</sub></i>	<i>H</i>	<i>I</i>
			ALPHA Premium	DELTA® HR	DELTA TITANIUM 2									

BS standard chains (European series)															
08B-1	7N	12,7	x	x	x	(1)	8,51	7,75	16,60	13,92	1,6	14,5	11,8	1,5	20,4
10B-1	11N	15,875	x	x	x	(1)	10,16	9,65	19,00	16,59	1,6	16,0	13,7	1,5	22,2
Narrow width BS standard chains - (European series)															
	6N	12,7	x	x	x		8,51	5,35	14,10		1,6	14,5	11,8	1,5	20,4
	10N	15,875	x	x	x		10,16	6,50	16,60		1,6	16,0	13,7	1,5	22,2
ANSI standard chains (American series)															
08A-1	40-1	12,7	x	x	x		7,93	7,85	16,30	14,38	1,6	14,5	11,5	1,5	20,4
10A-1	50-1	15,875	x	x	x		10,16	9,65	20,85	18,11	2,0	16,4	13,7	2,0	23,2

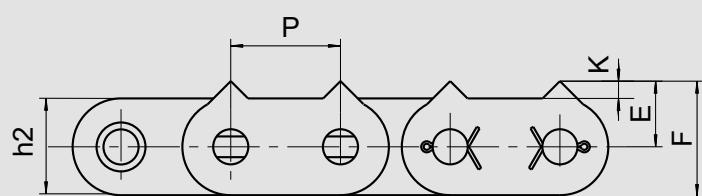
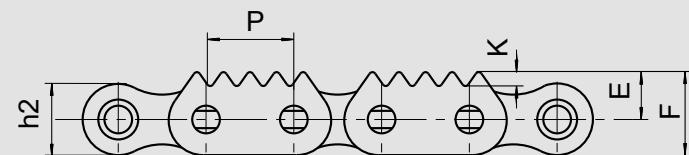
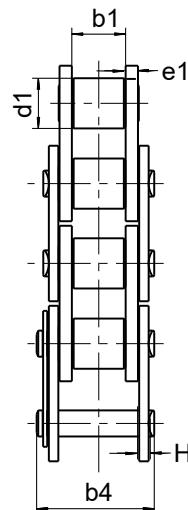
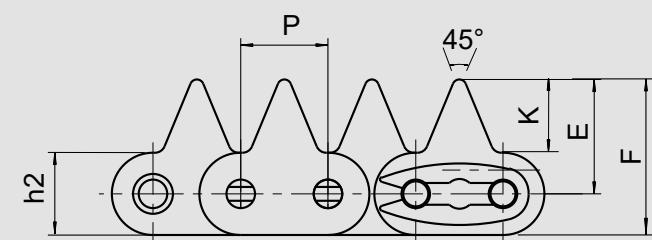
(1): References in Lub Free. In DELTA® VERTE please consult us

## EXAMPLES OF SPIKED CHAINS



**SPIKE PLATE CHAINS** - Derived from ISO 606**APPLICATIONS**

These chains are generally used in the wood industry. e.g. conveying wood planks.

**TYPE 1****TYPE 2****TYPE 3**

Dimensions in mm

References		Pitch	SEDIS RANGES			Spike type	max.	min.	max.	h2	E	H	I	K	Minimum Breaking load	
ISO 606	SEDIS		P	ALPHA Premium	DELTA® HR											
16 B-1	15T	25,4	x	x	x	2	15,88	17,02	35,1	3,9	20,6	13,7	3,0	24,0	4	66
16 B-1	15T	25,4	x	x	x	3	15,88	17,02	35,1	3,9	23,8	33,3	3,0	45,2	21,4	66
20 B-1	17T	31,75	x	x	x	1	19,05	19,56	40,5	4,5	28,0	19,0	3,5	33,0	5	105

- In duplex and triplex chain for 15T (16B-1) and 17T (20B-1): consult us.

Many other versions possible. Do not hesitate to consult our specific Wood Industry brochure for more details.

# WHEELS & SPROCKETS



**sedis** 

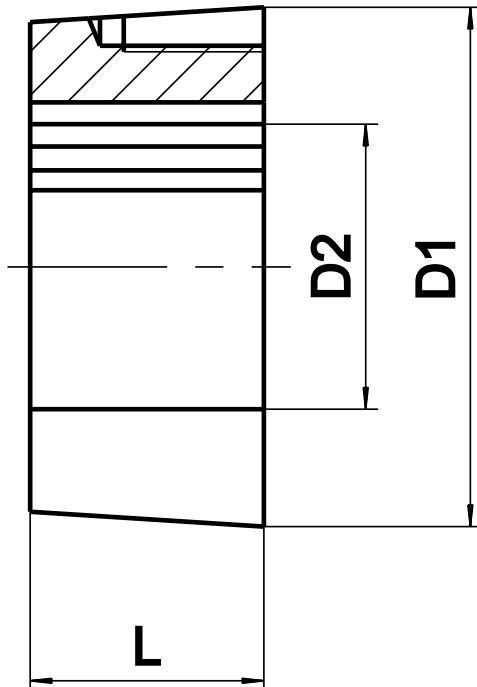
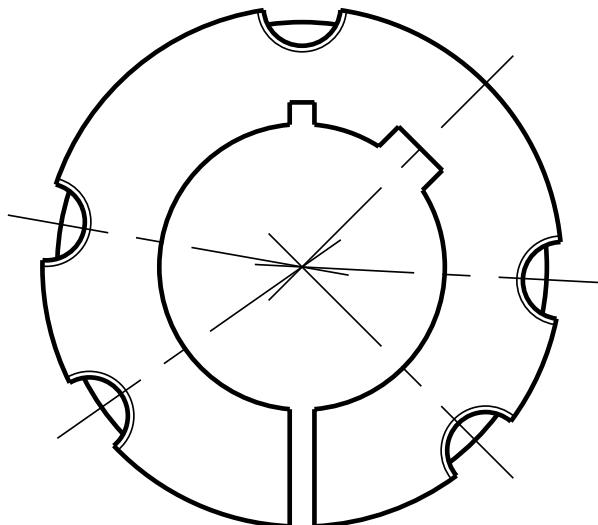








## TAPER BUSHES



References	D2													L	D1
10 08	11 12 14 16 18 19 20 22 24 25* 28*													20,1	35
11 08	11 12 14 16 18 19 20 22 24 25 28*													22,3	38
12 10	12 14 16 18 19 20 22 24 25 28 30 32*													25,4	47
12 15	12 14 16 18 19 20 22 24 25 28 30 32*													38,1	47
16 10	12 14 16 18 19 20 22 24 25 28 30 32 35 38 40 42*													25,4	57
16 15	12 14 16 18 19 20 22 24 25 28 30 32 35 38 40 42*													38,1	57
20 12	16 18 19 20 22 24 25 26 28 30 32 35 38 40 42 45 48 50													38,1	70
25 17	18 19 20 22 24 25 26 28 30 32 35 38 40 42 45 48 50 55 60 65													44,5	85
30 20	25 28 30 32 35 38 40 42 45 48 50 55 60 65 70 75													50,8	108
30 30	45 48 50 55 60 65 70 75													76,2	108
35 35	45 48 50 55 60 65 70 75 80 85 90													88,9	127
40 40	55 60 65 70 75 80 85 90 95 100													101,6	146
50 50	70 75 80 85 90 95 100 105 110 115 120 125													125,0	178

\* REDUCED KEY WAY

MANUFACTURING OF SPECIAL SPLIT SPROCKETS.  
ALL DIMENSIONS ON REQUEST.  
PLEASE CONSULT US

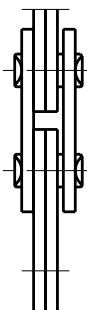
# LEAF CHAINS



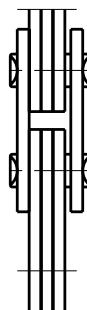
**sedis** 

## THE LACINGS GENERALLY USED

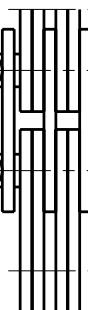
2x2



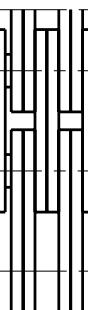
2x3



3x4



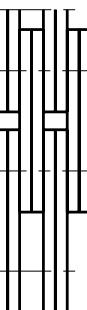
4x4



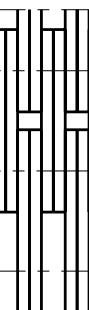
4x6



6x6

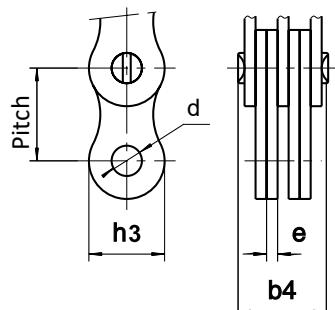


8x8

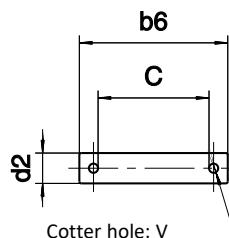


OTHER LACINGS ARE ALSO AVAILABLE. CONSULT US

## AL SERIES CHAINS - Plates issued from American standard roller chains



### CLEVIS PIN



Dimensions in mm

References	Nominal pitch	Real pitch	Lacing	b4	h3	d	e	SEDIS UTS		Mass per meter	Clevis pin			
								max.	min.		c	b6	d2	v
AL422			2 x 2	8,2					16,5	0,35	10,0	17,9		
AL444	12,7	12,63	4 x 4	14,6	11,5	3,99	1,55		33,0	0,70	16,2	24,1	3,98	1,8
AL466			6 x 6	21,0					49,5	1,01	22,6	30,5		
AL522			2 x 2	10,7					27,0	0,65	12,0	21,1		
AL544	15,875	15,82	4 x 4	19,1					54,0	1,25	21,5	29,5		
AL566			6 x 6	27,4	13,5	5,10	2,05		81,0	1,85	29,7	37,9	5,09	1,8
AL588			8 x 8	36,7					108,0	2,60	37,9	46,0		
AL622			2 x 2	12,3					38,0	0,76	15,0	23,5		
AL644	19,05	19,00	4 x 4	22,3					80,0	1,50	25,0	33,5		
AL666			6 x 6	32,4	14,3	5,97	2,40		120,0	2,25	34,6	43,1	5,96	1,8
AL688			8 x 8	41,7					160,0	2,93	44,9	53,4		
AL822			2 x 2	17,0					65,7	1,50	20,0	30,2		
AL844	25,4	25,26	4 x 4	30,0	20,8	7,97	3,20		131,4	2,80	33,3	43,5	7,94	2,0
AL866			6 x 6	43,0					197,1	4,10	46,5	56,7		
AL888			8 x 8	55,0					262,8	5,40	--	--	--	--
AL1022			2 x 2	20,8					88,5	2,52	25,0	35,3		
AL1044	31,75	31,63	4 x 4	37,4	25,4	9,57	4,10		168,6	4,95	42,0	52,5	9,53	2,5
AL1066			6 x 6	54,0					252,8	7,35	55,0	65,5		
AL1222			2 x 2	24,4					127,0	3,50	30,0	44,3		
AL1244	38,1	37,95	4 x 4	44,2	30,0	11,12	4,90		254,0	6,90	48,0	62,5	11,10	3,2
AL1266			6 x 6	64,0					381,0	10,30	70,0	84,5		
AL1422			2 x 2	28,5					172,4	4,65	35,0	50,3		
AL1444	44,45	44,32	4 x 4	51,9	35,7	12,75	5,80		344,8	9,45	60,0	75,3	12,70	3,2
AL1466			6 x 6	75,1					517,2	14,10	85,0	100,5		
AL1622			2 x 2	32,0					226,8	5,70	42,0	58,2		
AL1644	50,8	50,65	4 x 4	58,5	40,5	14,32	6,55		453,6	11,70	70,0	86,4	14,30	3,2
AL1666			6 x 6	84,6					680,4	17,40	95,0	111,5		

ALL OUR LEAF CHAINS CAN BE SUPPLIED WITH AN ANTI-CORROSION TREATMENT OR A TREATMENT AGAINST COLD USAGE. PLEASE CONSULT US

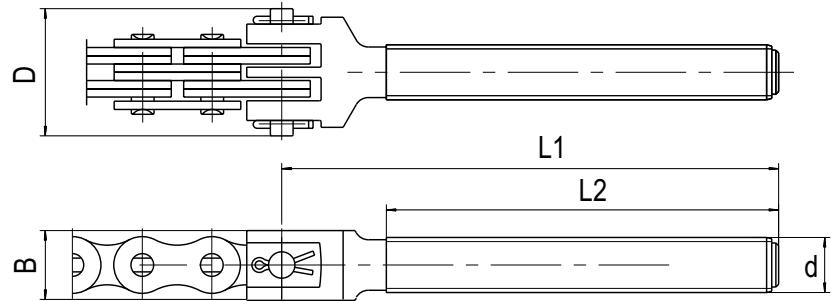




## CLEVISES

Our range of clevises is adapted to fit with the most popular inner and outer link plates lacings for the AL, J/LL and LH/BL chains.

Standard Clevises as described hereafter are, by default, of **female type** which connect to the chain with a **clevis pin**. On demand SEDIS can deliver clevises of **male type** which connect to the chain with a **connecting link**.



Dimensions in mm

CLEVISES FOR J (LL) CHAINS								
References	Corresponding chain		Lacing	d	D	B	L1	L2
	ISO 4347	SEDIS						
C48R160-120	LL08-44	J48	4 x 4	M14	21,8	20	160	120
C412R172-140	LL08-66	J412	6 x 6	M14	27,3	25	172	140
C54R82-50	LL10-22	J54	2 x 2	M14	18,4	20	82	50
C54R172-140	LL10-22	J54	2 x 2	M14	18,4	20	172	140
C58R117-85	LL10-44	J58	4 x 4	M14	25,5	20	117	85
C58R172-140	LL10-44	J58	4 x 4	M14	25,5	20	172	140
C512R82-50	LL10-66	J512	6 x 6	M14	32,0	25	82	50
C512R105-70	LL10-66	J512	6 x 6	M14	32,0	25	105	70
C512R112-80	LL10-66	J512	6 x 6	M14	32,0	25	112	80
C512R172-140	LL10-66	J512	6 x 6	M14	32,0	25	172	140
C516F172-140	LL10-66	J516	8 x 8	M16	38,7	25	172	140
C524F172-140		J524	12 x 12	M24	52,0	32	172	140
C68R160-130	LL12-44	J68	4 x 4	M14	27,5	25	160	130
C612R75-40	LL12-66	J612	6 x 6	M16	35,3	30	75	40
C612R110-75	LL12-66	J612	6 x 6	M16	35,3	30	110	75
C612R120-80	LL12-66	J612	6 x 6	M16	35,3	30	120	80
C612R135-105	LL12-66	J612	6 x 6	M16	35,3	30	135	105
C612R160-125	LL12-66	J612	6 x 6	M16	35,3	30	160	125
C612R190-160	LL12-66	J612	6 x 6	M16	35,3	30	190	160
C87F178-140		J87	3 x 4	M20	40,4	24	178	140
C88F133-90	LL16-44	J88	4 x 4	M20	43,6	25	133	90
C88F175-140	LL16-44	J88	4 x 4	M20	43,6	25	175	140
C88F250-110	LL16-44	J88	4 x 4	M20	43,6	25	250	110
C88F345-300	LL16-44	J88	4 x 4	M20	43,6	25	345	300
C812F172-135	LL16-66	J812	6 x 6	M20	56,5	25	172	135
C812F222-185	LL16-66	J812	6 x 6	M20	56,5	25	222	185
C812F287-250	LL16-66	J812	6 x 6	M20	56,5	25	287	250
C816F235-190		J816	8 x 8	M20	75,0	30	235	190
C108F194-135	LL20-44	J108	4 x 4	M24	50,6	32	194	135
C108F239-180	LL20-44	J108	4 x 4	M24	50,6	32	239	180
C1012F165-115	LL20-66	J1012	6 x 6	M24	65,5	40	165	115
C1012F250-200	LL20-66	J1012	6 x 6	M24	65,5	40	250	200
C1012F323-205	LL20-66	J1012	6 x 6	M24	65,5	40	323	205
C1012F430-165	LL20-66	J1012	6 x 6	M24	65,5	40	430	165
C1016F250-200		J1016	8 x 8	M24	81,4	40	250	200
C1204F285-160	LL24-22	J1204	2 x 2	M24	47,2	39	285	160
C1208F192-135	LL24-44	J1208	4 x 4	M30	68,2	39	192	135
C1212F285-160	LL24-66	J1212	6 x 6	M36	88,8	50	285	160
C1212F285-180	LL24-66	J1212	6 x 6	M36	88,8	50	285	180
C1212F305-180	LL24-66	J1212	6 x 6	M36	88,8	50	305	180
C1212F400-200	LL24-66	J1212	6 x 6	M36	88,8	50	400	200
C1608F255-180	LL32-44	J1608	4 x 4	M36	81,1	60	255	180
C1612F375-200	LL32-66	J1612	6 x 6	M36	106,0	60	375	200

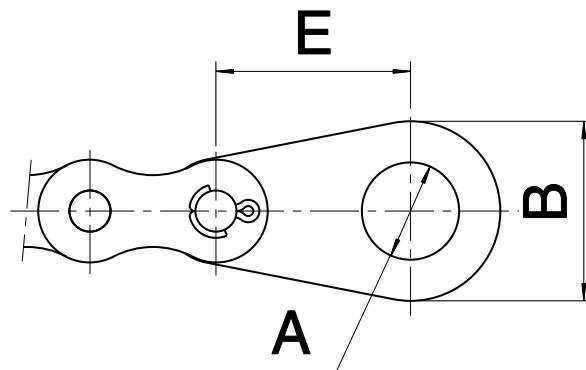
- Clevises are also available in L1 and L2 lengths different from those in above table

- When ordering your chain, please make sure whether the clevis must be delivered with or without the axle

## ACCESSORIES FOR LEAF CHAINS

### END LINKS

When the use of clevises is unsuitable, special **end links** are available.



Dimensions in mm

<i>Chain</i>	<i>A</i>	<i>B</i>	<i>E</i>
AL5	16,0	28,0	31,8
AL6	14,1	25,0	35,0
LH08	8,3 10,3	18,0 20,0	20,0 31,8
J4 (LL08)	8,2 6,5 10,3 10,0	16,0 16,0 22,0 20,0	18,0 18,0 30,0 30,0
J5 (LL10)	10,3 12,0 12,0 12,0 16,0	22,0 22,0 22,0 25,0 28,2	25,0 44,7 25,0 45,0 31,8
J6 (LL12)	10,0 10,1 10,3	22,0 20,0 20,0	25,0 25,0 25,0
J8 (LL16)	15,0 12,3 12,0 16H7 18,0 19,1 24,0 25,0 25,0 25,2	30,5 30,5 (flated) 25,0 35,0 36,0 36,0 50,0 44,0 44,0 44,0	40,0 40,0 30,0 38,1 38,5 39,0 65,0 50,0 51,0 50,8
J10 (LL20)	20,0 25,0	40,0 44,0	60,0 63,5
J12 (LL24)	24,0 32,0	52,3 56,0	65,0 76,2
J16 (LL32)	36,0 35,0 35,0 36H10	60,0 80,0 80,0 60,5	70,0 91,5 75,0 70,8

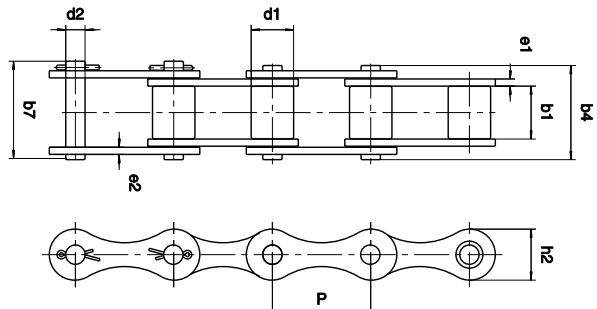
All dimensions possible. Please consult us.

# AGRICULTURAL CHAINS



**sedis** 

## ROLLER CHAIN ISO 487 S TYPE CHAINS - comply with ISO 487 international standard



- Chains S55 and S62 are fitted with large rollers  $d_1 > h_2$
- These chains are zinc plated

References	Pitch <i>P</i>	<i>d</i> max.	<i>b</i> min.	<i>b</i> max.	<i>b</i> max.	<i>d</i> max.	<i>h</i> max.	UTS		<i>kN</i>	<i>Mass</i> <i>per meter</i> <i>kg</i>
								<i>e</i> max.	<i>e</i> max.		
S52	38,1	15,20	22,20	37,3	42,5	5,78	17,20	3,06	2,60	27	1,6
S45	41,4	15,20	22,20	37,3	42,5	5,78	17,20	3,06	2,60	23	1,5
S55	41,4	17,80	22,20	37,3	42,5	5,78	17,20	3,06	2,60	23	1,8
S55R	41,4	17,80	22,20	39,5	43,0	8,13	21,66	3,15	3,15	45	2,4
S62	41,9	19,00	25,40	40,5	45,7	5,78	17,20	3,06	3,06	29	2,2

Dimensions in mm

### CONNECTING LINKS



N°205: Outer link to rivet



N°208: Cottered link



N°216: Single crank cottered link

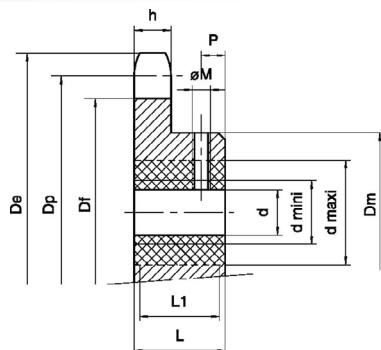
### CRANKED LINK

## STANDARD SPROCKETS FOR CHAINS S55

Shapes and profiles of teeth comply with NFE 23-105 standard

### MANUFACTURING

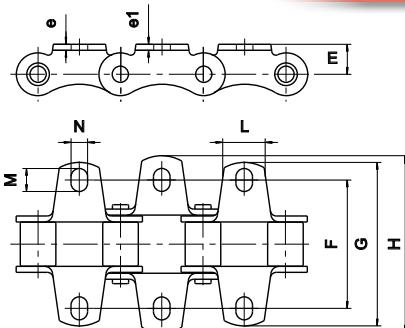
- Material: cast iron (as-cast including teeth)
- On request, we can finish these parts according to dimensions L1, *d*,  $\phi_M$  and *P* given in the right hand columns of the table, and all pin grooves (table hereafter)
- Keyways also possible



Dimensions in mm

References	Number of teeth	SPROCKETS in STOCK							FINISHING (on request)				
		<i>D</i> <i>p</i>	<i>D</i> <i>e</i>	<i>D</i> <i>f</i>	<i>d</i> max.	<i>h</i>	<i>D</i> <i>m</i>	<i>L</i>	<i>L</i> 1	<i>d</i> min.	<i>d</i> max.	$\phi_M$	<i>p</i>
9S55	9	122,0	133	105	20	18	85	50	47	25	50	M8	16
11S55	11	148,2	159	131	20	18	90	50	47	25	50	M8	16
13S55	13	174,5	186	157	20	18	100	56	53	25	60	M10	18
15S55	15	200,8	212	184	20	18	100	56	53	25	60	M10	18

## FITTED WITH K1 ATTACHMENTS

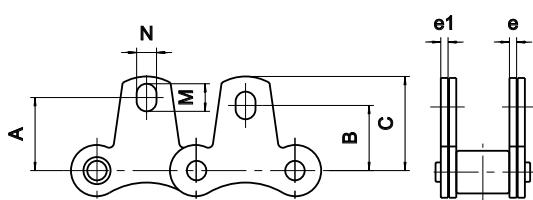


French standard: NFE 26-105

Dimensions in mm

References	E nom.	e nom.	e1 nom.	N min.	M min.	L nom.	F nom.	G max.	H max.
S52	11,7	2,5	2,5	8,3	9,9	20	59,0	77,5	77,5
S45	11,7	3,0	3,0	8,3	13,3	20	54,0	74,9	74,9
S55	15,3	3,0	3,0	8,3	13,3	20	54,0	74,9	74,9
S62	15,3	3,0	3,0	8,3	15,8	20	66,6	95,3	95,3
S55R	15,3	3,0	3,0	8,3	11,5	20	64,5	84,0	90,0

## FITTED WITH M1 ATTACHMENTS

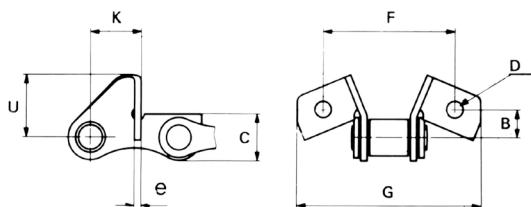


French standard: NFE 26-105

Dimensions in mm

References	A nom.	B nom.	C max.	e1 nom.	e nom.	M min.	N min.
S52	22,10	22,1	31,7			9,9	
S45	19,80	19,8	30,2	2,5	2,5	13,3	8,3
S55	19,80	19,8	30,2			13,3	
S62	24,60	24,6	38,6	3,0	3,0	15,8	8,3
S55R	30,50	27,2	39,5	3,0	3,0	11,5	8,3

## FITTED WITH SE ATTACHMENTS

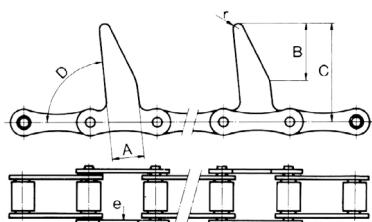


(on inner link only)

Dimensions in mm

References	B nom.	C nom.	e nom.	F nom.	G maxi	K nom.	U max.	D min.
S45	13,6	17,0	2,5	61,7	89,8	24,0	28,0	9,0
S55								

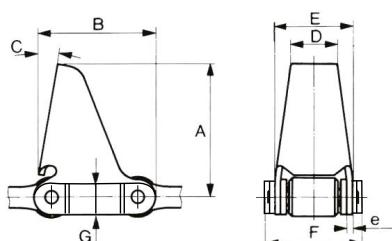
## FITTED WITH HOOKED PLATES

*Use on loaders-collectors of bales of hay, straw, etc...*

Dimensions in mm

References	A nom.	B nom.	C nom.	D	e nom.
S45	20	35	61,5	85°	2,5
S52	20	35	61,5	85°	2,5
S55	20	35	61,5	85°	2,5

## FITTED WITH SCOOPED PLATES AND TREATED EXTERNAL SCRAPING PLATES

*Used for harvesting maize (corn)*

(on outer link only)

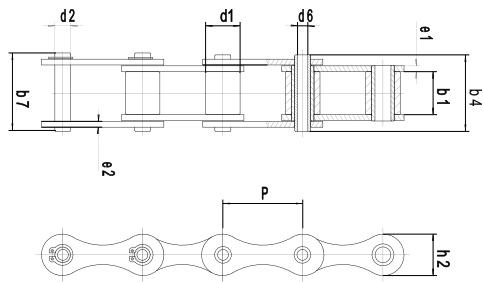
Dimensions in mm

References	A	B	C	D	E	F	G	e
S62	65,0	57,2	11°	23	38	49	17,2	3

## A-TYPE "AGRICULTURAL" CHAINS (HOLLOW PIN CHAINS)

- These hollow pin chains allow the use of  $\phi 8$  rods ( $\phi 10$  mm for B255 chain)

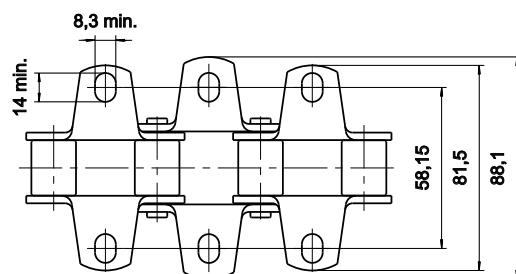
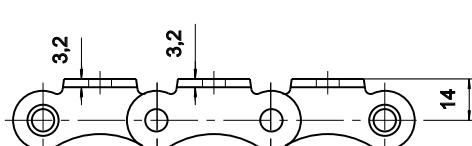
- Connecting links available:
  - with spring clip or normal outer link for A55BC and A55 INOX
  - with cottered connecting link or normal outer link for chains A155TS and B255



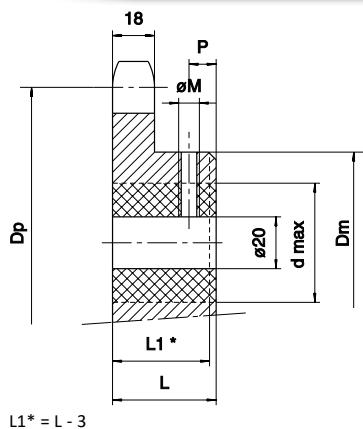
Dimensions in mm

References	Pitch <i>P</i>	<i>d</i> <sub>1</sub> max.	<i>b</i> <sub>1</sub> min.	<i>b</i> <sub>4</sub> max.	<i>b</i> <sub>7</sub> max.	<i>d</i> <sub>2</sub> max.	<i>d</i> <sub>6</sub> min.	<i>h</i> <sub>2</sub> max.	<i>e</i> <sub>1</sub> max.		<i>UTS</i> <i>kN</i>	<i>Mass per meter</i> <i>kg</i>	
									<i>e</i> <sub>2</sub>	<i>UTS</i> <i>kN</i>	<i>Mass per meter</i> <i>kg</i>		
A55BC	41,75	17,1		19,9	35,7	38,0	11,11	8,1	21,65	3,2	3,2	22,6	1,4
A155TS	41,75	17,1		19,9	35,7	42,5	11,11	8,1	25,26	3,2	3,2	49,0	2,0
B255	41,75	17,1		19,9	39,0	42,7	14,11	10,3	25,26	4,1	3,2	49,0	2,1
A55 INOX	41,75	17,1		19,9	35,0	36,7	11,11	8,2	20,50	3,2	3,2	17,6	1,3

## K1 ATTACHMENTS FOR A55BC (ZINC BI-CHROMATE PLATED)

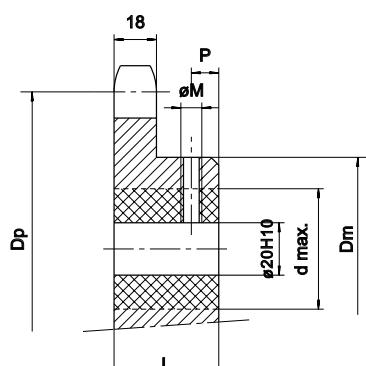


## STANDARD SPROCKETS FOR CHAINS A55 AND A155TS



### MANUFACTURING

- These steel sprockets are proposed either in cut or trimmed version. Cast iron sprockets are unpolished, tooth included.
- Any machining of these parts will be on demand and in relation to dimensions L1, d, M, P mentioned into the right column of the hereafter table
- Keyways also possible.



Dimensions in mm

CAST IRON SPROCKETS: as cast						
References	Number of teeth	D <sub>p</sub>	L	D <sub>m</sub>	d max.	P
9F55	9	122,0	50	85	50	16 M8
11F55	11	148,2	50	90	50	16 M8
13F55	13	174,5	56	100	60	18 M10
15F55	15	200,8	56	100	60	18 M10

STEEL SPROCKETS: machined							
References	Number of teeth	D <sub>p</sub>	L nom.	D <sub>m</sub> max.	d max.	P nom.	øM
9A55	9	122	50	80	50	12,5	M8
11A55	11	148,2	50	100	60	12,0	M8
13A55	13	174,5	63	130	85	16,0	M10
15A55	15	200,8	63	165	110	16,0	M10

# CONVEYOR CHAINS



**sedis** 

## SOLID BEARING PIN CHAINS ACCORDING TO ISO 1977

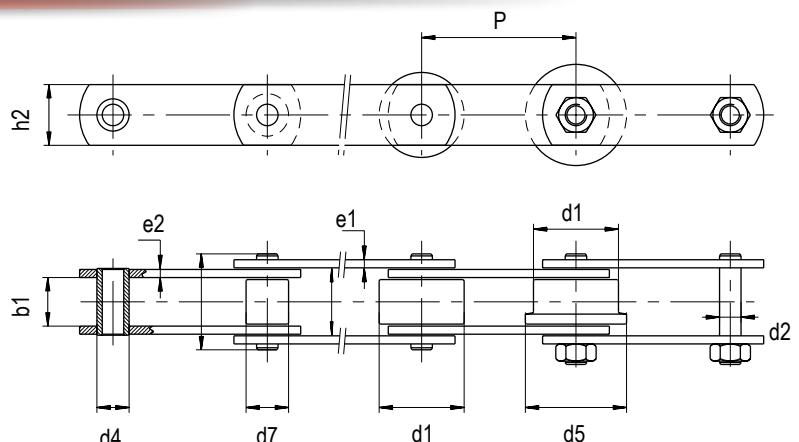
These chains are:

- bush chains (d4)
- small roller chains (d7)
- big roller chain (plain (d1) or flanged (d5))

The big rollers are heat treated. We can deliver other metallurgy treatments on demand (hardening, quenching, high frequency, etc...)

The connecting links available:

- screwed connecting link N° 209
- cottered connecting link N° 208



Dimensions in mm

Chain	Pitch (intermediate pitches on request)													$R_r$ (kN) min.
	40	50	63	80	100	125	160	200	250	315	400	500	630	
	min.	min.	ave.	max.	ave.	ave.	max.							
M 20	*													15,5
M 56		*												23,2
M 80														28,0
M 112			*											32,0
M 160				*										37,0
M 224					*									43,0
M 315						*								48,0
M 450														56,0
M 630														66,0
M 900							*							78,0

Réalisable



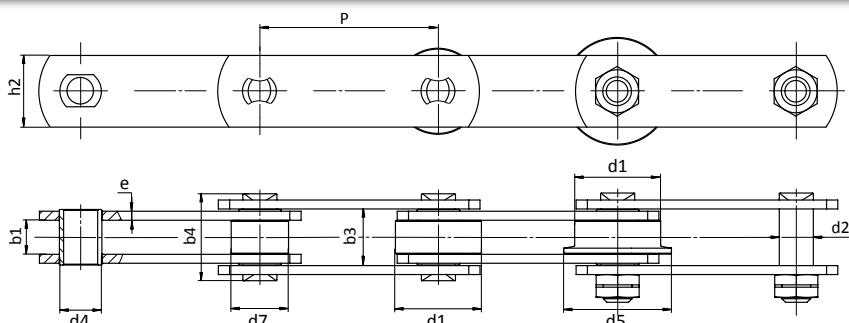
Livraison possible sous 3 semaines



\* chaînes réalisables seulement à douilles et à rouleaux

THESE CHAINS CAN BE MANUFACTURED IN DELTA® HR / DELTA® TITANIUM 2 / VERTE®  
PLEASE CONTACT US

## CHAINS WITH FLATTENED PINS AND BUSHES

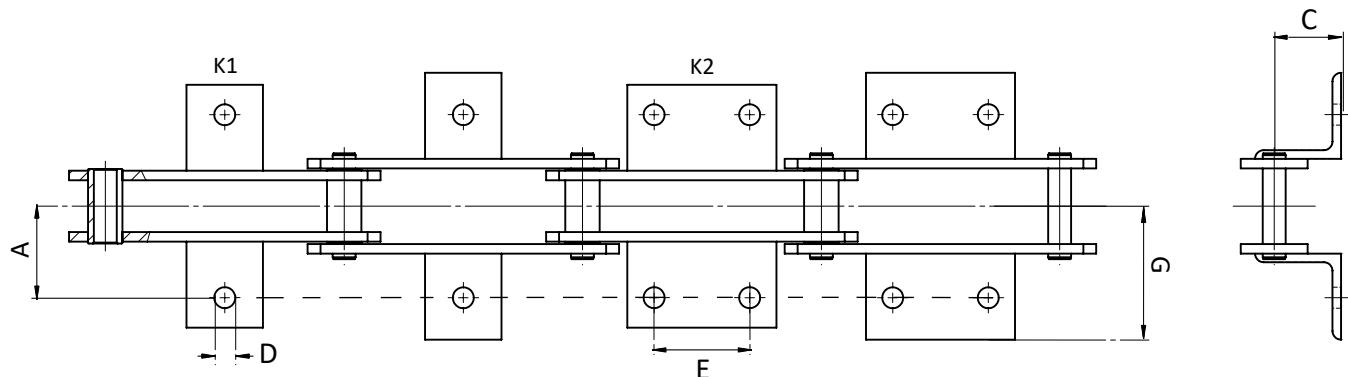


Chain		Pitch mm							$b_1$ min	$b_3$ min	$h_2$ nom	$b_4$ max	$e$ nom	$d_2$ max	$d_4$ max	$d_7$ max	$d_1$ max	$d_5$ max	$R_r$ (kN) min
Type 1*	Type 2*	63	80	100	125	160	200	250	24	33,3	30	52	4	10	15	21	42	50	56
MV 56	MVS 56	63	80	100	125	160	200	250	28	39,4	35	62	5	12	18	25	50	60	80
MV 80	MVS 80	80	100	125	160	200	250	315	32	45,5	40	73	6	15	21	30	60	70	112
MV 112	MVS 112	80	100	125	160	200	250	315	37	52,5	50	85	7	18	25	36	70	85	160
MV 160	MVS 160	100	125	160	200	250	315	400	43	60,6	60	98	8	21	30	42	85	100	224
MV 224	MVS 224	125	160	200	250	315	400	500	48	70,7	70	112	10	25	36	50	100	120	315
MV 315	MVS 315	160	200	250	315	400	500	630	56	82,8	80	135	12	30	42	60	120	140	450
MV 450	MVS 450	-	200	250	315	400	500	630	66	97	100	147	14	36	50	70	140	170	630
MV 630	MVS 630	-	200	250	315	400	500	630	78	113	120	167	16	44	60	85	170	210	900
MV 900	MVS 900	-	-	250	315	400	500	630											

\* TYPE 1: Flattened pin and bush chains, wood series

\* TYPE 2: Welded flattened pin and bush chains, wood series

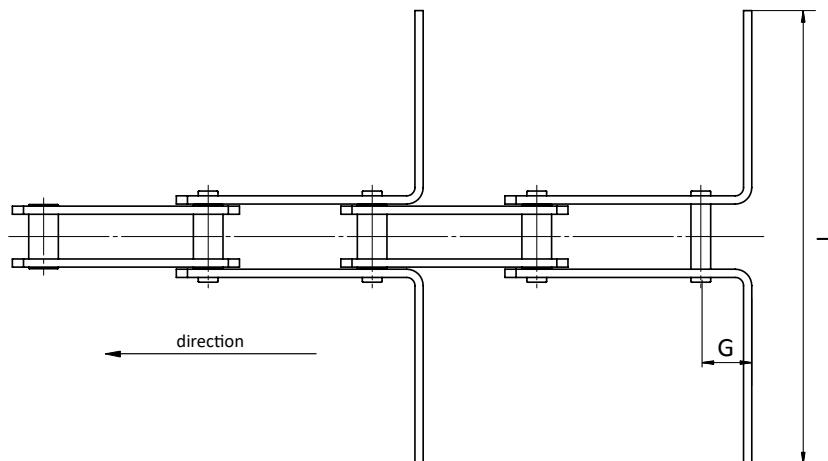
## K ATTACHMENTS FOR ISO 1977 CHAINS



Dimensions in mm

Chain	D	A	G	C	E depending on the pitch P										
					63	80	100	125	160	200	250	315	400	500	630
M20	6,6	27	43,5	16,5	20	35	50	50	50						
M56	11	44	63	30			25	50	85	85	85				
M80	11	48	71	35				50	85	125	125	125			
M112	14	55	80	40				35	65	100	100	100	100		
M160	14	62	95	45					50	85	125	125	125	145	
M224	18	70	110	55						65	125	190	190	190	190
M315	18	80	116	65						50	100	155	155	155	155
M450	18	90	135	75							85	155	240	240	240
M630	24	115	165	90								100	190	300	300
M900	30	140	200	110								100	190	300	300

## SCRAPER ISO 1977 CHAINS



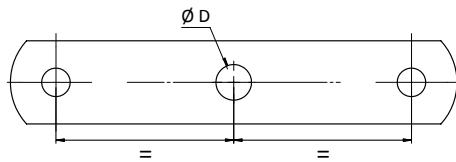
Dimensions in mm

Chain	G	L max.
MR56	26	330
MR80	28	350
MR112	30	430
MR160	35	480
MR224	39	580

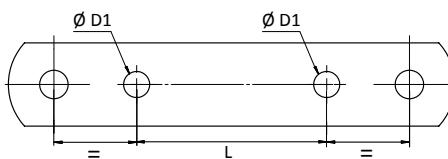
Plastic, welded or bended scraper types  
on request.

## PLATES WITH HOLES FOR ISO 1977 CHAIN

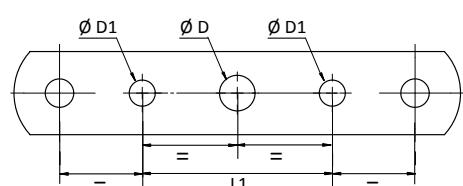
1 HOLE



2 HOLES



3 HOLES

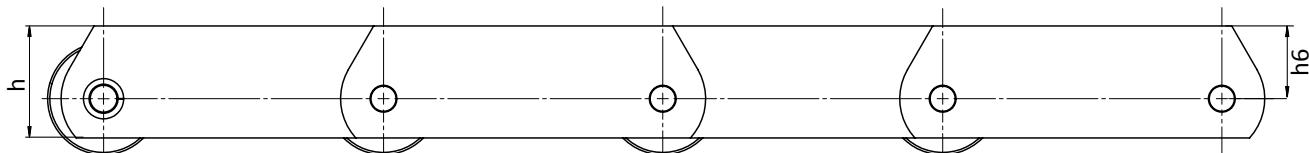


On external & internal plates

Dimensions in mm

Chain	D	D1	L	possible pitch		
				1 hole	2 holes	3 holes
M20	9			40 - 160		
M56	11	11	63	63 - 250	160 min	160 min
M80	15	11	80	80 - 315	200 min	200 min
M112	15	14	80	80 - 400	200 min	200 min
M160	21	14	100	100 - 500	250 min	250 min
M224	21	18	100	125 - 630	250 min	250 min
M315	25	18	125	160 - 630	315 min	315 min
M450	30	18	on request	200 - 630	315 min	315 min
M630	36	24	160	250 - 630	400 min	400 min
M900	45	30	200	250 - 630	500 min	500 min

## DEEP LINK ISO 1977 CHAINS



Dimensions in mm

Chain	h	h6
MD20	25	16
MD56	45	30
MD80	50	32,5
MD112	60	40
MD160	70	45
MD224	90	60
MD315	100	65
MD450	120	80
MD630	140	90
MD900	180	120

THESE CHAINS CAN BE MANUFACTURED IN DELTA® HR/DELTA® TITANIUM 2 / VERTE® VERSIONS.  
PLEASE CONSULT US.

These chains can also be manufactured with pins and flat bushes.  
See our 2013 Conveyor Chain Flyer

These chains are:

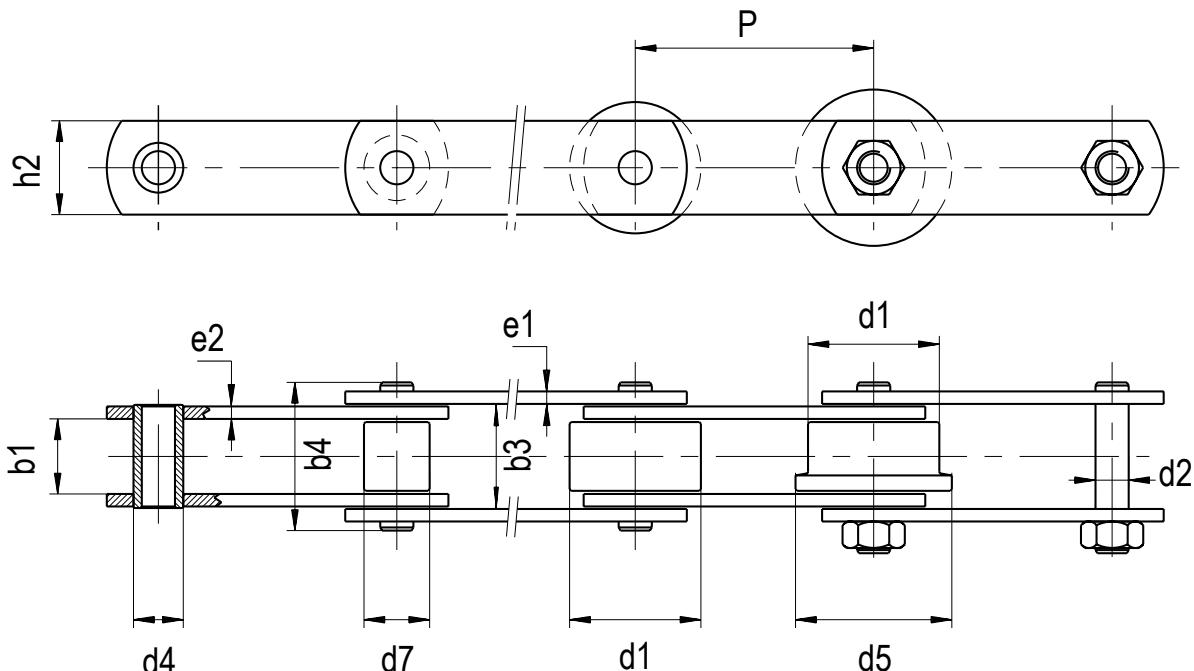
- bush chains (d4)
- small roller chains (d7)
- large roller chain (plain (d1) or flanged (d5))

The large rollers are heat treated.

We can deliver other metallurgy treatments on demand (hardening, quenching, high frequency, etc...)

The connecting links available:

- screwed connecting link N° 209
- cottered connecting link N° 208



Dimensions in mm

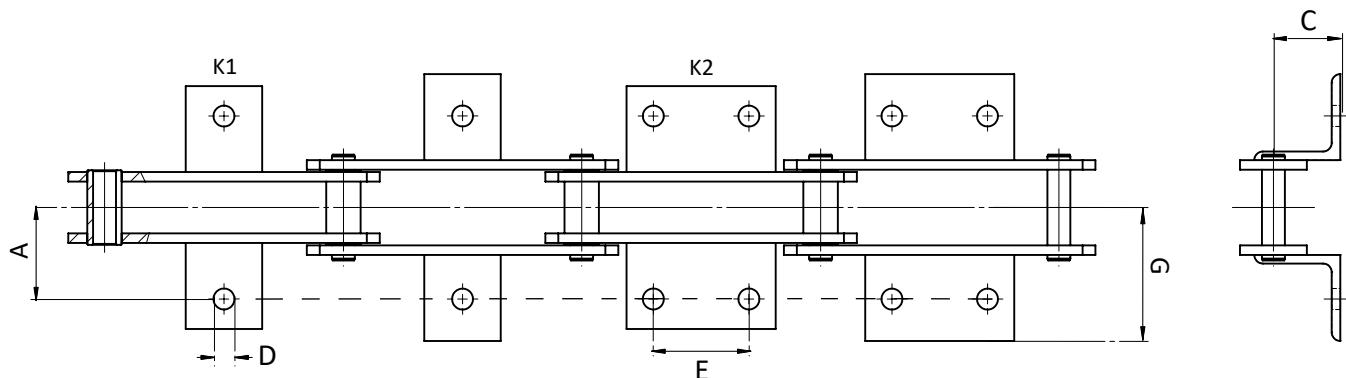
BS norme US/NF	Chain	Pitch (Intermediate pitches upon request)												<i>b1</i> min.	<i>h2</i> nom.	<i>b3</i> min.	<i>b4</i> max.	<i>e1</i> nom.	<i>e2</i> nom.	<i>d2</i> max.	<i>d4</i> max.	<i>d7</i> max.	<i>d1</i> max.	<i>d5</i> max.	<i>Rr</i> (kN) min.
		40	50	60	75	100	125	135	150	160	175	200	250												
	M22													16,0	20,0	23,0	34,0	3,0	3,0	8	12,0	18	25,0	32	20
	M35 (ZM34)													15,2	25,0	25,3	38,2	4,0	4,0	14	18,4	25	32,0	42	34
	M68 (ZM68)			*										19,0	40,0	31,6	48,5	5,0	5,0	19	23,7	32	48,0	60	90
	M100			*										21,0	40,0	37,0	53,4	5,0	7,0	19	26,0	32	48,0	60	120
	M200												203,2	26,0	50,0	46,0	65,0	6,0	8,0	24	32,0	48	70,0	90	200
	M270							*					254	38,0	60,0	58,0	81,0	8,0	8,0	28	38,0	55	90,0	115	330
	M400												252,4	38,0	70,0	66,0	94,0	10,0	12,0	29,05	38,0	60	100,0	127	490

Possible pitches

\* Only applicable to chains with bushes and rollers

THESE CHAINS CAN BE MANUFACTURED IN  
DELTA® HR/DELTA® TITANIUM 2 /VERTE® VERSIONS.  
PLEASE CONSULT US.

## K ATTACHMENTS FOR BS CHAINS

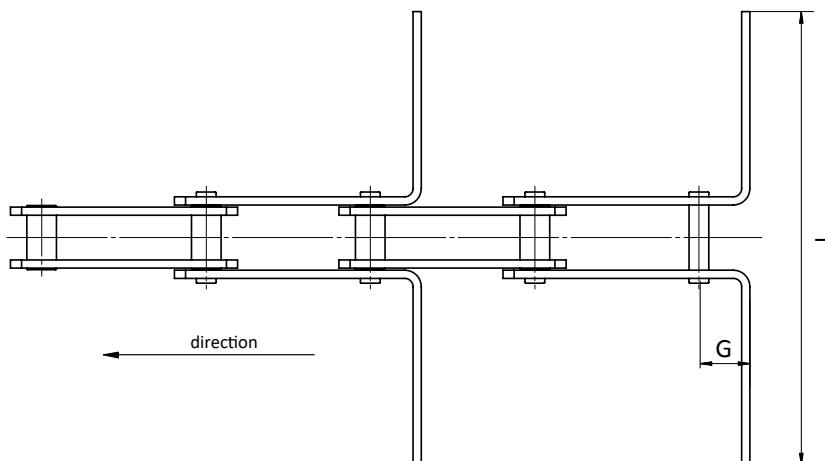


Dimensions in mm

Chain	D	A	G	C	E depending on the pitch										
					75	100	125	127	150	152,4	160	200	203,2	250	254
M22	6,6	27	43,5	16,5	20	20	50								
M35 (ZM34)															
The attachments are different. Please consult us.															
M68 (ZM68)	12,5	42,5	66,5	32		32	32	32	58	58		90		90	
M100	12,5	52,5	77	32		32	32	32	100	100		100			
M200*	14,5	52,5	101	45					50	60	60	60	60		
M270	14,5	75	121	50					40	40	60	60	60	60	60
M400	17	87,5	137	55							55	55	55	55	55

\*The M140 chain has been replaced by the M200 chain

## SCRAPER BS CHAINS



Dimensions in mm

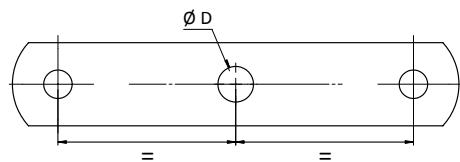
Chain	G	L max.
MR22	18	140
MR35	30	250
MR68	30	
MR100	37	
MR200*	42	480
MR270	48	
MR400	45	

Plastic, welded or bended scraper types  
on demand.

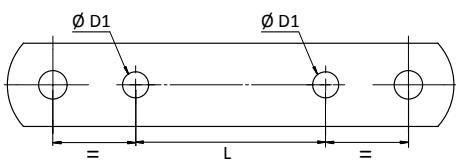
\*The MR140 chain has been replaced by the MR200 chain

## PLATES WITH HOLES FOR BS CHAINS

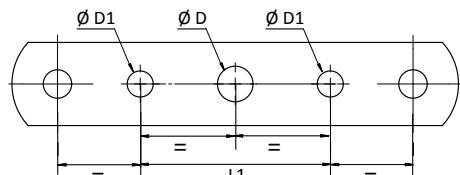
1 HOLE



2 HOLES



3 HOLES



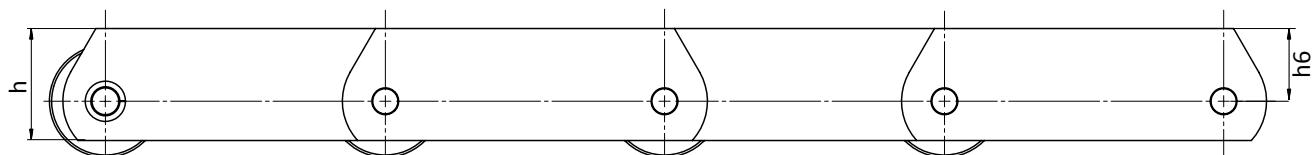
On outer and inner plates

Dimensions in mm

Chain	D	D1	L	L1	possible pitches		
					1 hole	2 holes	3 holes
M35	10,5	8,3	40		100, 125	100, 125	
M68	12,5	10,5	35, 60, 80	100	63 - 250	125, 150, 160	200, 250
M100	12,5	10,5	35, 60, 80	100	100 - 125	125, 150, 160	200, 250
M200*	12,5	12,5	60	100	100 min	150 min	200 min
M270	14,5	14,5	60	60	150 min	160 min	160 min
M400	17	17	100	100	160 min	200 min	200 min

\* the M140 chain has been replaced by the M200

## DEEP LINK BS CHAINS



Dimensions in mm

Chaîne	h	h6
MD22	25	15
MD35	35	21,5
MD68	50	30
MD100	50	30
MD200*	70	45
MD270	90	60
MD400	110	75

\* the MD140 chain has been replaced by the MD200

THESE CHAINS CAN BE MANUFACTURED IN DELTA® HR/DELTA® TITANIUM 2 / VERTE® VERSIONS.  
PLEASE CONSULT US.

## HOLLOW BEARING PIN CHAINS

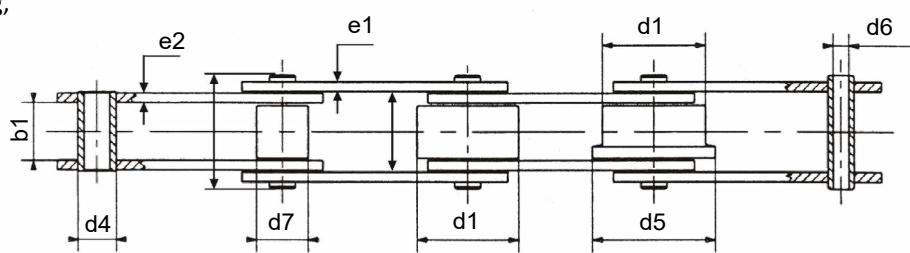
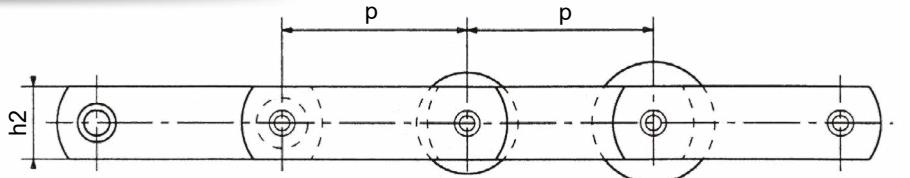
These chains are:

- bush chains (d4)
- small roller chains (d7)
- big roller chain (plain (d1) or flanged (d5))

The big rollers are heat treated. We can deliver other metallurgy treatments on demand (hardening, quenching, high frequency, etc...).

The connecting links available:

- outer riveting link N° 205
- spring connecting link N° 206
- cottered connecting link N° 208



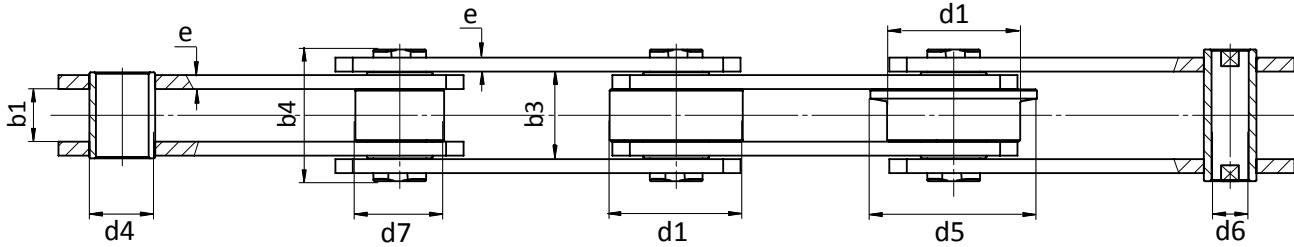
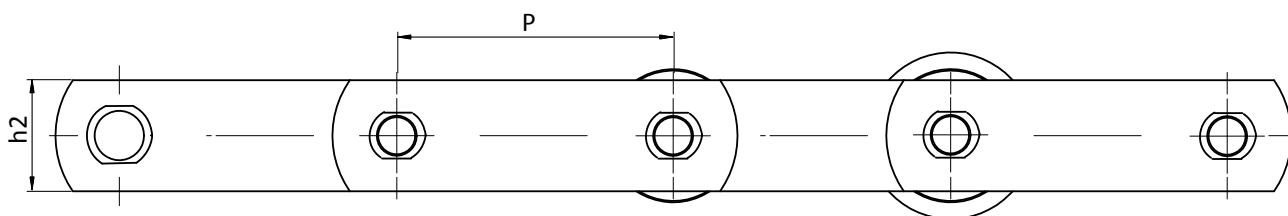
Chain	Pitch (Intermediate pitch upon request)													<i>Rr</i> (kN)												
	40	50	60	75	80	100	125	135	150	160	175	200	250	315												
norme ISO	MC56														23,2	35,0	33,7	46,6	4,0	5,0	10,2	21,0	—	50,0	60	70
norme USINE	MC112														30,0	50,0	45,7	64,8	6,0	6,0	14,3	30,0	—	70,0	88	130
BS norme USINE	MC27 (ZM28)														15,2	25,0	25,3	37,1	4,0	4,0	10,2	18,4	25	32,0	42	34
	MC55 (ZM54)														19,0	40,0	31,6	48,5	5,0	5,0	13,3	23,7	32	48,0	60	68
	MC110														26,0	50,0	44,0	62,0	5,0	8,0	20,4	32,0	48	70,0	90	110

Note: Attachments, deep link side plates and drilled side plates are available only for Special SEDIS BS Standard chains.

Possible pitches

THESE CHAINS CAN BE MANUFACTURED IN DELTA® HR/DELTA® TITANIUM 2 /VERTE® VERSIONS.  
PLEASE CONSULT US.

## CHAINS WITH FLATTENED PINS AND BUSHES

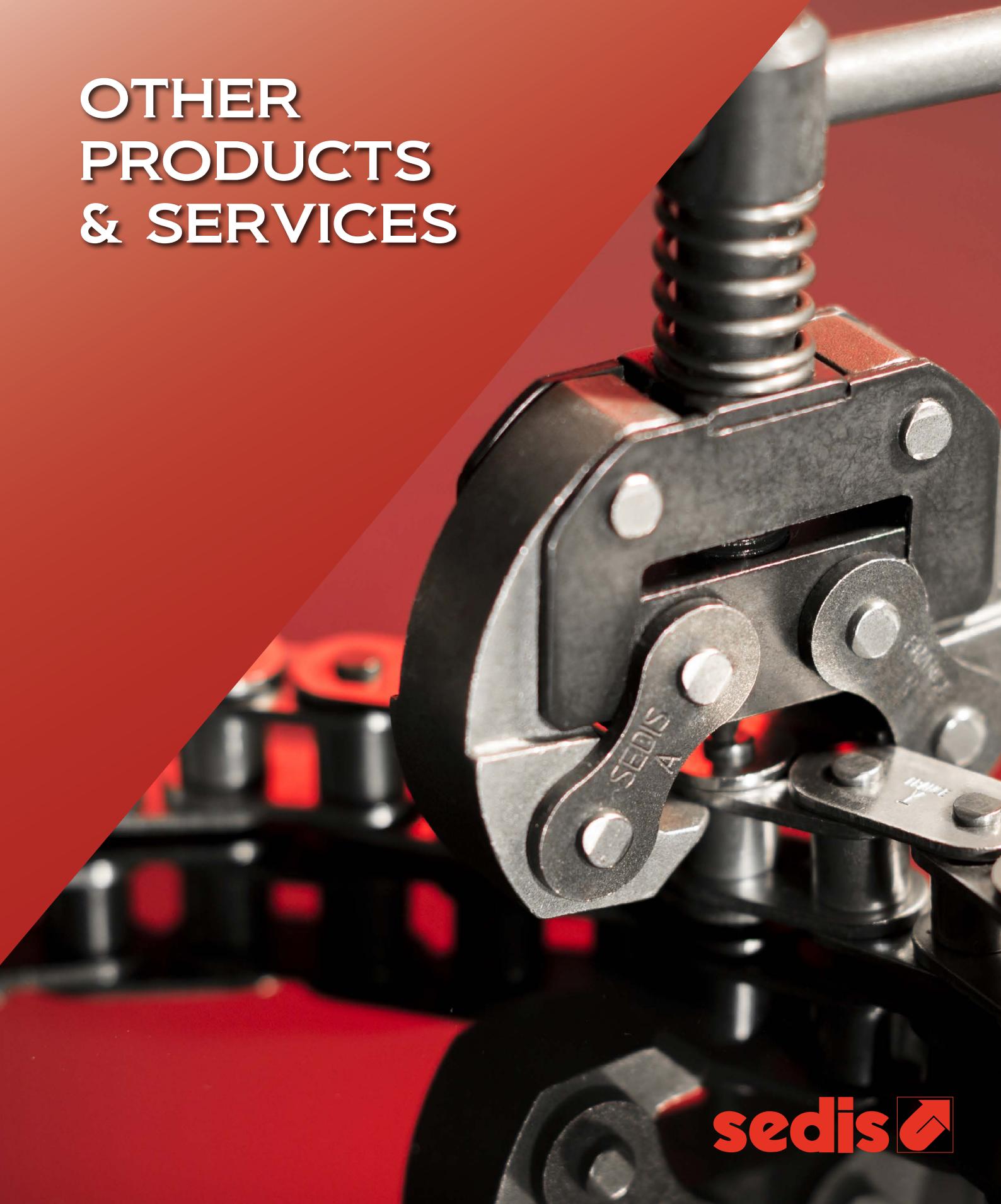


Chain	Pitch mm							<i>b1</i> min	<i>h2</i> min	<i>b3</i> nom	<i>b4</i> max	<i>e</i> nom	<i>d6</i> max	<i>d4</i> max	<i>d7</i> max	<i>d1</i> max	<i>d5</i> max	<i>Rr</i> (kN)
	63	80	100	125	160	200	250											
MVC 56	63	80	100	125	160	200	250	24	35	33,3	48	4	10,2	21	30	50	60	56
MVC 112	80	100	125	160	200	250	315	32	50	45,5	67	6	14,3	29	42	70	85	112
MVC 224	125	160	200	250	315	400	500	43	70	60,6	90	8	20,3	41	60	100	120	224



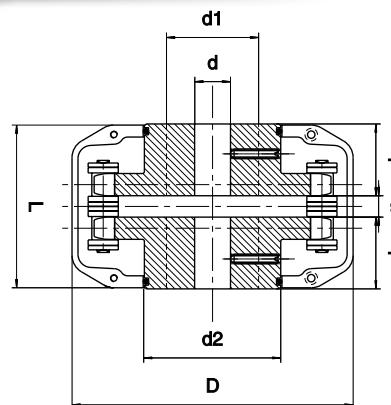


# OTHER PRODUCTS & SERVICES



**sedis** 

## CHAIN COUPLINGS



**CHAIN COUPLINGS WITHOUT PROTECTION HAVE DIFFERENT DIMENSIONS. THEY ARE AVAILABLE WITHOUT KEYWAY AND WITHOUT GRUB SCREW. IN DOUBT, CONSULT US.**

<i>References</i>		<i>d</i>	<i>d1</i>	<i>d2</i>	<i>l</i>	<i>D</i>	<i>L</i>	<i>a</i>	<i>Maximum misalignment between shafts (mm)</i>	<i>Maximum angular shafts divergence (degrees)</i>	<i>Mass (without case) (kg)</i>
<i>with case</i>	<i>without case</i>										
A203	A203SP	12	28	42	30	80	65	5,04	0,25	1°	0,82
A207	A207SP	12	34	56	28	97	63	6,82	0,25	0°50'	1,65
A211	A211SP	14	48	70	30	117	68	7,69	0,25	0°50'	3,00
A213	A213SP	16	55	80	35	145	79	8,61	0,30	0°40'	4,60
A215	A215SP	20	65	100	45	190	106	15,98	0,30	0°40'	10,00
	A217SP	30	77	114	60	-	138	18,10	0,40	0°35'	20,00
	A218SP	40	97	148	70	-	165	24,46	0,40	0°30'	40,00
	A220SP	50	112	162	85	-	201	30,41	0,50	0°30'	65,00
	A222SP	50	127	185	90	360	210	29,40	0,50	0°30'	75,00
	A223SP*	60	150	220	120	450	277	36,34	0,60	0°30'	150,00
	A224SP*	80	170	280	150	-	348	48,01	0,60	0°30'	260,00

\* manufactured on request

Sprockets are 18 teeth type except for A224 (16 teeth type).

### TRANSMISSIBLE POWER RATING IN KW (CONSTANT TORQUE)

<i>References</i>	<i>RPM</i>																
	25	50	75	100	200	300	400	500	600	900	1 200	1 500	1 800	2 500	3 000	3 600	4 800
A203	0,1	0,3	0,4	0,6	1,1	1,7	2,2	2,8	3,3	5,0	6,7	8,3	10,0	13,7	16,3	19,3	24,9
A207	0,3	0,7	1,0	1,4	2,8	4,1	5,5	6,9	8,2	12,3	16,4	20,4	24,3	33,2	39,3	46,0	
A211	0,6	1,1	1,7	2,2	4,5	6,7	9,0	11,2	13,4	20,1	26,6	33,1	39,4	53,3	62,5		
A213	0,9	1,7	2,6	3,4	6,8	10,3	13,7	17,1	20,4	30,5	40,3	49,9	59,0	78,7			
A215	2,5	5,0	7,5	10,0	20,0	29,9	39,8	49,7	59,4	88,2	115,8	141,9	166,0				
A217	5,1	10,2	15,3	20,5	40,9	61,2	81,4	101,5	121,4	179,4	234,4	285,1					
A218	10,3	20,7	31,0	41,3	82,5	123,4	163,9	203,9	243,3	356,5	459,5	548,8					
A220	16,2	32,4	48,5	64,7	129,1	192,9	256,0	317,9	378,5	549,4	698,4						
A222	23,2	46,4	69,6	92,8	185,1	276,6	366,8	455,3	541,6	783,6							
A223	47,9	95,8	143,6	191,4	381,5	568,5	752,2	930,1	1 101,3								
A224	70,1	140,2	210,1	280,0	557,5	829,8	1 094,6	1 349,2	1 591,1								

**Coupling selection:** select a coupling whose rated power  $P_n$  (or transmissible power) is given in the table above. Rated power  $P_n$  (as per table) has to be higher than the power to be transmitted  $\times$  safety factor "S".

### SAFETY FACTOR "S"

#### Correction

Multiply these factors by:

- 1,15: for operating 16/24 hours
- 1,30: for operating 24/24 hours

<i>Class of transmission</i>	<i>Electric motor or turbine</i>	<i>I.C engine with hydraulic drive</i>	<i>I.C engine with mechanical drive</i>
A - Efforts réguliers	1,0	1,2	1,4
B - Efforts irréguliers	1,2	1,4	2,0
C - Efforts irréguliers, à coups	1,8	2,0	2,3

Gauges available for measuring the wear elongation of chains:

- J (LL) & AL type leaf chains
- LH/BL type leaf chains & roller chains



**CHAIN EXTRACTOR REF 9130**

Simplex, duplex and triplex chains of pitches from 8 to 19,05mm in British and American standards



**CHAIN EXTRACTOR REF 9160**

Simplex, duplex and triplex chains of pitches from 25,4 to 31,75mm in British and American standards

This tooling is used to extract the pins of a transmission chain facilitating the dismantling of an outer link.

It is recommended to file the pins before removing them.

## ASSEMBLING AND EXTRACTING TOOL

Tooling used to dismantle and assemble all our conveyor chains, special and standard, in all pitch sizes.  
Dismantling possible on unriveted pins.

Widely used in theme parks, cement and sugar industries, etc...



## SEDIS SERVICE



The performance of an equipment is not only due to an excellent quality of product but also to a proper installation and an appropriate maintenance, that's why you can trust our experienced team for complete installation, maintenance and refurbishing of your conveyor lines on site, for any industry.

SEDIS Service performs:

- *Prescription*
- *Assessment study*
- *Installation*
- *Training*
- *Application analysis*

From design to installation, one contact:  
**SEDIS**

FOR FURTHER INFORMATION PLEASE CONTACT US

# OTHER AVAILABLE BROCHURES AND CATALOGUES

## CONVEYOR CHAINS CATALOGUE



## INDUSTRIAL COMPONENTS CATALOGUE



## NEW CONVEYOR OFFERING



## TRANSMISSION BROCHURE 2021



## RANGES FLYERS

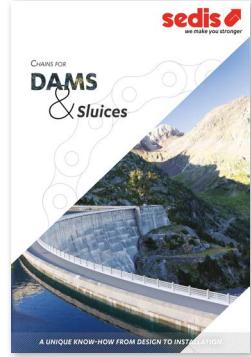
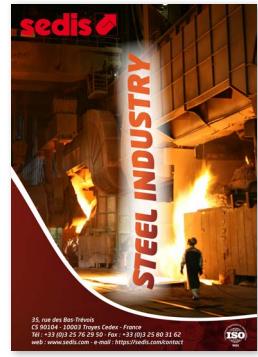
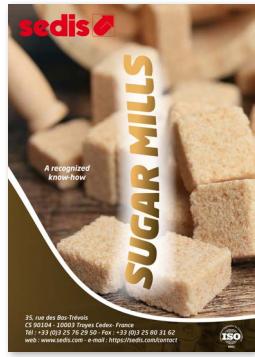
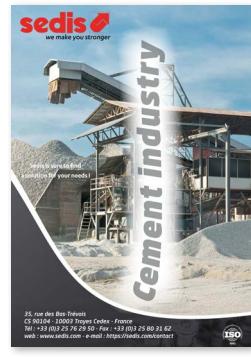
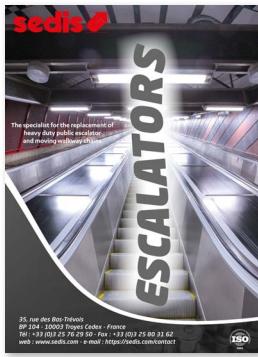
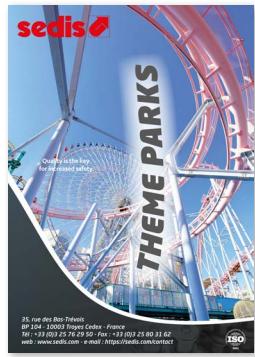
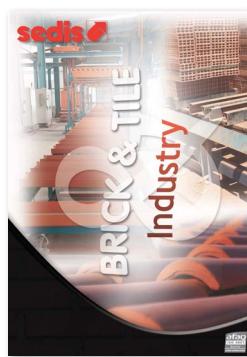
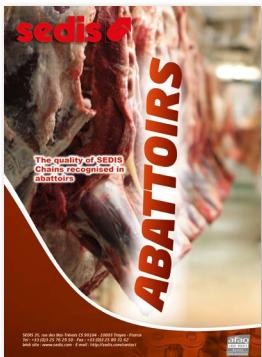


# OTHER AVAILABLE BROCHURES AND CATALOGUES

## CORPORATE BROCHURE



## SPECIFIC APPLICATION BROCHURES





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