# Power Chains for Cranes





#### The Cavotec Group

Cavotec is the name of a group of companies specialized in power supply technology for cranes and other industrial equipment. It is formed by 6 manufacturing companies located in Canada, Germany, Italy, Sweden and UK, and by 18 Cavotec sales companies which, together with a network of Distributors, serve more than 30 countries in five continents. Each manufacturing company, no matter where it is located, aims at being a market leader in its field by providing innovative and reliable products to Group customers. Although they manufacture different products in different countries, they are globally supported and coordinated by the Cavotec Group in their product development and marketing activities. Each sales company, and each distributor, has a policy aiming at better serving its local market with

#### Cavotec Sales Companies

the full support of the Cavotec Group.

The products manufactured by Specimas described in the following pages, as well as other quality products in the field of crane and power technology, are distributed around the world by the Cavotec sales companies and by a network of selected Distributors.

# Our aim is to be local everywhere

Great emphasis is put in providing the highest quality not only in the selected products, but also in service and backing to their customers. Our philosophy in fact is to be local everywhere.

# Our fields of activity are



Mining, tunnelling



**Steel Mills** 



**Forestry** 



Ports, Terminals



Robots, Automation



**Offshore** 



**Constructions** 

The cover picture shows a Cavotec power chain installation on a large 1000 T bridge crane by Kocks Krane GmbH in a shipyard at Stralsund, Germany. Three Brevetti SR 319 power chains are mounted on this crane, each having a travel length over 80 meters.



Typical single-loop power chain installation on a KCI Konecrane RTG unit in operation.



For many years overhead cranes have been powered by means of festooning systems and conductors bars. Even if these systems are generally accepted solutions on trolleys and overhead cranes, there are today alternatives which are more innovative and cost-effective.

The alternative system which is now gaining acceptance in ports, terminals, steel mills, foundries and workshop operations - is based on the use of "Cavotec Power Chains", manufactured by Brevetti.

With this system, power and control cables are carried, safely and fully protected, by a nylon chain, over long travelling distances, at high speeds. The main advantages are:

- reduces cable length & weight by more than 50%
- allows trolley speeds exceeding 200 m/min
- allows separation of power and control cables
- allows any combination of cables, hoses and fibre optic cables
- low and easy maintenance.

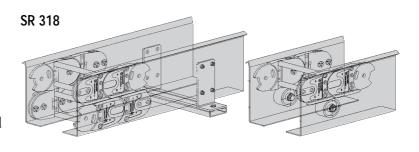
Endurance tests carried out by leading crane manufacturers followed by applications have proved the reliability of the system and its clear economic advantages.

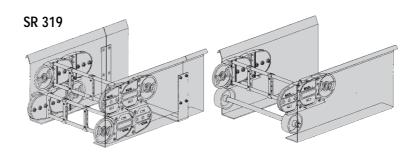


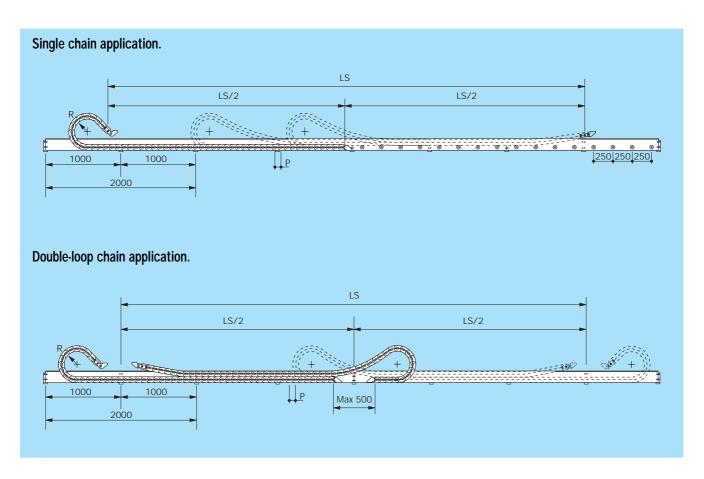
## Power Chains: selection guide

#### Power Chains for long travel distances.

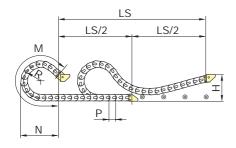
The chain links are all equipped with a sliding skid which allows the chain to slide over itself inside a guiding channel. This special feature permits the use of power chains for long travel distances. Rollers are used to support the section of the chain which is not sliding on itself.







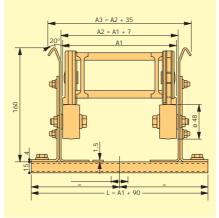
### SR 318

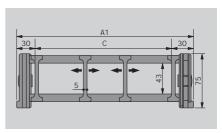


Determining the length of the chain.

$$L= \frac{LS}{2} + M + 2P$$

P= 80mm Weight of the chain without fastening: 2,2 kg/m

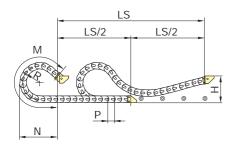




A1	С
260	200
360	300
460	400
560	500
660	600

Radius	Н	M	N
150	250	1040	400
200	250	1360	550
230	250	1600	650
280	250	2000	800
400	250	3040	1200

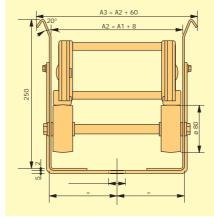
### SR 319

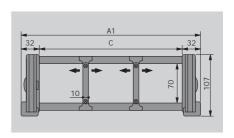


Determining the length of the chain.

$$L = \frac{LS}{2} + M + 2P$$

P= 100mm Weight of the chain without fastening: 3,7 kg/m





A1	C	
264	200	_
364	300	
464	400	
564	500	_
664	600	

Radius	Н	M	N
200	300	1200	485
250	300	1600	650
300	300	2000	830
350	300	2500	1000
400	300	3000	1200
500	300	3800	1500

#### Power Chains at work.



Power chains are an excellent alternative to traditional festoon systems on automatic stacking cranes where space is limited. Photo from Nelcon RMGC at ECT, Rotterdam, The Netherlands.

