



**STIASA**

Suministros Industriales del Tajo, S.A.



**ENDURO SERIES  
MAINTENANCE FREE CHAINS**



## Regina ENDURO chains are designed to operate in “lube-free” applications.

Designed to work without periodic maintenance, Regina ENDURO chains are ideal for applications where regular lubrication is difficult or not allowed, and where product contamination has to be avoided.

Regina ENDURO chains fit standard sprockets of ISO roller chains and are available in both European (BS) and American (ANSI) standard, with pitches from 1/2” to 1”, in simplex and duplex versions.

## WEAR RESISTANCE

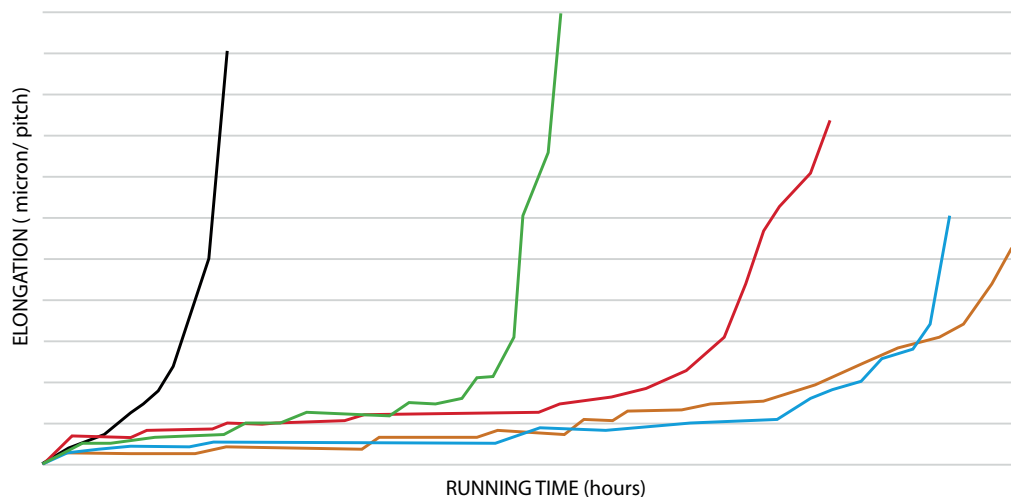
ENDURO chains outlast standard chains without periodic lubrication.

The unique technology and “heavy wall” design of the sintered bushing ensures excellent wear resistance.

### COMPARATIVE WEAR TEST - 16B-1 CHAINS WITH SINTERED BUSHINGS

Regina Catene Calibrate S.p.A. - Laboratory

13/07/2011



#### TEST CONDITIONS

Rpm: 234  
 Sprockets: z1=15 z2=15  
 Chain pull: 3'432 N (350kg)  
 Chain speed: 1,50 m/s  
 Specific pressure pin/bushing: 17 N/mm<sup>2</sup>  
**No lubrication during the test**

- 16B-1 Regina STANDARD chain with factory pre-lubrication (no relubrication)
- 16B-1 Maintenance free chain - Competitor B
- 16B-1 Maintenance free chain - Competitor A
- 16B-1 Maintenance free chain - Competitor C
- **16B-1 Maintenance free chain - Regina Enduro series - code 147BS**

## BENEFITS

- Dramatic wear life increase compared to standard chains in un-lubricated conditions
- Eliminate need for periodic lubrication
- No product or equipment contamination
- Resistance to corrosion in mildly aggressive environment
- Savings in lubrication and maintenance costs

## APPLICATION LIMITS

- Maximum SPEED: 2 m/sec
- Maximum specific pressure: 20 N/mm<sup>2</sup>
- Temperature operating range: -30°C ÷ +150°C
- Mild corrosive environment
- Absence of abrasive contamination

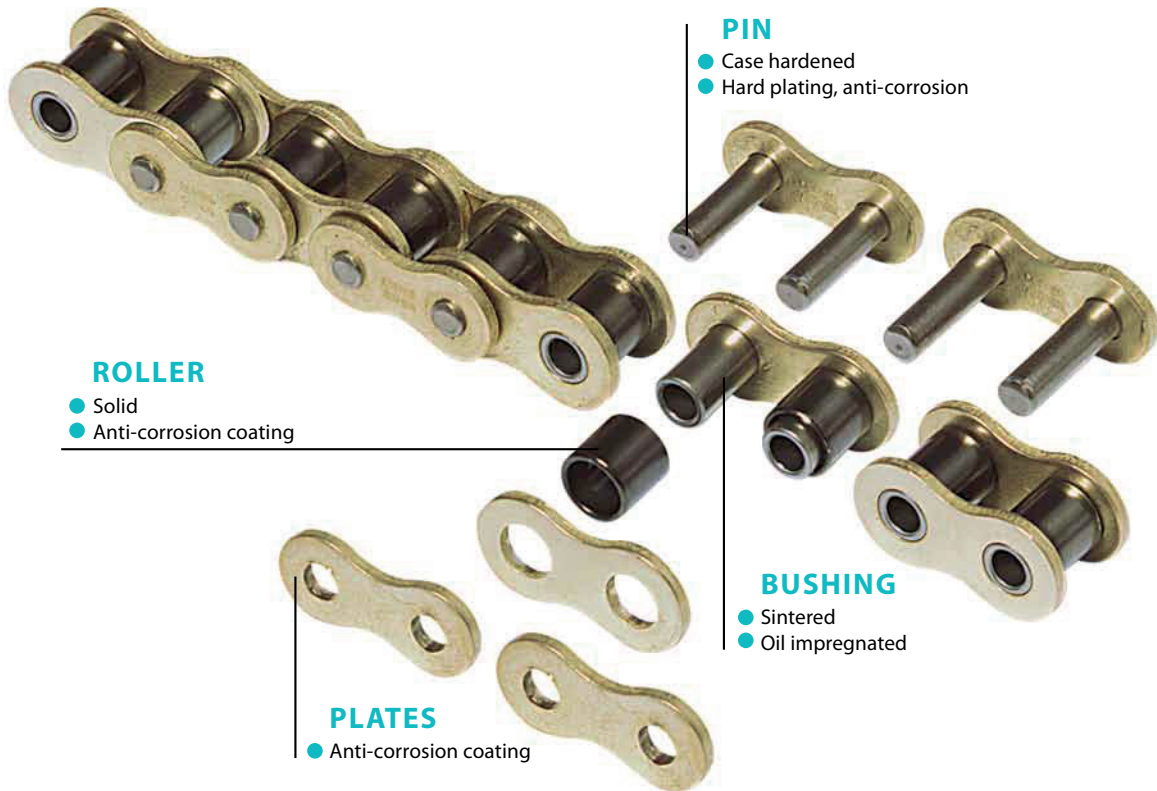
If your application exceeds the above limits, please contact Regina Technical Service for further analysis.



Regina ENDURO chains, as well as all other Regina products, are manufactured in Regina's European Factories.

## TECHNICAL CHARACTERISTICS

- ➔ "HEAVY WALL" SINTERED BUSHING, IMPREGNATED WITH USDA H1 FOOD APPROVED OIL
- ➔ HARD PLATED PIN
- ➔ GALVANICALLY COATED PLATES AND ROLLERS FOR RESISTANCE TO MILDLY AGGRESSIVE ENVIRONMENT

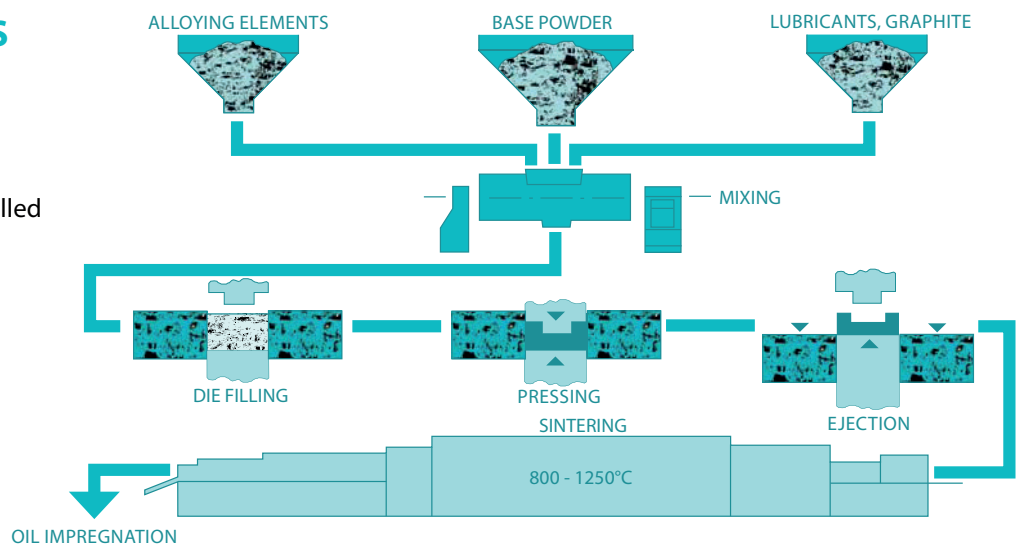


- Sintered bushing, impregnated with high performance lubricant
- Optimized bushing wall thickness for increased wear performance

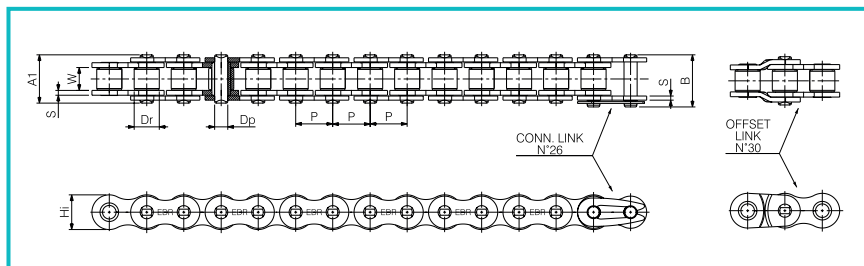
## THE SINTERING PROCESS

A blend of metallic powders is pressed into the desired shape and sintered at high temperature.

The porosity left in the material is then filled with high quality oil through a vacuum process.



## SINGLE STRAND



Regina	Iso	Pitch		Roller	Inside	Plate	Plate	Pin	Pin	Max	Working	Average	Suggested	Std. loose parts	
ref	ref	mm	inches	Dr	W	Hi	S	Dp	A1	mm	mm <sup>2</sup>	kN	Load (max)	Conn.	Offset
				mm	mm	mm	mm	mm	mm	mm			N	Link	Link

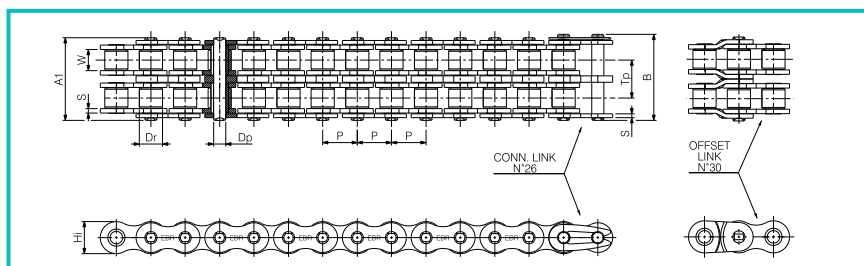
## EUROPEAN SERIES

126BS	08B-1	12,70	1/2	8,51	7,75	11,85	1,63/1,40	4,45	16,50	24,00	50	18,60	1000	26	30
136BS	10B-1	15,875	5/8	10,16	9,65	15,15	2,00/1,53	5,09	19,60	27,00	69	24,80	1380	26	30
140BS	12B-1	19,05	3/4	12,07	11,68	18,08	1,85/1,70	5,72	22,50	30,00	89	33,00	1780	26	30
147BS	16B-1	25,40	1	15,88	17,02	21,08	3,80/3,00	8,28	35,90	46,00	210	63,35	4200	26	30

## AMERICAN SERIES

A40BS	08A-1	12,70	1/2	7,92	7,85	11,85	1,63/1,53	3,98	16,50	23,00	44	17,15	880	26	30
A50BS	10A-1	15,875	5/8	10,16	9,40	15,15	2,00/2,00	5,09	20,50	28,00	70	26,00	1400	26	30
A60BS	12A-1	19,05	3/4	11,91	12,57	18,08	2,30/2,30	5,72	25,80	33,00	101	37,25	2020	26	30
A80BS	16A-1	25,40	1	15,88	15,75	24,13	3,15/3,15	7,94	33,50	40,00	180	64,70	3600	26	30

## DOUBLE STRAND



Regina	Iso	Pitch		Roller	Inside	Plate	Plate	Pin	Pin	Max	Working	Average	Suggested	Std. loose parts		Trasversal
ref	ref	mm	inches	Dr	W	Hi	S	Dp	A1	mm	mm <sup>2</sup>	kN	Load (max)	Conn.	Offset	Pitch
				mm	mm	mm	mm	mm	mm	mm			N	Link	Link	mm

## EUROPEAN SERIES

226BS	08B-2	12,70	1/2	8,51	7,75	11,85	1,63/1,40	4,45	30,40	38,20	100	35,10	2000	26	30	13,92
236BS	10B-2	15,875	5/8	10,16	9,65	15,15	2,00/1,53	5,09	35,80	44,00	138	42,00	2760	26	30	16,59
240BS	12B-2	19,05	3/4	12,07	11,68	18,08	1,85/1,70	5,72	42,00	51,20	178	66,00	3560	26	30	19,46
247BS	16B-2	25,40	1	15,88	17,02	21,08	3,80/3,00	8,28	68,00	78,80	420	127,50	8400	26	30	31,88

## AMERICAN SERIES

A40BS-2	08A-2	12,70	1/2	7,92	7,85	11,85	1,63/1,53	3,98	30,90	38,60	88	34,30	1760	26	30	14,38
A50BS-2	10A-2	15,875	5/8	10,16	9,40	15,15	2,00/2,00	5,09	38,40	46,60	140	52,00	2800	26	30	18,11
A60BS-2	12A-2	19,05	3/4	11,91	12,57	18,08	2,30/2,30	5,72	48,80	58,00	202	74,50	4040	26	30	22,78
A80BS-2	16A-2	25,40	1	15,88	15,75	24,13	3,15/3,15	7,94	62,70	73,50	360	129,45	7200	26	30	29,29

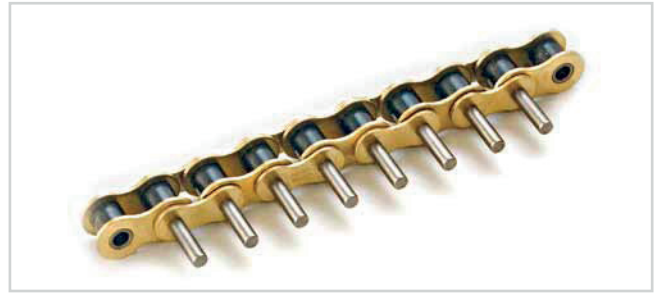
Some dimensions of ENDURO chain may differ from ISO standard, but the engagement with standard ISO sprocket is guaranteed.

## SPECIAL CONFIGURATIONS

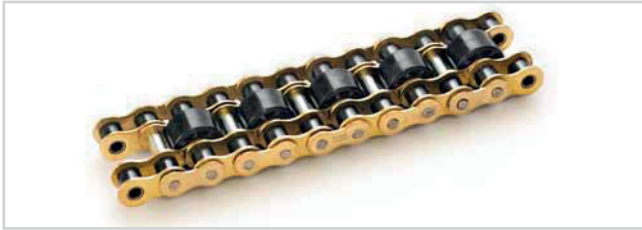
Regina ENDURO chains can be equipped with attachment plates or produced in special configurations.



Attachment plates



Extended pins



Fly roller



Retractable pusher



Extended pins

## FIELDS OF APPLICATION

INDUSTRIES

- Packaging
- Food
- Printing
- Automotive
- Tissue
- Electronics
- Medical
- Textile
- Conveyors
- and more...





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