

# FORGED CHAIN

## Forged Chain for the toughest applications



www.go4b.com

4B drop forged chain is made of special heat treated alloy steel case hardened to Rockwell C57 with a ductile core hardness of Rockwell C40.

Heat treating is a complex process that is done to provide the optimum chain link with a more fracture resilient ductile core for shock resistance, and an extremely hard exterior surface for superior wear resistance.

4B drop forged chain is backed by an international network of companies with over 120 years of experience, and a global team of engineers that can provide you with practical solutions for all your material handling applications.



### Forged Chain

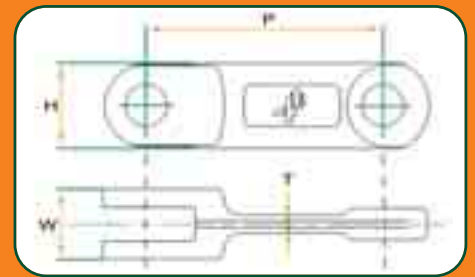


#### LINK SPECIFICATION

A - Alloy Steel - Case hardened, surface hardness RC 57min

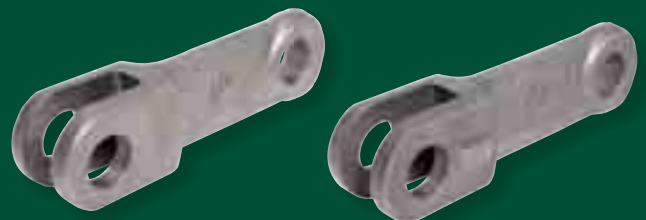
#### PIN SPECIFICATION

Alloy Steel - Case hardened, surface hardness RC 57min. effective case depth 0.6mm



Chain Link	102 N-A Drop Forged Chain	125 N-A Drop Forged Chain	142 N-A Drop Forged Chain	142 H-A Drop Forged Chain	150 N-A Drop Forged Chain	160 N-A Drop Forged Chain	216 N-A Drop Forged Chain	260 N-A Drop Forged Chain
<b>Minimum Breaking Load</b>	150 kn 33,000 lb	175 kn 39,375 lb	300 kn 67,500 lb	450 kn 101,000	250 kn 56,250	260 kn 58,500	600 kn 135,000 lb	700 kn 158,000 lb
<b>Case (MIN) Hardness</b>	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57	Rockwell C57
<b>Case Depth</b>	0.5 mm	0.6 mm	0.7 mm	0.7 mm	0.7 mm	0.8 mm	1.0 mm	1.0mm
<b>Case Hardness</b>	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40	Rockwell C40
<b>Weight (per link)</b>	0.38 kg	0.7 kg	1.08 kg	1.76 kg	1.2 kg	1.3 kg	3.66 kg	5.38 kg
<b>Bolt 'N' Go Compatible</b>	Yes	Yes	Yes	Yes	Yes	Yes	No	No
<b>Dimensions</b>								
<b>P</b>	102 mm	125 mm	142 mm	142 mm	150 mm	160 mm	216 mm	260 mm
<b>H</b>	36 mm	35 mm	50 mm	50 mm	49 mm	44.5 mm	75 mm	75 mm
<b>W</b>	28 mm	36 mm	42 mm	62 mm	36 mm	42 mm	60 mm	71 mm
<b>T</b>	7.62 mm	10 mm	11 mm	16.5 mm	13 mm	13 mm	19 mm	22 mm

\* See page 5-6 for Bolt 'N' Go chain on flight system.



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# FORGED CHAIN



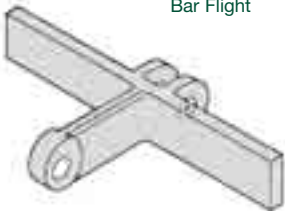
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- **Ultimate Tensile Strengths:** Range from 150 kN to 700 kN
- **Availability:** Chain without flights – from stock. Chain with flights – quick delivery
- **Chain Links and Pins:** Case hardened special alloy steel to Rockwell "C" 57-62 with core typically RC-40
- **Stainless Steel Options**
- **'NEW' BOLT 'N' GO** – Bolt on Flight System, see pages 5-6
- Pins and accessories available in hardened stainless steel.
- Flights are manufactured and attached according to customer's specification.
- Other Link & Pin designs available to order.

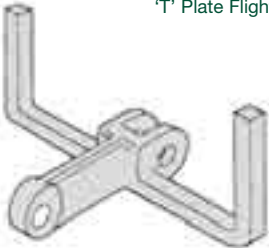
## Forged Chain - Pin Style



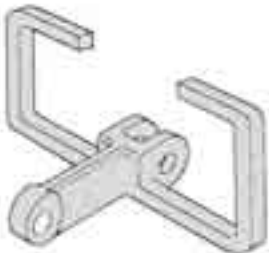
Bar Flight



'T' Plate Flight



U-Flight



Closed U-Flight



OO Flight

**Note:** Custom flights are available.



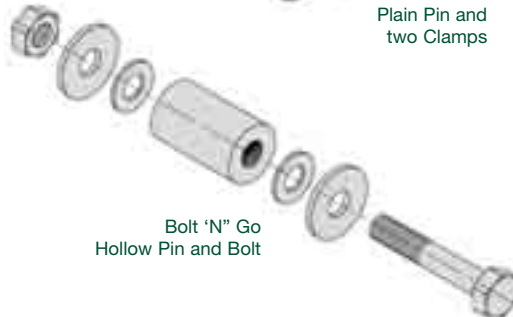
Forged Head Pin and one Clamp



Forged Head Pin, Collar and Roll Pin



Plain Pin and two Clamps



Bolt 'N' Go Hollow Pin and Bolt

**Note:** Clamps or roll pins must not be reused, install one time and discard after use.



**Pins:**  
Case Hardened to RC57min/64 x 0.6mm (0.02")

**Clamps:**  
Rockwell B63 (Do Not Re-Use)

**Sprockets & Trailers:**  
Through Hardened Type: Rockwell C45  
Case Hardened Type: RC60min x 1.5mm (0.06")

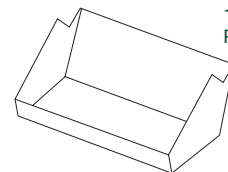
**Flight Material Specifications:**  
Low Carbon Steel

**Flight Attachment Procedure:**  
Remove case, bevel flight and weld as specified below.

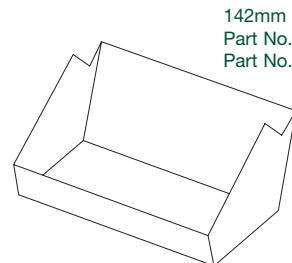
**Rod Specification:**  
Phillips 35S or #7018S

**Mig Weld Specification:**  
Wire: Linde #86 x .045"  
Gas: CO2: 25% Argon: 75%  
Voltage: 34-36  
Speed: 45-48 on 1-100

### Return Buckets



102mm  
Part No. GBRB4 = 4%



142mm  
Part No. GBRB5 = 5\*  
Part No. GBRB8 = 8\*

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# BOLT 'N' GO



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## Flight Installation and Chain Assembly Made Easy!

The Bolt 'N' Go flight system is a revolutionary assembly method for drop forged and round link conveyor chain.

### Features

- Easy and simple assembly on site or in the shop
- Precise calculated flight bending forces
- No welding required
- Guaranteed and reliable pin attachment
- Condensed storage and shipping costs
- Forged chain and round link chain compatible
- Plastic flight option (high density polyethylene or nylon)
- Steel flight option (drop forged chain only)

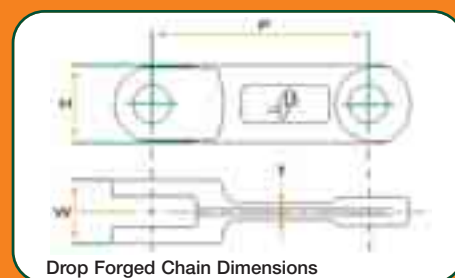
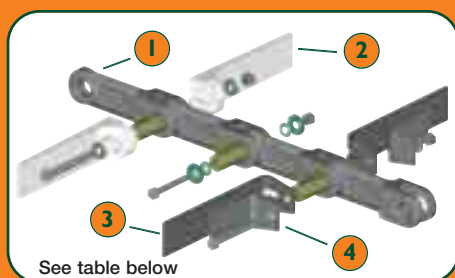
### Drop Forged Chain

Link and flight assembly are made easy by using a standard bolt and nut with a high strength hollow pin. There are no circlips to become loose and there is no intricate assembly. There is no welding required on the flights, no need to remove chain form the conveyor for installation, and no issues with strength. Just bolt the links and the flights together. It's easy, simple and reliable!

**U.S. Patent #7,080,728**  
**Other Patents Pending**

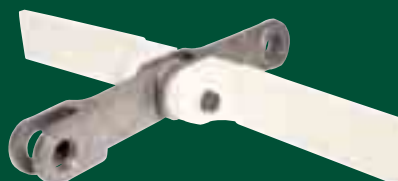


## Forged Chain with Bolt 'n' Go Flights



### Bolt 'n' Go System is available on 3 Drop Forged Chain sizes

No.	Description	102 N-A Link	142 N-A Link	142 H-A Link
1	Drop Forged Chain Link	GB0102BNA	GB0142BNA	GB0142BHA
2	Attachable Plastic Flight (Max.Width 600mm)	GB0102BFP (HDP) GB0102BFN (Nylon) (400mm)	GB0142BFP (HDP) GB0142BFN (Nylon)	GB0142BFP (HDP) GB0142BFN (Nylon)
3	Attachable Steel Flight (Max.Width 600mm)	GB0102BF (400mm)	GB0142BF (600mm)	GB0142BF (600mm)
4	Reinforcement Plate (For Flights Over 400mm)	Not Required	GB0142BBF	GB0142BBF
5	Bolt 'n' Go Assembly Kits (Pins included)	GB0102NPAC - No Flights GB0102NPAF - Flights	GB0142NPAC - No Flights GB0142NPAF - Flights	GB0142HPAC - No Flights GB0142HPAF - Flights



### Bolt 'n' Go - Drop Forged Chain Link

Link	P	H	A	T	Weight	Min. Breaking Load	Case Hardness	Case Depth	Core Hardness
<b>102 N-A</b>	102 mm 4.02 in	36 mm 1.42 in	28 mm 1.10 in	7.62 mm 0.30 in	0.38 Kg 0.80 Lbs	150 Kn 33,000 Lbs	Rockwell C59/64	0.5 mm 0.02 in	Rockwell C40
<b>142 N-A</b>	142 mm 5.59 in	50 mm 1.97 in	42 mm 1.65 in	11 mm 0.43 in	1.08 Kg 2.38 Lbs	300 Kn 67,500 Lbs	Rockwell C59/64	0.7 mm 0.03 in	Rockwell C40
<b>142 H-A</b>	142 mm 5.59 in	50 mm 1.97 in	62 mm 2.44 in	16.5 mm 0.65 in	1.76 Kg 3.88 Lbs	450 Kn 101,000 Lbs	Rockwell C59/64	0.7 mm 0.03 in	Rockwell C40

# BOLT 'N' GO



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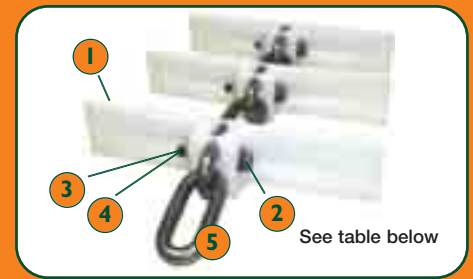
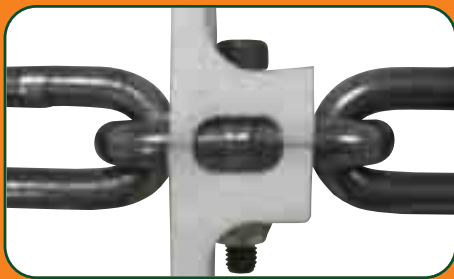
## Round Link Chain

Easy flight assembly by using a standard bolt and nut, connecting the flights directly to the link. The chain can be supplied in a coil together with the bolt on flights already assembled.



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## Round Link Chain with Bolt 'n' Go Flights



### Bolt 'N' Go - Round Link Chain Size 13 x 65mm

#### ABSORBED POWER (KW)

		Conveyor Length - Meters										
		15	20	25	30	35	40	45	50	60	70	80
Capacity t/h	50	1.7	2.2	2.8	3.4	3.9	4.5	5.0	5.6	6.7	7.9	9.0
	75	2.2	2.9	3.7	4.4	5.1	5.8	6.6	7.3	8.8	10.2	11.7
	100	3.1	4.1	5.1	6.1	7.2	8.2	9.2	10.2	12.3	14.3	16.4
	150	4.4	5.9	7.4	8.9	10.4	11.8	13.3	14.8	17.8	20.7	23.7
	200	5.8	7.8	9.7	11.7	13.6	15.6	17.5	19.5	23.4	27.3	31.2

#### CHAIN PULL (kN)

		Conveyor Length - Meters										
		15	20	25	30	35	40	45	50	60	70	80
Capacity t/h	50	2.8	3.7	4.7	5.6	6.5	7.5	8.4	9.3	11.2	13.1	15.0
	75	3.7	4.9	6.1	7.3	8.5	9.7	11.0	12.2	14.6	17.1	19.5
	100	4.4	5.8	7.3	8.8	10.2	11.7	13.2	14.6	17.5	20.5	23.4
	150	5.9	7.9	9.9	11.8	13.8	15.8	17.8	19.7	23.7	27.6	31.6
	200	7.3	9.7	12.2	14.6	17.1	19.5	21.9	24.4	29.2	34.1	39.0

#### MINIMUM CHAIN UTS (kN) - 5.1 SAFETY FACTOR

		Conveyor Length - Meters										
		15	20	25	30	35	40	45	50	60	70	80
Capacity t/h	50	14.0	18.7	23.4	28.0	32.7	37.4	42.1	46.7	56.1	65.4	-
	75	18.3	24.4	30.4	36.5	42.6	48.7	54.8	60.9	73.1	-	-
	100	21.9	29.2	36.5	43.9	51.2	58.5	65.8	73.1	-	-	-
	150	28.3	37.8	47.2	56.6	66.1	-	-	-	-	-	-
	200	33.7	44.9	56.2	67.4	-	-	-	-	-	-	-
	250	39.4	52.5	65.6	-	-	-	-	-	-	-	-
	300	45.0	60.0	-	-	-	-	-	-	-	-	-

#	Description	Part Number
1	Attachable Plastic Flight	GBI365BPF
2	M10 x 45 Bolt	GBI42BM1045HEX
3	Washer (Not Shown)	GBI42BM10W
4	Nylock Nut	GBI42BM1045NYL
5	Round Link Chain	GBI365BRL
6	Link Connector	GBI365BC

Link Material: Case Hardened Steel  
Flight Material: High Density Polyethylene  
Bolt Material: Carbon Steel



Bolt 'N' Go System Round Link Chain Application on a Conveyor