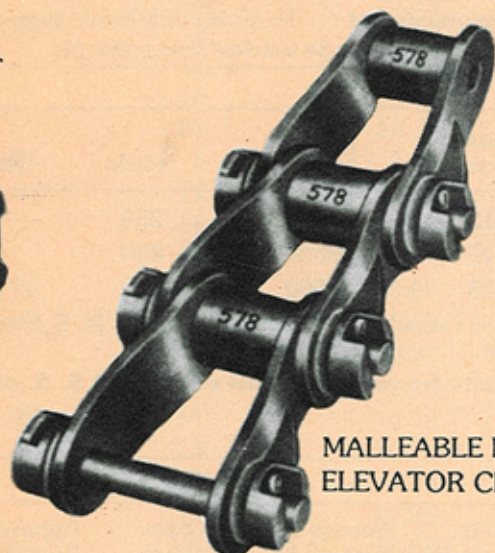
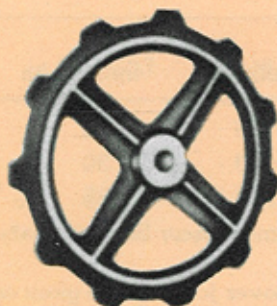


Chains, Sprockets and Buckets for Solvent Extraction, Oil & Vanaspati Plants

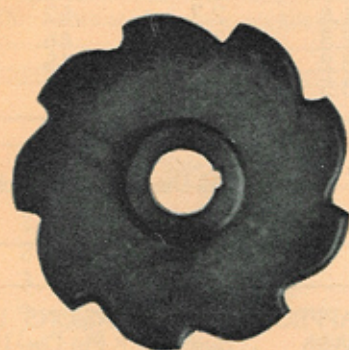
ELEVATOR SPROCKET



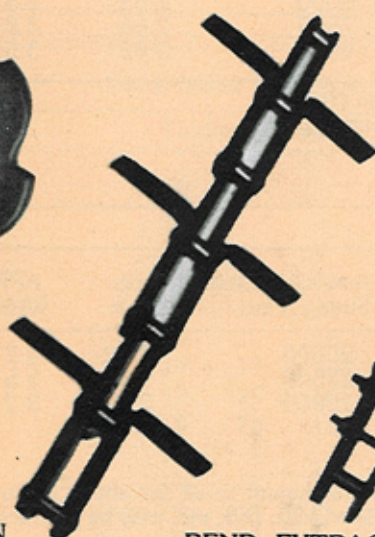
MALLEABLE IRON
ELEVATOR CHAIN



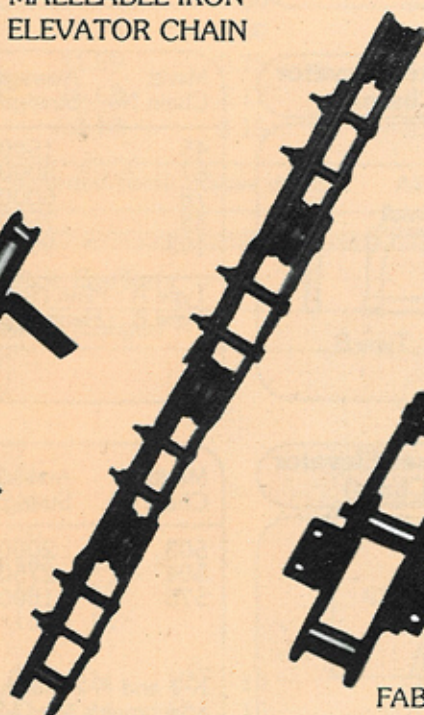
BUCKET



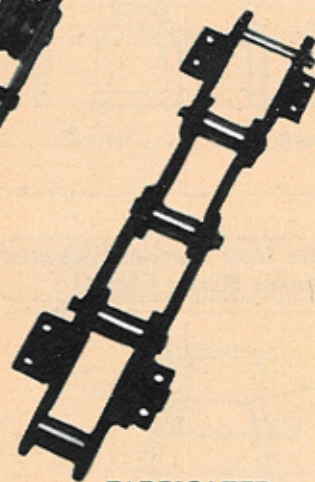
REDLER CHAIN
SPROCKET



REDLER CHAIN



BEND EXTRACTOR CHAIN



FABRICATED
ELEVATOR CHAIN

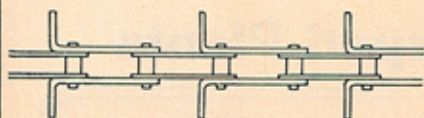


Meritt

T • R • A • N • S • M • I • S • S • I • O • N • S

157/159, NARAYAN DHURU STREET, BEHIND NAGDEVI STREET, BOMBAY-400 003.
TEL. : 344956/342857/328342 GRAM : SEAWIZARD

Fabricated Redler Chain

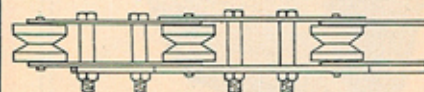


Meritt Chain No.	Breaking Strength kg.	Pitch	Bush Dia	Bush Width	Total width	Conveyor Size
R-72	6000	125	25	30	285	300
R-73	6000	125	25	30	385	400
R-74	15000	125	30	36	485	500
R-75	15000	125	30	36	585	600

Note :-
 1. The standard redler chain are available in M.S. Cotter pin
 2. S. S. Cotter pin can be given on request.
 3. **Castle Nut type** redler chain can be given on request.

Recommended : To avoid costly break down and production loss, it is always recommended to use stainless steel cotter pin.
 All Dimensions in mm

Fabricated Bend Extractor Chain



Meritt Chain No.	Breaking Strength Kg.	Pitch	Roller Dia	Inner width	Type
B-12	25000	250	90	28	1200
B-15	28000	250	90	30	1500
B-18	35000	400	130	35	1800

Note Extractor chain complete includes M. S. Shims, Spacer Bush and Tata Bolt & Nut.

Cadre frame, Perforated sheets and S. S. cover joint can be given on request.
 All Dimensions in mm

Malleable Iron Bucket Elevator Chain (Ewart Chains)



Type A



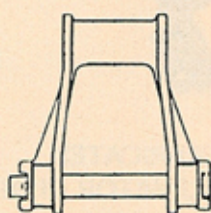
Type B

Meritt Chain No.	Average Ultimate Strength lbs.	App. Pitch	Approximate Breadth	Dimensions Depth.	Links to 10ft. Coil	Type
45	1500	1.61	1.3	1.9	75	A
57	3000	2.32	1.8	2.7	52	A
78	6000	2.63	2.8	3.3	46	B
88	7500	2.66	3.2	3.5	45	B
103	9000	3.02	3.5	4.0	40	B

Type A : Plain Hook
 Type B : Flanged Hook

All Dimensions in Inches

Malleable Iron Bucket Elevator Chains (Gray Chain)

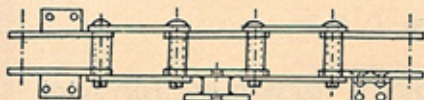


Meritt Chain No.	Average Ultimate Strength lbs.	App. Pitch	APPROXIMATE DIMENSIONS Width	Bush Dia	Pin Dia	Links to 10ft. Coil
503	20000	3.02	4.2	1.1	0.56	40
504	27500	4.06	5.5	1.3	0.63	30
578	15000	2.63	3.2	1.0	0.44	46

K-1 and K-2 attachment to all the above chain are carried in stock However other attachments like G-20, D-5, etc. may be produced on order.

All Dimensions in Inches

Fabricated Bucket Elevator Chain



Meritt Chain No.	Breaking Strength lbs	Pitch	Bush Dia.	Inner Width	Pin Dia
F-578	20000	67	22	30	11.11
F-12	28000	78	30	38	14
F-13	30000	101.6	28	20	18
G-18	48000	76.2	25.4	28	15.24
G-16	70000	152.4	36	36	23

Note : In the slow operation of Conveyor/elevator where there require less contact between cast tooth sprockets and bush, when this type of chain is applicable in transferring greater strength.

The main advantage of fabricated chain over malleable iron chain is higher life and load carrying capacity and gradual wear and tear of pins and bush.

This chains does not have roller and type of attachment like K-2, A-2, G-20, etc can be fitted.
 All Dimensions in mm

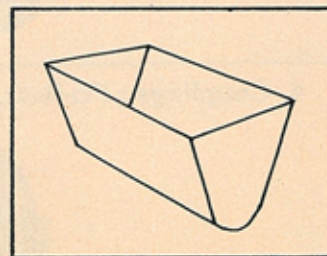
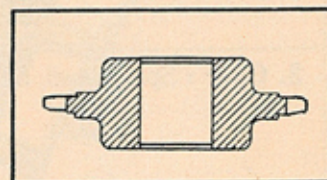
Conveyor & Elevator Sprockets

Material	Chain No.	Pitch	No. of Teeth	P.C.D.	Bore	Boss Dia	Boss length
M. S.	R-72/73	125mm	9	14.38	3.23	3.54	1.26
M. S.	R-74/75	125mm	9	14.38	3.23	4.72	1.26
C. I.	57	2.32	8	6.06	0.50	3.15	1.97
			12	8.96	0.75	3.15	1.97
			16	11.89	1.00	3.94	2.86
			24	17.77	1.25	4.92	2.95
C. I.	78/578	2.63	8	6.87	0.50	3.15	1.97
			12	10.16	1.00	3.94	2.36
			16	13.48	1.25	4.92	2.95
			24	20.15	1.50	5.90	3.94
C. I.	103/503	3.02	8	7.89	0.60	3.15	1.97
			12	11.67	1.00	3.94	2.36
			16	15.48	1.50	5.90	3.94
			24	23.14	1.50	5.90	4.92
C. I.	504	4.06	8	10.61	1.00	3.94	2.36
			12	15.69	1.50	5.90	3.94
			16	20.81	1.50	5.90	4.92
			24	31.10	1.50	7.87	5.90
M. S./EN8	F-13	4.00	11	14.19	1.50	3.50	4.0
			13	16.71	1.50	3.50	4.0
	G-18	3.00	9	8.77	2.00	4.00	4.0
			12	11.59	2.75	5.25	5.75
	G-16	6.00	8	15.68	2.17	5.12	3.54
			12	23.18	3.15	5.51	5.51

NOTE : Fabricated chain sprocket can be supplied with **flame hardened teeth**. Please enquire. All Dimension in Inches.

Seamless Elevator Buckets

Sr. No	Size (Inches)	Thickness Available (Gauges)					
1	2 1/2 x 2 3/4 x 2 1/4	19					
2	3 x 3 1/2 x 2 3/4	19					
3	3 1/2 x 3 1/2 x 2 3/4	19					
4	4 x 3 3/4 x 2 3/4	19	16				
5	4 x 4 1/8 x 3 1/4	19	16				
6	4 1/2 x 4 x 3 1/4	19	16				
7	5 x 4 x 3 1/4	19	18	16	14		
8	5 x 4 3/4 x 3 1/2	19	18	16	14		
9	5 1/2 x 4 1/2 x 3 1/4	19	18	16	14		
10	5 3/4 x 4 3/4 x 3 1/4	19					
11	6 x 4 x 3 1/4	19	18	16	14	12	10
12	6 x 4 3/4 x 3 1/2	19	18	16	14	12	10
13	7 x 4 x 3 1/4	19	18	16	14	12	10
14	7 x 4 3/4 x 3 3/4	19	18	16	14	12	10
15	8 x 4 x 3 3/4	19	18	16	14	12	10
16	8 x 4 1/2 x 3 1/2		18	16	14	12	10
17	8 x 5 1/4 x 4 1/2		18	16	14	12	10
18	9 x 5 x 3 1/2		18	16	14	12	10
19	9 x 6 x 5		18	16	14	12	10
20	9 x 7 x 6			16	14		
21	10 x 6 x 5		18	16	14	12	10
22	12 x 6 x 5			16	14	12	10
23	14 x 7 x 5			16	14	12	10
24	18 x 8 3/4 x 8				14	12	10



Fabricated Elevator Buckets

Fabricated buckets A1, B1, B2, B3, and B4 are available from length of 150 mm x depth of 100 mm to 1000 mm x 260 mm so as to have capacity of 0.87 litre to 36.50 litres. Note : Buckets are manufactured as per ISI specifications.

Conveyor & Elevator Chain Calculatons :

- 1) The capacity of all types of elevator is

$$T = \frac{F \times C \times W \times 3600 \times V}{S \times 1000000}$$

Where T = Capacity in t/h

F = Constant, representing percentage filling of buckets,

C = Capacity of individual buckets in litre,

W = Material bulk density in kg./cubic metre,

V = Chain speed in m/sec.,

B = Bucket spacing in metre.

- 2) The method of calculating maximum tension in chain is

$$T = A + B + C + D$$

Where T = Max. Chain tension in N,

A = Tension due to mass of bucket in N,

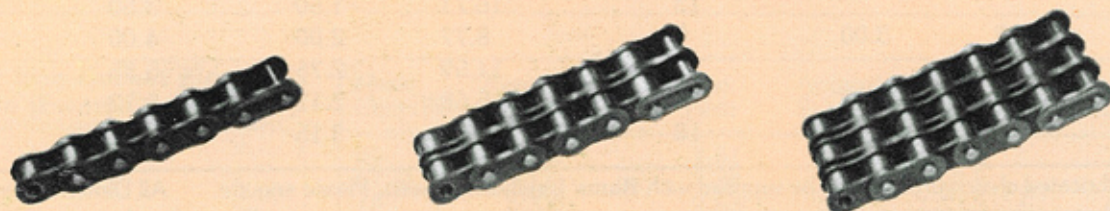
B = Tension due to mass of bucket in N,

C = Tension due to mass of Material in N,

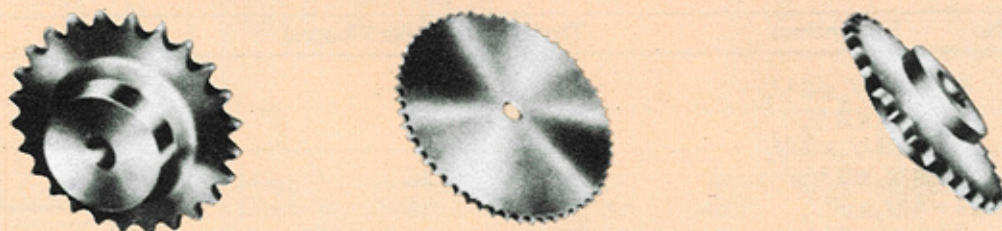
D = Tension due to mass of pick up material in N.

Other Products

1. **Roller Transmission Chain :** 3/8" Pitch to 3" Pitch in Simplex, Duplex & Triplex in BSS Standard & ASA Standard.



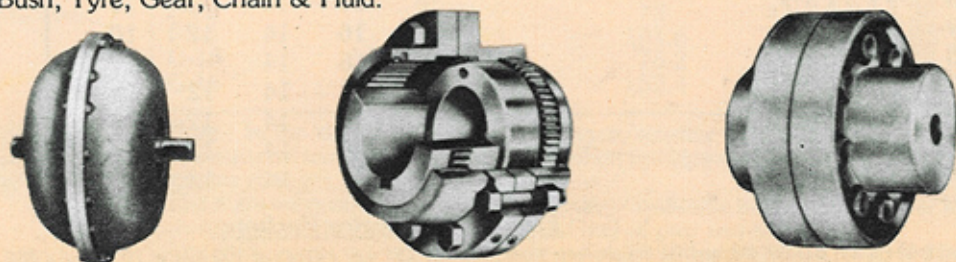
2. **Sprockets :** Sprocket for roller chain are available from 9 teeth to 144 teeth in simplex, duplex & triplex.



3. **Gear :** Spur, bevel, helical and worm & worm wheel.



4. **Couplings :** Pin-Bush, Tyre, Gear, Chain & Fluid.



Please contact to us for individual product detail catalogue.