

# **Drop Forged Chain For Conveyors & Elevators**



Quality Components for Chain Conveyors & Elevators

### Introduction

Members of the Schenck Process Group, Redler are leading providers of feeding, automation and bulk solids handling solutions.

The Schenck Process Group are global market leaders for solutions in measuring and process technologies in industrial weighing, feeding, screening and automation. Always close to customers, with an unrivalled global network of operating companies we are your competent global partner for weighing, feeding, conveying, screening and automation solutions throughout the process industries.



### Our philosophy is based on...

- Continuous product development
- Sest practice approach to applications
- Raising industry standards

#### Capabilities

- Single Machine
- Multiple Machines
- System Solutions
- Installation & Commissioning
- Plant Layout & Integration
- Engineering & Contract Management
- Professional Customer Service Approach

### Industries

Power, Coal, Steel, Cement, Mineral Chemical, Grain Processing, Brewing/Malting Flour/Feed Food, Particle Board, Water Treatment



The Schenck Process Group develops, manufactures and markets a full range of solutions, products and turnkey systems on the basis of combining process engineering expertise, reliable components and field-proven technology.

# Members of the Schenck Process Group are:























# **Quality Components for Chain Conveyors & Elevators**

Redler, the originators of the world renowned "En-Masse" system of dry bulk materials handling continue to be at the forefront of systems development and component supply.

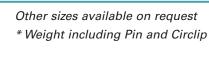
With over 75 years of experience the Redler "En-Masse" system of handling is well proven. Redler have supplied many thousands of conveyors and elevators to handle hundreds of different dry bulk materials.

At the heart of these machines is our high quality Redler Chain.

# **High Strength Chain Links**

- Drop forged from alloy steel
- Precision machined
- Case hardened to Rockwell 57 minimum
- High tensile strength
- The Redler® link minimum tensile strength is our competitor's average
- Consistent dimensional accuracy
- Manufactured to stringent quality procedures

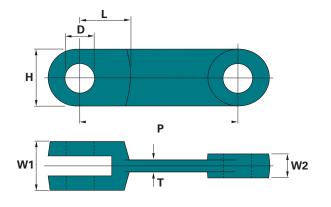
| Link Reference                      | 3004 | 3002 | 3003 | 3003D |      | 3122 |      |
|-------------------------------------|------|------|------|-------|------|------|------|
|                                     | 5004 | 5002 | 5003 | 5003D | 5005 |      | 5006 |
| P mm (Pitch)                        | 102  | 142  | 142  | 142   | 200  | 216  | 260  |
| H mm                                | 36   | 50   | 50   | 50    | 60   | 72   | 75   |
| W1 mm                               | 28   | 42   | 62   | 62    | 62   | 58   | 70   |
| W2 mm                               | 12   | 20   | 30   | 30    | 28   | 25   | 31   |
| T mm                                | 7.6  | 11   | 16.5 | 16.5  | 20   | 18   | 20   |
| L mm                                | 32   | 46   | 55   | 55    | 58   | 60   | 79   |
| D mm                                | 14   | 25   | 25   | 25    | 25   | 35   | 32   |
| Wt kg *                             | 0.44 | 1.26 | 2.1  | 2.1   | 3.2  | 4.6  | 5.65 |
| Min. UTS kN<br>(Guaranteed minimum) | 150  | 300  | 450  | 600   | 500  | 582  | 700  |





# **Redler Quality**

The Redler Quality Management system has been certified in accordance with ISO 9001: 2000. Quality control throughout the manufacturing process, supported by long term experience ensures that a high quality of chain is consistently guaranteed.



# **Headless Pin and two Circlips**



**Headed Pin, Collar and Pin** 



Pins

- Case hardened Alloy Steel
- Surface hardness Rockwell 57 minimum
- Effective case depth 0.6mm

# **Headed Pin and one Circlip**



# **Connecting Pin and snug**

Can be used on 3122 chain - requires provision of keyway to all link fixing holes

# chain flights & configurations







'T' Plate Flight



Deep 'T' Plate Flight



**Plastic Sleeve** 



'U' Flight



Pad Flight



### **Chain Configuration**

- Links are assembled in a configuration to match individual applications.
- This configuration can include scavenger, cleaning or pad flights as required.
- Within a complete chain, flighted links are usually supplied at every single, second or third pitch. See sketch showing typical arrangement of a 'T' type chain. Alternative configurations available.
- Chain is usually supplied pre-assembled into 3metre lengths complete with connecting pins.
- All assembled chains supplied with an appropriate protective coating.

# **Special Flight Designs**

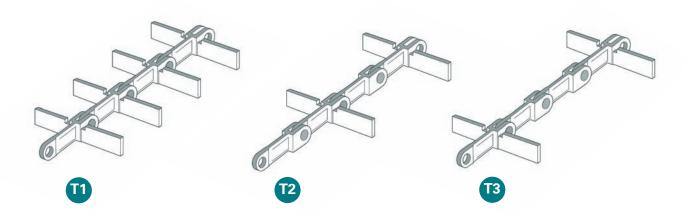
- A wide range of designs are readily available including: Scavenger, Pad or Scoop Flights.
- Chains are supplied to accommodate specific "En-Masse" conveying and elevating applications.

### **How to Order**

- Contact the Redler Sales Team for information and to discuss your specific application requirements.
- For Redler machines ALWAYS quote the machine serial number. This will help us to identify and confirm your chain details.
- For non Redler replacement components please provide a fully dimensional sketch with as much information as possible or a sample of the flighted link.

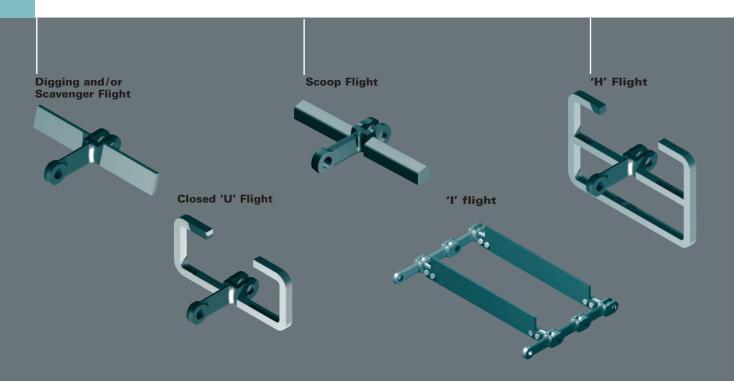
### Information to include:

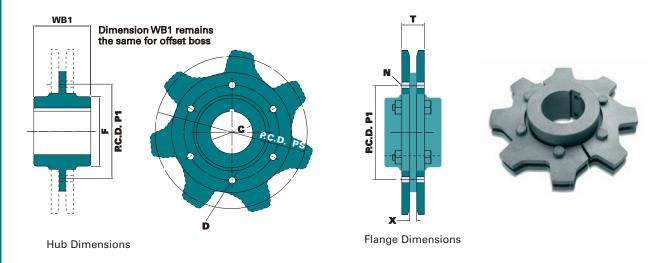
- Chain pitch (P).
- Link reference number and details shown on the link.
- Number of links required.
- Type of flight attachments with full dimensional details
  overall width, depth and thickness of material.
- Configuration of flighted links required.
- Any special additional features like Scavenger, Pad or Scoop Flights and quantity required.



### **Typical Flight Configuration**

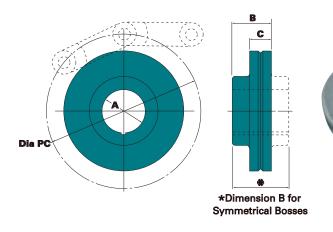
Similar configurations available for U,H and I Flight designs



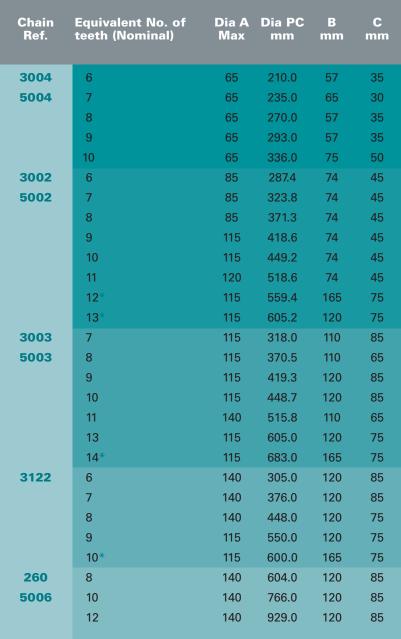


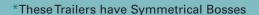
# sprockets

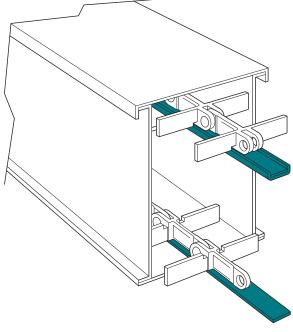
| Chain<br>Ref. | No.of<br>teeth | Dia PS<br>mm | Dia P1<br>mm | Dia C<br>mm Max | Dia D<br>mm | N No.<br>Holes | T<br>mm | X<br>mm | WB1<br>mm |
|---------------|----------------|--------------|--------------|-----------------|-------------|----------------|---------|---------|-----------|
| 3004          | 6              | 204.0        | -            | 70              | -           | -              | 29      | 9       | 83        |
| 5004          | 7              | 235.1        | 146.1        | 70              | 12          | 6              | 29      | 9       | 83        |
|               | 8              | 266.5        | 168.3        | 85              | 12          | 6              | 29      | 9       | 83        |
|               | 9              | 298.2        | 200.0        | 105             | 12          | 6              | 29      | 9       | 83        |
|               | 10             | 330.1        | 241.3        | 105             | 12          | 8              | 39      | 9       | 83        |
| 3002          | 6              | 284.0        | -            | 85              | -           | -              | 44      | 14      | 95        |
| 5002          | 7              | 327.3        | 200.0        | 105             | 16          | 6              | 44      | 14      | 112       |
|               | 8              | 371.1        | 241.3        | 115             | 20          | 8              | 44      | 14      | 127       |
|               | 9              | 415.2        | 285.8        | 115             | 20          | 8              | 44      | 14      | 127       |
|               | 10             | 459.5        | 285.8        | 150             | 20          | 8              | 44      | 14      | 127       |
|               | 11             | 504.0        | 368.3        | 170             | 20          | 8              | 44      | 14      | 150       |
|               | 13             | 593.1        | 470.0        | 170             | 20          | 8              | 44      | 14      | 150       |
|               | 14             | 638.3        | 470.0        | 170             | 20          | 8              | 44      | 14      | 150       |
| 3003          | 7              | 327.3        | 200.0        | 105             | 16          | 6              | 61      | 31      | 125       |
| 5003          | 8              | 371.1        | 241.3        | 115             | 20          | 8              | 61      | 31      | 150       |
|               | 9              | 415.2        | 285.8        | 150             | 20          | 8              | 61      | 31      | 150       |
|               | 10             | 459.5        | 285.8        | 150             | 20          | 8              | 61      | 31      | 150       |
|               | 11             | 504.0        | 368.3        | 170             | 20          | 8              | 61      | 31      | 150       |
|               | 13             | 593.1        | 470.0        | 170             | 20          | 8              | 61      | 31      | 180       |
|               | 14             | 683.3        | 470.0        | 170             | 20          | 8              | 61      | 31      | 180       |
|               | 16             | 727.9        | 558.9        | 170             | 20          | 12             | 61      | 31      | 180       |
| 3122          | 6              | 432.0        | -            | 140             | -           | -              | 74      | 24      | 150       |
|               | 7              | 498.0        | 311.2        | 140             | 24          | 8              | 74      | 24      | 150       |
|               | 8              | 564.1        | 381.0        | 170             | 20          | 8              | 74      | 24      | 150       |
|               | 9              | 631.5        | 430.0        | 170             | 24          | 8              | 74      | 24      | 203       |
|               | 10             | 699.0        | 490.0        | 170             | 24          | 8              | 74      | 24      | 203       |
| 260           | 8              | 679.4        | 451.0        | 170             | 24          | 8              | 76      | 26      | 200       |
| 5006          | 10             | 841.4        | 625.0        | 170             | 24          | 8              | 76      | 26      | 200       |
|               | 12             | 1004.6       | 795.0        | 170             | 24          | 8              | 76      | 26      | 200       |





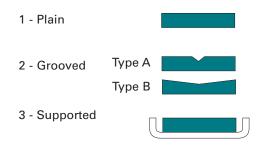






#### **Chain Runners**

- Chain is normally carried on special wear resistant manganese steel runners.
- There are three typical forms of chain runners.



- All three types are available in a range of sizes.
- Call the Stock Redler Sales Team to discuss details.

### **Sprockets and Trailing Wheels**

- Stock Redler Ltd manufacture a range of quality Sprockets and Trailing Wheels to suit drop forged chain.
- Sprockets can be supplied with detachable flange segments. All wearing surfaces are hardened for improved life.
- All components are designed with full boss that includes a keyway and grub screw for secure shaft mounting.
- All components can be supplied with high strength shafts.

### **Notes:**

- Sprocket and Trailing Wheel bosses must be the offset design for twin strand Chain.
- All Hub and Bore requirements to be confirmed when ordering.

weighing

feeding

conveying

filtration

automation





Schenck Process is the global market leader of solutions in measuring and process technologies in industrial weighing, feeding, conveying, screening, automation and air filtration technology.

Schenck Process develops, manufactures and markets a full range of solutions, products and turnkey systems on the basis of combining process engineering expertise, reliable components and field-proven technology.

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