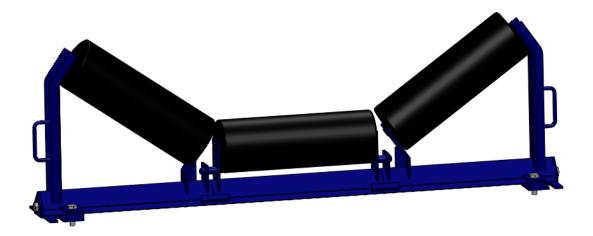
# BENETECH. Zone

## BCIR*Nxx*B*yyy*T*zz*

**Simple Slide Idler Frame and Idler Rolls** 

Owner Operator & Manual





1

#### ! IMPORTANT!

#### BENETECH. INC. HEREBY DISCLAIMS ANY LIABILITY FOR. BUT NOT LIMITED TO:

- IMPROPER INSTALLATION OF EQUIPMENT
- IMPROPER SIZING OF EQUIPMENT
- DAMAGE DUE TO CONTAMINATION OF MATERIAL
- USER'S FAILURE TO INSPECT EQUIPMENT
- USER'S FAILURE TO MAINTAIN EQUIPMENT
- USER'S FAILURE TO TAKE REASONABLE CARE OF THE EQUIPMENT
- INJURIES OR DAMAGE RESULTING FROM USE OR APPLICATION OF THIS PRODUCT CONTRARY TO INSTRUCTIONS AND SPECIFICATIONS CONTAINED HEREIN.

#### BENETECH, INC.'S LIABILITY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF EQUIPMENT SHOWN TO BE DEFECTIVE.

#### ! SAFETY!

Review and understand all safety rules given herein along with local and Governmental standards and regulations. Know and understand the American National Standards Institute (ANSI) z244.1-1982 lockout/tagout procedures, the American National Standard for Personnel Protection - Lockout/Tagout of Energy Sources - Minimum Safety Requirements and the Occupational Safety and Health Administration (OSHA) Federal Register, Part IV, 29 CFR Part 1910, Control of Hazardous Energy Source (Lockout/Tagout); Final Rule.

Also observe all local and Governmental regulations concerning entry into confined spaces, welding, cutting, grinding, wash-down procedures and all Personal Protective Equipment (PPE) regulations.

The following notations are used throughout in this manual.

#### ! DANGER!

Danger: Denotes immediate hazards that will result in severe personal injury or death.

#### ! WARNING!

Warning: Denotes hazards or unsafe practices that could result in personal injury.

#### ! CAUTION!

Caution: Denotes hazards or unsafe practices that could result in product or property damages.

#### ! IMPORTANT!

<u>Important</u>: Denotes <u>instructions</u> that <u>must be followed</u> for <u>proper installation</u> and/or <u>operation of</u> equipment.

#### ! NOTE!

Note: Denotes general items to assist the reader/installer/operator.

\*\*\*

<u>Please pay close attention to all of these items and warnings.</u> <u>They have been included here for your safety and for ease of installation.</u>

# **Table of Contents**

Introduction	4
References	4
Safety	5-6
Before Installation	7
Installation	8-9
Operation and Maintenance	10-11
Part Numbers	12-13

## Introduction

The Simple Slide Idler is a carrying side conveyor belt idler and is used on the cargo carrying side of the conveyor belt. It is most common in transfer point or load zone areas but can be used anywhere on the carrying side of the conveyor belt.

There are a lot of different sizes and types of idlers, made by multiple manufacturers, so its critical that the correct type and size are ordered to minimize problems in the conveying system. Incorrect idler sizing or specification can lead to belt damage, cargo spillage, premature equipment failure, or other even more catastrophic events. Care must be taken to order and use the correct size frames and idlers in a conveying system.

Once the Simple Slide Idler, or Idlers, is installed the alignment and height of the Simple Slide Idler should match the other idlers in the conveying system to prevent problems in cargo transport or in the other equipment being used. If this is a concern there are companies available who specialize in conveyor and conveying system alignment that can be utilized to verify or correct potential issues.

In some cases the materials used in the construction of the idler frames or idler rolls may <u>not be</u> <u>compatible</u> with the material being handled and contamination can occur if the product is damaged during use of even when it operates as intended. If the material handling process could be contaminated in any way through the use of this product it is the user's responsibility to take the necessary steps to prevent contamination.

Please feel free to consult BENETECH, INC. if you suspect there may be incompatibility problems or questions about product application and use, we can provide specific recommendations for your particular problem.

### References

The following documents are referenced in this manual:

- American National Standards Institute (ANSI) z244.1-1982, American National Standard for Personnel Protection Lockout/Tagout of Energy Sources Minimum Safety Requirements, American National Standards Institute Inc., 1430 Broadway, New York, NY 10018.
- Federal Register, Volume 54, Number 169, Part IV, 29 CFR Part 1910, Control of Hazardous Energy Source (Lockout/Tagout); Final Rule, Department of Labor, Occupational Safety and Health Administration (OSHA), 32nd Floor, Room 3244, 230 South Dearborn Street, Chicago, IL 60604.

## **Safety**

All safety rules defined in this document and all owner/employer as well as State and Federal safety rules must be strictly adhered to when working on/with this, or any, belt cleaner.

#### ! DANGER!

Do not touch or go near the conveyor belt or conveyor accessories when the belt is running. Your body or clothing can get caught and you can be pulled into the conveyor, resulting in severe injury or death.



#### ! DANGER!

Before installing, servicing, or adjusting the equipment, turn off AND lock out/tag out all energy sources to the conveyor and conveyor accessories according to ANSI standards. Failure to do so could result in serious injury or death.

#### ! DANGER!

If this equipment is to be installed in an enclosed area, observe all confined space entry regulations and test the atmosphere for gas levels and dust content levels before using a cutting torch, welding equipment or electric hand tools. Using a torch, welding, grinding or drilling in an area with gas or dust may cause an explosion and/or fire resulting in serious injury or death.

#### ! WARNING!

Before using a cutting torch, welders, or grinding equipment, cover the conveyor belt with a fire retardant/resistant cover. Make sure a water source/fire hose is readily available AND OPERATIONAL. Failure to do so can allow the belt to catch fire.

#### ! WARNING!

Conveyor components are heavy and require two people to lift. Attempting to lift the equipment without assistance could result in injuries or damage to the equipment.



#### ! WARNING!

Remove all tools, parts, trash, and foreign objects from the installation area and conveyor belt before turning on the conveyor. Failure to do so can result in serious injury to personnel or damage the belt and conveyor.

## **Before Installation**

- 1. Inspect ALL shipping containers for damage and correct number of items (skids, pallets, cartons, boxes, etc.) being delivered. Report damage and/or shortages to delivery service immediately and fill out delivery service's claim form. Keep ALL damaged goods for examination. Benetech Inc is NOT responsible for damage occurring during transit.
- 2. All Benetech Inc. Conveyor Components are shipped from our facilities fully assembled. Care should be taken while dissembling the units to ensure no parts are lost or damaged as the equipment is moved to its desired location. Dispose of shipping containers in approved manner.
- 3. If any items are missing, IMMEDIATELY contact BENETECH, INC. or an authorized representative.
- 4. Gather tools. Minimum tools required for installation are:
  - Tape measure/String
  - Torch/Hole Saw
  - Level/Straight Edge
  - Welder/Drill
  - Open/Box End Wrenches
  - Socket Set
- 5. Turn off and lock out/tag out energy source according to ANSI standards (see "References") and local plant regulations.



6. If using a cutting torch or welding, test atmosphere for gas level or dust content. Cover conveyor belt with fire retardant cover. Verify locations of fire extinguishers and operational water hoses prior to begin cutting/welding operations.

#### ! WARNING!

If equipment will be installed in an enclosed area, the atmosphere in the structure/area must be tested for gas levels and dust content levels before using a cutting torch, welding equipment, grinding equipment or electric powered tools. Using a cutting torch, welding, drilling or grinding in an area with gas or dust may cause an explosion.

## **Installation**

#### ! IMPORTANT!

Read entire section before beginning work.

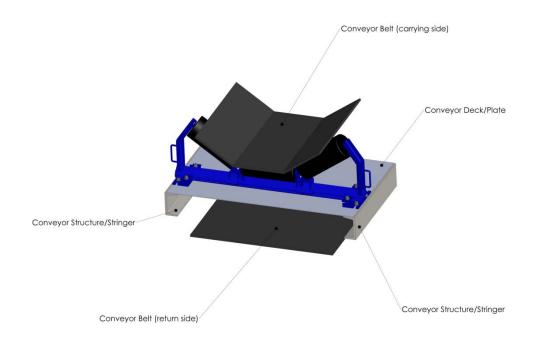


Figure 1

To install the Simple Slide Idler, follow the steps detailed in this section.

- 1. Remove or relocate any existing idlers or belt support cradles as necessary.
- 2. Disassemble Simple Slide Idler Frame as Shown in Figure 1
- 3. Mount the Simple Slide Idler Fixed frame (4) to the conveyor structure or decking using mount bolts (20)
- 4. Slide center roll assembly (10) onto fixed frame (4). This can be done from either side.
- 5. Slide wing roll assemblies (10) onto fixed frame (4) and secure with mounting bolts (20), 3 on each side.
- 6. Ensure center roll height is the same as other idlers in system (Figure 3). Use shims to level the idlers if necessary.

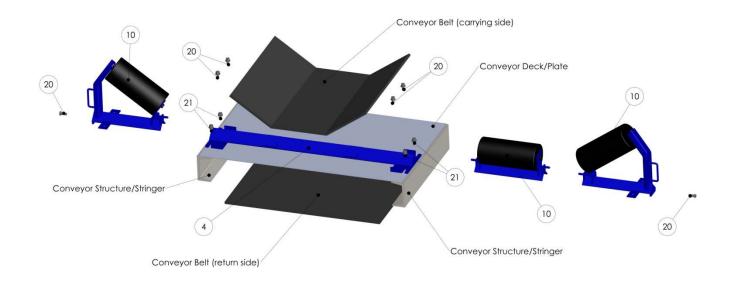


Figure 2

#### ! NOTE!

Note: Belt Support Systems require the center heights of the idlers and support cradles to be level and spaced properly to prevent spillage and dust.

7. If mounting, alignment, or configuration of the belt support and Simple Slide Idler is unclear contact a Benetech Inc specialist for assistance.

#### ! WARNING!

Failure to remove tools from installation area and conveyor belt before turning on energy source can cause serious injury to personnel and damage to belt.

#### ! WARNING!

Do not touch or go near conveyor belt or conveyor accessories when conveyor belt is running. Body or clothing can get caught and pull body into conveyor belt, causing severe injury or death.

## **Operation and Maintenance**



1) Once installation is complete turn on conveyor belt for 1/2 hour and ensure the Simple Slide Idler rolls are making good contact with the conveyor belt and that the rolls are turning, then turn the conveyor belt off. Tighten all mounting nuts, bolts, etc. Check for belt condition and proper tensioner settings. Readjust if necessary.

#### ! DANGER!

Before installing, servicing, or adjusting the Simple Slide Idler, turn off and lock out/tag out all energy sources to the conveyor and conveyor accessories according to ANSI standards. Failure to do so could result in serious injury or death.



- 2) Periodic inspection and maintenance MUST be performed on a regular basis to ensure the equipment is functioning properly.
  - a. Inspect the idler frame to ensure it is stable and not rocking or moving in any way.
  - b. During conveyor belt operation ensure that all of the idler rolls are turning appropriately and that they are no slipping or sliding on the conveyor belt.
  - c. Make sure all fasteners are tight on the assembly and on the conveyor structure. Tighten if necessary.
  - d. Remove equipment from service if there is any indication it is not functioning properly. Call BENETECH, INC. or a representative for assistance.

#### ! NOTE!

Maintenance inspection should be performed no less than weekly. Some applications may require more frequent maintenance inspections.

#### ! WARNING!

Failure to remove tools from installation area and conveyor belt before turning on energy source can cause serious injury to personnel and damage to belt.

#### ! WARNING!

Do not touch or go near conveyor belt or conveyor accessories when conveyor belt is running. Body or clothing can get caught and pull body into conveyor belt, causing severe injury or death.

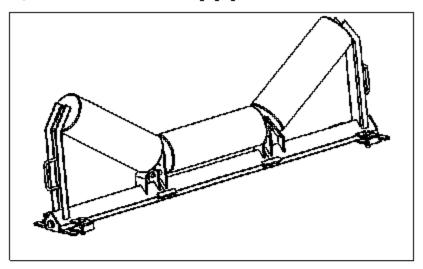




## **Part Numbers**

This section provides product names and corresponding part numbers for the Benetech Simple Slide Idler Frame and Idler Rolls. For a more detailed parts list please contact Benetech Inc.

## P/N: BCIR0xxByyyTzz

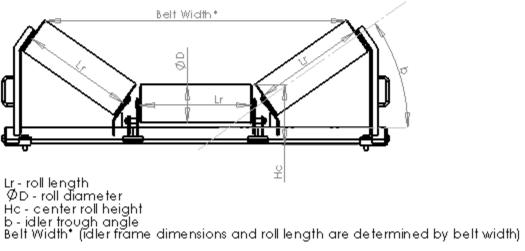


BCIRO - Slide Out Idler Frame with Steel Rolls

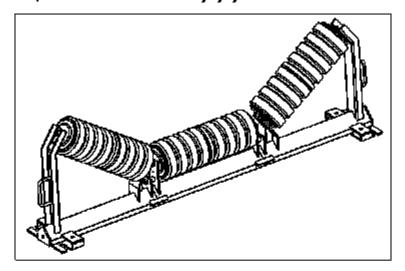
xx - CEMA roll rating (roll diameter and bearing/shaft) e.g. C6, D6, etc.

Byyy - Belt Width, inches e.g.048 = 48" 060 = 60"

Tzz = Tough Angle of frame e.g. T35 = 35 degree trough



## P/N: BCIRIXXByyyTzz

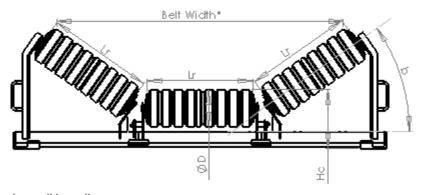


BCIRI - Slide Out Idler Frame with Impact Rolls

x - CEMA roll rating (roll diameter and bearing/shaft) e.g. C6, D6, etc.

Byyy - Belt Width, inches e.g. 048 = 48" 060 = 60"

Tzz = Tough Angle of frame e.g. T35 = 35 degree trough



Lr-roll length

ØD - roll diameter

Hc - center roll height
b - idler trough angle

b - idler trough angle Belt Width\* (idler frame dimensions and roll length are determined by belt width)

Benetech, Inc P: 630-844-1300 2245 Sequoia Drive F: 630-844-8690 Suite 300 www.benetechusa.com Aurora, IL 60506