# OPERATIONS MANUAL

## BERRIDGE MODEL SL-1 PORTABLE ROLL FORMER



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## I. GENERAL DESCRIPTION

THE BERRIDGE MODEL SL-1 PORTABLE ROLL FORMER is a precision-manufactured machine designed to provide high quality "Jobsite" production capability for installers of the BERRIDGE COMPOUND CURVED TEE-PANEL standing seam roof panel (Fig. 1) for use on domed or compound curved corners or canopies (Fig. 2).

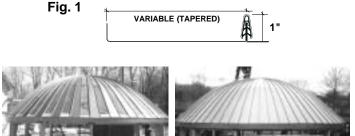


FIG. 2: COMPOUND CURVED TEE-PANELS FORMED WITH THE SL-1 HAVE CURVED EDGES AND ARE USED ON DOMES AND COMPOUND CURVED ROUNDED CORNERS.

#### THE BERRIDGE MODEL SL-1 PORTABLE ROLL FORMER

is mounted on a heavy-duty four wheel cart and is completely self-contained, including uncoiler, mechanical shear and counter gauge for measuring panel length.

#### CASTER BRAKES & LOCKING MECHANISM:

For safety reasons, it is recommended that the foot brakes on each caster be placed in the locked position whenever the roll former is not being moved. Also, note the two front casters have a locking mechanism to keep them from swiveling. This is useful when pulling the cart onto the Berridge Trailer.

#### MODEL SL-24 MATERIAL USAGE:

Material used with the Berridge Model SL-1 Portable Roll Former must comply with the following parameters:

Maximum Strip Width .....No limit Maximum MaterialThickness .....24 Ga. (.024 In.)

Material: Prefinished galvanized or Galvalume, 16 oz.  ${}^{\circ}$ - $\Omega$  hard Copper

<u>NOTE:</u> Do not run unpainted coil on the SL-1 Portable Roll Former; Unpainted coil may cause flake build-up on rolls. Because the SL-1 is a precision machine, designed to fabricate only Berridge-developed products, only Berridge Coil may be used in these roll-formers. Other coil material may vary in thickness, hardness, and surface treatment which could damage the components of the SL-1 Roll-Former. Also, defective coil material will result in a defective product which could damage the reputation of the high quality Berridge products. Therefore, only Berridge coil is allowed to be used in any Berridge Portable Roll-Former. If it is discovered that any other material has been used in a Berridge Portable Roll-Former, Berridge Manufacturing Company has the right to recall the machine and completely disassemble and inspect it . A service charge will be assessed.

#### **ELECTRICAL POWER REQUIREMENTS:**

The Berridge Model SL-1 Portable Roll Former requires standard U.S. electrical current of 110 to 120 volts AC 60 cycles. Connect to a grounded supply receptacle with at least 20 amp current capacity. If extension cords are required, use the following recommended sizes:

Length Wire Gauge

20 - 50 FT ..... 12 50+ FT ..... 10

<u>NOTE:</u> The use of portable electric generators to power the Model SL-1 is not recommended, as this practice will lead to damage to the electric motor.

### **II. EQUIPMENT NOMENCLATURE**

### **MODEL SL-1 PORTABLE ROLL-FORMER**



#### **FEATURES:**

- 1. CASTERS
- 2. FOOT SWITCH
- 3. FORMING ROLLERS

#### **ROLL FORMER SPECIFICATIONS**

WIDTH:	2'-0"*
LENGTH:	4' -2"*

- HEIGHT: 3' 6"\*
- WEIGHT: 550 LBS W/ COVER
- SPEED: 20' PER MINUTE

MOTOR: 1/2 H.P. 110V. SINGLE-PHASE ELECTRIC

\*Dimensions approximate; Berridge SL-1 roll formers are custom-made machines, hence exact size dimensions may vary from machine to machine.

## **III. OPERATING INSTRUCTIONS**

#### PREPARING THE MATERIAL FOR FORMING

- To prepare Berridge 24 gauge material for singleleg roll forming into Compound Curve Tee-Panels, consult the **Berridge Technical Manual**, Curved Tee section, Pages CT-27 through CT-31. These details and instructions show how to develop a template for the Compound Curved Tee-Panel by taking measurements from the domed or compound curve hip substrate and then preparing templates.
- The final template, which will be hand-cut from triangular shaped pieces (see Fig. 1), will have bow-shaped curved edges which will be rolled upward 90∞ one leg at a time using the SL-1 Portable Roll Former.

#### ROLL-FORMING THE COMPOUND CURVED TEE-PANELS (ONE LEG AT A TIME) ON THE SL-1:

- Press metal firmly against table and backstop of machine. Machine operator should use a steel "C" channel to hold metal strip against backstop as metal is feeding through machine to avoid injury from sharp metal edge.
- 2. Metal must be evenly supported on the in-going and out-going sides of the SL-1 roll former. make sure personnel supporting metal are spaced no more than 10 feet apart and that metal is held level and flat.
- 3. The SL-1 Portable Roll Former forms only one leg per pass (See Fig. 2). After the first leg is formed, turn metal end-for-end and repeat process.

#### INSTALLING COMPOUND CURVED TEE- PAN-ELS

Once the 90∞ legs are formed, the Compound Curved Tee-Panel must be curved by hand over the framework or substrate: *The SL-1 does not curve the material.* 



FIG. 1: CUTTING PANEL SHAPES FOR FORMING, USING CURVED-EDGE COMPOUND CURVE TEMPLATE.

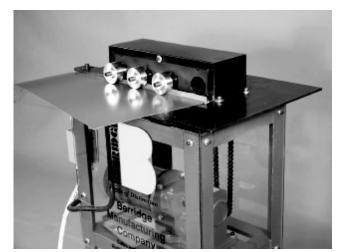


FIG. 2: THE 90° VERTICAL LEG ON THE COMPOUND CURVED TEE-PANEL IS FORMED ON LEG AT A TIME ON THE BERRIDGE SL-1 PORTABLE ROLL FORMER <u>(NOTE: THE SL-1 DOES NOT CURVE THE</u> <u>PANELS)</u>

### **IV. MAINTENANCE INSTRUCTIONS**

THE BERRIDGE MODEL SL-1 PORTABLE ROLL FORMER requires very little maintenance. To insure the highest quality product and maximum machine life, the following routine preventative maintenance is required. Keep the machine DRY, CLEAN & DIRT-FREE; this is a precision piece of equipment. Keep a MAINTENANCE LOG.

- A. The **MAIN DRIVE GEAR BOX** uses 90 weight gear oil. Every 40 hours of operation, gears should be lubricated.
- B. **GEARS** should be lubricated with oil-free, dry spray-on lubricant.
- C. The **HOUSING** can be cleaned with any liquid household cleaner. Touch-up as needed with Glidden "Bolt Green" paint.
- D. Check tightness of all **MOUNTING BOLTS & SCREWS** regularly, especially after each time the machine has been in transit.

## V. SAFETY

It is important to abide by normal safety rules when operating the **BERRIDGE MODEL SL-1 PORT-ABLE ROLL FORMER.** While Berridge recommends the following minimum safety practices, the company accepts no responsibility for personal injury or property damage incurred while operating the machine.

- A. Make sure electrical outlet is grounded.
- B. Do not operate machine in rain or stand in water while operating.
- C. Make sure electrical cord is free of cuts and exposed wire.
- D. Keep hands and clothing out of the rolls. (See operating instructions on previous page)

### **NOTE TO LESSEES:**

The Berridge Model SL-1 Roll Former Machine is shipped in good working condition and must be returned in the same condition. The cost of any required repairs for damage or deterioration caused by misuse or negligence will be charged to lessee.

#### DRIVE MOTOR:

0.5 HP 110V AC

#### **GEAR REDUCER:**

Please verify w/San Antonio plant Roll Former Opns.

#### WHEELS:

Payson #300 - 8 UT-WB and #301 - 8UP or equal.

#### SWITCH:

Allen Bradley 350-TAV32

#### CHAIN:

ASA 40 Standard

#### NOTE:

Leasees should only replace parts after checking with Berridge's San Antonio Roll Former Operations Department to obtain approval and verify correct replacement part(s), as machines may vary.



#### BERRIDGE MANUFACTURING COMPANY ROLL FORMER OPERATIONS

2201 Rudeloff Road Seguin, Texas 78155 Fax: 830-303-0530



## BERRIDGE MANUFACTURING COMPANY 1720 Maury Street, Houston, Texas 77026

for Design & Technical Assistance Call toll-free: 1 (800) 231-8127 Fax: (713) 236-9422 www.berridge.com

#### SALES HQ

#### **SALES & DISTRIBUTION BRANCH OFFICES**

SAN ANTONIO, TX 6515 Fratt Rd San Antonio,TX 78218 1-800-669-0009 Fax: 210-650-0379 SEGUIN, TX 2201 Rudeloff Rd Seguin, TX 78155 1-800-303-0811 Fax: 210-303-0530 DENVER, CO 7801 E. 40th St. Denver, CO 80207 1-800-735-3703 Fax: 303-322-3810 CHICAGO, IL 1175 Carolina Dr. W. Chicago, IL 60185 1-800-488-7415 Fax: 630-231-7520 ATLANTA, GA 319 Lee Industrial Blvd Austell, GA 30168 1-800-927-9712 Fax: 770-941-7344