

## External Clamps

### Alignment and Reforming Ratchet Type Line-Up Clamp

#### RATCHET ALIGNMENT CLAMP



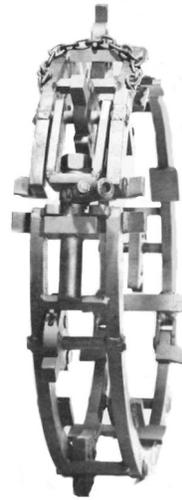
**Heavy duty** clamp designed for the most demanding pipe-line construction.

**FEATURES:**

- Ratchet closure for speed and ease of aligning pipe ends.
- Rings are exceptionally heavy, accurately rolled the hard way to close tolerances, fitted with pads, hooks and hinge assembly.
- Crossbars are heavier and larger to assure straight alignment—**1" X 2" cross section** (compared to other industry clamps of 1" X 1" design).
- Operational mechanism is enclosed in protective housing to eliminate mud and dirt contamination.
- Pads are heavy to insure rigidity. They are placed flat to give large bearing area for truing and aligning pipe, then bored to exact size
- Hinge Pin is a large diameter of alloy steel, unbreakable in service. It is drilled and fitted with grease fitting.
- Ratchet Handle is reversible, long lasting, heavy construction. One ratchet handle included with each clamp. Extra ratchet handles available from Challenger Services.

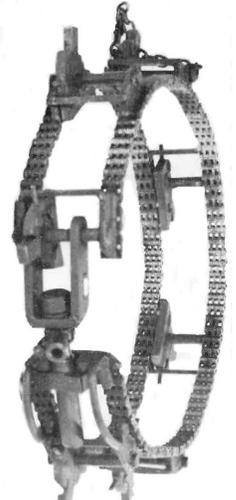
Available in sizes 4",6",8",10",12",14",16",18",20",22",24",26",28",30",34",36",38",40",42",44",46",48",54",60".  
Clamps smaller than 60", other than those listed, can be made to order.

#### RATCHET REFORMING CLAMPS



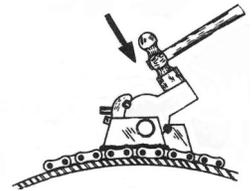
**Rim Clamp**

PATENTED



**Chain Clamp**

Drive down to eliminate high-low. Set at minimum 1/64" to maximum 1/2".



This clamp reforms pipe quickly and easily with 100% line-up.

**FEATURES:**

- Everything you need in one clamp. No wear out or lost parts.
- Made of strong, rugged alloy steel.
- Eccentric operating shoes do the work.
- Precision machined to pipe contour which eliminates pipe damage.
- Ratchet is standard on Rim and Chain Clamps 12" and above.

Stock sizes: 6",8",10",12",14",16",18",20",22",24",26",28",30",34",36",38",40",42",44",46",48",54",60". Other sizes are special order.

**HEAVY DUTY RIM CLAMP**—3/4" Alloy Steel—For pipe up to .750 wall thickness. Stock Sizes 10" to 48". Special order available.

**EXTRA HEAVY DUTY RIM CLAMP**—1" Alloy Steel—For pipe .750 (and above) wall thickness. Stock Sizes 16" to 48".  
Special order available.

**LIGHT WEIGHT LEAF CHAIN CLAMP**—48,000 lb. Test—For pipe up to .4375 wall thickness. Stock Sizes 6" to 48".

**EXTRA HEAVY DUTY LEAF CHAIN CLAMP**—69,000 lb. Test—For e .500 to .750 wall thickness. Stock Sizes 18" to 48".