



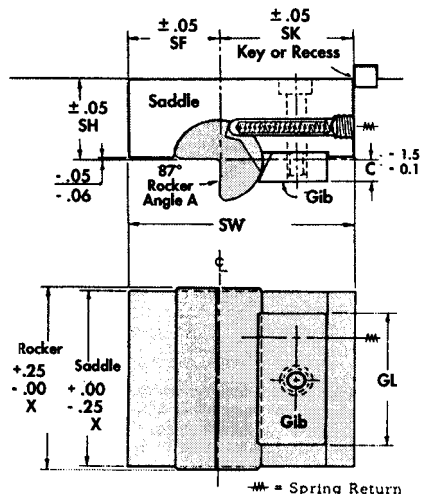
## METRIC Hard Metric Benders

- Designed to produce up to one million parts, ideal for most stamping dies.
- In stock lengths: 305, 610 and up to 915 mm long.
- Segment stock lengths to further reduce your tooling budget; quick delivery.
- Custom lengths available, specify.

### Features:

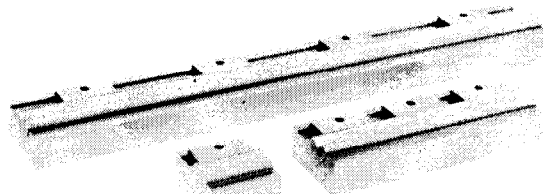
1. Rockers: fully hardened (Rc 58), cryogenically tempered S-7 tool steel. Rockers and gibs are held to inch dimensions.
2. **Saddles:** machinable thru hardened steel; machined holes left for diemaker to locate where needed.
3. Saddle socket is coated for lubrication and long life. Saddle has flush mount lube fittings.
4. Rockers and saddles are CNC ground for precision and interchangeability.
5. Rocker angle is 87° on all standard benders. This allows for 3" of **overbend** to produce consistent 90° forms in mild steel. Harder steel or larger part radii may require more overbend. Rocker angles can be specified at time of order or altered by the diemaker. See page 10 about oversquare bends.
6. CAUTION: Some materials that "flake" during bending may cause benders to gall, seize, or develop excessive wear. Frequent cleanings are suggested when running these materials. READY can reapply the "moly" coating for a nominal fee if needed.

### Standard Hard Metric Bender



## Introducing the Hard Metric Bender

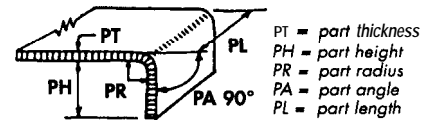
Metric Benders are now less expensive than wipe tooling.



### Selecting Standard Benders:

1. Find the PT you are forming in top row of chart below. Read down (vertically) for all data. Verify the PH check (specials can bend shorter PH's).
2. Note minimum and maximum lengths (X) in chart below. Custom lengths are available. Use in stock lengths whenever possible for quick delivery. Longer lengths achieved by butting units end-to-end, .25mm gap between.

3. If you have questions or need a special quotation, please fax the worksheet on back cover with prints.



Standard benders form a 90° bend in mild steel. The PR should roughly equal the PT.

All dimensions are in millimeters.

Part Material Thickness (PT)	0.3 - 0.9	0.9 - 1.7	1.7 - 2.8	2.8 - 3.8	3.8 - 4.9	4.9 - 6.0	Extended Range Available
Part Height Check (PH)	6.15	9.9	14.8	19.7	24.6	29.5	
To use standard benders, PH should exceed these dimensions. Fax prints for specials.							
Stock Lengths (X)	305, 610, 915	305, 610, 915	305, 610, 915	305, 610, 915	305, 610, 915	305, 610, 915	
Minimum Length (X) (Gib Length - GL)	29	39	51	64	77	89	
Maximum Length (X)	610, *	610, *	915	915	915	915	
MODEL CALLOUT	HMB 62	HMB 100	HMB 150	HMB 200	HMB 250	HMB 300	We Make Specials

Rocker Diameter (87° Angle)	15.9	25.4	38.1	50.8	63.5	76.2	Extended Range Available
Saddle (SW)	53	72	98	123	148	173	
Saddle to Front (SF)	19	28	38	47	56	69	
Saddle to Key (SK)	34	44	60	76	92	104	We Specialize In:
Height (SH)	22	34	47	60	73	85	• High Strength Steel • Radii
Gib Length (GL)	29	39	51	64	77	89	• Aluminum
Rocker Dimensions (B)	5.39	8.61	12.90	17.22	21.54	25.83	
(C)	4.95	7.93	11.89	15.85	19.81	23.77	
(J)	6.15	9.83	14.76	19.66	24.59	29.49	

\* Future units may be available 915 mm long, call READY