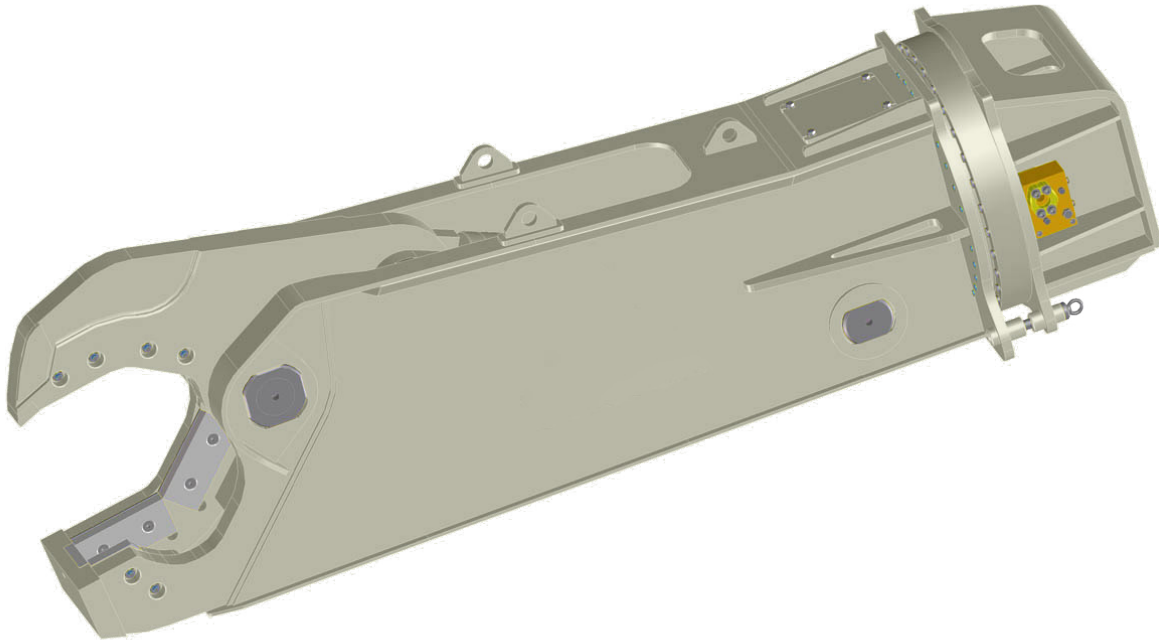


# HYDRAULIC SHEARS



## **Strong Piercing Tip**

Bolted blades eliminate time-consuming rebuilding of the tip

## **Double Guide**

The twin guide on the movable jaw ensures perfect alignment

## **Advanced Blades**

The blades' rhomboid shape reduces stress on the jaws. Each blade can be turned effectively three times. Threaded blades make them easy to remove and install

## **Frontal Blade**

The front blade ensures accurate shearing with the tip, which can be turned

## **Advanced Jaw Design**

Astec's fixed jaw design increases cutting capacity, allowing material to easily fall away

## **Special Speed Valve**

The distinct speed valve delivers reduced cycle times that regenerate power when required. The valve offers protection for the shear, eliminating pressure peaks

## **Rotating Group with Anticavitation Valve**

The 360-degree continuous rotation delivers the best the positioning of the shear

## **Large Cylinders**

The large cylinder size offers 20-percent more power, with a forged cylinder rod for better functionality and security. The Reversed cylinder installation offers full rod protection

## **Manto-Autolube System®**

Heavy shears above 15,500 pounds are equipped with the "Manto-Autolube," a unique total shear greasing system

## **Central Pin Adjustment Kit**

A unique central pivot pin layout allows for regular adjustment of the pin to ensure perfect shearing. The fully protected the pin can be removed for maintenance of all related parts

## Physical/Operating Characteristics

Dimension	SH180R		SH310R		SH410R		SH550R		SH700R	
	Stand.	Metric	Stand.	Metric	Stand.	Metric	Stand.	Metric	Stand.	Metric
Carrier Range (3rd member)	39,683-59,525lb	18,000-27,000kg	61,729-85,980lb	28,000-39,000kg	85,980-110,231lb	39,000-50,000kg	112,436-143,301lb	51,000-65,000kg	154,324-198,416lb	70,000-90,000kg
Carrier Range (2nd member)	30,865-39,683lb	14,000-18,000kg	44,092-61,729lb	20,000-28,000kg	61,729-85,980lb	28,000-39,000kg	85,980-99,208lb	39,000-45,000kg	99,208-132,277lb	45,000-60,000kg
Operating Weight (3rd member)	4,630lb	2,100kg	7,275lb	3,300kg	10,362lb	4,700kg	12,677lb	5,750kg	16,976lb	7,700kg
Operating Weight (2nd member)	4,850lb	2,200kg	7,496lb	3,400kg	10,803lb	4,900kg	13,228lb	6,000kg	17,416lb	7,900kg
Jaw Opening (A)	17.5in	445mm	22.2in	565mm	26.4in	670mm	29.9in	760mm	32.7in	830mm
Jaw Depth (B)	20.7in	525mm	24.8in	630mm	28.3in	720mm	30.7in	780mm	33.1in	840mm
Length (C)	106.3in	2,700mm	129.9in	3,300mm	145.7in	3,700mm	155.5in	3,950mm	169.3in	4,300mm
Force at Upper Tips F1	165,347lb	75 t	242,509lb	110 t	332,898lb	151 t	407,855lb	185 t	473,994lb	215 t
Cutting Force F2 (main blade centre)	437lb	198 t	630,522lb	286 t	910,509lb	413 t	1,053,810lb	478 t	1,216,952lb	552 t
Force at Pin F3	1,697,560lb	770 t	2,272,966lb	1,031 t	3,024,743lb	1,372 t	3,990,368lb	1,810 t	4,587,820lb	2,081 t
Hydraulic Working Pressure	4,641-5,076psi	320-350bar	4,641-5,076psi	320-350bar	4,641-5,076psi	320-350bar	4,641-5,076psi	320-350bar	4,641-5,076psi	320-350bar
Recommended Flow Range	39.6-52.8 gpm	150-200 l/min	52.8-66 gpm	200-250 l/min	66-79.3 gpm	250-300 l/min	72.6-99.1 gpm	275-375 l/min	132.1-158.5 gpm	500-600 l/min
Rotation Type	360° H		360° H		360° H		360° H		360° H	
Hydraulic Motor Pressure Range	1,885-2,176psi	130-150bar	1,450-1,668psi	100-115bar	1,450-1,668psi	100-115bar	1,450-1,668psi	100-115bar	2,030-2,176psi	140-150bar
Hydraulic Motor Flow Range	7.9-10.6 gpm	30-40 l/min	7.9-10.6 gpm	30-40 l/min	7.9-10.6 gpm	30-40 l/min	7.9-10.6 gpm	30-40 l/min	13.2-15.9 gpm	50-60 l/min
Jaw Close Time (max oil flow)	1.9 sec		2.5 sec		4 sec		4.3 sec		2.8 sec	
Jaw Open Time (max oil flow)	2.6 sec		4.3 sec		5 sec		5.3 sec		4.8 sec	
Cycles per Minute (max oil flow)	13.5		8.8		6.7		6.2		7.9	
Rotation Speed (max oil flow)	11.2		6.7		7.4		5.7		9.7	
Hydraulic Ports Size (Cylinder)	1" SAE Code 62		1" SAE Code 62		1.25" SAE Code 62		1.25" SAE Code 62		1.5" SAE Code 62	
Hydraulic Ports Size (Rotation)	1/2" Gas		1/2" Gas		1/2" Gas		1/2" Gas		1/2" Gas	
Hydraulic Ports Size (Drain)	N/A		1/4" Gas		1/4" Gas		1/4" Gas		1/4" Gas	
Rod	2.6in	65mm	3.3in	85mm	3.9in	100mm	4.3in	110mm	5.1in	130mm
Pipe	8 x 0.3in	203 x 8mm	12.8 x 0.4in	324 x 10mm	16 x 0.5in	406 x 12mm	20 x 0.6in	508 x 14mm	22 x 0.6in	560 x 16mm
IPE	14.2in	360mm	19.7in	500mm	23.6in	600mm	27.6in	700mm	31.5in	800mm
HEA	11in	280mm	13.4in	340mm	15.7in	400mm	19.7in	500mm	25.6in	650mm
HEB	7.9in	200mm	11in	280mm	11.8in	300mm	14.2in	360mm	17.7in	450mm
Plate	0.6in	15mm	0.8in	20mm	1in	25mm	1in	25mm	1.2in	30mm
L profile	7.9 x 0.6in	200 x 15mm	7.9 x 0.8in	200 x 20mm	7.9 x 1.0in	200 x 25mm	9.8 x 1.0in	250 x 25mm	11.8 x 1.2in	300 x 30mm
Rail	No		No		Yes		Yes		Yes	