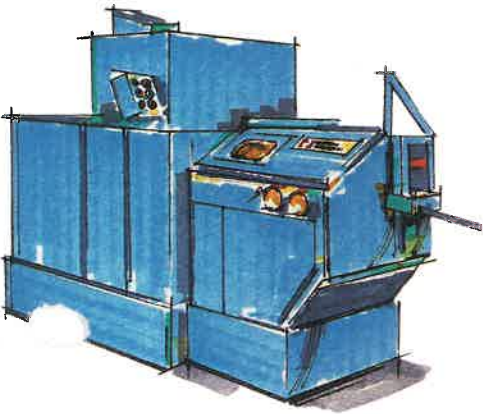


# Double-Stroke Headers



# Double-Stroke Headers--Standard features

- Five-roll straightener on MS (10-roll on LS)
- Electric feed shutoff
- Quick change feed rolls and feed tube
- Quick change bushing-type cutter and quill
- Oscillating punch rocker with mechanical lock
- Timed knockouts in both punches
- Heading wedge with quick set scale
- Complementary cam drive for punch rocker, transfer and kickout
- Quick change transfer head with quick set scale and set up fixture
- Quick change die block
- Quick change mechanical blank ejector with quick set scale
- Disc brake

- Dynamic counterbalancing
- Dual distribution recirculating lubrication with two filters and automatic low pressure shutoff
- Calibrated handwheels for feed, stockgauge and kickout stroke adjustment
- Functionally located operator adjustments and controls with automatic shutoffs
- Integral acoustic covers designed to control sound levels at 85 dB(A) or lower
- Electronic piece counter

## Option

- ToolChek - tool checking fixture
- Relieving kickout mechanism (not available on 31 MS and 31 LS)
- Digital readouts on the kickout and stockgauge lengths

## Standard specifications--All dimensions are Millimeters unless otherwise noted

Machine Size	31MS	31LS	51MS	51LS	61MS	61LS
Number of dies	1	1	1	1	1	1
Number of punches	2	2	2	2	2	2
Pieces per minute	550	400	470	340	400	300
Cutoff diameter <sup>1</sup>	3.5	3.5	5	5	6	6.35
Cutoff length (min./max.) <sup>2</sup>	7/48	12/65	10/60	13/80	10/52	16/95
Kickout stroke-die (min./max.) <sup>3</sup>	5/25	10/50	8/40	12/60	4.8/30	14/70
Kickout stroke - punch (max.)	3.2	3.2	10	10	9.5	12
Upset diameter <sup>4</sup>	8	8	11	11	14	14
Quill diameter	11	11	13	13	19	19
Cutter insert diameter	10	10	12	12	12	13
Die diameter	30	30	40	40	41	44
Cone punch diameter	19	19	22	22	32	32
Finish punch diameter	22	22	25	25	35	37
Motor size (kW)	11	7.5	15	11	15	15
Wire centerline above floor	935	940	957	956	956	1100
Net weight (kg)	3800	3900	5270	5300	4700	6800
Boxed weight (kg)	5080	5180	6080	7200	5400	8000
Floor space width(m)	1.3	1.3	1.4	1.4	1.34	1.6
Floor space length(m)	2.8	2.9	3.1	3.2	2.68	3.8
Height(m)	1.85	1.85	1.94	1.94	1.97	2.24

<sup>1</sup>600 N/mm<sup>2</sup> tensile

<sup>2</sup>Minimum requires special cutter and extended quill.

Maximum cutoff may be affected by special tooling (example, sliding cone tool)

<sup>3</sup>With special machine parts, minimum stroke can be less, but maximum will also be less.

<sup>4</sup>Upset on face of dies but may vary with material and degree of deformation.

As we are constantly striving to improve our products, discrepancies may exist between the actual product and the descriptions or photographs here, resulting from design modifications, specification changes and special or optional features which are extra as quoted.