

MMC PRESSES

45 THRU 315 TON CX1 PRESSES



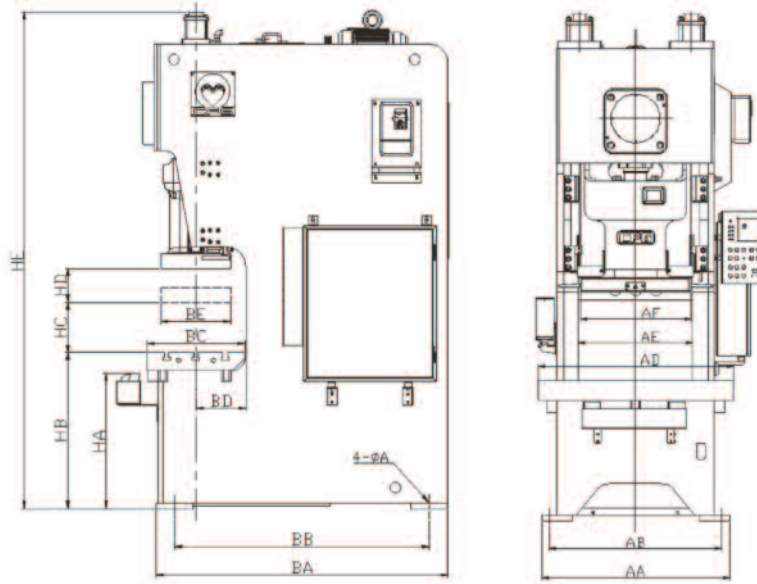
MMC Presses Quality Feature:
All 80-ton and larger CX1 series presses feature a standard extra wide (approx. 40% wider) flanged ram for easier mounting and better support of tooling, providing better part quality and longer tooling life.

CX1 SERIES BASIC SPECIFICATIONS

All specifications are subject to change without notice. If you have critical dimensions that must be maintained, please confirm before ordering.

| No. | Feature | Unit | CX1-450 | | CX1-600 | | CX1-800 | | CX1-1100 | | CX1-1600 | | CX1-2000 | | CX1-2500 | | CX1-3150 | |
|-----|------------------------------|-------------|---------|---------|---------|---------|---------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|
| | | | 45 | 60 | 80 | 110 | 160 | 200 | 250 | 315 | | | | | | | | |
| 1 | Capacity | Metric Ton | 45 | 60 | 80 | 110 | 160 | 200 | 250 | 315 | | | | | | | | |
| | | US Ton | 50 | 66 | 88 | 121 | 176 | 220 | 275 | 347 | | | | | | | | |
| 2 | Model Designation | Type L or H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H |
| 3 | Tonnage Rating Above BDC | mm | 3.2 | 1.6 | 4.0 | 2.0 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.5 | 6.5 | 8.0 | 8.0 |
| | | inch | 0.13 | 0.06 | 0.16 | 0.08 | 0.16 | 0.16 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.26 | 0.26 | 0.31 | 0.31 |
| 4 | Stroke Length | mm | 80 | 50 | 120 | 60 | 150 | 100 | 180 | 110 | 200 | 130 | 200 | 150 | 250 | 150 | 250 | 150 |
| | | inch | 3.15 | 1.97 | 4.72 | 2.36 | 5.91 | 3.94 | 7.09 | 4.33 | 7.87 | 5.12 | 7.87 | 5.91 | 9.84 | 5.91 | 9.84 | 5.91 |
| 5 | Speed Range | SPM | 40-100 | 100-150 | 35-90 | 80-120 | 45-75 | 50-90 | 35-60 | 45-80 | 30-50 | 35-65 | 25-45 | 35-55 | 20-40 | 30-50 | 20-40 | 30-50 |
| 6 | Die height over bolster SDAU | mm | 250 | 265 | 310 | 340 | 330 | 350 | 350 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 |
| | | inch | 9.84 | 10.43 | 12.20 | 13.39 | 12.99 | 13.78 | 13.78 | 17.72 | 17.72 | 17.72 | 17.72 | 17.72 | 17.72 | 17.72 | 17.72 | 17.72 |
| 7 | Slide Adjustment | mm | 60 | 75 | 80 | 80 | 80 | 80 | 100 | 100 | 100 | 110 | 110 | 110 | 120 | 120 | 120 | 120 |
| | | inch | 2.36 | 2.95 | 3.15 | 3.15 | 3.15 | 3.15 | 3.94 | 3.94 | 3.94 | 4.33 | 4.33 | 4.33 | 4.72 | 4.72 | 4.72 | 4.72 |
| 8 | Max. Upper Die Weight | Kg | 300 | 300 | 500 | 500 | 650 | 650 | 750 | 750 | 950 | 950 | 950 | 1300 | 1300 | 1400 | 1400 | 1400 |
| | | lb | 660 | 660 | 1100 | 1100 | 1430 | 1430 | 1650 | 1650 | 2090 | 2090 | 2090 | 2860 | 2860 | 3080 | 3080 | 3080 |
| 9 | Bolster Area (R-L x F-B) | mm | 850 | 440 | 900 | 500 | 1000 | 600 | 1150 | 680 | 1250 | 760 | 1400 | 840 | 1500 | 900 | 1600 | 900 |
| | | inch | 33.46 | 17.32 | 35.43 | 19.69 | 39.37 | 23.62 | 45.28 | 26.77 | 49.21 | 29.92 | 55.12 | 33.07 | 59.06 | 35.43 | 62.99 | 35.43 |
| 10 | Bolster Thickness | mm | 90 | 90 | 90 | 100 | 100 | 120 | 120 | 150 | 150 | 170 | 170 | 180 | 180 | 180 | 180 | 180 |
| | | inch | 3.54 | 3.54 | 3.54 | 3.94 | 3.94 | 4.72 | 4.72 | 5.91 | 5.91 | 6.69 | 6.69 | 7.09 | 7.09 | 7.09 | 7.09 | 7.09 |
| 11 | Slide Area (R-L x F-B) | mm | 400 | 300 | 500 | 360 | 770 | 460 | 960 | 520 | 980 | 580 | 1100 | 650 | 1200 | 700 | 1200 | 700 |
| | | inch | 15.75 | 11.81 | 19.69 | 14.17 | 30.31 | 18.11 | 37.80 | 20.47 | 38.58 | 22.83 | 43.31 | 25.59 | 47.24 | 27.56 | 47.24 | 27.56 |
| 12 | Throat Depth | mm | 225 | 255 | 310 | 310 | 350 | 350 | 390 | 390 | 430 | 430 | 430 | 460 | 460 | 460 | 460 | 460 |
| | | inch | 8.86 | 10.04 | 12.20 | 12.20 | 13.78 | 13.78 | 15.35 | 15.35 | 16.93 | 16.93 | 16.93 | 18.11 | 18.11 | 18.11 | 18.11 | 18.11 |
| 13 | Die Shank Hole Diameter | mm | 38.1 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| | | inch | 1.50 | 1.97 | 1.97 | 1.97 | 1.97 | 1.97 | 2.56 | 2.56 | 2.56 | 2.56 | 2.56 | 2.56 | 2.56 | 2.56 | 2.56 | 2.56 |
| 14 | Main Motor (VFD) | Kw | 3.7 | 5.5 | 5.5 | 5.5 | 7.5 | 7.5 | 11.0 | 11.0 | 15.0 | 15.0 | 15.0 | 18.5 | 18.5 | 22.0 | 22.0 | 22.0 |
| | | hp | 5.0 | 7.4 | 7.4 | 7.4 | 10.1 | 10.1 | 14.7 | 14.7 | 20.1 | 20.1 | 20.1 | 24.8 | 24.8 | 29.5 | 29.5 | 29.5 |
| 15 | Slide Adjust Motor | Kw | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| | | hp | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 16 | Compressed Air Requirement | Mpa | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 |
| | | psi | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| 17 | Accuracy Standard | JIS | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 | Class 1 |
| 18 | Approx. Press Weight | Kg | 3,800 | 5,600 | 7,000 | 10,000 | 14,000 | 22,000 | 30,800 | 48,400 | 55,000 | 63,800 | 83,000 | 110,000 | 140,000 | 170,000 | 210,000 | 250,000 |
| | | lb | 8,360 | 12,320 | 15,400 | 22,000 | 30,800 | 48,400 | 63,800 | 83,000 | 110,000 | 140,000 | 170,000 | 210,000 | 250,000 | 308,000 | 375,000 | 462,000 |
| 19 | OPTIONAL Die Cushion | | | | | | | | | | | | | | | | | |
| 20 | Capacity | kN | 23 | n/a | 36 | n/a | 36 | n/a | 63 | n/a | 100 | n/a | 140 | n/a | 140 | n/a | 140 | n/a |
| | | US Ton | 2.5 | n/a | 4.0 | n/a | 4.0 | n/a | 6.9 | n/a | 11.0 | n/a | 15.4 | n/a | 15.4 | n/a | 15.4 | n/a |
| 21 | Compressed Air Requirement | Mpa | 0.55 | n/a | 0.55 | n/a | 0.55 | n/a | 0.55 | n/a | 0.55 | n/a | 0.55 | n/a | 0.55 | n/a | 0.55 | n/a |
| | | psi | 80 | n/a | 80 | n/a | 80 | n/a | 80 | n/a | 80 | n/a | 80 | n/a | 80 | n/a | 80 | n/a |
| 22 | Stroke Length | mm | 50 | n/a | 70 | n/a | 70 | n/a | 80 | n/a | 90 | n/a | 90 | n/a | 110 | n/a | 110 | n/a |
| | | inch | 1.97 | n/a | 2.76 | n/a | 2.76 | n/a | 3.15 | n/a | 3.54 | n/a | 3.54 | n/a | 4.33 | n/a | 4.33 | n/a |
| 23 | Pad Area (L-R x F-B) | mm | 300 | 230 | 350 | 300 | 410 | 330 | 500 | 460 | 540 | 460 | 640 | 510 | 700 | 510 | 700 | 510 |
| | | inch | 11.81 | 9.06 | 13.78 | 11.81 | 16.14 | 12.99 | 19.69 | 18.11 | 21.26 | 18.11 | 25.20 | 20.08 | 27.56 | 20.08 | 27.56 | 20.08 |

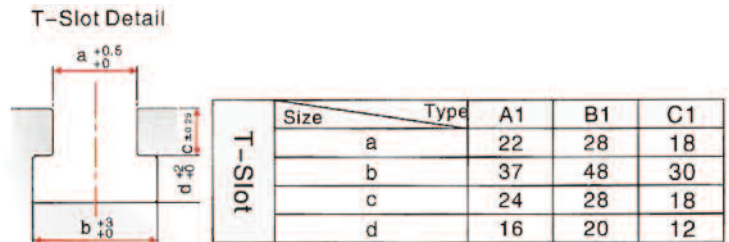
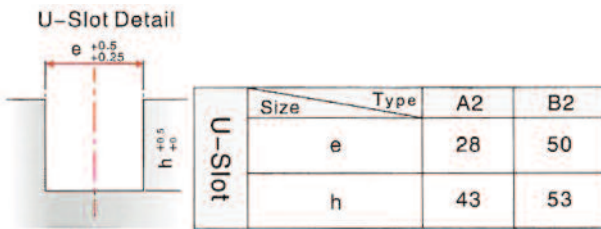
MMC PRESSES REFERENCE DIMENSIONS CX1 SERIES



CX1 SERIES DIMENSIONS

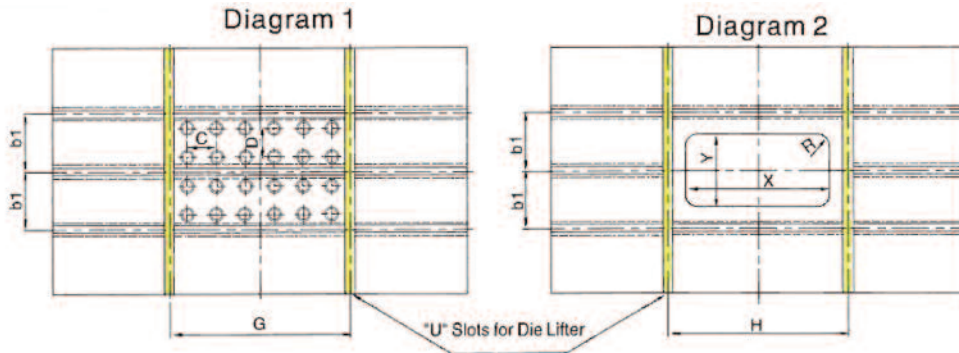
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| Model | CX1-450 | CX1-600 | CX1-800 | CX1-1100 | CX1-1600 | CX1-2000 | CX1-2500 | CX1-3150 |
|-------|---------|---------|---------|----------|----------|----------|----------|----------|
| AA | 860 | 910 | 1060 | 1110 | 1250 | 1410 | 1600 | 1690 |
| AB | 790 | 840 | 970 | 1020 | 1150 | 1310 | 1480 | 1570 |
| AD | 850 | 900 | 1000 | 1150 | 1250 | 1400 | 1500 | 1600 |
| AE | 500 | 570 | 675 | 670 | 720 | 870 | 930 | 1020 |
| AG | 700 | 750 | 865 | 930 | 1030 | 1200 | 1340 | 1430 |
| BA | 1230 | 1495 | 1635 | 1790 | 1960 | 2270 | 2460 | 2715 |
| BB | 1040 | 1305 | 1435 | 1540 | 1660 | 1920 | 2040 | 2295 |
| BC | 440 | 500 | 600 | 680 | 760 | 840 | 900 | 900 |
| BD | 225 | 255 | 310 | 350 | 390 | 430 | 460 | 460 |
| BE | 350 | 360 | 460 | 520 | 580 | 650 | 700 | 700 |
| HA | 690 | 690 | 690 | 690 | 705 | 770 | 840 | 880 |
| HB | 800 | 800 | 835 | 840 | 900 | 1020 | 1100 | 1140 |
| HC | 275 | 310 | 330 | 240 | 450 | 450 | 450 | 450 |
| HD | 110 | 120 | 150 | 180 | 200 | 200 | 250 | 250 |
| HE | 2245 | 2550 | 2950 | 2970 | 3480 | 4000 | 4220 | 4455 |
| HF | 810 | 810 | 1380 | 1500 | 1580 | 1600 | 1635 | 1650 |
| ØA | Ø28 | Ø28 | Ø28 | Ø28 | Ø45 | Ø45 | Ø45 | Ø45 |

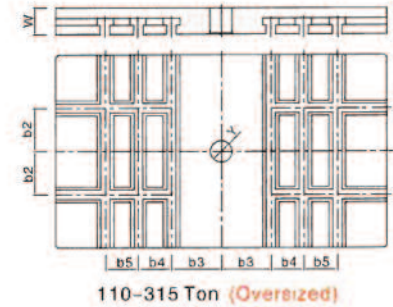
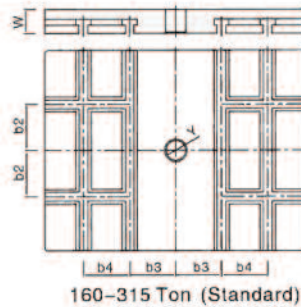
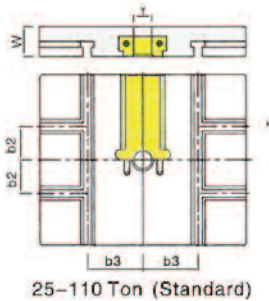


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MINSTER AUXILIARY EQUIPMENT CX1 SLIDE & BOLSTER REFERENCE DIMENSIONS



| Model | CX1-450 | CX1-600 | CX1-800 | CX1-1100 | CX1-1600 | CX1-2000 | CX1-2500 | CX1-3150 |
|------------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| T-Slot Type | C1 | A1 | A1 | A1 | B1 | B1 | B1 | B1 |
| U-Slot Type | - | - | A2 | A2 | B2 | B2 | B2 | B2 |
| Bolster Area (LR x FR) | 850 x 440 | 900 x 500 | 1000 x 600 | 1150 x 680 | 1250 x 760 | 1400 x 840 | 1500 x 900 | 1600 x 900 |
| Shank Hole Qty x Dia. | 15 x Ø20 | 15 x Ø20 | 24 x Ø20 | 24 x Ø20 | 24 x Ø28 | 24 x Ø28 | 24 x Ø28 | 24 x Ø28 |
| C x D | 75 x 85 | 75 x 100 | 75 x 75 | 80 x 80 | 100 x 110 | 115 x 110 | 130 x 120 | 130 x 120 |
| b1 | 120 | 150 | 150 | 160 | 220 | 280 | 290 | 290 |
| X x Y | 300 x 150 | 320 x 160 | 360 x 180 | 400 x 200 | 440 x 220 | 480 x 240 | 520 x 260 | 520 x 260 |
| G | 360 | 370 | 480 | 500 | 580 | 680 | 730 | 730 |
| H | 420 | 420 | 480 | 500 | 520 | 550 | 600 | 600 |



Note: Shank blocks are provided as standard features on presses up to 110 tons capacity.

| Model | CX1-450 | CX1-600 | CX1-800 | CX1-1100 | CX1-1600 | CX1-2000 | CX1-2500 | CX1-3150 |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| Slide Area (LR x FR) | 400 x 300 | 500 x 360 | | | | | | |
| Standard Slide Plate (LR x FR) | - | - | 560 x 460 | 650 x 520 | 700 x 580 | 850 x 650 | 920 x 700 | 920 x 700 |
| Oversize Slide Plate (LR x FR) | - | - | 770 x 460 | 960 x 520 | 980 x 580 | 1100 x 650 | 1200 x 700 | 1200 x 700 |
| T-Slot Type | C1 | A1 | A1 | A1 | B1 | B1 | B1 | B1 |
| Shank Hole Size Y | Ø38.1 | Ø50 | Ø50 | Ø50 | Ø65 | Ø65 | Ø65 | Ø65 |
| b2 | 60 | 80 | 90 | 110 | 130 | 150 | 170 | 170 |
| b3 | - | 110 | 150 | 150 | 150 | 150 | 150 | 150 |
| b4 | - | - | - | 100 | 100 | 100 | 150 | 150 |
| b5 | - | - | - | 100 | 100 | 100 | 150 | 150 |
| W | 60 | 70 | 70 | 80 | 80 | 85 | 85 | 85 |

NOTE:

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