

**Atlas** *Tube*  
A ZEKELMAN COMPANY

# PIPE PILES



# THE STRENGTH OF A GREAT PRODUCT. THE SUPPORT OF A GREAT COMPANY.

Atlas Tube ERW pipe piles are manufactured to deliver unmatched quality and dependability, supporting both the public and private sectors. All of our piles are produced to meet ASTM 252 or ASTM 500.

## MARKETS:

USACE, DOTs and private projects.

## APPLICATIONS:

Bearing pile, shell pile, micropile casing, jack and bore, etc.

## TRACEABILITY:

100% domestic material with full traceability.

## VALUE-ADDED SERVICES:

Beveling and attachment of points/plates.

## CUSTOMIZATION:

Custom lengths, gauges and grades available upon request.

## RELIABLE DELIVERY:

Products ship via truck, rail or barge from our North American mills.

## LOCATIONS:

Chicago, Illinois; Blytheville, Arkansas; Birmingham, Alabama; Plymouth, Michigan; Harrow, Ontario.

## A252

As the industry standard pipe pile specification, A252 covers nominal (average) wall steel pipe piles of cylindrical shape and applies to pipe piles in which the steel cylinder acts as a permanent load-carrying member, or as a shell for cast-in-place concrete piles.

## A500

As the industry standard structural specification, A500 covers cold-formed welded and seamless carbon steel round, square, rectangular or special structural tubular shapes for welded, riveted or bolted construction of bridges and buildings, as well as general structural purposes.

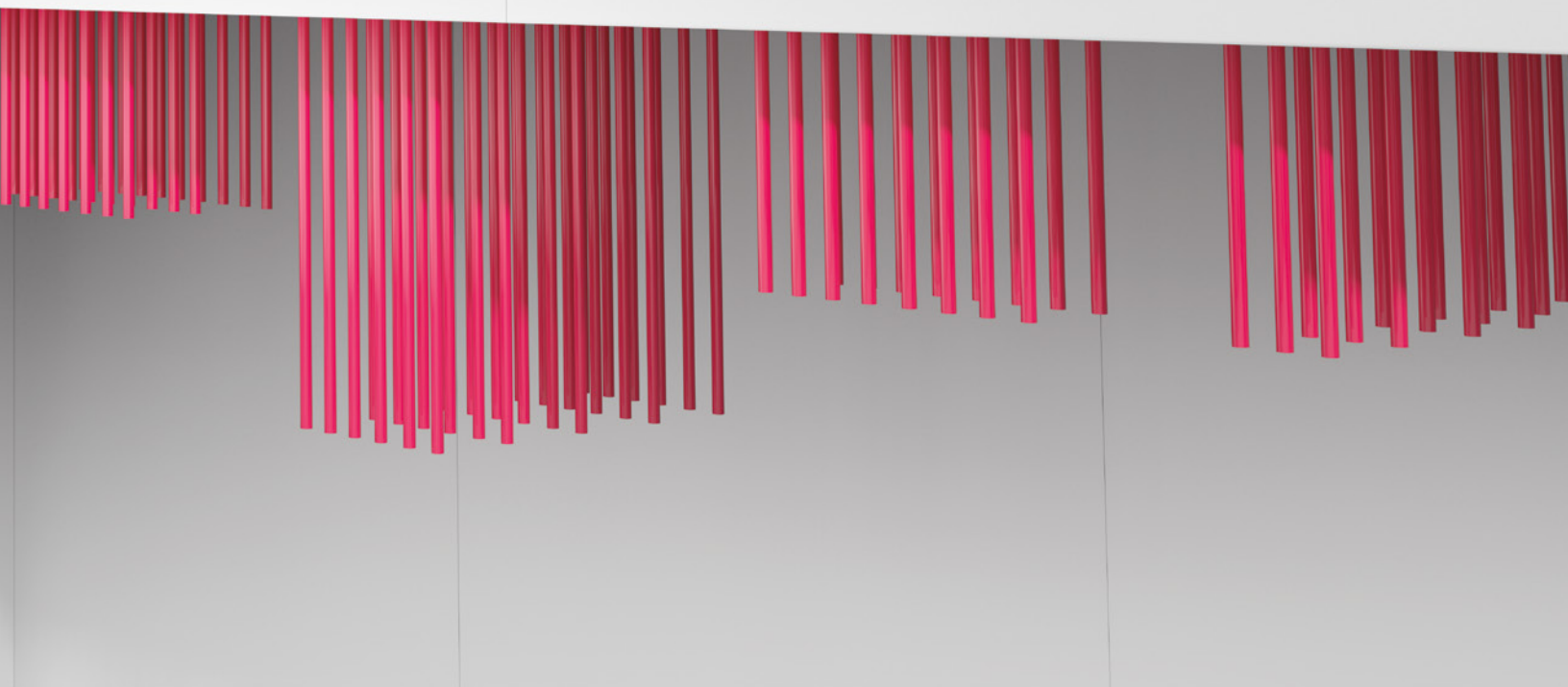
## STEEL PIPE SPECIFICATIONS

| ASTM                | MIN YIELD (KSI) |
|---------------------|-----------------|
| A252 Grade 2        | 35              |
| A252 Grade 3        | 45              |
| A252 Grade 3 (Mod)* | 50              |
| A500 Grade C**      | 50              |

\*Most common and readily available piling spec

\*\*Most common and readily available structural spec

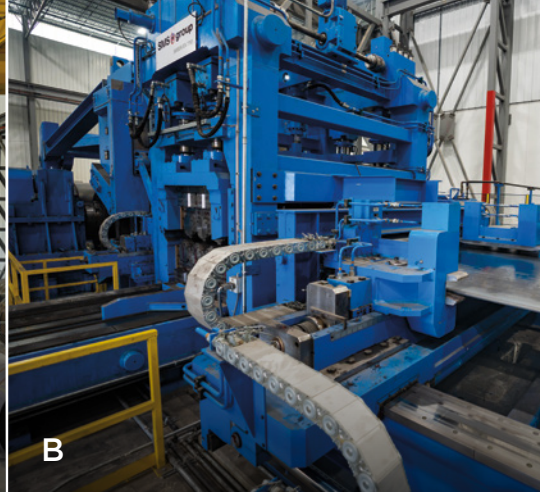








A



B



C



D



E



F

## WELCOME TO STATE-OF-THE-ART MANUFACTURING.

Our facilities feature the newest technology and automation to ensure you're getting the highest quality, most precise pipe piles as efficiently as possible. Our drop-in rollings and quick-change manufacturing process allow for flexibility and fast order turnaround.

### COIL BAY (A)

Hot-rolled steel coils are inspected by our technicians to verify gauge and ensure the coils are defect-free. These are some of the largest coils produced in North America.

### UNCOILER (B)

The steel is uncoiled, flattened and joined to the end of another coil with an end weld or butt weld, forming a continuous sheet. This welded portion will be cut out and scrapped.

### ACCUMULATOR (C)

The continuous sheet heads into the spiral accumulator. The accumulator can hold up to 20 coils (approximately 800 tons). This allows our operations team to continually add coils so there is never a material lag.

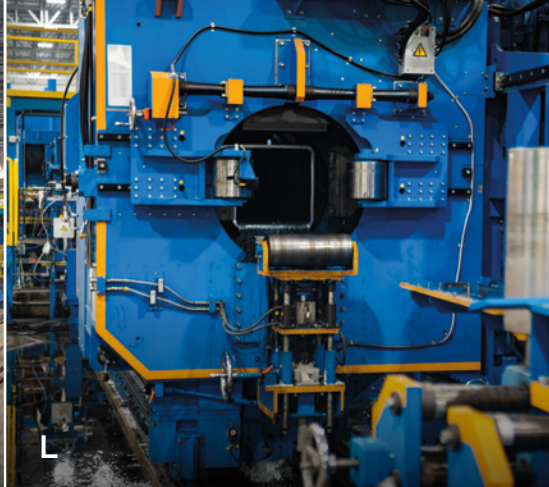
### EDGE MILLER (D)

The edge miller trims the edges of the coil to the required width and prepares the steel for the electric resistance welding (ERW) process.

### FORMING SECTION (E)

Forming rolls gradually shape the flat steel sheet into a tube.





### **WELDING (F)**

The edges of the steel are heated up to 2,700°F using electric resistance welding. The hot steel is then pressed together to form a full thickness metallurgical bond, which is stronger than the steel itself. At the same time, excess metal forms a weld bead along the seam. The excess metal is removed from the outside of the pipe piles to form a smooth surface.

### **SEAM ANNEALER (G)**

The heat-affected zone (HAZ) is normalized through the seam annealing process, which provides a uniform grain structure and minimizes the risk of untampered martensite in the steel. It results in reduced hardness, improved ductility and relieved internal stress. Our state-of-the-art seam annealing system uses automated weld line tracking and up to five annealers to ensure full through-wall annealing.

### **TOOLING BAY (H)**

Tooling sets are stored and the offline mill stands are prepared for the next size/changeover.

### **PULL OUT STAND (I)**

Tooling is installed and staged for the next size to be rolled. Staging the next set of tooling allows the changeover of the mill to be completed in as little as two hours.

### **COOLING SECTION (J)**

After seam annealing, the welded tube is air cooled to just below 400°F, then bathed by a stream of coolant to prevent cracking and splitting and to maintain straightness tolerances. The coolant is recovered and filtered through a closed loop process, preventing it from contaminating wastewater collections.

### **FINAL SHAPING STATION (K)**

Forming stands straighten and shape the pipe piling into its final round shape.

### **CUT OFF SAW (L)**

The pipe piles enter the flying Kusakabe saw, which cuts tubes to ordered length with a 0.125" tolerance and provides a smooth end cut. Piles will then be staged for shipment.

PIPE PILE SIZES & PROPERTIES

| OUTER DIAMETER | WALL THICKNESS | INSIDE DIAMETER | WEIGHT   | CROSS SECTION AREA | I                | S                | COATING AREA          |
|----------------|----------------|-----------------|----------|--------------------|------------------|------------------|-----------------------|
| in.            | in.            | in.             | lbs./ft. | in. <sup>2</sup>   | in. <sup>4</sup> | in. <sup>3</sup> | ft. <sup>2</sup> /ft. |
| 6.625          | 0.250          | 6.125           | 17.04    | 5.01               | 25.47            | 7.69             | 1.73                  |
|                | 0.280          | 6.065           | 18.99    | 5.58               | 28.14            | 8.50             | 1.73                  |
|                | 0.375          | 5.875           | 25.05    | 7.36               | 36.08            | 10.89            | 1.73                  |
|                | 0.432          | 5.761           | 28.60    | 8.40               | 40.49            | 12.22            | 1.73                  |
| 7              | 0.250          | 6.500           | 18.04    | 5.30               | 30.23            | 8.64             | 1.83                  |
|                | 0.312          | 6.376           | 22.31    | 6.55               | 36.73            | 10.49            | 1.83                  |
|                | 0.375          | 6.250           | 26.56    | 7.80               | 42.96            | 12.27            | 1.83                  |
|                | 0.500          | 6.000           | 34.74    | 10.21              | 54.24            | 15.50            | 1.83                  |
| 8.625          | 0.250          | 8.125           | 22.38    | 6.58               | 57.72            | 13.38            | 2.26                  |
|                | 0.322          | 7.981           | 25.58    | 8.40               | 72.49            | 16.81            | 2.26                  |
|                | 0.375          | 7.875           | 33.07    | 9.72               | 82.86            | 19.21            | 2.26                  |
|                | 0.500          | 7.625           | 43.43    | 12.76              | 105.72           | 24.51            | 2.26                  |
| 9.625          | 0.625          | 7.375           | 53.45    | 15.71              | 126.43           | 29.32            | 2.26                  |
|                | 0.250          | 9.125           | 25.05    | 7.36               | 80.95            | 16.82            | 2.52                  |
|                | 0.312          | 9.001           | 31.06    | 9.13               | 99.08            | 20.59            | 2.52                  |
|                | 0.375          | 8.875           | 37.08    | 10.90              | 116.74           | 24.26            | 2.52                  |
|                | 0.500          | 8.625           | 48.77    | 14.33              | 149.63           | 31.09            | 2.52                  |
| 10.75          | 0.625          | 8.375           | 60.13    | 17.67              | 179.79           | 37.36            | 2.52                  |
|                | 0.250          | 10.250          | 28.06    | 8.25               | 113.71           | 21.16            | 2.81                  |
|                | 0.312          | 10.126          | 34.81    | 10.23              | 139.46           | 25.95            | 2.81                  |
|                | 0.365          | 10.020          | 40.52    | 11.91              | 160.73           | 29.90            | 2.81                  |
|                | 0.375          | 10.000          | 41.59    | 12.22              | 164.67           | 30.64            | 2.81                  |
|                | 0.500          | 9.750           | 54.79    | 16.10              | 211.95           | 39.43            | 2.81                  |
|                | 0.625          | 9.500           | 67.65    | 19.88              | 255.73           | 47.58            | 2.81                  |
| 12             | 0.688          | 9.374           | 74.00    | 21.74              | 276.52           | 51.45            | 2.81                  |
|                | 0.250          | 11.500          | 31.40    | 9.23               | 159.33           | 26.56            | 3.14                  |
|                | 0.312          | 11.376          | 38.98    | 11.45              | 195.77           | 32.63            | 3.14                  |
|                | 0.375          | 11.250          | 46.60    | 13.69              | 231.59           | 38.60            | 3.14                  |
|                | 0.500          | 11.000          | 61.47    | 18.06              | 299.19           | 49.86            | 3.14                  |
| 12.75          | 0.625          | 10.750          | 76.00    | 22.33              | 362.33           | 60.39            | 3.14                  |
|                | 0.250          | 12.250          | 33.41    | 9.82               | 191.82           | 30.09            | 3.34                  |
|                | 0.312          | 12.126          | 41.48    | 12.19              | 235.91           | 37.00            | 3.34                  |
|                | 0.375          | 12.000          | 49.61    | 14.58              | 279.33           | 43.82            | 3.34                  |
|                | 0.500          | 11.750          | 65.48    | 19.24              | 361.54           | 56.71            | 3.34                  |
|                | 0.625          | 11.500          | 81.01    | 23.80              | 438.67           | 68.81            | 3.34                  |
|                | 0.688          | 11.374          | 88.71    | 26.07              | 475.68           | 74.62            | 3.34                  |
| 14             | 0.750          | 11.250          | 96.21    | 28.27              | 510.93           | 80.15            | 3.34                  |
|                | 0.875          | 11.000          | 111.08   | 32.64              | 578.52           | 90.75            | 3.34                  |
|                | 0.250          | 13.500          | 36.75    | 10.80              | 255.30           | 36.47            | 3.66                  |
|                | 0.312          | 13.376          | 45.65    | 13.41              | 314.38           | 44.91            | 3.66                  |
|                | 0.375          | 13.250          | 54.62    | 16.05              | 372.76           | 53.25            | 3.66                  |
|                | 0.500          | 13.000          | 72.16    | 21.20              | 483.76           | 69.11            | 3.66                  |
|                | 0.625          | 12.750          | 89.36    | 26.26              | 588.53           | 84.08            | 3.66                  |
|                | 0.688          | 12.624          | 97.91    | 28.77              | 639.05           | 91.29            | 3.66                  |
|                | 0.750          | 12.500          | 106.23   | 31.21              | 687.32           | 98.19            | 3.66                  |
|                | 0.875          | 12.250          | 122.77   | 36.07              | 780.35           | 111.48           | 3.66                  |
|                | 1.000          | 12.000          | 138.97   | 40.83              | 867.86           | 123.98           | 3.66                  |

## PIPE PILE SIZES & PROPERTIES

| OUTER DIAMETER | WALL THICKNESS | INSIDE DIAMETER | WEIGHT   | CROSS SECTION AREA | I                | S                | COATING AREA          |
|----------------|----------------|-----------------|----------|--------------------|------------------|------------------|-----------------------|
| in.            | in.            | in.             | lbs./ft. | in. <sup>2</sup>   | in. <sup>4</sup> | in. <sup>3</sup> | ft. <sup>2</sup> /ft. |
| 16             | 0.250          | 15.500          | 42.09    | 12.37              | 383.66           | 47.96            | 4.19                  |
|                | 0.312          | 15.376          | 52.32    | 15.37              | 473.25           | 59.16            | 4.19                  |
|                | 0.375          | 15.250          | 62.64    | 18.40              | 562.08           | 70.26            | 4.19                  |
|                | 0.500          | 15.000          | 82.85    | 24.34              | 731.94           | 91.49            | 4.19                  |
|                | 0.625          | 14.750          | 102.72   | 30.18              | 893.52           | 111.69           | 4.19                  |
|                | 0.688          | 14.624          | 112.62   | 33.09              | 971.90           | 121.49           | 4.19                  |
|                | 0.750          | 14.500          | 122.27   | 35.93              | 1047.08          | 130.88           | 4.19                  |
|                | 0.875          | 14.250          | 141.48   | 41.57              | 1192.90          | 149.11           | 4.19                  |
|                | 1.000          | 14.000          | 160.35   | 47.12              | 1331.25          | 166.41           | 4.19                  |
| 18             | 0.250          | 17.500          | 47.44    | 13.94              | 549.14           | 61.02            | 4.71                  |
|                | 0.312          | 17.376          | 58.99    | 17.33              | 678.24           | 75.36            | 4.71                  |
|                | 0.375          | 17.250          | 70.65    | 20.76              | 806.63           | 89.63            | 4.71                  |
|                | 0.500          | 17.000          | 93.54    | 27.48              | 1053.17          | 117.02           | 4.71                  |
|                | 0.625          | 16.750          | 116.09   | 34.11              | 1289.07          | 143.23           | 4.71                  |
|                | 0.688          | 16.624          | 127.32   | 37.41              | 1404.03          | 156.00           | 4.71                  |
|                | 0.750          | 16.500          | 138.30   | 40.64              | 1514.64          | 168.29           | 4.71                  |
|                | 0.875          | 16.250          | 160.18   | 47.07              | 1730.18          | 192.24           | 4.71                  |
|                | 1.000          | 16.000          | 181.73   | 53.40              | 1936.00          | 215.11           | 4.71                  |
| 20             | 0.250          | 19.500          | 52.78    | 15.51              | 756.43           | 75.64            | 5.24                  |
|                | 0.312          | 19.376          | 65.66    | 19.29              | 935.25           | 93.53            | 5.24                  |
|                | 0.375          | 19.250          | 78.67    | 23.12              | 1113.47          | 111.35           | 5.24                  |
|                | 0.500          | 19.000          | 104.23   | 30.62              | 1456.86          | 145.69           | 5.24                  |
|                | 0.625          | 18.750          | 129.45   | 38.04              | 1786.97          | 178.70           | 5.24                  |
|                | 0.688          | 18.624          | 142.03   | 41.73              | 1948.41          | 194.84           | 5.24                  |
|                | 0.750          | 18.500          | 154.34   | 45.35              | 2104.13          | 210.41           | 5.24                  |
|                | 0.875          | 18.250          | 178.89   | 52.56              | 2408.69          | 240.87           | 5.24                  |
|                | 1.000          | 18.000          | 203.11   | 59.68              | 2700.98          | 270.10           | 5.24                  |
| 24             | 0.375          | 23.250          | 94.71    | 27.83              | 1942.30          | 161.86           | 6.28                  |
|                | 0.500          | 23.000          | 125.61   | 36.91              | 2549.35          | 212.45           | 6.28                  |
|                | 0.625          | 22.750          | 156.17   | 45.89              | 3136.93          | 261.41           | 6.28                  |
|                | 0.688          | 22.624          | 171.45   | 50.38              | 3425.82          | 285.49           | 6.28                  |
|                | 0.750          | 22.500          | 186.41   | 54.77              | 3705.45          | 308.79           | 6.28                  |
|                | 0.875          | 22.250          | 216.31   | 63.56              | 4255.34          | 354.61           | 6.28                  |
|                | 1.000          | 22.000          | 245.87   | 72.24              | 4787.00          | 398.92           | 6.28                  |
|                | 0.375          | 27.250          | 110.74   | 32.54              | 3105.11          | 221.79           | 7.33                  |
| 28             | 0.500          | 27.000          | 146.99   | 43.19              | 4084.80          | 291.77           | 7.33                  |
|                | 0.625          | 26.750          | 182.90   | 53.74              | 5037.65          | 359.83           | 7.33                  |
|                | 0.688          | 26.624          | 200.87   | 59.02              | 5507.87          | 393.42           | 7.33                  |
|                | 0.750          | 26.500          | 218.48   | 64.19              | 5964.16          | 426.01           | 7.33                  |
|                | 0.875          | 26.250          | 253.72   | 74.55              | 6864.81          | 490.34           | 7.33                  |
|                | 1.000          | 26.000          | 288.63   | 84.81              | 7740.09          | 552.86           | 7.33                  |

**Custom lengths, gauges and grades available upon request.**  
Piling products produced from domestic materials with MTRs.

Please inquire about rolling schedule and lead times.  
Project specific rollings available.





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## Made in North America

All Atlas Tube products are made right here in North America and support local steelworkers. Atlas Tube is proudly Canadian owned and a champion for American Metal—a national grassroots initiative that supports the domestic steel industry and all the hard workers whose livelihoods depend on it.



PROUDLY CANADIAN OWNED



## About Atlas Tube

Atlas Tube, a division of Zekelman Industries, produces a wide range of steel tubular products and is the leading provider of hollow structural sections (HSS) and pipe pile sections in North America. Other offerings include webinars and technical support to owners, engineers and contractors.

For more information, contact Atlas Tube at **800.733.5683** or **info@atlastube.com**. Or, visit our website at [atlastube.com](http://atlastube.com)

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