

### NICKEL - PLATED CHAIN

Diamond Chain produces a full line of nickel-plated roller chains for a variety of uses in environments where the chains are exposed to moisture. Common uses include applications exposed to the weather, high humidity, or those on machines that are frequently washed down with water.

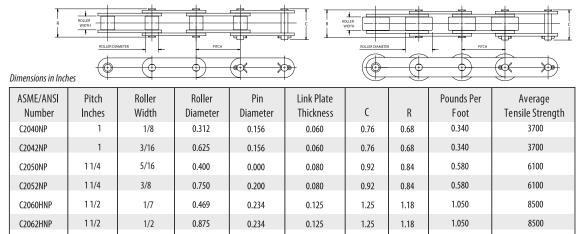
Diamond nickel-plated chain provides superior protection from the elements, greatly extending the life of the base chain when operating in wet conditions. Each individual component of Diamond nickel-plated chain is plated before assembly to ensure full coverage and plate depth.

ROLLER DIAMETI

| Dimensions in Inch | ies    |        |          |          |            | C    |      | $\rightarrow$ |                  |
|--------------------|--------|--------|----------|----------|------------|------|------|---------------|------------------|
| ASME/ANSI          | Pitch  | Roller | Roller   | Pin      | Link Plate |      |      | Pounds Per    | Average          |
| Number             | Inches | Width  | Diameter | Diameter | Thickness  | C    | R    | Foot          | Tensile Strength |
| 25NP               | 1/4    | 1/8    | *.130    | 0.090    | 0.030      | 0.37 | 0.34 | 0.085         | 875              |
| 35NP               | 3/8    | 3/16   | *.200    | 0.141    | 0.050      | 0.56 | 0.50 | 0.220         | 2100             |
| 40NP               | 1/2    | 5/16   | 0.312    | 0.156    | 0.060      | 0.72 | 0.67 | 0.420         | 4000             |
| 50NP               | 5/8    | 3/8    | 0.400    | 0.200    | 0.080      | 0.89 | 0.83 | 0.680         | 6600             |
| 60NP               | 3/4    | 1/2    | 0.469    | 0.234    | 0.094      | 1.11 | 1.04 | 0.970         | 8500             |
| 80NP               | 1      | 5/8    | 0.625    | 0.312    | 0.125      | 1.44 | 1.32 | 1.700         | 14500            |
| 100NP              | 1 1/4  | 3/4    | 0.750    | 0.375    | 0.156      | 1.73 | 1.61 | 2.500         | 24000            |
| 120NP              | 1 1/2  | 1      | 0.875    | 0.437    | 0.187      | 2.14 | 2.00 | 3.700         | 34000            |

#### SINGLE PITCH DRIVE CHAINS

#### DOUBLE PITCH DRIVE CHAINS



0.156

0.156

1.57

1.57

1.45

1.45

1.400

1.400

14500 14500

2 \*Chains are rollerless - dimension shown is bushing diameter.

2

5/8

5/8

0.625

1.125

0.312

0.312

DIAMOND

C2080HNP

C20802HNP

# NOTHING OUTLASTS A DIAMOND.®

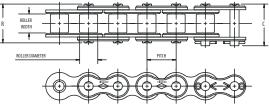
### DIAMOND ACE<sup>®</sup> CHAIN

The Diamond ACE (anti-corrosion exterior) chain incorporates an electrochemically bonded, protective exterior coating that is applied prior to assembly. Each individual part is treated before assembly using a electrochemical bonding process that provides maximum resistance to iron oxide (red rust) corrosion. Pre-assembly coating ensures all component parts are thoroughly treated, which prevents internal rust from seeping out and causing contamination. Diamond ACE features a zinc-nickel and non-hexavalent chromate coating with a protective lubricant to provide corrosion protection and extended wear resistance. The anti-corrosion exterior is specifically designed to permit sacrificial oxidation of the outer layer, allowing the chain to function without corrosive attack of the base metal.

Independent salt spray and sprocket drive tests have shown that Diamond ACE is superior in balancing corrosion protection and performance.

NOTE: These chains are not intended to resist corrosion from caustic chemicals or acids. Stainless steel chain is recommended for those types of applications. Contact Diamond's application engineers for assistance in selecting the proper chain for your application.

#### SINGLE PITCH DRIVE CHAINS



#### Dimensions in Inches

| ASME/ANSI<br>Number | Pitch<br>Inches | Roller<br>Width | Roller<br>Diameter | Pin<br>Diameter | Link Plate<br>Thickness | C    | R    | Pounds Per<br>Foot | Average<br>Tensile Strength |
|---------------------|-----------------|-----------------|--------------------|-----------------|-------------------------|------|------|--------------------|-----------------------------|
| 40 ACE              | 1/2             | 5/16            | 0.312              | 0.156           | 0.060                   | 0.72 | 0.67 | 0.420              | 4000                        |
| 50 ACE              | 5/8             | 3/8             | 0.400              | 0.200           | 0.080                   | 0.89 | 0.83 | 0.680              | 6600                        |
| 60 ACE              | 3/4             | 1/2             | 0.469              | 0.234           | 0.094                   | 1.11 | 1.04 | 0.970              | 8500                        |
| 80 ACE              | 1               | 5/8             | 0.625              | 0.312           | 0.125                   | 1.44 | 1.32 | 1.700              | 14500                       |

#### DOUBLE PITCH DRIVE CHAINS

|            |        |        | рпсн     |          |            |      |      |            |                  |
|------------|--------|--------|----------|----------|------------|------|------|------------|------------------|
| ASME/ANSI  | Pitch  | Roller | Roller   | Pin      | Link Plate |      |      | Pounds Per | Average          |
| Number     | Inches | Width  | Diameter | Diameter | Thickness  | C    | R    | Foot       | Tensile Strength |
| C2040 ACE  | 1      | 5/16   | 0.312    | 0.156    | 0.060      | 0.76 | 0.68 | 0.340      | 3700             |
| C2042 ACE  | 1      | 5/16   | 0.625    | 0.156    | 0.060      | 0.76 | 0.68 | 0.340      | 3700             |
| C2050 ACE  | 1 1/4  | 3/8    | 0.400    | 0.200    | 0.080      | 0.92 | 0.84 | 0.580      | 6100             |
| C2052 ACE  | 1 1/4  | 3/8    | 0.750    | 0.200    | 0.080      | 0.92 | 0.84 | 0.580      | 6100             |
| C2060H ACE | 1 1/2  | 1/2    | 0.469    | 0.234    | 0.125      | 1.25 | 1.18 | 1.050      | 8500             |
| C2062H ACE | 1 1/2  | 1/2    | 0.875    | 0.234    | 0.125      | 1.25 | 1.18 | 1.050      | 8500             |
| C2080H ACE | 2      | 5/8    | 0.625    | 0.312    | 0.156      | 1.57 | 1.45 | 1.400      | 14500            |
| C2082H ACE | 2      | 5/8    | 1.125    | 0.312    | 0.156      | 1.57 | 1.45 | 1.400      | 14500            |

NOTE: For sizes not listed, contact Diamond for availability on a made-to-order basis.

For more information, please contact your Sales District Manager or call 877-484-6536 to place your order.

### **NOTHING OUTLASTS A DIAMOND**

### STAINLESS STEEL CHAIN

Diamond produces a wide range of single-pitch and double-pitch stainless steel conveyor chains. These chains are offered in four different stainless steel series to best suit your needs: AP series, 300 series, 400 series, and 600 series.

#### AP SERIES STAINLESS STEEL CHAIN

These chains are assembled using 300 series link plates, bushings, and rollers along with a precipitation-hardened stainless steel pin. This combination increases the wear life of the chain. AP stainless steel chains are well suited for food processing and are approved by the FDA.

#### 300 SERIES STAINLESS STEEL CHAIN

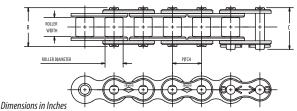
These chains are assembled using only 300 series components. They have excellent corrosion resistance and very low magnetic permeability. The 300 series chain is a "non-sparking" chain.

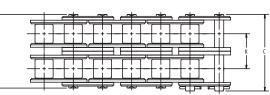
#### 400 SERIES STAINLESS STEEL CHAIN

These chains are manufactured using 300 series link plates but have pins, bushings, and rollers that are produced from 400 series heat treated stainless steel. This combination significantly increases wear resistance over those that are constructed using only 300 series stainless steel components.

#### 600 SERIES STAINLESS STEEL CHAIN

These chains are assembled using 300 series link plates with pins, bushings, and rollers made from 600 series precipitation-hardened stainless steel.





| ASME/ANSI<br>Number | Pitch<br>Inches | Roller<br>Width | Roller<br>Diameter | Pin<br>Diameter | Link Plate<br>Thickness | C    | R    | К     | Pounds Per<br>Foot | Average<br>Tensile Strength |
|---------------------|-----------------|-----------------|--------------------|-----------------|-------------------------|------|------|-------|--------------------|-----------------------------|
| 47SS                | .1475           | 0.072           | *.090              | 0.062           | 0.015                   | 0.25 | 0.22 |       | 0.035              | 180                         |
| 25SS                | 1/4             | 1/8             | *.130              | 0.090           | 0.030                   | 0.37 | 0.34 |       | 0.084              | 700                         |
| 25-2SS              | 1/4             | 1/8             | *.130              | 0.090           | 0.030                   | 0.63 | 0.59 | 0.252 | 0.163              | 1400                        |
| 35SS                | 3/8             | 3/16            | *.200              | 0.141           | 0.050                   | 0.56 | 0.50 |       | 0.210              | 1700                        |
| 40SS                | 1/2             | 5/16            | 0.312              | 0.156           | 0.060                   | 0.72 | 0.67 |       | 0.410              | 3000                        |
| 40-2SS              | 1/2             | 5/16            | 0.312              | 0.156           | 0.060                   | 1.29 | 1.24 | 0.566 | 0.800              | 6000                        |
| 41SS                | 1/2             | 1/4             | 0.306              | 0.141           | 0.050                   | 0.65 | 0.57 |       | 0.280              | 1700                        |
| 50SS                | 5/8             | 3/8             | 0.400              | 0.200           | 0.080                   | 0.89 | 0.83 |       | 0.680              | 4700                        |
| 50-2SS              | 5/8             | 3/8             | 0.400              | 0.200           | 0.080                   | 1.60 | 1.55 | 0.713 | 1.320              | 9400                        |
| 60SS                | 3/4             | 1/2             | 0.469              | 0.234           | 0.094                   | 1.11 | 1.04 |       | 1.000              | 6750                        |
| 60-2SS              | 3/4             | 1/2             | 0.469              | 0.234           | 0.094                   | 2.01 | 1.94 | 0.897 | 1.950              | 13500                       |
| 80SS                | 1               | 5/6             | 0.625              | 0.312           | 0.125                   | 1.44 | 1.32 |       | 1.690              | 12000                       |

\*Chains are rollerless - dimension shown is bushing diameter.

FOR MORE INFORMATION, PLEASE CONTACT YOUR SALES DISTRICT MANAGER OR CALL 877-484-6536 TO PLACE YOUR ORDER.

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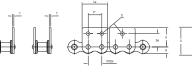
#### STANDARD STRAIGHT AND BENT ATTACHMENT STAINLESS STEEL CHAIN

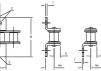
|                   | Diamond<br>S1 (one hole)<br>S2 (one hole) |      |      |       |      |           |      |      |       | Others<br>A1<br>K1 | Diamond<br>B1 (one hole)<br>B2 (one hole) |
|-------------------|---|------|------|-------|------|-----------|------|------|-------|--------------------|---|
| Diamond<br>Number | Pitch<br>Inches                           | D    | Н    | К     | L    | R<br>Max. | S    | T    | WI    | WO                 | X   |
| 25SS              | .250                                      | .125 | .180 | .451  | .218 | .119      | .308 | .030 | .781  | .843               | .562                                      |
| 35SS              | .375                                      | .102 | .250 | .577  | .312 | .178      | .387 | .050 | 1.125 | 1.125              | .750                                      |
| 40SS              | .500                                      | .141 | .312 | .684  | .375 | .238      | .489 | .060 | 1.390 | 1.390              | 1.000                                     |
| 41SS              | .500                                      | .141 | .282 | .698  | .375 | .192      | .482 | .050 | 1.375 | 1.375              | .937                                      |
| 50SS              | .625                                      | .203 | .406 | .895  | .500 | .297      | .618 | .080 | 1.812 | 1.812              | 1.250                                     |
| 60SS              | .750                                      | .203 | .478 | 1.038 | .625 | .356      | .716 | .094 | 2.135 | 2.135              | 1.500                                     |
| 80SS              | 1.000                                     | .266 | .625 | 1.339 | .750 | .475      | .968 | .125 | 2.750 | 2.750              | 2.000                                     |

Note: Above attachments available for multiple strand chain.

#### WIDE CONTOUR STRAIGHT AND BENT ATTACHMENT STAINLESS STEEL CHAIN

| Others  | Diamond          | Others | Diamond          |
|---------|------------------|--------|------------------|
| WM-35   | WCS1 (one hole)  | WM-1   | WCS2 (one hole)  |
| WM-35-2 | WCS1 (two holes) | WM-2   | WCS2 (two holes) |





| Others   | Diamond          | Others   | Diamond          |
|----------|------------------|----------|------------------|
| WA-1     | WCB1 (one hole)  | WK-1     | WCB2 (one hole)  |
| WA-2, A2 | WCB1 (two holes) | WK-2, K2 | WCB2 (two holes) |

Dimensions in Inches

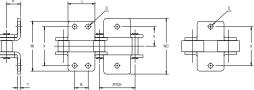
| Diamond<br>Number | Pitch<br>Inches | D    | Hw   | K     | Lw    | Р     | R<br>Max. | Sw   | T    | W     | Х     |
|-------------------|-----------------|------|------|-------|-------|-------|-----------|------|------|-------|-------|
| 3555              | .375            | .125 | .262 | .577  | .727  | .375  | .178      | .399 | .050 | 1.105 | .750  |
| 40SS              | .500            | .141 | .326 | .684  | .946  | .500  | .238      | .503 | .060 | 1.366 | 1.000 |
| 50SS              | .625            | .203 | .406 | .895  | 1.211 | .625  | .297      | .618 | .080 | 1.807 | 1.250 |
| 60SS              | .750            | .203 | .478 | 1.038 | 1.420 | .750  | .356      | .716 | .094 | 2.135 | 1.500 |
| 8055              | 1.000           | .266 | .625 | 1.339 | 1.885 | 1.000 | .475      | .967 | .125 | 2.750 | 2.000 |

Contact Diamond Chain for available attachments on roller links (wide contour).

Note: Above attachments available for multiple strand chain.

DOUBLE-PITCH OVAL CONTOUR STAINLESS STEEL CONVEYOR CHAIN BENT ATTACHMENTS OVAL CONTOUR LINK PLATES/STANDARD AND OVERSIZED ROLLER

| Diamond        |
|----------------|
| B1 (one hole)  |
| B1 (two holes) |
|                |





| Others | Diamond        |
|--------|----------------|
| K1     | B2 (one hole)  |
| K2     | B2 (two holes) |

| Dim  | ensions  | in | Inches |  |
|------|----------|----|--------|--|
| 2000 | cinsions |    | menes  |  |

| Standard          | Roller             |                 |       |      |      |      |       |      |       |       |       | Large R           | oller              |
|-------------------|--------------------|-----------------|-------|------|------|------|-------|------|-------|-------|-------|-------------------|--------------------|
| Diamond<br>Number | Roller<br>Diameter | Pitch<br>Inches | A     | В    | D    | Н    | L     | T    | WI    | WO    | Х     | Diamond<br>Number | Roller<br>Diameter |
| C2040SS           | .312               | 1.00            | .500  | .375 | .141 | .355 | .750  | .060 | 1.350 | 1.488 | 1.000 | C2042SS           | .625               |
| C2050SS           | .400               | 1.25            | .625  | .469 | .203 | .453 | .937  | .080 | 1.692 | 1.863 | 1.250 | C2052SS           | .750               |
| C2060SS           | .469               | 1.50            | .844  | .562 | .203 | .561 | 1.125 | .094 | 2.115 | 2.317 | 1.688 | C2062SS           | .875               |
| C2080SS           | .625               | 2.00            | 1.094 | .750 | .266 | .739 | 1.500 | .125 | 2.760 | 3.028 | 2.188 | C2082SS           | 1.125              |

FOR MORE INFORMATION, PLEASE CONTACT YOUR SALES DISTRICT MANAGER OR CALL 877-484-6536 TO PLACE YOUR ORDER.

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#### DOUBLE-PITCH OVAL CONTOUR STAINLESS STEEL CONVEYOR CHAIN STRAIGHT ATTACHMENTS (OVAL CONTOUR LINK PLATES/STANDARD AND OVERSIZED ROLLER)

| M-35, SA1 S1      | Diamond<br>(one hole)<br>(two holes) |                 |                    |          | <u> </u>     |       |                    |      |              |      | Others<br>M-1, SK1<br>M-2, SK2 | S2 ( | iamond<br>one hole)<br>two holes) |
|-------------------|--------------------------------------|-----------------|--------------------|----------|--------------|-------|--------------------|------|--------------|------|--------------------------------|------|-----------------------------------|
| Standard Roller   |                                      |                 | 2 Attachment Holes |          |              |       |                    |      | 1 Attachment |      | Large Roller                   |      |                                   |
| Diamond<br>Number | Roller<br>Diameter                   | Pitch<br>Inches | В                  | D        | S            | K     | L                  | T    | D1           | S1   | Diamon<br>Number               |      | Roller<br>Diameter                |
| C2040SS           | .312                                 | 1.00            | .375               | .141     | .531         | .773  | .750               | .060 | .188         | .438 | C20425                         | S    | .625                              |
| C2050SS           | .400                                 | 1.25            | .469               | .203     | .625         | .971  | .937               | .080 | .250         | .563 | C20525                         | S    | .750                              |
| C2060SS           | .469                                 | 1.50            | .562               | .203     | .750         | 1.203 | 1.125              | .094 | .329         | .688 | C20625                         |      | .875                              |
| C2080SS           | .625                                 | 2.00            | .750               | .266     | 1.000        | 1.590 | 1.500              | .125 | .375         | .875 | C20825                         | S    | 1.125                             |
| · _ ·             | wo extended pins) Pitch              |                 | D                  |          |              |       | Diamond            |      | Pitch        |      |                                |      |                                   |
| Diamond<br>Number | Inches                               |                 | D<br>± .0005"      |          | L<br>± .010" |       | Number             |      | Inches       | ±    | .0005"                         | ±.   | L<br>.010''                       |
| 35SS              | .375                                 |                 | .141               |          | .375         |       | C2040SS            |      | 1.00         |      | .156                           |      | 375                               |
| 40SS              | .500                                 |                 | .156               |          | .383         |       | C2042SS            |      | 1.00         |      | .156                           |      | 375                               |
| 41SS              | .500                                 |                 | .141               |          | .375         |       | C2050SS            |      | 1.25         |      | .200                           |      | 469                               |
| 50SS              | .625                                 |                 | .200               |          | .469         |       | C2052SS            |      | 1.25         |      | .200                           |      | 469                               |
| 60SS              | .750                                 |                 | .234               |          | .562         |       | C2060SS            |      | 1.50         |      | .234                           |      | 562                               |
| 80SS              | 1.000                                |                 | .312               |          | .750         |       | C2062SS            |      | 1.50         |      | .234                           |      | 562                               |
| NOLER<br>WDD1     |                                      |                 | R ROLLER<br>WOTH   |          |              |       | C2080SS<br>C2082SS |      | 2.00<br>2.00 |      | .312                           |      | 750<br>750                        |
| ROLLER DAMETER    | РІСН                                 | athair T        | ROLLER D           | AVALUE . |              |       | (200233            |      | 2.00         |      |                                | .,   |                                   |

#### DOUBLE-PITCH OVAL CONTOUR STAINLESS STEEL CONVEYOR CHAIN STANDARD DIAMETER ROLLER

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| Diamond<br>Number | Pitch<br>Inches | Rol <b>l</b> er<br>Width | Roller<br>Diameter | Pin<br>Diameter | Link Plate<br>Thickness | C    | R    | Weight Per<br>Foot | Average<br>Tensile Strength |
|-------------------|-----------------|--------------------------|--------------------|-----------------|-------------------------|------|------|--------------------|-----------------------------|
| C2040SS           | 1               | 5/16                     | .312               | .156            | .060                    | .76  | .68  | .34                | 3000                        |
| C2050SS           | 1¼              | 3%                       | .400               | .200            | .080                    | .92  | .84  | .56                | 4700                        |
| C2060SS           | 1½              | 1/2                      | .469               | .234            | .094                    | 1.11 | 1.05 | .81                | 6750                        |
| C2080SS           | 2               | 5%                       | .625               | .312            | .125                    | 1.44 | 1.32 | 1.40               | 12000                       |

#### DOUBLE-PITCH OVAL CONTOUR STAINLESS STEEL CONVEYOR CHAIN LARGE DIAMETER ROLLER

| Diamond<br>Number | Pitch<br>Inches | Ro <b>ll</b> er<br>Width | Ro <b>ll</b> er<br>Diameter | Pin<br>Diameter | Link Plate<br>Thickness | C    | R    | Weight Per<br>Foot | Average<br>Tensile Strength |
|-------------------|-----------------|--------------------------|-----------------------------|-----------------|-------------------------|------|------|--------------------|-----------------------------|
| C2042SS           | 1               | 5/16                     | .625                        | .156            | .060                    | .76  | .68  | .55                | 3000                        |
| C2052SS           | 1¼              | 3%                       | .750                        | .200            | .080                    | .92  | .84  | .86                | 4700                        |
| C2062SS           | 1½              | 1/2                      | .875                        | .234            | .094                    | 1.11 | 1.05 | 1.27               | 6750                        |
| C2082SS           | 2               | 5%                       | 1.125                       | .312            | .125                    | 1.44 | 1.32 | 2.06               | 12000                       |

FOR MORE INFORMATION, PLEASE CONTACT YOUR SALES DISTRICT MANAGER OR CALL 877-484-6536 TO PLACE YOUR ORDER.

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