

## **JWIS<sup>®</sup>** Roller chains

are characterised by an above-average service life due to excellent wear resistance, high consistency, matchless precision and a considerably higher breaking strength and fatigue strength than required by DIN/ISO standard. All iwis chains are pre-stretched and are provided with a highly efficient initial lubrication.

iwis SL series chains (Super Longlife) have pins with an extremely hard surface. This special design shows outstanding characteristics: Highest wear resistance, a prolonged service life, high breaking and fatigue strength, low susceptibility to deficient operational lubrication, corrosion and frictional corrosion in the chain links.





## iwis® Roller chains

according to DIN 8187-1, ISO 606: 2004 and iwis standard

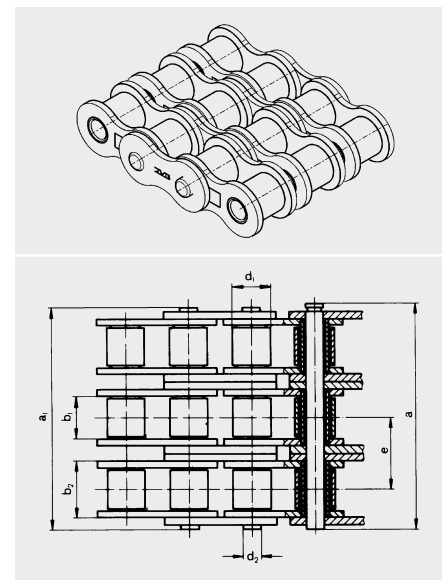
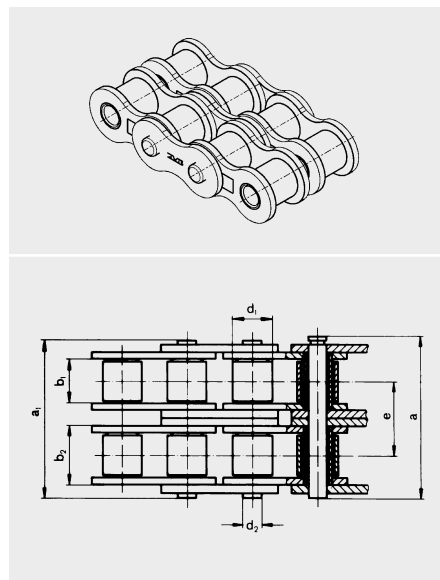
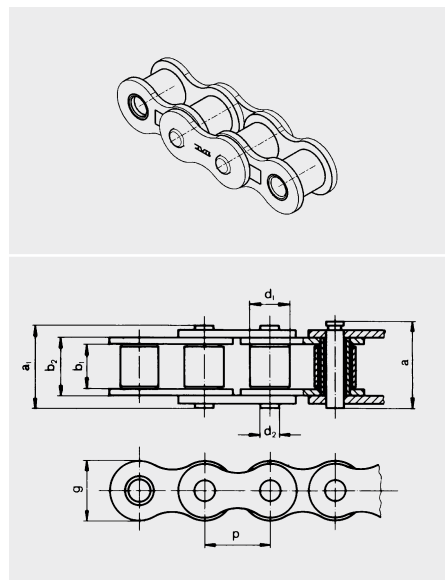
| DIN ISO no. | Ref. no. iwis              | Pitch p (") | Pitch p (mm) | iwis (N) ave. | Norm (N) min. | Bearing area f (cm <sup>2</sup> ) | Weight per m q (kg/m) | Chain components and connecting links | b <sub>1</sub> (mm) min. | b <sub>2</sub> (mm) max. | g (mm) max. | a <sub>1</sub> (mm) max. <sup>2)</sup> | a (mm) max. <sup>2)</sup> | Roller d <sub>1</sub> (mm) max. | Pin d <sub>2</sub> (mm) max. |
|-------------|----------------------------|-------------|--------------|---------------|---------------|-----------------------------------|-----------------------|---------------------------------------|--------------------------|--------------------------|-------------|----------------------------------------|---------------------------|---------------------------------|------------------------------|
| Simplex     |                            |             |              |               |               |                                   |                       |                                       |                          |                          |             |                                        |                           |                                 |                              |
| 04          | G 42                       | 6 mm        | 6,00         | 3.200         | 3.000         | 0,07                              | 0,12                  | 2, 3, 7, 8                            | 2,80                     | 4,10                     | 5,00        | 6,70                                   | 7,60                      | 4,00                            | 1,85                         |
| 05 B-1      | G 52                       | 8 mm        | 8,00         | 6.000         | 5.000         | 0,11                              | 0,18                  | 2, 3, 7, 8                            | 3,16                     | 4,85                     | 7,10        | 8,10                                   | 9,20                      | 5,00                            | 2,31                         |
| –           | G 53 HC-2 <sup>1) 3)</sup> | 8 mm        | 8,00         | 8.500         | –             | 0,25                              | 0,34                  | 2, 8                                  | 4,76                     | 7,90                     | 7,60        | 11,70                                  | –                         | 5,00                            | 3,15                         |
| –           | G 62 1/2" <sup>1)</sup>    | 3/8"        | 9,525        | 11.000        | –             | 0,22                              | 0,34                  | 2, 3, 7, 8                            | 3,94                     | 6,63                     | 8,20        | 11,00                                  | 12,20                     | 6,35                            | 3,31                         |
| 06 B-1      | G 67 <sup>1)</sup> *       | 3/8"        | 9,525        | 10.500        | 9.000         | 0,28                              | 0,41                  | 2, 3, 6, 7, 8                         | 5,72                     | 8,53                     | 8,20        | 12,90                                  | 14,10                     | 6,35                            | 3,31                         |
| –           | P 83 V                     | 1/2"        | 12,70        | 15.500        | –             | 0,29                              | 0,44                  | 2, 3, 6, 7, 8                         | 4,88                     | 7,97                     | 10,20       | 13,20                                  | 14,10                     | 7,75                            | 3,68                         |
| –           | S 84 V                     | 1/2"        | 12,70        | 18.000        | –             | 0,38                              | 0,58                  | 2, 3, 6, 7, 8                         | 6,40                     | 9,65                     | 12,00       | 15,00                                  | 16,00                     | 7,75                            | 3,97                         |
| 08 B-1      | L 85 SL*                   | 1/2"        | 12,70        | 22.000        | 18.000        | 0,50                              | 0,70                  | 2, 3, 6, 7, 8                         | 7,75                     | 11,30                    | 11,80       | 16,90                                  | 18,50                     | 8,51                            | 4,45                         |
| 10 B-1      | M 106 SL*                  | 5/8"        | 15,875       | 27.000        | 22.400        | 0,67                              | 0,95                  | 2, 3, 6, 7, 8                         | 9,65                     | 13,28                    | 14,40       | 19,50                                  | 20,90                     | 10,16                           | 5,08                         |
| 12 B-1      | M 127 SL*                  | 3/4"        | 19,05        | 34.000        | 29.000        | 0,89                              | 1,25                  | 2, 3, 4, 6, 7, 8                      | 11,75                    | 15,62                    | 16,40       | 22,70                                  | 23,60                     | 12,07                           | 5,72                         |
| 16 B-1      | M 1611*                    | 1"          | 25,40        | 75.000        | 60.000        | 2,10                              | 2,70                  | 2, 3, 6, 7, 8                         | 17,02                    | 25,45                    | 21,10       | 36,10                                  | 36,90                     | 15,88                           | 8,28                         |
| 20 B-1      | M 2012                     | 1 1/4"      | 31,75        | 120.000       | 95.000        | 2,92                              | 3,72                  | 2, 4, 6, 8                            | 19,56                    | 29,01                    | 25,40       | 40,50                                  | 46,30                     | 19,05                           | 10,19                        |
| 24 B-1      | M 2416                     | 1 1/2"      | 38,10        | 211.000       | 160.000       | 5,50                              | 7,05                  | 2, 4, 6, 8                            | 25,40                    | 37,92                    | 33,50       | 53,10                                  | 60,00                     | 25,40                           | 14,63                        |
| 28 B-1      | M 2819                     | 1 3/4"      | 44,45        | 250.000       | 200.000       | 7,35                              | 8,96                  | 2, 4, 6, 8                            | 30,95                    | 46,58                    | 37,00       | 63,60                                  | 69,90                     | 27,94                           | 15,90                        |
| 32 B-1      | M 3219                     | 2"          | 50,80        | 315.000       | 250.000       | 8,05                              | 10,00                 | 2, 4, 6, 8                            | 30,95                    | 45,57                    | 42,30       | 65,10                                  | 70,10                     | 29,21                           | 17,81                        |

<sup>1)</sup> Also available with straight side plates <sup>2)</sup> Varying dimensions for cranked links <sup>3)</sup> Bush chain

\* easy break – chains with shouldered pins

The suffix SL indicates chains with particular wear-resistant pins.

It should be noted that if cranked links are fitted, the breaking strength of the chain may be reduced by approximately 20%.



## **iwis® Roller chains**

according to DIN 8187-1, ISO 606: 2004 and iwis standard

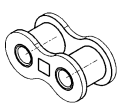
| DIN ISO no.    | Ref. no. iwis        | Pitch p (") | Pitch p (mm) | iwis (N) ave. | Norm (N) min. | Breaking load F <sub>B</sub><br>Bearing area<br>f (cm <sup>2</sup> ) | Weight per m<br>q (kg/m) | Chain components and<br>connecting links | b <sub>1</sub> (mm) min. | b <sub>2</sub> (mm) max. | g (mm) max. | Inner link<br>a <sub>1</sub> (mm) max. <sup>2)</sup> | Outer link<br>a (mm) max. <sup>2)</sup> | Roller d <sub>1</sub> (mm) max. | Pin<br>d <sub>2</sub> (mm) max. | Transverse pitch<br>e (mm) |
|----------------|----------------------|-------------|--------------|---------------|---------------|----------------------------------------------------------------------|--------------------------|------------------------------------------|--------------------------|--------------------------|-------------|------------------------------------------------------|-----------------------------------------|---------------------------------|---------------------------------|----------------------------|
| <b>Duplex</b>  |                      |             |              |               |               |                                                                      |                          |                                          |                          |                          |             |                                                      |                                         |                                 |                                 |                            |
| 05 B-2         | D 52                 | 8"          | 8,00         | 9.100         | 7.800         | 0,22                                                                 | 0,36                     | 2, 3, 8                                  | 3,16                     | 4,85                     | 7,10        | 13,90                                                | 15,00                                   | 5,00                            | 2,31                            | 5,64                       |
| 06 B-2         | D 67 <sup>1)</sup> * | 3/8"        | 9,525        | 20.000        | 16.900        | 0,56                                                                 | 0,78                     | 2, 3, 6, 7, 8                            | 5,72                     | 8,53                     | 8,20        | 23,40                                                | 24,60                                   | 6,35                            | 3,31                            | 10,24                      |
| 08 B-2         | D 85 SL*             | 1/2"        | 12,70        | 40.000        | 32.000        | 1,00                                                                 | 1,35                     | 2, 3, 6, 7, 8                            | 7,75                     | 11,30                    | 12,20       | 30,80                                                | 32,40                                   | 8,51                            | 4,45                            | 13,92                      |
| 10 B-2         | D 106 SL*            | 5/8"        | 15,875       | 56.000        | 44.500        | 1,34                                                                 | 1,85                     | 2, 3, 6, 7, 8                            | 9,65                     | 13,28                    | 14,40       | 36,00                                                | 37,50                                   | 10,16                           | 5,08                            | 16,59                      |
| 12 B-2         | D 127*               | 3/4"        | 19,05        | 68.000        | 57.800        | 1,78                                                                 | 2,50                     | 2, 3, 6, 7, 8                            | 11,75                    | 15,62                    | 16,40       | 42,10                                                | 43,00                                   | 12,07                           | 5,72                            | 19,46                      |
| 16 B-2         | D 1611*              | 1"          | 25,40        | 150.000       | 106.000       | 4,21                                                                 | 5,40                     | 2, 3, 6, 7, 8                            | 17,02                    | 25,45                    | 21,10       | 68,00                                                | 68,80                                   | 15,88                           | 8,28                            | 31,88                      |
| 20 B-2         | D 2012               | 1 1/4"      | 31,75        | 210.000       | 170.000       | 5,84                                                                 | 7,36                     | 2, 4, 6, 8                               | 19,56                    | 29,01                    | 25,40       | 79,70                                                | 82,90                                   | 19,05                           | 10,19                           | 36,45                      |
| 24 B-2         | D 2416               | 1 1/2"      | 38,10        | 370.000       | 280.000       | 11,00                                                                | 13,85                    | 2, 4, 6, 8                               | 25,40                    | 37,92                    | 33,50       | 101,80                                               | 106,50                                  | 25,40                           | 14,63                           | 48,36                      |
| 28 B-2         | D 2819               | 1 3/4"      | 44,45        | 500.000       | 360.000       | 14,70                                                                | 18,80                    | 2, 4, 6, 8                               | 30,95                    | 46,58                    | 37,00       | 124,70                                               | 129,20                                  | 27,94                           | 15,90                           | 59,56                      |
| 32 B-2         | D 3219               | 2"          | 50,80        | 530.000       | 450.000       | 16,10                                                                | 19,80                    | 2, 4, 6, 8                               | 30,95                    | 45,57                    | 42,30       | 126,00                                               | 128,30                                  | 29,21                           | 17,81                           | 58,55                      |
| <b>Triplex</b> |                      |             |              |               |               |                                                                      |                          |                                          |                          |                          |             |                                                      |                                         |                                 |                                 |                            |
| 08 B-3         | Tr 85*               | 1/2"        | 12,70        | 58.000        | 47.500        | 1,50                                                                 | 2,00                     | 2, 3, 7, 8                               | 7,75                     | 11,30                    | 12,20       | 44,70                                                | 46,30                                   | 8,51                            | 4,45                            | 13,92                      |
| 10 B-3         | Tr 106*              | 5/8"        | 15,875       | 80.000        | 66.700        | 2,02                                                                 | 2,80                     | 2, 3, 7, 8                               | 9,65                     | 13,28                    | 14,40       | 52,50                                                | 54,00                                   | 10,16                           | 5,08                            | 16,59                      |
| 12 B-3         | Tr 127*              | 3/4"        | 19,05        | 100.000       | 86.700        | 2,68                                                                 | 3,80                     | 2, 3, 7, 8                               | 11,75                    | 15,62                    | 16,40       | 61,50                                                | 62,50                                   | 12,07                           | 5,72                            | 19,46                      |
| 16 B-3         | Tr 1611*             | 1"          | 25,40        | 220.000       | 160.000       | 6,32                                                                 | 8,00                     | 2, 3, 6, 7, 8                            | 17,02                    | 25,45                    | 21,10       | 99,20                                                | 100,70                                  | 15,88                           | 8,28                            | 31,88                      |
| 20 B-3         | Tr 2012              | 1 1/4"      | 31,75        | 315.000       | 250.000       | 8,76                                                                 | 11,00                    | 2, 4, 6, 8                               | 19,56                    | 29,01                    | 25,40       | 116,10                                               | 119,40                                  | 19,05                           | 10,19                           | 36,45                      |
| 24 B-3         | Tr 2416              | 1 1/2"      | 38,10        | 560.000       | 425.000       | 16,50                                                                | 20,31                    | 2, 4, 6, 8                               | 25,40                    | 37,92                    | 33,50       | 150,20                                               | 155,40                                  | 25,40                           | 14,63                           | 48,36                      |
| 28 B-3         | Tr 2819              | 1 3/4"      | 44,45        | 750.000       | 530.000       | 22,05                                                                | 28,00                    | 2, 4, 6, 8                               | 30,95                    | 46,58                    | 37,00       | 184,60                                               | 188,90                                  | 27,94                           | 15,90                           | 59,56                      |
| 32 B-3         | Tr 3219              | 2"          | 50,80        | 795.000       | 670.000       | 24,15                                                                | 29,60                    | 2, 4, 6, 8                               | 30,95                    | 45,57                    | 42,30       | 184,50                                               | 186,50                                  | 29,21                           | 17,81                           | 58,55                      |

<sup>1)</sup> Straight side plate <sup>2)</sup> Varying dimensions for cranked links

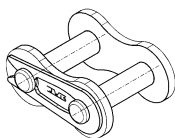
The suffix SL indicates chains with particularly wear-resistant pins.

It should be noted that if cranked links are fitted, the breaking strength of the chain may be reduced by approximately 20%.

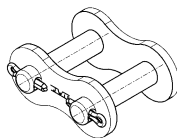
### CHAIN COMPONENTS AND CONNECTING LINKS



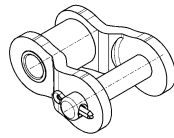
Nr. 2 Inner links Standard designation B



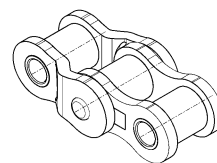
Nr. 3 Connecting link with spring clip Standard designation E



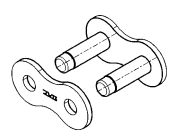
Nr. 4 Connecting link with split pin fastening Standard designation S



Nr. 6 Single cranked link with split pin fastening Standard designation L



Nr. 7 Double cranked links Standard designation C



Nr. 8 Outer link Standard designation A

## IWIS® Roller chains

according to DIN 8188-1, American standard, ISO 606: 2004

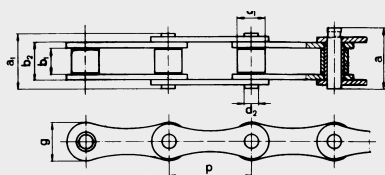
| DIN ISO no.    | Ref. no. iwis            | ANSI Ref. no. | Pitch p (") | Pitch p (mm) | iwis (N) ave. | Norm (N) min. | Bearing area f (cm <sup>2</sup> ) | Weight per m q (kg/m) | Chain components and connecting links | b <sub>1</sub> (mm) min. | b <sub>2</sub> (mm) max. | g (mm) max. | a <sub>1</sub> (mm) max. <sup>2)</sup> | a (mm) max. <sup>2)</sup> | Roller d <sub>1</sub> (mm) max. | Pin d <sub>2</sub> (mm) max. | Transverse pitch e (mm) |
|----------------|--------------------------|---------------|-------------|--------------|---------------|---------------|-----------------------------------|-----------------------|---------------------------------------|--------------------------|--------------------------|-------------|----------------------------------------|---------------------------|---------------------------------|------------------------------|-------------------------|
| <b>Simplex</b> |                          |               |             |              |               |               |                                   |                       |                                       |                          |                          |             |                                        |                           |                                 |                              |                         |
| 08 A-1         | L 85 A                   | ANSI 40       | 1/2"        | 12,70        | 18.000        | 14.100        | 0,44                              | 0,60                  | 2, 3, 6, 7, 8                         | 7,94                     | 11,15                    | 12,00       | 16,60                                  | 17,50                     | 7,95                            | 3,96                         | —                       |
| 10 A-1         | M 106 A                  | ANSI 50       | 5/8"        | 15,875       | 29.000        | 22.200        | 0,70                              | 1,00                  | 2, 3, 6, 7, 8                         | 9,53                     | 13,84                    | 14,40       | 20,40                                  | 21,70                     | 10,16                           | 5,08                         | —                       |
| 12 A-1         | M 128 A SL <sup>1)</sup> | ANSI 60       | 3/4"        | 19,05        | 42.000        | 31.800        | 1,06                              | 1,47                  | 2, 3, 4, 6, 7, 8                      | 12,70                    | 17,75                    | 18,00       | 25,30                                  | 26,70                     | 11,91                           | 5,94                         | —                       |
| 16 A-1         | M 1610 A                 | ANSI 80       | 1"          | 25,40        | 68.000        | 56.700        | 1,79                              | 2,57                  | 2, 3, 4, 6, 7, 8                      | 15,88                    | 22,60                    | 22,80       | 32,10                                  | 34,00                     | 15,88                           | 7,92                         | —                       |
| <b>Duplex</b>  |                          |               |             |              |               |               |                                   |                       |                                       |                          |                          |             |                                        |                           |                                 |                              |                         |
| 08 A-2         | D 85 A                   | ANSI 40-2     | 1/2"        | 12,70        | 36.000        | 28.200        | 0,88                              | 1,19                  | 2, 3, 4, 6, 7, 8                      | 7,94                     | 11,15                    | 12,00       | 31,00                                  | 31,90                     | 7,95                            | 3,96                         | 14,38                   |
| 10 A-2         | D 106 A                  | ANSI 50-2     | 5/8"        | 15,875       | 56.000        | 44.400        | 1,40                              | 1,92                  | 2, 3, 6, 7, 8                         | 9,53                     | 13,84                    | 14,40       | 38,60                                  | 39,90                     | 10,16                           | 5,08                         | 18,11                   |
| 12 A-2         | D 128 A <sup>1)</sup>    | ANSI 60-2     | 3/4"        | 19,05        | 84.000        | 63.600        | 2,12                              | 2,90                  | 2, 3, 4, 6, 7, 8                      | 12,70                    | 17,75                    | 18,00       | 48,10                                  | 49,50                     | 11,91                           | 5,94                         | 22,78                   |
| 16 A-2         | D 1610 A                 | ANSI 80-2     | 1"          | 25,40        | 145.000       | 113.400       | 3,58                              | 5,01                  | 2, 3, 4, 6, 7, 8                      | 15,88                    | 22,60                    | 22,80       | 61,40                                  | 63,30                     | 15,88                           | 7,92                         | 29,29                   |
| <b>Triplex</b> |                          |               |             |              |               |               |                                   |                       |                                       |                          |                          |             |                                        |                           |                                 |                              |                         |
| 08 A-3         | Tr 85 A                  | ANSI 40-3     | 1/2"        | 12,70        | 50.000        | 42.300        | 1,32                              | 1,78                  | 2, 3, 6, 7, 8                         | 7,94                     | 11,15                    | 12,00       | 45,40                                  | 46,30                     | 7,95                            | 3,96                         | 14,38                   |
| 10 A-3         | Tr 106 A                 | ANSI 50-3     | 5/8"        | 15,875       | 80.000        | 66.600        | 2,10                              | 2,89                  | 2, 3, 6, 7, 8                         | 9,53                     | 13,84                    | 14,40       | 56,70                                  | 58,00                     | 10,16                           | 5,08                         | 18,11                   |
| 12 A-3         | Tr 128 A                 | ANSI 60-3     | 3/4"        | 19,05        | 125.000       | 95.400        | 3,18                              | 4,28                  | 2, 3, 4, 6, 7, 8                      | 12,70                    | 17,75                    | 18,00       | 71,00                                  | 72,30                     | 11,91                           | 5,94                         | 22,78                   |
| 16 A-3         | Tr 1610 A                | ANSI 80-3     | 1"          | 25,40        | 210.000       | 170.100       | 5,37                              | 7,47                  | 2, 3, 4, 6, 7, 8                      | 15,88                    | 22,60                    | 22,80       | 90,70                                  | 92,70                     | 15,88                           | 7,92                         | 29,29                   |

## IWIS® Roller chains, double-pitch type

according to DIN 8181 and ISO 1275:1995

|       |           |   |        |       |        |        |      |      |            |       |       |       |       |       |       |      |   |
|-------|-----------|---|--------|-------|--------|--------|------|------|------------|-------|-------|-------|-------|-------|-------|------|---|
| 208 B | LR 165 SL | - | 1"     | 25,40 | 22.000 | 18.000 | 0,50 | 0,52 | 2, 4, 6, 8 | 7,75  | 11,30 | 11,80 | 16,90 | 18,60 | 8,51  | 4,45 | — |
| 210 B | LR 206 SL | - | 1 1/4" | 31,75 | 28.000 | 22.400 | 0,67 | 0,63 | 2, 4, 6, 8 | 9,65  | 13,28 | 15,10 | 19,50 | 20,80 | 10,16 | 5,08 | — |
| 212 B | LR 247 SL | - | 1 1/2" | 38,10 | 34.000 | 29.000 | 0,89 | 0,85 | 2, 4, 6, 8 | 11,75 | 15,62 | 16,10 | 22,70 | 24,10 | 12,07 | 5,72 | — |
| 216 B | LR 3211   | - | 2"     | 50,80 | 75.000 | 60.000 | 2,10 | 2,10 | 2, 4, 6, 8 | 17,02 | 25,45 | 20,60 | 36,10 | 38,10 | 15,88 | 8,28 | — |

Roller Chains, double-pitch type



<sup>1)</sup> Also available with straight side plates <sup>2)</sup> Varying dimensions for cranked links

It should be noted that if cranked links are fitted, the breaking strength of the chain may be reduced by approximately 20%.

The suffix SL indicates chains with particularly wear-resistant pins.

## **iwis® High performance chains**

Quality products with a world reputation

### HIGH QUALITY IS BASED ON EACH INDIVIDUAL PART BEING TECHNICALLY PERFECT

- Use of high-grade heat-treatable steels which are made exclusively for iwis to their material analysis, tolerance and surface quality.
- Each chain part is manufactured a million times daily to the same precision. This production is monitored by SPC (statistical process control).
- All chain parts are heat-treated, using special processes to optimize quality features.
- Constant geometry and high surface quality result from the use of modern production technologies.
- Chains are checked for dimensional accuracy: length tolerance, freedom of articulation and assembly component integrity, inspection of the press-in seating of the pin outer links and bush-inner link interfaces.
- The high standard of quality assurance conforms with the high requirements of ISO 9001: 2006.
- For special applications
  - Surface coatings
  - Special lubrications
  - Reduced length tolerated chains
  - Special materials (e.g. corrosion resistant)

**iwis** side plate – optimally dimensioned, shaped with precision, and heat-treated for toughness and hardness.

**iwis** shouldered pin (DIN 8187).  
SL serie chains have pins with still higher resistance to wear.

**iwis** bush – manufactured as a special, surface treated, seamless closed cylinder.

**iwis** roller – an absolutely cylindrical form guarantees ideal sliding-contact bearing properties.

