

HSP Chains for High Strength & Performance

Based on years of development, testing, and proven performance, the **HSP chain** combines a proven chain design with optimum material and metallurgical specifications to provide performance and value unparalleled in the marketplace.

Key features

- Straight sideplate design to ensure maximum finite fatigue strength
- Ball-drifted inner and outer plates for maximum press-fit bearing area
- Maximum pre-load minimizes initial chain elongation and maximizes chain life
- Shot peened sideplates and rollers for extreme endurance
- Through-hardened shot peened pins with engineered metallurgy further maximizes chain breaking load strength without compromising fatigue strength



Increased average tensile strength of 40-60%



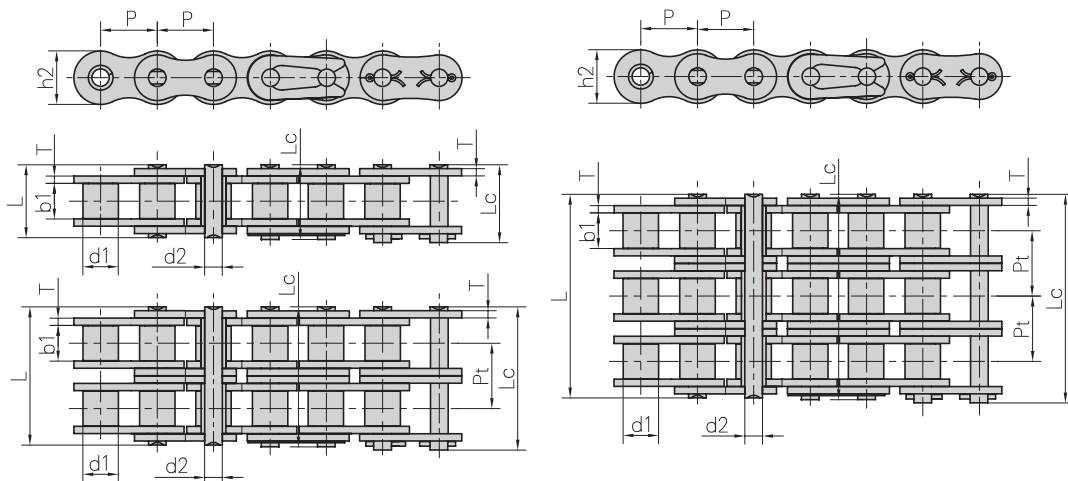
Increased fatigue strength for optimal life

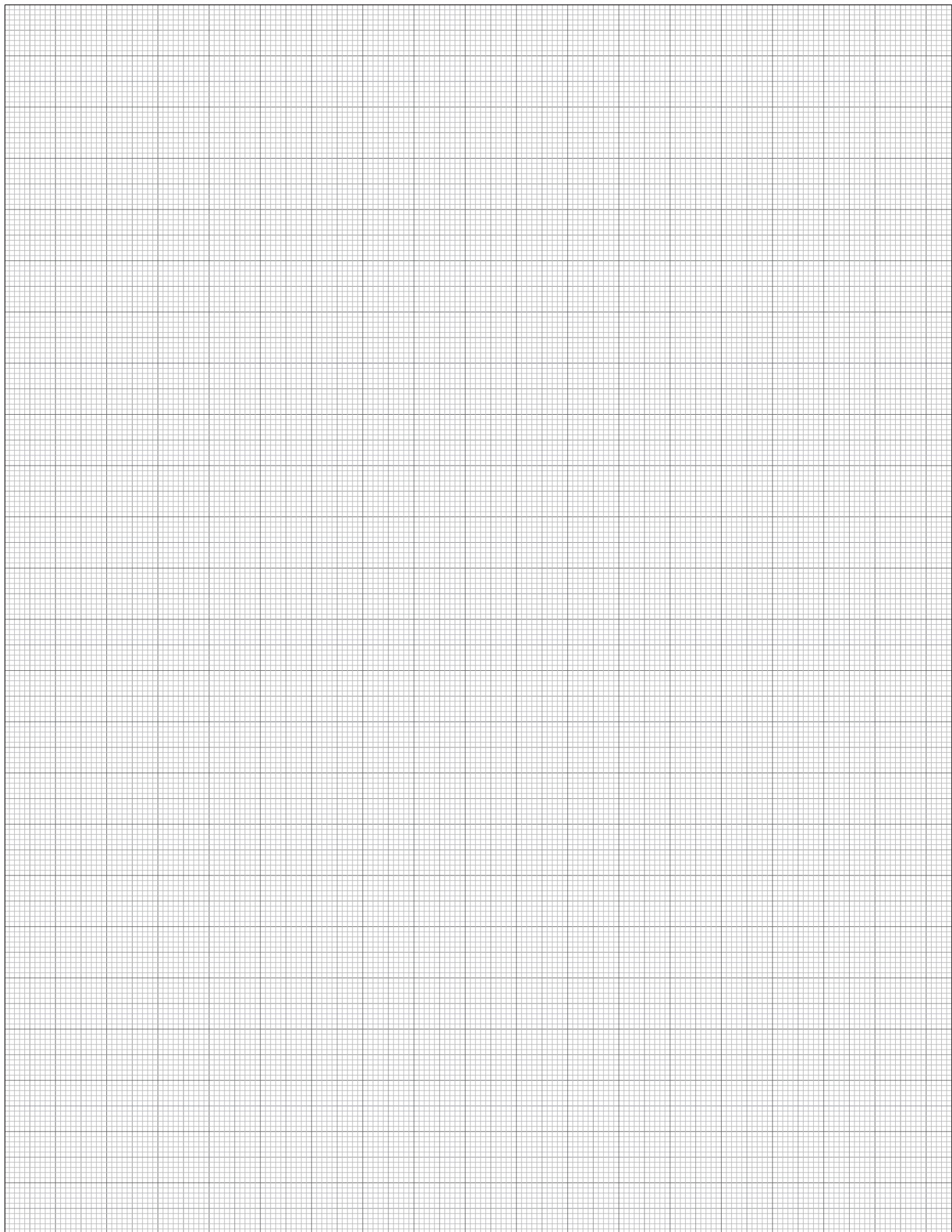
For more information, visit www.iwisusa.com or contact our sales engineering team at 877-535-3966

Heavy duty series high precision roller chains according to ANSI B 29.1

| Chain no. | Pitch | Roller diameter | Width between inner plates | Pin diameter | Pin length | | Inner plate depth | Plate thickness | Transverse pitch | min. tensile strength | Average tensile strength | Weight per meter | |
|-----------|--------|-----------------|----------------------------|--------------|------------|-------|-------------------|-----------------|------------------|-----------------------|--------------------------|------------------|-------|
| | ANSI | P | d1 max | b1 min | d2 max | L max | Lc max | h2 max | T max | Pt | Q min | Q0 | q |
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | LB | kN | kg/m |
| 40HSP | 12,700 | 7,95 | 7,85 | 3,96 | 18,8 | 19,9 | 12,00 | 2,03 | | | Contact iwis | 19,1 | 0,82 |
| 50HSP | 15,875 | 10,16 | 9,40 | 5,08 | 22,1 | 23,4 | 15,09 | 2,42 | | | 6743 | 30,2 | 1,25 |
| 60HSP | 19,050 | 11,91 | 12,57 | 5,94 | 29,2 | 31,0 | 18,00 | 3,25 | | | 9660 | 42,7 | 1,87 |
| 80HSP | 25,400 | 15,88 | 15,75 | 7,92 | 36,2 | 37,7 | 24,00 | 4,00 | | | 20929 | 71,4 | 3,10 |
| 100HSP | 31,750 | 19,05 | 18,90 | 9,53 | 43,6 | 46,9 | 30,00 | 4,80 | | | 31945 | 112,4 | 4,52 |
| 120HSP | 38,100 | 22,23 | 25,22 | 11,10 | 53,5 | 57,5 | 35,70 | 5,60 | | | 40892 | 160,9 | 6,60 |
| 140HSP | 44,450 | 25,40 | 25,22 | 12,70 | 57,6 | 62,2 | 41,00 | 6,40 | | | 52273 | 217,3 | 8,30 |
| 160HSP | 50,800 | 28,58 | 31,55 | 14,27 | 68,2 | 73,0 | 47,80 | 7,20 | | | 64173 | 285,8 | 10,30 |
| 180HSP | 57,150 | 35,71 | 35,48 | 17,46 | 75,9 | 81,6 | 53,60 | 8,0 | | | 75909 | 341,8 | 14,83 |
| 200HSP | 63,500 | 39,68 | 37,85 | 19,85 | 86,6 | 93,5 | 60,00 | 9,50 | | | 100109 | 444,5 | 19,16 |
| 240HSP | 76,200 | 47,63 | 47,35 | 23,81 | 109,6 | 115,9 | 72,30 | 12,70 | | | 144391 | 622,5 | 30,40 |
| 60HSP-2 | 19,050 | 11,91 | 12,57 | 5,94 | 55,3 | 57,1 | 18,00 | 3,25 | 26,11 | | 19320 | 84,5 | 3,71 |
| 80HSP-2 | 25,400 | 15,88 | 15,75 | 7,92 | 68,8 | 70,3 | 24,00 | 4,00 | 32,59 | | 41589 | 145,3 | 6,15 |
| 100HSP-2 | 31,750 | 19,05 | 18,90 | 9,53 | 82,7 | 86,0 | 30,00 | 4,80 | 39,09 | | 63890 | 225,9 | 9,03 |
| 120HSP-2 | 38,100 | 22,23 | 25,22 | 11,10 | 102,4 | 106,4 | 35,70 | 5,60 | 48,87 | | 81785 | 322,7 | 13,13 |
| 140HSP-2 | 44,450 | 25,40 | 25,22 | 12,70 | 109,8 | 114,4 | 41,00 | 6,40 | 52,20 | | 10446 | 437,7 | 16,60 |
| 160HSP-2 | 50,800 | 28,58 | 31,55 | 14,27 | 130,1 | 134,9 | 47,80 | 7,20 | 61,90 | | 128348 | 571,6 | 20,20 |
| 200HSP-2 | 63,500 | 39,68 | 37,85 | 19,85 | 164,9 | 171,8 | 60,00 | 9,50 | 78,31 | | 200218 | 894,9 | 38,11 |
| 60HSP-3 | 19,050 | 11,91 | 12,57 | 5,94 | 81,4 | 83,2 | 18,00 | 3,25 | 26,11 | | 28738 | 113,9 | 5,54 |
| 80HSP-3 | 25,400 | 15,88 | 15,75 | 7,92 | 101,4 | 102,9 | 24,00 | 4,00 | 32,59 | | 62263 | 203,5 | 9,42 |
| 100HSP-3 | 31,750 | 19,05 | 18,90 | 9,53 | 121,8 | 125,1 | 30,00 | 4,80 | 39,09 | | 95036 | 314,8 | 12,96 |
| 120HSP-3 | 38,100 | 22,23 | 25,22 | 11,10 | 151,2 | 155,2 | 35,70 | 5,60 | 48,87 | | 121653 | 444,7 | 19,64 |
| 140HSP-3 | 44,450 | 25,40 | 25,22 | 12,70 | 162,0 | 166,6 | 41,00 | 6,40 | 52,20 | | 155512 | 598,4 | 24,90 |
| 160HSP-3 | 50,800 | 28,58 | 31,55 | 14,27 | 192,0 | 196,8 | 47,80 | 7,20 | 61,90 | | 190914 | 787,3 | 30,10 |

* Bushing chain: d1 in the table indicate the external diameter of the bushing. These chains have no rollers.







HSP – Designed and manufactured to the highest strength durability standards in the roller chain industry.

Let us prove it! Qualified OEMs eligible for free HSP chain.



More than 15 pulsers are available for testing dynamic fatigue strength according to different testing methods



Testing of chain wear elongation behavior on more than 20 testing rigs



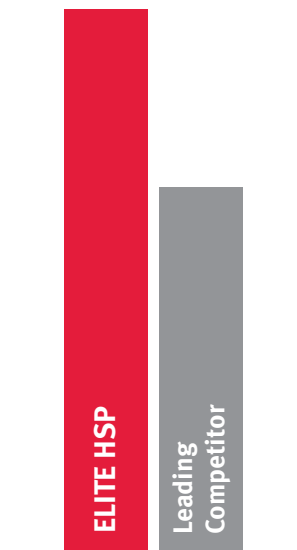
Evaluation of chain breaking strength and elongation up to 1000kN

Your perfect engineering partner

iwis utilizes state-of-the-art equipment to test the ultimate tensile, fatigue load, and wear characteristics of our chains. Our laboratory has the capabilities to carry out many different testing possibilities including microscopy, metallography, evaluation of mechanical properties, chemical composition and qualified analysis of data.

This investment into R&D allows iwis to engineer and deliver a product that will meet the requirements of each application while being commercially viable.

Let us prove it!



Average fatigue strength