

齒條裝配說明

為了可以更順利的安裝連接用齒條，標準齒條的兩端端面將會加工為半齒齒底；以方便跟下一支齒條的端面半齒齒底連接成一個全齒。下圖表示為兩支齒條如何連接並由齒規可以擁有準確的齒距位置。

關於斜齒齒條相皆可以藉由反向齒規的配合以便可以精準的連接齒條。

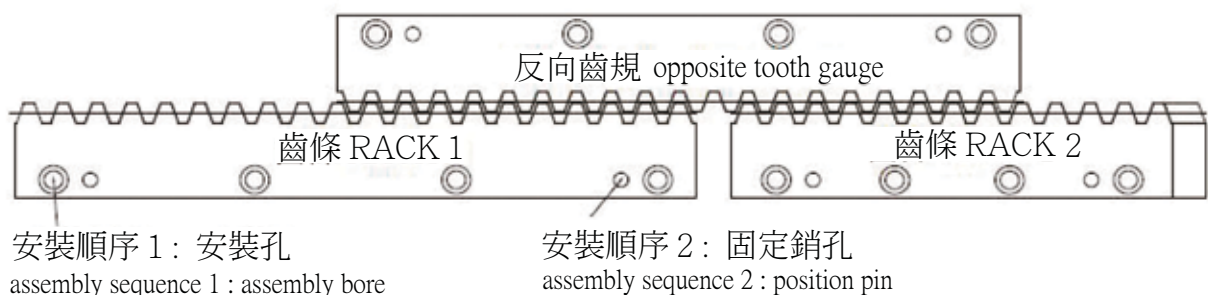
1. 而在齒條安裝相接時，我們建議先鎖上齒條側面的安裝孔，並依照基座上相對的孔位依序鎖上；並藉由安裝齒規可以很準確的將齒條的齒距位置安裝完成。
2. 最後再將齒條上的兩端側面的固定銷孔給固定上即完成安裝。

Instruction Of Rack Assembly



To assemble connected racks more smoothly, 2 ends of a standard rack would add half tooth which is convenient for next half tooth of next rack to be connected to a complete tooth. The following drawing shows how 2 racks connect and tooth gauge can control pitch position accurately.

With regards to connection of helical racks, it can be connected accurately by opposite tooth gauge.

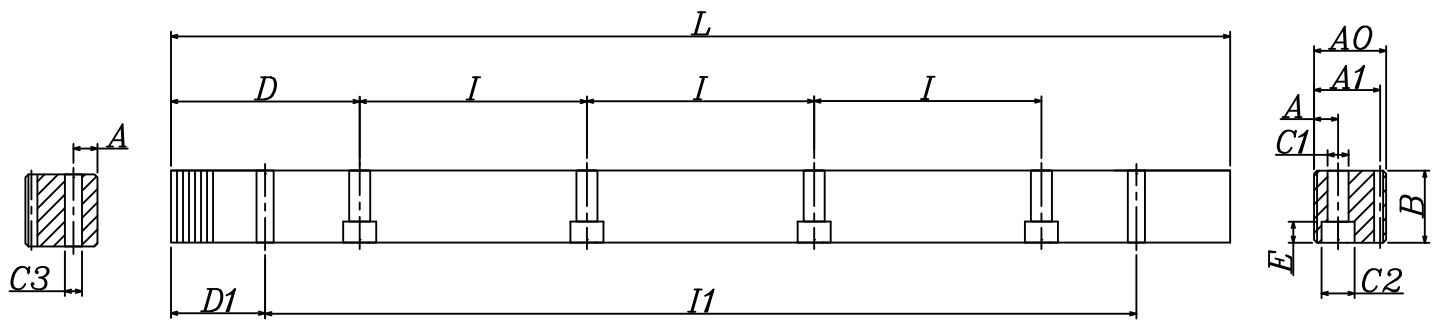
1. When connecting racks, we recommend lock bores on the sides of rack first, and lock bores by the sequence of the foundation. With assembling the tooth gauge, pitch position of racks can assembled accurately and completely.
2. Last, lock the position pins on 2 sides of rack; the assembly is completed



齒條型號說明 Rack Code Instruction

| 材料 Material | 齒型 Rack Type | 棒形 Shape | 齒面處理 Treatment of Tooth | 硬度處理 Hardness | 模數 Module | 長度 Length | 鑽孔 Holes |
|---------------------------|-------------------------------------|---|-----------------------------------|---|---------------------|------------------------------|--------------------------------------|
| A ↓ A = S45C | S ↓ S = 直齒 Straight | I ↓ T = 四角棒 Tetragon | G ↓ G = 研磨 Ground | H/Q ↓ H = 硬度處理 Hardened Q = 調質 Tempered & quenched | 20 ↓ 1 | 50 ↓ 50 = 500mm | N ↓ N = 無鑽孔 No Holes |
| B = SCM440 | H = 斜齒 Helical |  | M = 精銑 Milled | M = 無硬度處理 Without Hardness | 2 | 100 = 1,000mm | |
| | |  | | | 3 | | |
| | | | | | 4 | | |
| | | | | | 5 | | |
| | | | | | 6 | | |
| | | | | | 8 | | |
| | | | | | 10 | | |

型號：ASTGH



| 型號 Code | 模數 Module | L | 齒數 T00th No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | | |
|------------|--------------|-----|--------------------|---------|-----|----|----|----|-------------------|--------|----|----|----|----|----|------|---------------------------------|--|-------|------|
| ASTGH | 20 | 50 | 2 | 502.65 | 80 | 24 | 24 | 22 | 62.83 | 125.66 | 4 | 8 | 7 | 11 | 7 | 31.3 | 440.1 | 5.7 | 0.022 | 246 |
| | 20 | 100 | 2 | 1005.31 | 160 | 24 | 24 | 22 | 62.83 | 125.66 | 8 | 8 | 7 | 11 | 7 | 31.3 | 942.7 | 5.7 | 0.022 | |
| | 30 | 50 | 3 | 508.94 | 54 | 29 | 29 | 26 | 63.62 | 127.23 | 4 | 9 | 10 | 15 | 9 | 34.4 | 440.1 | 7.7 | 0.024 | 553 |
| | 30 | 100 | 3 | 1017.88 | 108 | 29 | 29 | 26 | 63.62 | 127.23 | 8 | 9 | 10 | 15 | 9 | 34.4 | 949.1 | 7.7 | 0.024 | |
| | 40 | 50 | 4 | 502.65 | 40 | 39 | 39 | 35 | 62.83 | 125.66 | 4 | 12 | 10 | 15 | 9 | 37.5 | 427.7 | 7.7 | 0.025 | 983 |
| | 40 | 100 | 4 | 1005.31 | 80 | 39 | 39 | 35 | 62.83 | 125.66 | 8 | 12 | 10 | 15 | 9 | 37.5 | 930.3 | 7.7 | 0.025 | |
| | 50 | 50 | 5 | 502.65 | 32 | 49 | 39 | 34 | 62.83 | 125.66 | 4 | 12 | 14 | 20 | 13 | 30.1 | 442.4 | 11.7 | 0.025 | 1540 |
| | 50 | 100 | 5 | 1005.31 | 64 | 49 | 39 | 34 | 62.83 | 125.66 | 8 | 12 | 14 | 20 | 13 | 30.1 | 945.0 | 11.7 | 0.025 | |
| | 60 | 50 | 6 | 508.94 | 27 | 59 | 49 | 43 | 63.62 | 127.23 | 4 | 16 | 18 | 26 | 17 | 31.4 | 446.1 | 15.7 | 0.026 | 2210 |
| | 60 | 100 | 6 | 1017.88 | 54 | 59 | 49 | 43 | 63.62 | 127.23 | 8 | 16 | 18 | 26 | 17 | 31.4 | 955.0 | 15.7 | 0.026 | |
| | 80 | 50 | 8 | 502.65 | 20 | 79 | 79 | 71 | 62.83 | 125.66 | 4 | 25 | 22 | 33 | 21 | 26.6 | 449.5 | 19.7 | 0.027 | 3750 |
| | 80 | 100 | 8 | 1005.31 | 40 | 79 | 79 | 71 | 62.83 | 125.66 | 8 | 25 | 22 | 33 | 21 | 26.6 | 952.0 | 19.7 | 0.027 | |

製程說明：

精度等級：(JIS 二級)

材料：(S45C 中碳鋼) S45C

齒型：直齒

齒面處理：研磨

硬度處理：熱處理；硬度為 45~50 度

四面研磨：有

壓力角：20度

Manufacturing Description

Precision grade : (JIS Grade 2)

Material : (S45C Medium Carbon Steel) S45C

Type : Straight Rack

Treatment of Teeth : Ground

Hardness : Heat Treatment ; 45~50 degree

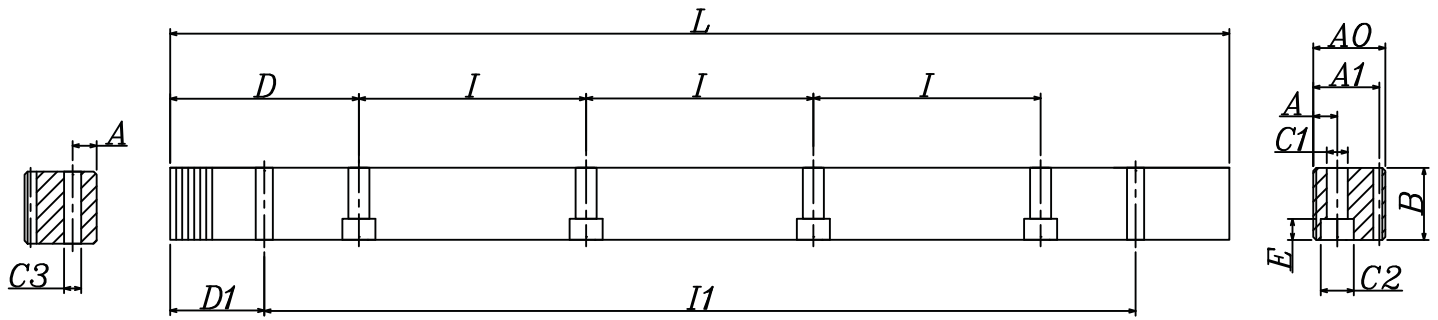
Sides Ground : Included

Pressure Angle : 20 degree

● 不同尺寸與材質以可依照圖面客製化

● Other Dimensions / Materials could be customized by drawings

型號：ASTMQ



| 型號 Code | 模數 Module | L | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | | |
|------------|--------------|-----|--------------------|---------|-----|----|----|----|-------------------|--------|----|----|----|----|----|------|---------------------------------|--------------------------------------|-------|------|
| ASTMQ | 20 | 50 | 2 | 502.65 | 80 | 25 | 24 | 22 | 62.83 | 125.66 | 4 | 8 | 7 | 11 | 7 | 31.3 | 440.1 | 5.7 | 0.034 | 135 |
| | 20 | 100 | 2 | 1005.31 | 160 | 25 | 24 | 22 | 62.83 | 125.66 | 8 | 8 | 7 | 11 | 7 | 31.3 | 942.7 | 5.7 | 0.034 | |
| | 30 | 50 | 3 | 508.94 | 54 | 30 | 29 | 26 | 63.62 | 127.23 | 4 | 9 | 10 | 15 | 9 | 34.4 | 440.1 | 7.7 | 0.034 | 316 |
| | 30 | 100 | 3 | 1017.88 | 108 | 30 | 29 | 26 | 63.62 | 127.23 | 8 | 9 | 10 | 15 | 9 | 34.4 | 949.1 | 7.7 | 0.034 | |
| | 40 | 50 | 4 | 502.65 | 40 | 40 | 39 | 35 | 62.83 | 125.66 | 4 | 12 | 10 | 15 | 9 | 37.5 | 427.7 | 7.7 | 0.038 | 560 |
| | 40 | 100 | 4 | 1005.31 | 80 | 40 | 39 | 35 | 62.83 | 125.66 | 8 | 12 | 10 | 15 | 9 | 37.5 | 930.3 | 7.7 | 0.038 | |
| | 50 | 50 | 5 | 502.65 | 32 | 49 | 39 | 34 | 62.83 | 125.66 | 4 | 12 | 14 | 20 | 13 | 30.1 | 442.4 | 11.7 | 0.040 | 892 |
| | 50 | 100 | 5 | 1005.31 | 64 | 49 | 39 | 34 | 62.83 | 125.66 | 8 | 12 | 14 | 20 | 13 | 30.1 | 945.0 | 11.7 | 0.040 | |
| | 60 | 50 | 6 | 508.94 | 27 | 59 | 49 | 43 | 63.62 | 127.23 | 4 | 16 | 18 | 26 | 17 | 31.4 | 446.1 | 15.7 | 0.045 | 1210 |
| | 60 | 100 | 6 | 1017.88 | 54 | 59 | 49 | 43 | 63.62 | 127.23 | 8 | 16 | 18 | 26 | 17 | 31.4 | 955.0 | 15.7 | 0.045 | |
| | 80 | 50 | 8 | 502.65 | 20 | 79 | 79 | 71 | 62.83 | 125.66 | 4 | 25 | 22 | 33 | 21 | 26.6 | 449.5 | 19.7 | 0.050 | 1980 |
| | 80 | 100 | 8 | 1005.31 | 40 | 79 | 79 | 71 | 62.83 | 125.66 | 8 | 25 | 22 | 33 | 21 | 26.6 | 952.0 | 19.7 | 0.050 | |

製程說明：

精度等級：(JIS 三級)

材料：(S45C 中碳鋼) S45C

齒型：直齒

齒面處理：精銑

硬度處理：調質處理

四面研磨：有

壓力角：20度

Manufacturing Description

Precision grade : (JIS Grade 3)

Material : (S45C Medium Carbon Steel) S45C

Type : Straight Rack

Treatment of Teeth : Milled

Hardness : Quenched

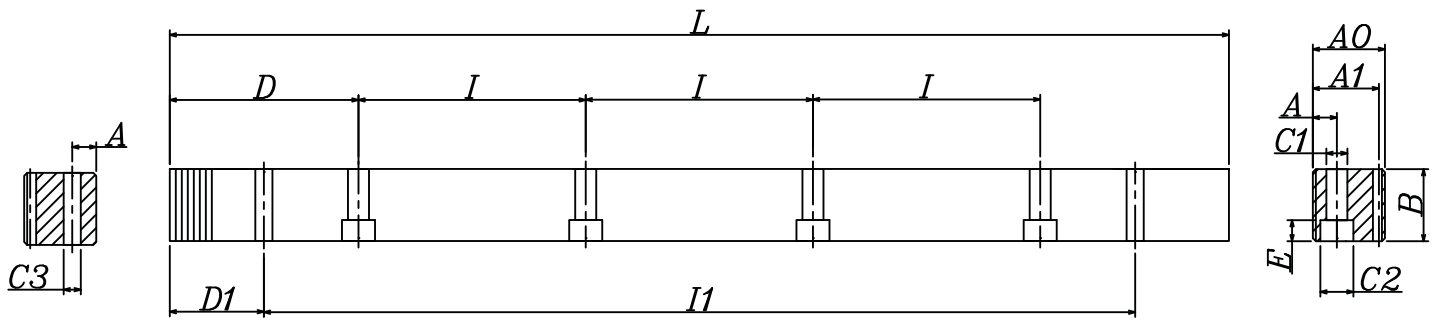
Sides Ground : Included

Pressure Angle : 20 degree

● 不同尺寸與材質以可依照圖面客製化

● Other Dimensions / Materials could be customized by drawings

型號：ASTM



| 型號 Code | 模數 Module | L | 齒數 T00th No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | |
|------------|--------------|-----|--------------------|---------|-----|----|----|------|-------------------|--------|----|----|----|----|----|------|---------------------------------|--|------|
| ASTM | 20 | 50 | 2 | 502.65 | 80 | 20 | 20 | 18 | 62.83 | 125.66 | 4 | 8 | 7 | 11 | 7 | 31.3 | 440.1 | 5.7 | 79 |
| | 20 | 100 | 2 | 999.03 | 159 | 20 | 20 | 18 | 62.83 | 125.66 | 8 | 8 | 7 | 11 | 7 | 31.3 | 942.7 | 5.7 | |
| | 30 | 50 | 3 | 508.94 | 54 | 30 | 30 | 27 | 63.62 | 127.23 | 4 | 9 | 10 | 15 | 9 | 34.4 | 440.1 | 7.7 | 186 |
| | 30 | 100 | 3 | 1017.88 | 108 | 30 | 30 | 27 | 63.62 | 127.23 | 8 | 9 | 10 | 15 | 9 | 34.4 | 949.1 | 7.7 | |
| | 40 | 50 | 4 | 502.65 | 40 | 40 | 40 | 36 | 62.83 | 125.66 | 4 | 12 | 10 | 15 | 9 | 37.5 | 427.7 | 7.7 | 339 |
| | 40 | 100 | 4 | 1005.31 | 80 | 40 | 40 | 36 | 62.83 | 125.66 | 8 | 12 | 10 | 15 | 9 | 37.5 | 930.3 | 7.7 | |
| | 50 | 50 | 5 | 502.65 | 32 | 50 | 40 | 35 | 62.83 | 125.66 | 4 | 12 | 14 | 20 | 13 | 30.1 | 442.4 | 11.7 | 540 |
| | 50 | 100 | 5 | 1005.31 | 64 | 50 | 40 | 35 | 62.83 | 125.66 | 8 | 12 | 14 | 20 | 13 | 30.1 | 945.0 | 11.7 | |
| | 60 | 50 | 6 | 508.94 | 27 | 60 | 50 | 44 | 63.62 | 127.23 | 4 | 16 | 18 | 26 | 17 | 31.4 | 446.1 | 15.7 | 780 |
| | 60 | 100 | 6 | 1017.88 | 54 | 60 | 50 | 44 | 63.62 | 127.23 | 8 | 16 | 18 | 26 | 17 | 31.4 | 955.0 | 15.7 | |
| | 80 | 50 | 8 | 502.65 | 20 | 80 | 80 | 71.5 | 62.83 | 125.66 | 4 | 25 | 22 | 33 | 21 | 26.6 | 449.5 | 19.7 | 1170 |
| | 80 | 100 | 8 | 1005.31 | 40 | 80 | 80 | 71.5 | 62.83 | 125.66 | 8 | 25 | 22 | 33 | 21 | 26.6 | 952.0 | 19.7 | |

製程說明：

精度等級：(JIS 五級)

材料：(S45C 中碳鋼) S45C

齒型：直齒

齒面處理：精銑

硬度處理：無

四面研磨：無

壓力角：20度

Manufacturing Description

Precision grade : (JIS Grade 5)

Material : (S45C Medium Carbon Steel) S45C

Type : Straight Rack

Treatment of Teeth : Milled

Hardness : No Heat Treatment

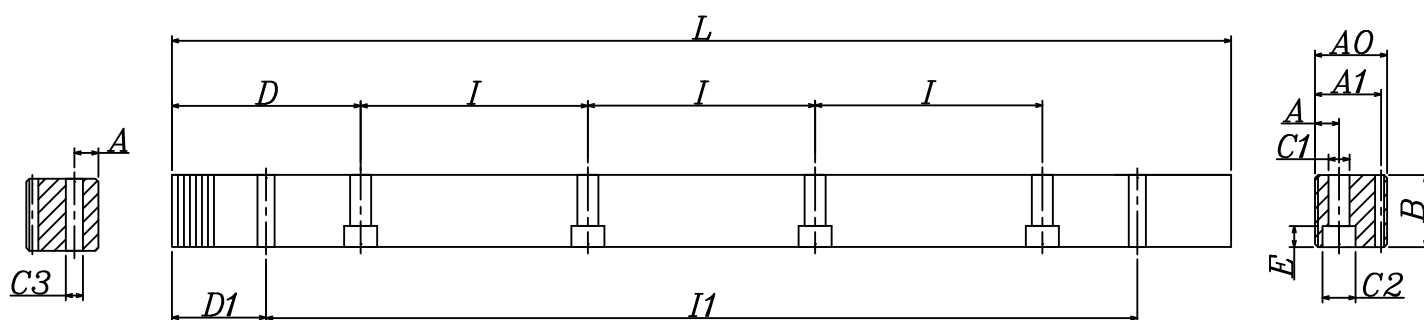
Sides Ground : Not Included

Pressure Angle : 20 degree

● 不同尺寸與材質以可依照圖面客製化

● Other Dimensions / Materials could be customized by drawings

型號：ASTMH



| 型號 Code | 模數 Module | L | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | |
|------------|--------------|-----|--------------------|---------|-----|----|----|----|-------------------|--------|----|----|----|----|----|------|---------------------------------|--------------------------------------|------|
| ASTMH | 20 | 50 | 2 | 502.65 | 80 | 24 | 24 | 22 | 62.83 | 125.66 | 4 | 8 | 7 | 11 | 7 | 31.3 | 440.1 | 5.7 | 246 |
| | 20 | 100 | 2 | 1005.31 | 160 | 24 | 24 | 22 | 62.83 | 125.66 | 8 | 8 | 7 | 11 | 7 | 31.3 | 942.7 | 5.7 | |
| | 30 | 50 | 3 | 508.94 | 54 | 29 | 29 | 26 | 63.62 | 127.23 | 4 | 9 | 10 | 15 | 9 | 34.4 | 440.1 | 7.7 | 553 |
| | 30 | 100 | 3 | 1017.88 | 108 | 29 | 29 | 26 | 63.62 | 127.23 | 8 | 9 | 10 | 15 | 9 | 34.4 | 949.1 | 7.7 | |
| | 40 | 50 | 4 | 502.65 | 40 | 39 | 39 | 35 | 62.83 | 125.66 | 4 | 12 | 10 | 15 | 9 | 37.5 | 427.7 | 7.7 | 983 |
| | 40 | 100 | 4 | 1005.31 | 80 | 39 | 39 | 35 | 62.83 | 125.66 | 8 | 12 | 10 | 15 | 9 | 37.5 | 930.3 | 7.7 | |
| | 50 | 50 | 5 | 502.65 | 32 | 49 | 39 | 34 | 62.83 | 125.66 | 4 | 12 | 14 | 20 | 13 | 30.1 | 442.4 | 11.7 | 1540 |
| | 50 | 100 | 5 | 1005.31 | 64 | 49 | 39 | 34 | 62.83 | 125.66 | 8 | 12 | 14 | 20 | 13 | 30.1 | 945.0 | 11.7 | |
| | 60 | 50 | 6 | 508.94 | 27 | 59 | 49 | 43 | 63.62 | 127.23 | 4 | 16 | 18 | 26 | 17 | 31.4 | 446.1 | 15.7 | 2210 |
| | 60 | 100 | 6 | 1017.88 | 54 | 59 | 49 | 43 | 63.62 | 127.23 | 8 | 16 | 18 | 26 | 17 | 31.4 | 955.0 | 15.7 | |
| | 80 | 50 | 8 | 502.65 | 20 | 79 | 79 | 71 | 62.83 | 125.66 | 4 | 25 | 22 | 33 | 21 | 26.6 | 449.5 | 19.7 | 3750 |
| | 80 | 100 | 8 | 1005.31 | 40 | 79 | 79 | 71 | 62.83 | 125.66 | 8 | 25 | 22 | 33 | 21 | 26.6 | 952.0 | 19.7 | |

製程說明：

精度等級：(JIS 六級)

材料：(S45C 中碳鋼) S45C

齒型：直齒

齒面處理：精銑

硬度處理：熱處理；硬度為 45~50 度

四面研磨：無

壓力角：20度

Manufacturing Description

Precision grade : (JIS Grade 6)

Material : (S45C Medium Carbon Steel) S45C

Type : Straight Rack

Treatment of Teeth : Milled

Hardness : Heat Treatment ; 45~50 degree

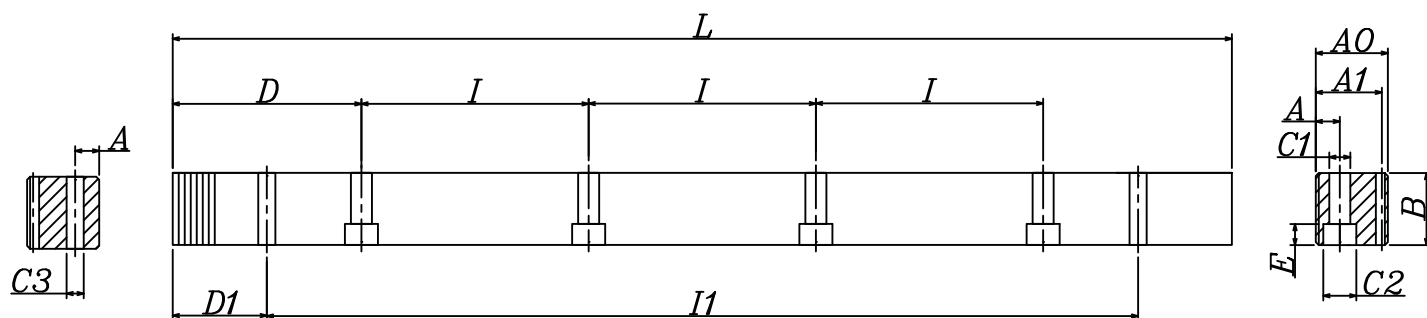
Sides Ground : Not Included

Pressure Angle : 20 degree

● 不同尺寸與材質可以依照圖面客製化

● Other Dimensions / Materials could be customized by drawings

型號：BSTGH



| 型號 Code | 模數 Module | L | 齒數 T00th No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | |
|------------|--------------|-----|--------------------|---------|-----|----|----|----|-------------------|--------|----|----|----|----|----|------|---------------------------------|--|------|
| BSTGH | 20 | 50 | 2 | 502.65 | 80 | 24 | 24 | 22 | 62.83 | 125.66 | 4 | 8 | 7 | 11 | 7 | 31.3 | 440.1 | 5.7 | 360 |
| | 20 | 100 | 2 | 1005.31 | 160 | 24 | 24 | 22 | 62.83 | 125.66 | 8 | 8 | 7 | 11 | 7 | 31.3 | 942.7 | 5.7 | |
| | 30 | 50 | 3 | 508.94 | 54 | 29 | 29 | 26 | 63.62 | 127.23 | 4 | 9 | 10 | 15 | 9 | 34.4 | 440.1 | 7.7 | 1380 |
| | 30 | 100 | 3 | 1017.88 | 108 | 29 | 29 | 26 | 63.62 | 127.23 | 8 | 9 | 10 | 15 | 9 | 34.4 | 949.1 | 7.7 | |
| | 40 | 50 | 4 | 502.65 | 40 | 39 | 39 | 35 | 62.83 | 125.66 | 4 | 12 | 10 | 15 | 9 | 37.5 | 427.7 | 7.7 | 3320 |
| | 40 | 100 | 4 | 1005.31 | 80 | 39 | 39 | 35 | 62.83 | 125.66 | 8 | 12 | 10 | 15 | 9 | 37.5 | 930.3 | 7.7 | |
| | 50 | 50 | 5 | 502.65 | 32 | 49 | 49 | 34 | 62.83 | 125.66 | 4 | 12 | 14 | 20 | 13 | 30.1 | 442.4 | 11.7 | 5300 |
| | 50 | 100 | 5 | 1005.31 | 64 | 49 | 49 | 34 | 62.83 | 125.66 | 8 | 12 | 14 | 20 | 13 | 30.1 | 945.0 | 11.7 | |
| | 60 | 50 | 6 | 508.94 | 27 | 59 | 59 | 43 | 63.62 | 127.23 | 4 | 16 | 18 | 26 | 17 | 31.4 | 446.1 | 15.7 | 5300 |
| | 60 | 100 | 6 | 1017.88 | 54 | 59 | 59 | 43 | 63.62 | 127.23 | 8 | 16 | 18 | 26 | 17 | 31.4 | 955.0 | 15.7 | |
| | 80 | 50 | 8 | 502.65 | 20 | 79 | 79 | 71 | 62.83 | 125.66 | 4 | 25 | 22 | 33 | 21 | 26.6 | 449.5 | 19.7 | 5300 |
| | 80 | 100 | 8 | 1005.31 | 40 | 79 | 79 | 71 | 62.83 | 125.66 | 8 | 25 | 22 | 33 | 21 | 26.6 | 952.0 | 19.7 | |

製程說明：

精度等級：(JIS 二級)

材料：(SCM440)

齒型：直齒

齒面處理：研磨

硬度處理：熱處理；硬度為 55-60 度

四面研磨：有

壓力角：20度

Manufacturing Description

Precision grade : (JIS Grade 2)

Material : (SCM440)

Type : Straight Rack

Treatment of Teeth : Ground

Hardness : Heat Treatment ; 55~60 degree

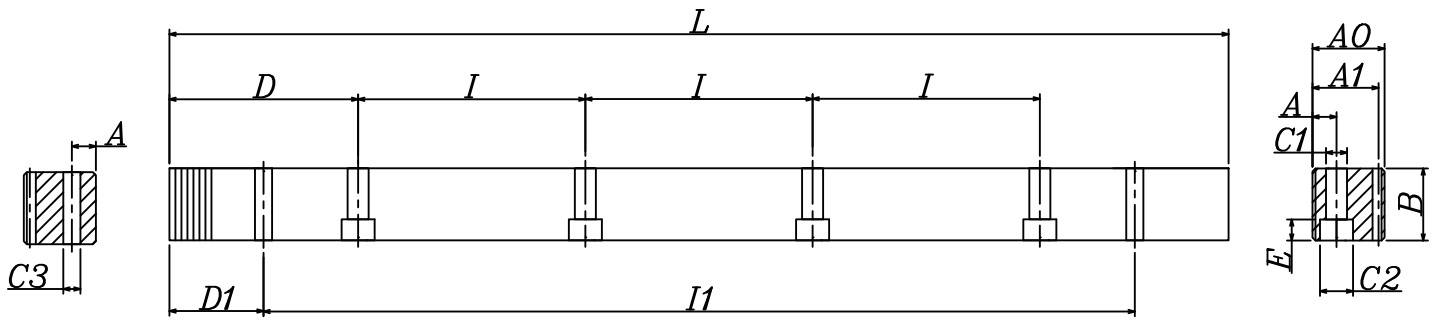
Sides Ground : Included

Pressure Angle : 20 degree

● 不同尺寸與材質以可依照圖面客製化

● Other Dimensions / Materials could be customized by drawings

型號：BSTMQ



| 型號 Code | 模數 Module | L | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | |
|------------|--------------|-----|--------------------|---------|-----|----|----|----|-------------------|--------|----|----|----|----|----|------|---------------------------------|--------------------------------------|------|
| BSTMQ | 20 | 50 | 2 | 502.65 | 80 | 25 | 24 | 22 | 62.83 | 125.66 | 4 | 8 | 7 | 11 | 7 | 31.3 | 440.1 | 5.7 | 179 |
| | 20 | 100 | 2 | 1005.31 | 160 | 25 | 24 | 22 | 62.83 | 125.66 | 8 | 8 | 7 | 11 | 7 | 31.3 | 942.7 | 5.7 | |
| | 30 | 50 | 3 | 508.94 | 54 | 30 | 29 | 26 | 63.62 | 127.23 | 4 | 9 | 10 | 15 | 9 | 34.4 | 440.1 | 7.7 | 421 |
| | 30 | 100 | 3 | 1017.88 | 108 | 30 | 29 | 26 | 63.62 | 127.23 | 8 | 9 | 10 | 15 | 9 | 34.4 | 949.1 | 7.7 | |
| | 40 | 50 | 4 | 502.65 | 40 | 40 | 39 | 35 | 62.83 | 125.66 | 4 | 12 | 10 | 15 | 9 | 37.5 | 427.7 | 7.7 | 768 |
| | 40 | 100 | 4 | 1005.31 | 80 | 40 | 39 | 35 | 62.83 | 125.66 | 8 | 12 | 10 | 15 | 9 | 37.5 | 930.3 | 7.7 | |
| | 50 | 50 | 5 | 502.65 | 32 | 49 | 39 | 34 | 62.83 | 125.66 | 4 | 12 | 14 | 20 | 13 | 30.1 | 442.4 | 11.7 | 1220 |
| | 50 | 100 | 5 | 1005.31 | 64 | 49 | 39 | 34 | 62.83 | 125.66 | 8 | 12 | 14 | 20 | 13 | 30.1 | 945.0 | 11.7 | |
| | 60 | 50 | 6 | 508.94 | 27 | 59 | 49 | 43 | 63.62 | 127.23 | 4 | 16 | 18 | 26 | 17 | 31.4 | 446.1 | 15.7 | 1950 |
| | 60 | 100 | 6 | 1017.88 | 54 | 59 | 49 | 43 | 63.62 | 127.23 | 8 | 16 | 18 | 26 | 17 | 31.4 | 955.0 | 15.7 | |
| | 80 | 50 | 8 | 502.65 | 20 | 79 | 79 | 71 | 62.83 | 125.66 | 4 | 25 | 22 | 33 | 21 | 26.6 | 449.5 | 19.7 | 3120 |
| | 80 | 100 | 8 | 1005.31 | 40 | 79 | 79 | 71 | 62.83 | 125.66 | 8 | 25 | 22 | 33 | 21 | 26.6 | 952.0 | 19.7 | |

製程說明：

精度等級：(JIS 三級)

材料：(SCM440)

齒型：直齒

齒面處理：精銑

硬度處理：調質處理

四面研磨：有

壓力角：20度

Manufacturing Description

Precision grade : (JIS Grade 3)

Material : (SCM440)

Type : Straight Rack

Treatment of Teeth : Milled

Hardness : Quenched

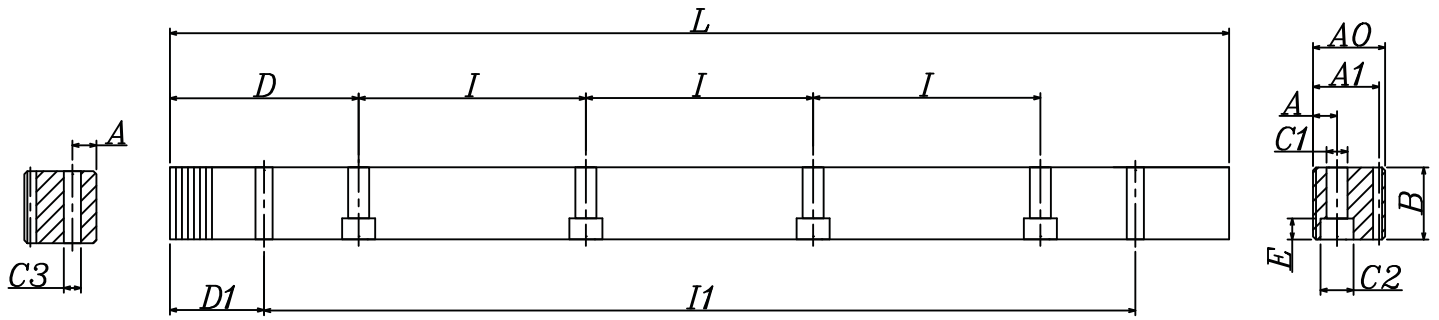
Sides Ground : Included

Pressure Angle : 20 degree

● 不同尺寸與材質可以依照圖面客製化

● Other Dimensions / Materials could be customized by drawings

型號：BSTM



| 型號 Code | 模數 Module | L | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | |
|------------|--------------|-----|--------------------|---------|-----|----|----|------|-------------------|--------|----|----|----|----|----|------|---------------------------------|--|-------|
| BSTM | 20 | 50 | 2 | 502.65 | 80 | 20 | 20 | 18 | 62.83 | 125.66 | 4 | 8 | 7 | 11 | 7 | 31.3 | 440.1 | 5.7 | 102 |
| | 20 | 100 | 2 | 999.03 | 159 | 20 | 20 | 18 | 62.83 | 125.66 | 8 | 8 | 7 | 11 | 7 | 31.3 | 942.7 | 5.7 | |
| | 30 | 50 | 3 | 508.94 | 54 | 30 | 30 | 27 | 63.62 | 127.23 | 4 | 9 | 10 | 15 | 9 | 34.4 | 440.1 | 7.7 | 427 |
| | 30 | 100 | 3 | 1017.88 | 108 | 30 | 30 | 27 | 63.62 | 127.23 | 8 | 9 | 10 | 15 | 9 | 34.4 | 949.1 | 7.7 | |
| | 40 | 50 | 4 | 502.65 | 40 | 40 | 40 | 36 | 62.83 | 125.66 | 4 | 12 | 10 | 15 | 9 | 37.5 | 427.7 | 7.7 | 1180 |
| | 40 | 100 | 4 | 1005.31 | 80 | 40 | 40 | 36 | 62.83 | 125.66 | 8 | 12 | 10 | 15 | 9 | 37.5 | 930.3 | 7.7 | |
| | 50 | 50 | 5 | 502.65 | 32 | 50 | 40 | 35 | 62.83 | 125.66 | 4 | 12 | 14 | 20 | 13 | 30.1 | 442.4 | 11.7 | 0.075 |
| | 50 | 100 | 5 | 1005.31 | 64 | 50 | 40 | 35 | 62.83 | 125.66 | 8 | 12 | 14 | 20 | 13 | 30.1 | 945.0 | 11.7 | |
| | 60 | 50 | 6 | 508.94 | 27 | 60 | 50 | 44 | 63.62 | 127.23 | 4 | 16 | 18 | 26 | 17 | 31.4 | 446.1 | 15.7 | 0.075 |
| | 60 | 100 | 6 | 1017.88 | 54 | 60 | 50 | 44 | 63.62 | 127.23 | 8 | 16 | 18 | 26 | 17 | 31.4 | 955.0 | 15.7 | |
| | 80 | 50 | 8 | 502.65 | 20 | 80 | 80 | 71.5 | 62.83 | 125.66 | 4 | 25 | 22 | 33 | 21 | 26.6 | 449.5 | 19.7 | 0.075 |
| | 80 | 100 | 8 | 1005.31 | 40 | 80 | 80 | 71.5 | 62.83 | 125.66 | 8 | 25 | 22 | 33 | 21 | 26.6 | 952.0 | 19.7 | |

製程說明：

精度等級：(JIS 五級)

材料：(SCM440)

齒型：直齒

齒面處理：精銑

硬度處理：無

四面研磨：無

壓力角：20度

Manufacturing Description

Precision grade : (JIS Grade 5)

Material : (SCM440)

Type : Straight Rack

Treatment of Teeth : Milled

Hardness : No Heat Treatment

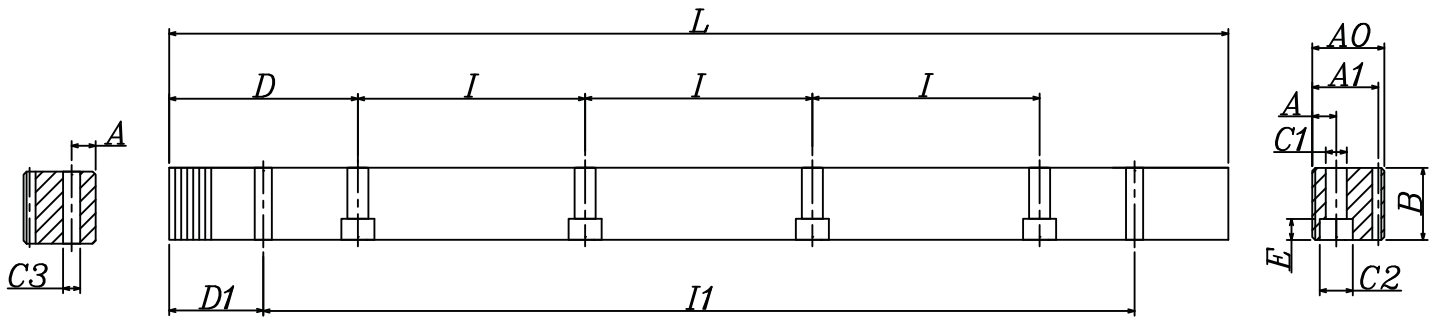
Sides Ground : Not Included

Pressure Angle : 20 degree

● 不同尺寸與材質以可依照圖面客製化

● Other Dimensions / Materials could be customized by drawings

型號：BSTMH



| 型號 Code | 模數 Module | L | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | |
|------------|--------------|-----|--------------------|---------|-----|----|----|----|-------------------|--------|----|----|----|----|----|------|---------------------------------|--------------------------------------|------|
| BSTMH | 20 | 50 | 2 | 502.65 | 80 | 24 | 24 | 22 | 62.83 | 125.66 | 4 | 8 | 7 | 11 | 7 | 31.3 | 440.1 | 5.7 | 360 |
| | 20 | 100 | 2 | 1005.31 | 160 | 24 | 24 | 22 | 62.83 | 125.66 | 8 | 8 | 7 | 11 | 7 | 31.3 | 942.7 | 5.7 | |
| | 30 | 50 | 3 | 508.94 | 54 | 29 | 29 | 26 | 63.62 | 127.23 | 4 | 9 | 10 | 15 | 9 | 34.4 | 440.1 | 7.7 | 850 |
| | 30 | 100 | 3 | 1017.88 | 108 | 29 | 29 | 26 | 63.62 | 127.23 | 8 | 9 | 10 | 15 | 9 | 34.4 | 949.1 | 7.7 | |
| | 40 | 50 | 4 | 502.65 | 40 | 39 | 39 | 35 | 62.83 | 125.66 | 4 | 12 | 10 | 15 | 9 | 37.5 | 427.7 | 7.7 | 1380 |
| | 40 | 100 | 4 | 1005.31 | 80 | 39 | 39 | 35 | 62.83 | 125.66 | 8 | 12 | 10 | 15 | 9 | 37.5 | 930.3 | 7.7 | |
| | 50 | 50 | 5 | 502.65 | 32 | 49 | 39 | 34 | 62.83 | 125.66 | 4 | 12 | 14 | 20 | 13 | 30.1 | 442.4 | 11.7 | 2190 |
| | 50 | 100 | 5 | 1005.31 | 64 | 49 | 39 | 34 | 62.83 | 125.66 | 8 | 12 | 14 | 20 | 13 | 30.1 | 945.0 | 11.7 | |
| | 60 | 50 | 6 | 508.94 | 27 | 59 | 49 | 43 | 63.62 | 127.23 | 4 | 16 | 18 | 26 | 17 | 31.4 | 446.1 | 15.7 | 3320 |
| | 60 | 100 | 6 | 1017.88 | 54 | 59 | 49 | 43 | 63.62 | 127.23 | 8 | 16 | 18 | 26 | 17 | 31.4 | 955.0 | 15.7 | |
| | 80 | 50 | 8 | 502.65 | 20 | 79 | 79 | 71 | 62.83 | 125.66 | 4 | 25 | 22 | 33 | 21 | 26.6 | 449.5 | 19.7 | 5300 |
| | 80 | 100 | 8 | 1005.31 | 40 | 79 | 79 | 71 | 62.83 | 125.66 | 8 | 25 | 22 | 33 | 21 | 26.6 | 952.0 | 19.7 | |

製程說明：

精度等級：(JIS 六級)

材料：(SCM440)

齒型：直齒

齒面處理：精銑

硬度處理：熱處理；硬度為 55-60 度

四面研磨：無

壓力角：20度

Manufacturing Description

Precision grade : (JIS Grade 6)

Material : (SCM440)

Type : Straight Rack

Treatment of Teeth : Milled

Hardness : Heat Treatment ; 55~60 degree

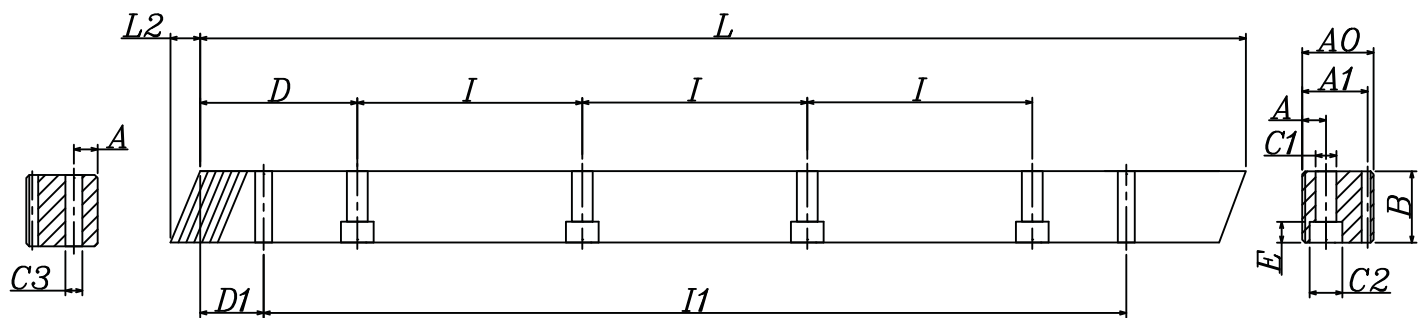
Sides Ground : Not Included

Pressure Angle : 20 degree

● 不同尺寸與材質以可依照圖面客製化

● Other Dimensions / Materials could be customized by drawings

型號：AHTGH



| 型號 Code | 模數 Module | L | L2 | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque (kgf) | | |
|------------|--------------|-----|----|--------------------|------|-----|----|----|----|-------------------|-----|----|----|----|----|----|------|---------------------------------|---------------------------------------|-------|------|
| AHTGH | 20 | 50 | 2 | 500 | 8.5 | 75 | 24 | 24 | 22 | 62.50 | 125 | 4 | 8 | 7 | 11 | 7 | 31.7 | 436.6 | 5.7 | 0.022 | 290 |
| | 20 | 100 | 2 | 1000 | 8.5 | 150 | 24 | 24 | 22 | 62.50 | 125 | 8 | 8 | 7 | 11 | 7 | 31.7 | 936.6 | 5.7 | 0.022 | |
| | 30 | 50 | 3 | 500 | 10.3 | 50 | 29 | 29 | 26 | 62.50 | 125 | 4 | 9 | 10 | 15 | 9 | 35.0 | 430.0 | 7.7 | 0.024 | 660 |
| | 30 | 100 | 3 | 1000 | 10.3 | 100 | 29 | 29 | 26 | 62.50 | 125 | 8 | 9 | 10 | 15 | 9 | 35.0 | 930.0 | 7.7 | 0.024 | |
| | 40 | 50 | 4 | 506.67 | 13.8 | 38 | 39 | 39 | 35 | 62.50 | 125 | 4 | 12 | 10 | 15 | 9 | 33.3 | 433.0 | 7.7 | 0.024 | 1220 |
| | 40 | 100 | 4 | 1000 | 13.8 | 75 | 39 | 39 | 35 | 62.50 | 125 | 8 | 12 | 10 | 15 | 9 | 33.3 | 933.4 | 7.7 | 0.024 | |
| | 50 | 50 | 5 | 500 | 17.4 | 30 | 49 | 39 | 34 | 62.50 | 125 | 4 | 12 | 14 | 20 | 13 | 37.5 | 425.0 | 11.7 | 0.025 | 1850 |
| | 50 | 100 | 5 | 1000 | 17.4 | 60 | 49 | 39 | 34 | 62.50 | 125 | 8 | 12 | 14 | 20 | 13 | 37.5 | 925.0 | 11.7 | 0.025 | |
| | 60 | 50 | 6 | 500 | 20.9 | 25 | 59 | 49 | 43 | 62.50 | 125 | 4 | 16 | 18 | 26 | 17 | 37.5 | 425.0 | 15.7 | 0.026 | 2650 |
| | 60 | 100 | 6 | 1000 | 20.9 | 50 | 59 | 49 | 43 | 62.50 | 125 | 8 | 16 | 18 | 26 | 17 | 37.5 | 925.0 | 15.7 | 0.026 | |
| | 80 | 50 | 8 | 480 | 28.0 | 18 | 79 | 79 | 71 | 60.00 | 120 | 4 | 25 | 22 | 33 | 21 | 120 | 240.0 | 19.7 | 0.027 | 4420 |
| | 80 | 100 | 8 | 960 | 28.0 | 36 | 79 | 79 | 71 | 60.00 | 120 | 8 | 25 | 22 | 33 | 21 | 120 | 720.0 | 19.7 | 0.027 | |

製程說明：

精度等級：(JIS 二級)

材料：(S45C 中碳鋼) S45C

齒型：斜齒

齒面處理：研磨

硬度處理：熱處理；硬度為45~50度

四面研磨：有

右旋角：19° 31' 42"

壓力角：20度

- 不同尺寸與材質以可依照圖面客製化

Manufacturing Description

Precision grade : (JIS Grade 2)

Material : (S45C Medium Carbon Steel) S45C

Type : Helical Rack

Treatment of Teeth : Ground

Hardness : Heat Treatment ; 45~50 degree

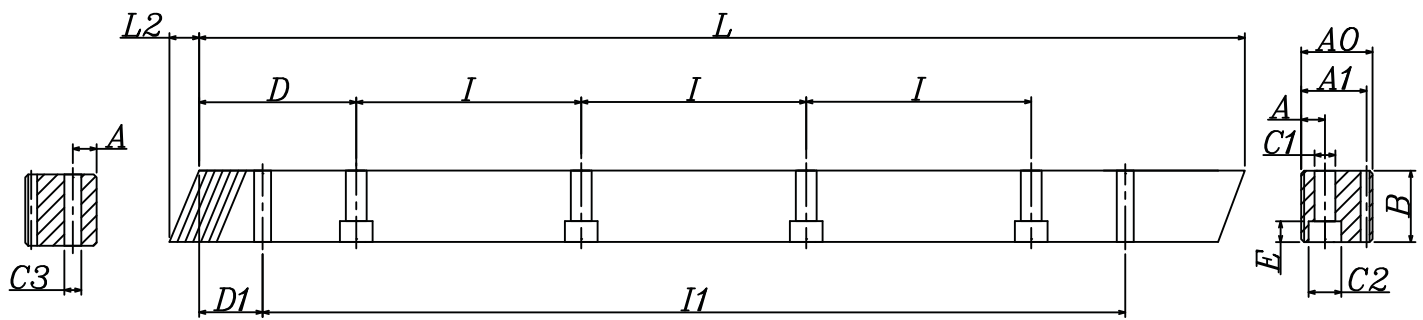
Sides Ground : Included

Right Hand Angle : 19° 31' 42"

Pressure Angle : 20 degree

- Other Dimensions / Materials could be customized by drawings

型號：AHTMQ



| 型號 Code | 模數 Module | L | L2 | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | |
|------------|--------------|-----|----|--------------------|------|-----|----|----|----|-------------------|-----|----|----|----|----|----|------|---------------------------------|--------------------------------------|------|
| AHTMQ | 20 | 50 | 2 | 500 | 8.9 | 75 | 25 | 24 | 22 | 62.50 | 125 | 4 | 8 | 7 | 11 | 7 | 31.7 | 436.6 | 5.7 | 160 |
| | 20 | 100 | 2 | 1000 | 8.9 | 150 | 25 | 24 | 22 | 62.50 | 125 | 8 | 8 | 7 | 11 | 7 | 31.7 | 936.6 | 5.7 | |
| | 30 | 50 | 3 | 500 | 10.6 | 50 | 30 | 29 | 26 | 62.50 | 125 | 4 | 9 | 10 | 15 | 9 | 35.0 | 430.0 | 7.7 | 380 |
| | 30 | 100 | 3 | 1000 | 10.6 | 100 | 30 | 29 | 26 | 62.50 | 125 | 8 | 9 | 10 | 15 | 9 | 35.0 | 930.0 | 7.7 | |
| | 40 | 50 | 4 | 506.67 | 14.2 | 38 | 40 | 39 | 35 | 62.50 | 125 | 4 | 12 | 10 | 15 | 9 | 33.3 | 433.0 | 7.7 | 700 |
| | 40 | 100 | 4 | 1000 | 14.2 | 75 | 40 | 39 | 35 | 62.50 | 125 | 8 | 12 | 10 | 15 | 9 | 33.3 | 933.4 | 7.7 | |
| | 50 | 50 | 5 | 500 | 17.4 | 30 | 50 | 39 | 34 | 62.50 | 125 | 4 | 12 | 14 | 20 | 13 | 37.5 | 425.0 | 11.7 | 1050 |
| | 50 | 100 | 5 | 1000 | 17.4 | 60 | 50 | 39 | 34 | 62.50 | 125 | 8 | 12 | 14 | 20 | 13 | 37.5 | 925.0 | 11.7 | |
| | 60 | 50 | 6 | 500 | 20.9 | 25 | 59 | 49 | 43 | 62.50 | 125 | 4 | 16 | 18 | 26 | 17 | 37.5 | 425.0 | 15.7 | 1450 |
| | 60 | 100 | 6 | 1000 | 20.9 | 50 | 59 | 49 | 43 | 62.50 | 125 | 8 | 16 | 18 | 26 | 17 | 37.5 | 925.0 | 15.7 | |
| | 80 | 50 | 8 | 480 | 28.0 | 18 | 79 | 79 | 71 | 60.00 | 120 | 4 | 25 | 22 | 33 | 21 | 120 | 240.0 | 19.7 | 2330 |
| | 80 | 100 | 8 | 960 | 28.0 | 36 | 79 | 79 | 71 | 60.00 | 120 | 8 | 25 | 22 | 33 | 21 | 120 | 720.0 | 19.7 | |

製程說明：

精度等級：(JIS 三級)

材料：(S45C 中碳鋼) S45C

齒型：斜齒

齒面處理：精銑

硬度處理：調質處理

四面研磨：有

右旋角：19° 31' 42"

壓力角：20度

● 不同尺寸與材質可以依照圖面客製化

Manufacturing Description

Precision grade : (JIS Grade 3)

Material : (S45C Medium Carbon Steel) S45C

Type : Helical Rack

Treatment of Teeth : Milled

Hardness : Quenched

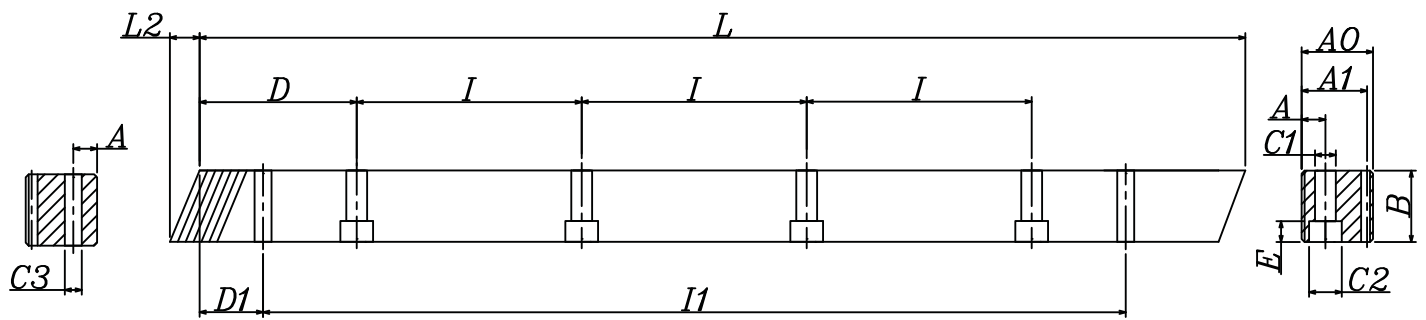
Sides Ground : Included

Right Hand Angle : 19° 31' 42"

Pressure Angle : 20 degree

● Other Dimensions / Materials could be customized by drawings

型號：AHTM



| 型號 Code | 模數 Module | L | L2 | 齒數 T00th No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pith Error / 300mm | 齒面強度 Tooth surface torque(kgf) | | |
|------------|--------------|-----|----|--------------------|------|-----|----|----|----|-------------------|-----|----|----|----|----|----|------|--------------------------------|---------------------------------------|-------|------|
| AHTM | 20 | 50 | 2 | 500 | 9.2 | 75 | 26 | 24 | 22 | 62.50 | 125 | 4 | 8 | 7 | 11 | 7 | 31.7 | 436.6 | 5.7 | 0.061 | 95 |
| | 20 | 100 | 2 | 1000 | 9.2 | 150 | 26 | 24 | 22 | 62.50 | 125 | 8 | 8 | 7 | 11 | 7 | 31.7 | 936.6 | 5.7 | 0.061 | |
| | 30 | 50 | 3 | 500 | 11.0 | 50 | 31 | 29 | 26 | 62.50 | 125 | 4 | 9 | 10 | 15 | 9 | 35.0 | 430.0 | 7.7 | 0.065 | 220 |
| | 30 | 100 | 3 | 1000 | 11.0 | 100 | 31 | 29 | 26 | 62.50 | 125 | 8 | 9 | 10 | 15 | 9 | 35.0 | 930.0 | 7.7 | 0.065 | |
| | 40 | 50 | 4 | 506.67 | 14.5 | 38 | 41 | 39 | 35 | 62.50 | 125 | 4 | 12 | 10 | 15 | 9 | 33.3 | 433.0 | 7.7 | 0.068 | 420 |
| | 40 | 100 | 4 | 1000 | 14.5 | 75 | 41 | 39 | 35 | 62.50 | 125 | 8 | 12 | 10 | 15 | 9 | 33.3 | 933.4 | 7.7 | 0.068 | |
| | 50 | 50 | 5 | 500 | 17.7 | 30 | 50 | 39 | 34 | 62.50 | 125 | 4 | 12 | 14 | 20 | 13 | 37.5 | 425.0 | 11.7 | 0.070 | 645 |
| | 50 | 100 | 5 | 1000 | 17.7 | 60 | 50 | 39 | 34 | 62.50 | 125 | 8 | 12 | 14 | 20 | 13 | 37.5 | 925.0 | 11.7 | 0.070 | |
| | 60 | 50 | 6 | 500 | 21.3 | 25 | 60 | 49 | 43 | 62.50 | 125 | 4 | 16 | 18 | 26 | 17 | 37.5 | 425.0 | 15.7 | 0.072 | 930 |
| | 60 | 100 | 6 | 1000 | 21.3 | 50 | 60 | 49 | 43 | 62.50 | 125 | 8 | 16 | 18 | 26 | 17 | 37.5 | 925.0 | 15.7 | 0.072 | |
| | 80 | 50 | 8 | 480 | 28.7 | 18 | 81 | 79 | 71 | 60.00 | 120 | 4 | 25 | 22 | 33 | 21 | 120 | 240.0 | 19.7 | 0.075 | 1400 |
| | 80 | 100 | 8 | 960 | 28.7 | 36 | 81 | 79 | 71 | 60.00 | 120 | 8 | 25 | 22 | 33 | 21 | 120 | 720.0 | 19.7 | 0.075 | |

製程說明：

精度等級：(JIS 五級)

材料：(S45C 中碳鋼) S45C

齒型：斜齒

齒面處理：精銑

硬度處理：調質處理

四面研磨：無

右旋角：19° 31' 42"

壓力角：20度

- 不同尺寸與材質以可依照圖面客製化

Manufacturing Description

Precision grade : (JIS Grade 5)

Material : (S45C Medium Carbon Steel) S45C

Type : Helical Rack

Treatment of Teeth : Milled

Hardness : Quenched

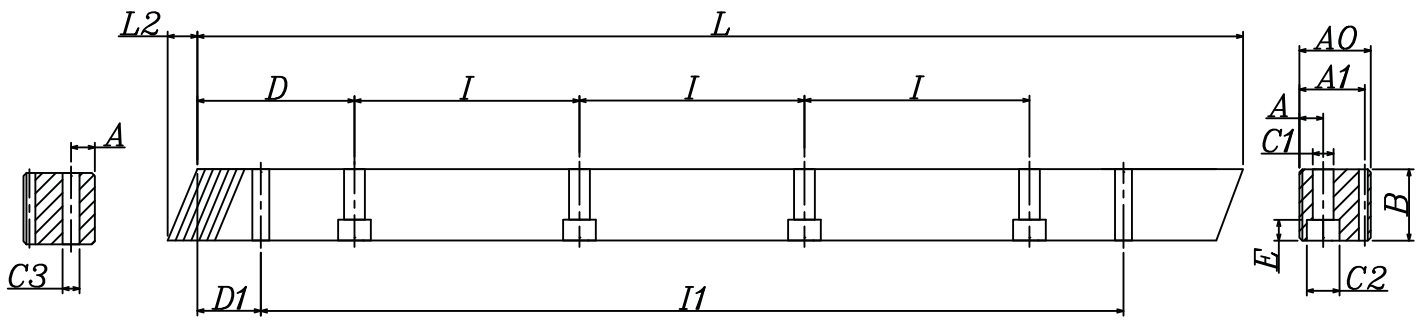
Sides Ground : Not Included

Right Hand Angle : 19° 31' 42"

Pressure Angle : 20 degree

- Other Dimensions / Materials could be customized by drawings

型號：AHTMH



| 型號 Code | 模數 Module | L | L2 | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque (kgf) | | |
|------------|--------------|-----|----|--------------------|------|-----|----|----|----|-------------------|-----|----|----|----|----|----|------|---------------------------------|---------------------------------------|-------|------|
| AHTMH | 20 | 50 | 2 | 500 | 8.5 | 75 | 24 | 24 | 22 | 62.50 | 125 | 4 | 8 | 7 | 11 | 7 | 31.7 | 436.6 | 5.7 | 0.086 | 290 |
| | 20 | 100 | 2 | 1000 | 8.5 | 150 | 24 | 24 | 22 | 62.50 | 125 | 8 | 8 | 7 | 11 | 7 | 31.7 | 936.6 | 5.7 | 0.086 | |
| | 30 | 50 | 3 | 500 | 10.3 | 50 | 29 | 29 | 26 | 62.50 | 125 | 4 | 9 | 10 | 15 | 9 | 35.0 | 430.0 | 7.7 | 0.091 | 660 |
| | 30 | 100 | 3 | 1000 | 10.3 | 100 | 29 | 29 | 26 | 62.50 | 125 | 8 | 9 | 10 | 15 | 9 | 35.0 | 930.0 | 7.7 | 0.091 | |
| | 40 | 50 | 4 | 506.67 | 13.8 | 38 | 39 | 39 | 35 | 62.50 | 125 | 4 | 12 | 10 | 15 | 9 | 33.3 | 433.0 | 7.7 | 0.095 | 1220 |
| | 40 | 100 | 4 | 1000 | 13.8 | 75 | 39 | 39 | 35 | 62.50 | 125 | 8 | 12 | 10 | 15 | 9 | 33.3 | 933.4 | 7.7 | 0.095 | |
| | 50 | 50 | 5 | 500 | 17.4 | 30 | 49 | 39 | 34 | 62.50 | 125 | 4 | 12 | 14 | 20 | 13 | 37.5 | 425.0 | 11.7 | 0.098 | 1850 |
| | 50 | 100 | 5 | 1000 | 17.4 | 60 | 49 | 39 | 34 | 62.50 | 125 | 8 | 12 | 14 | 20 | 13 | 37.5 | 925.0 | 11.7 | 0.098 | |
| | 60 | 50 | 6 | 500 | 20.9 | 25 | 59 | 49 | 43 | 62.50 | 125 | 4 | 16 | 18 | 26 | 17 | 37.5 | 425.0 | 15.7 | 0.100 | 2650 |
| | 60 | 100 | 6 | 1000 | 20.9 | 50 | 59 | 49 | 43 | 62.50 | 125 | 8 | 16 | 18 | 26 | 17 | 37.5 | 925.0 | 15.7 | 0.100 | |
| | 80 | 50 | 8 | 480 | 28.0 | 18 | 79 | 79 | 71 | 60.00 | 120 | 4 | 25 | 22 | 33 | 21 | 120 | 240.0 | 19.7 | 0.105 | 4420 |
| | 80 | 100 | 8 | 960 | 28.0 | 36 | 79 | 79 | 71 | 60.00 | 120 | 8 | 25 | 22 | 33 | 21 | 120 | 720.0 | 19.7 | 0.105 | |

製程說明：

精度等級：(JIS 六級)

材料：(S45C 中碳鋼) S45C

齒型：斜齒

齒面處理：精銑

硬度處理：熱處理；硬度為45~50度

四面研磨：無

右旋角：19° 31' 42"

壓力角：20度

● 不同尺寸與材質可以依照圖面客製化

Manufacturing Description

Precision grade : (JIS Grade 6)

Material : (S45C Medium Carbon Steel) S45C

Type : Helical Rack

Treatment of Teeth : Milled

Hardness : Heat Treatment ; 45~50 degree

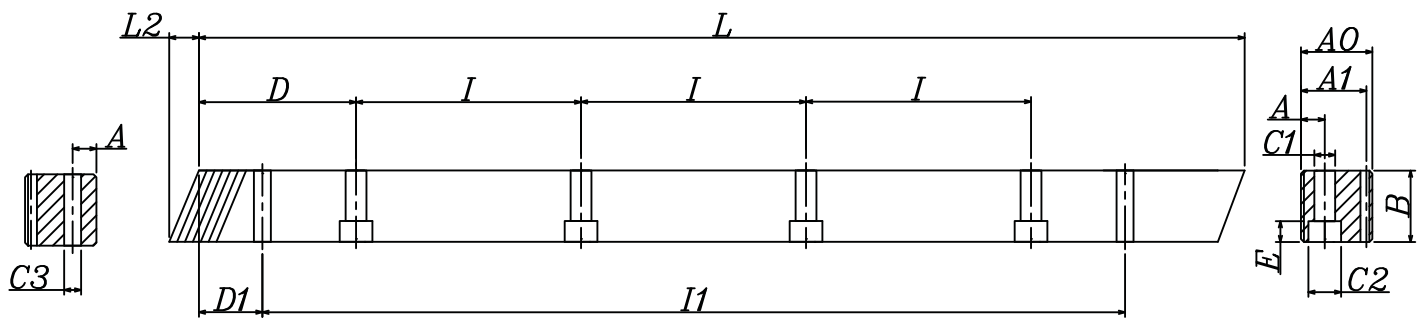
Sides Ground : Not Included

Right Hand Angle : 19° 31' 42"

Pressure Angle : 20 degree

● Other Dimensions / Materials could be customized by drawings

型號：BHTGH



| 型號 Code | 模數 Module | L | L2 | 齒數 T00th No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | |
|------------|--------------|-----|----|--------------------|------|-----|----|----|----|-------------------|-----|----|----|----|----|----|------|---------------------------------|--------------------------------------|------|
| BHTGH | 20 | 50 | 2 | 500 | 8.5 | 75 | 24 | 24 | 22 | 62.50 | 125 | 4 | 8 | 7 | 11 | 7 | 31.7 | 436.6 | 5.7 | 430 |
| | 20 | 100 | 2 | 1000 | 8.5 | 150 | 24 | 24 | 22 | 62.50 | 125 | 8 | 8 | 7 | 11 | 7 | 31.7 | 936.6 | 5.7 | |
| | 30 | 50 | 3 | 500 | 10.3 | 50 | 29 | 29 | 26 | 62.50 | 125 | 4 | 9 | 10 | 15 | 9 | 35.0 | 430.0 | 7.7 | 1015 |
| | 30 | 100 | 3 | 1000 | 10.3 | 100 | 29 | 29 | 26 | 62.50 | 125 | 8 | 9 | 10 | 15 | 9 | 35.0 | 930.0 | 7.7 | |
| | 40 | 50 | 4 | 506.67 | 13.8 | 38 | 39 | 39 | 35 | 62.50 | 125 | 4 | 12 | 10 | 15 | 9 | 33.3 | 433.0 | 7.7 | 1720 |
| | 40 | 100 | 4 | 1000 | 13.8 | 75 | 39 | 39 | 35 | 62.50 | 125 | 8 | 12 | 10 | 15 | 9 | 33.3 | 933.4 | 7.7 | |
| | 50 | 50 | 5 | 500 | 17.4 | 30 | 49 | 39 | 34 | 62.50 | 125 | 4 | 12 | 14 | 20 | 13 | 37.5 | 425.0 | 11.7 | 2620 |
| | 50 | 100 | 5 | 1000 | 17.4 | 60 | 49 | 39 | 34 | 62.50 | 125 | 8 | 12 | 14 | 20 | 13 | 37.5 | 925.0 | 11.7 | |
| | 60 | 50 | 6 | 500 | 20.9 | 25 | 59 | 49 | 43 | 62.50 | 125 | 4 | 16 | 18 | 26 | 17 | 37.5 | 425.0 | 15.7 | 3980 |
| | 60 | 100 | 6 | 1000 | 20.9 | 50 | 59 | 49 | 43 | 62.50 | 125 | 8 | 16 | 18 | 26 | 17 | 37.5 | 925.0 | 15.7 | |
| | 80 | 50 | 8 | 480 | 28.0 | 18 | 79 | 79 | 71 | 60.00 | 120 | 4 | 25 | 22 | 33 | 21 | 120 | 240.0 | 19.7 | 6300 |
| | 80 | 100 | 8 | 960 | 28.0 | 36 | 79 | 79 | 71 | 60.00 | 120 | 8 | 25 | 22 | 33 | 21 | 120 | 720.0 | 19.7 | |

製程說明：

精度等級：(JIS 二級)

材料：(SCM440)

齒型：斜齒

齒面處理：研磨

硬度處理：熱處理；硬度為55~60度

四面研磨：有

右旋角：19° 31' 42"

壓力角：20度

- 不同尺寸與材質以可依照圖面客製化

Manufacturing Description

Precision grade : (JIS Grade 2)

Material : (SCM440)

Type : Helical Rack

Treatment of Teeth : Ground

Hardness : Heat Treatment ; 55~60 degree

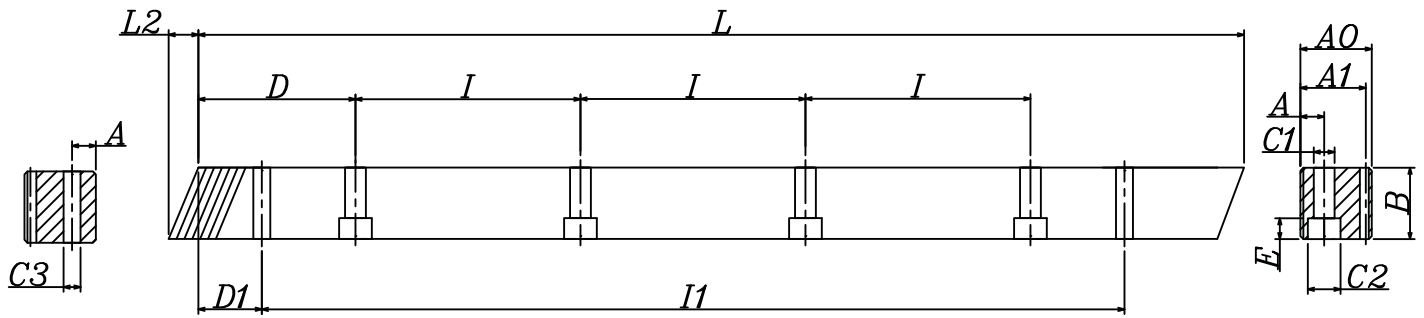
Sides Ground : Included

Right Hand Angle : 19° 31' 42"

Pressure Angle : 20 degree

- Other Dimensions / Materials could be customized by drawings

型號：BHTMQ



| 型號 Code | 模數 Module | L | L2 | 齒數 T00th No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | | |
|------------|--------------|-----|----|--------------------|------|-----|----|----|----|-------------------|-----|----|----|----|----|----|------|---------------------------------|--------------------------------------|-------|------|
| BHTMQ | 20 | 50 | 2 | 500 | 8.9 | 75 | 25 | 24 | 22 | 62.50 | 125 | 4 | 8 | 7 | 11 | 7 | 31.7 | 436.6 | 5.7 | 0.034 | 210 |
| | 20 | 100 | 2 | 1000 | 8.9 | 150 | 25 | 24 | 22 | 62.50 | 125 | 8 | 8 | 7 | 11 | 7 | 31.7 | 936.6 | 5.7 | 0.034 | |
| | 30 | 50 | 3 | 500 | 10.6 | 50 | 30 | 29 | 26 | 62.50 | 125 | 4 | 9 | 10 | 15 | 9 | 35.0 | 430.0 | 7.7 | 0.034 | 505 |
| | 30 | 100 | 3 | 1000 | 10.6 | 100 | 30 | 29 | 26 | 62.50 | 125 | 8 | 9 | 10 | 15 | 9 | 35.0 | 930.0 | 7.7 | 0.034 | |
| | 40 | 50 | 4 | 506.67 | 14.2 | 38 | 40 | 39 | 35 | 62.50 | 125 | 4 | 12 | 10 | 15 | 9 | 33.3 | 433.0 | 7.7 | 0.038 | 960 |
| | 40 | 100 | 4 | 1000 | 14.2 | 75 | 40 | 39 | 35 | 62.50 | 125 | 8 | 12 | 10 | 15 | 9 | 33.3 | 933.4 | 7.7 | 0.038 | |
| | 50 | 50 | 5 | 500 | 17.4 | 30 | 50 | 39 | 34 | 62.50 | 125 | 4 | 12 | 14 | 20 | 13 | 37.5 | 425.0 | 11.7 | 0.040 | 1450 |
| | 50 | 100 | 5 | 1000 | 17.4 | 60 | 50 | 39 | 34 | 62.50 | 125 | 8 | 12 | 14 | 20 | 13 | 37.5 | 925.0 | 11.7 | 0.040 | |
| | 60 | 50 | 6 | 500 | 20.9 | 25 | 59 | 49 | 43 | 62.50 | 125 | 4 | 16 | 18 | 26 | 17 | 37.5 | 425.0 | 15.7 | 0.045 | 2320 |
| | 60 | 100 | 6 | 1000 | 20.9 | 50 | 59 | 49 | 43 | 62.50 | 125 | 8 | 16 | 18 | 26 | 17 | 37.5 | 925.0 | 15.7 | 0.045 | |
| | 80 | 50 | 8 | 480 | 28.0 | 18 | 79 | 79 | 71 | 60.00 | 120 | 4 | 25 | 22 | 33 | 21 | 120 | 240.0 | 19.7 | 0.050 | 3590 |
| | 80 | 100 | 8 | 960 | 28.0 | 36 | 79 | 79 | 71 | 60.00 | 120 | 8 | 25 | 22 | 33 | 21 | 120 | 720.0 | 19.7 | 0.050 | |

製程說明：

精度等級：(JIS 三級)

材料：(SCM440)

齒型：斜齒

齒面處理：精銑

硬度處理：調質處理

四面研磨：有

右旋角：19° 31' 42"

壓力角：20度

● 不同尺寸與材質以可依照圖面客製化

Manufacturing Description

Precision grade : (JIS Grade 3)

Material : (SCM440)

Type : Helical Rack

Treatment of Teeth : Milled

Hardness : Quenched

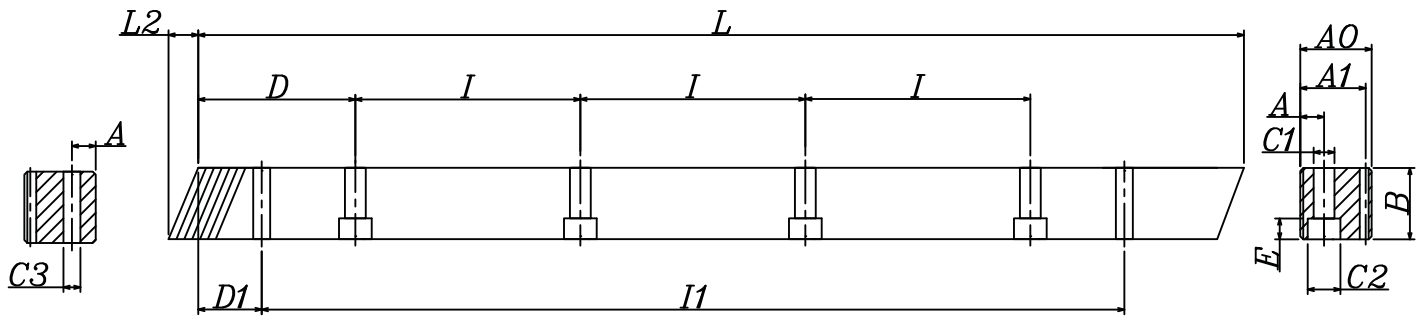
Sides Ground : Included

Right Hand Angle : 19° 31' 42"

Pressure Angle : 20 degree

● Other Dimensions / Materials could be customized by drawings

型號：BHTM



| 型號 Code | 模數 Module | L | L2 | 齒數 Tooth No. | B | A0 | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | | |
|------------|--------------|-----|----|--------------------|------|-----|----|----|----|-------------------|-----|----|----|----|----|----|------|---------------------------------|--------------------------------------|-------|------|
| BHTM | 20 | 50 | 2 | 500 | 9.2 | 75 | 26 | 24 | 22 | 62.50 | 125 | 4 | 8 | 7 | 11 | 7 | 31.7 | 436.6 | 5.7 | 0.061 | 120 |
| | 20 | 100 | 2 | 1000 | 9.2 | 150 | 26 | 24 | 22 | 62.50 | 125 | 8 | 8 | 7 | 11 | 7 | 31.7 | 936.6 | 5.7 | 0.061 | |
| | 30 | 50 | 3 | 500 | 11.0 | 50 | 31 | 29 | 26 | 62.50 | 125 | 4 | 9 | 10 | 15 | 9 | 35.0 | 430.0 | 7.7 | 0.065 | 305 |
| | 30 | 100 | 3 | 1000 | 11.0 | 100 | 31 | 29 | 26 | 62.50 | 125 | 8 | 9 | 10 | 15 | 9 | 35.0 | 930.0 | 7.7 | 0.065 | |
| | 40 | 50 | 4 | 506.67 | 14.5 | 38 | 41 | 39 | 35 | 62.50 | 125 | 4 | 12 | 10 | 15 | 9 | 33.3 | 433.0 | 7.7 | 0.068 | 530 |
| | 40 | 100 | 4 | 1000 | 14.5 | 75 | 41 | 39 | 35 | 62.50 | 125 | 8 | 12 | 10 | 15 | 9 | 33.3 | 933.4 | 7.7 | 0.068 | |
| | 50 | 50 | 5 | 500 | 17.7 | 30 | 50 | 39 | 34 | 62.50 | 125 | 4 | 12 | 14 | 20 | 13 | 37.5 | 425.0 | 11.7 | 0.070 | 843 |
| | 50 | 100 | 5 | 1000 | 17.7 | 60 | 50 | 39 | 34 | 62.50 | 125 | 8 | 12 | 14 | 20 | 13 | 37.5 | 925.0 | 11.7 | 0.070 | |
| | 60 | 50 | 6 | 500 | 21.3 | 25 | 60 | 49 | 43 | 62.50 | 125 | 4 | 16 | 18 | 26 | 17 | 37.5 | 425.0 | 15.7 | 0.072 | 1405 |
| | 60 | 100 | 6 | 1000 | 21.3 | 50 | 60 | 49 | 43 | 62.50 | 125 | 8 | 16 | 18 | 26 | 17 | 37.5 | 925.0 | 15.7 | 0.072 | |
| | 80 | 50 | 8 | 480 | 28.7 | 18 | 81 | 79 | 71 | 60.00 | 120 | 4 | 25 | 22 | 33 | 21 | 120 | 240.0 | 19.7 | 0.075 | 2105 |
| | 80 | 100 | 8 | 960 | 28.7 | 36 | 81 | 79 | 71 | 60.00 | 120 | 8 | 25 | 22 | 33 | 21 | 120 | 720.0 | 19.7 | 0.075 | |

製程說明：

精度等級：(JIS 五級)

材料：(SCM440)

齒型：斜齒

齒面處理：精銑

硬度處理：調質處理

四面研磨：無

右旋角：19° 31' 42"

壓力角：20度

● 不同尺寸與材質以可依照圖面客製化

Manufacturing Description

Precision grade : (JIS Grade 5)

Material : (SCM440)

Type : Helical Rack

Treatment of Teeth : Milled

Hardness : Quenched

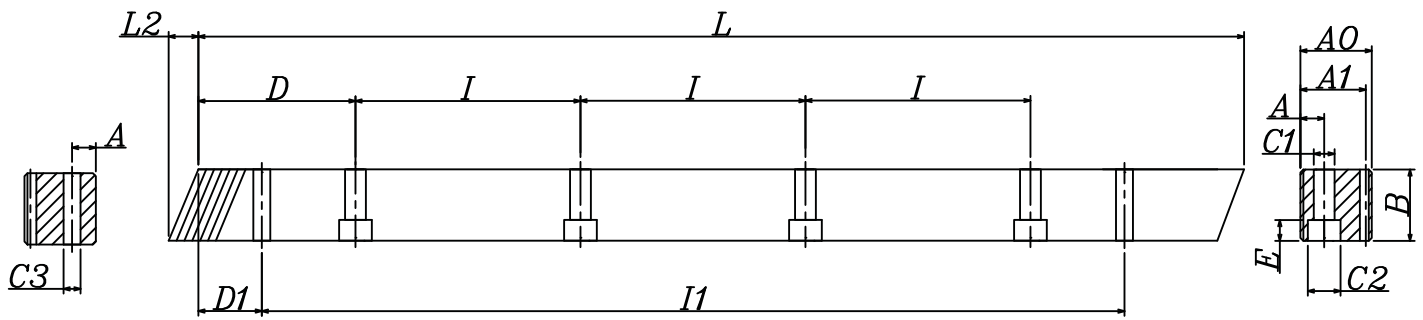
Sides Ground : Not Included

Right Hand Angle : 19° 31' 42"

Pressure Angle : 20 degree

● Other Dimensions / Materials could be customized by drawings

型號：BHTMH



| 型號 Code | 模數 Module | L | L2 | 齒數 Tooth No. | B | AO | A1 | D | I | 孔數 Hole No. | A | C1 | C2 | E | D1 | I1 | C3 | 總齒距誤差 Pitch Error / 300mm | 齒面強度 Tooth surface torque(kgf) | | |
|------------|--------------|-----|----|--------------------|------|-----|----|----|----|-------------------|-----|----|----|----|----|----|------|---------------------------------|--------------------------------------|-------|------|
| BHTMH | 20 | 50 | 2 | 500 | 8.5 | 75 | 24 | 24 | 22 | 62.50 | 125 | 4 | 8 | 7 | 11 | 7 | 31.7 | 436.6 | 5.7 | 0.086 | 430 |
| | 20 | 100 | 2 | 1000 | 8.5 | 150 | 24 | 24 | 22 | 62.50 | 125 | 8 | 8 | 7 | 11 | 7 | 31.7 | 936.6 | 5.7 | 0.086 | |
| | 30 | 50 | 3 | 500 | 10.3 | 50 | 29 | 29 | 26 | 62.50 | 125 | 4 | 9 | 10 | 15 | 9 | 35.0 | 430.0 | 7.7 | 0.091 | 1015 |
| | 30 | 100 | 3 | 1000 | 10.3 | 100 | 29 | 29 | 26 | 62.50 | 125 | 8 | 9 | 10 | 15 | 9 | 35.0 | 930.0 | 7.7 | 0.091 | |
| | 40 | 50 | 4 | 506.67 | 13.8 | 38 | 39 | 39 | 35 | 62.50 | 125 | 4 | 12 | 10 | 15 | 9 | 33.3 | 433.0 | 7.7 | 0.095 | 1720 |
| | 40 | 100 | 4 | 1000 | 13.8 | 75 | 39 | 39 | 35 | 62.50 | 125 | 8 | 12 | 10 | 15 | 9 | 33.3 | 933.4 | 7.7 | 0.095 | |
| | 50 | 50 | 5 | 500 | 17.4 | 30 | 49 | 39 | 34 | 62.50 | 125 | 4 | 12 | 14 | 20 | 13 | 37.5 | 425.0 | 11.7 | 0.098 | 2620 |
| | 50 | 100 | 5 | 1000 | 17.4 | 60 | 49 | 39 | 34 | 62.50 | 125 | 8 | 12 | 14 | 20 | 13 | 37.5 | 925.0 | 11.7 | 0.098 | |
| | 60 | 50 | 6 | 500 | 20.9 | 25 | 59 | 49 | 43 | 62.50 | 125 | 4 | 16 | 18 | 26 | 17 | 37.5 | 425.0 | 15.7 | 0.100 | 3980 |
| | 60 | 100 | 6 | 1000 | 20.9 | 50 | 59 | 49 | 43 | 62.50 | 125 | 8 | 16 | 18 | 26 | 17 | 37.5 | 925.0 | 15.7 | 0.100 | |
| | 80 | 50 | 8 | 480 | 28.0 | 18 | 79 | 79 | 71 | 60.00 | 120 | 4 | 25 | 22 | 33 | 21 | 120 | 240.0 | 19.7 | 0.105 | 6300 |
| | 80 | 100 | 8 | 960 | 28.0 | 36 | 79 | 79 | 71 | 60.00 | 120 | 8 | 25 | 22 | 33 | 21 | 120 | 720.0 | 19.7 | 0.105 | |

製程說明：

精度等級：(JIS 六級)

材料：(SCM440)

齒型：斜齒

齒面處理：精銑

硬度處理：熱處理；硬度為55~60度

四面研磨：無

右旋角：19° 31' 42"

壓力角：20度

● 不同尺寸與材質可以依照圖面客製化

Manufacturing Description

Precision grade : (JIS Grade 6)

Material : (SCM440)

Type : Helical Rack

Treatment of Teeth : Milled

Hardness : Heat Treatment ; 55~60 degree

Sides Ground : Not Included

Right Hand Angle : 19° 31' 42"

Pressure Angle : 20 degree

● Other Dimensions / Materials could be customized by drawings