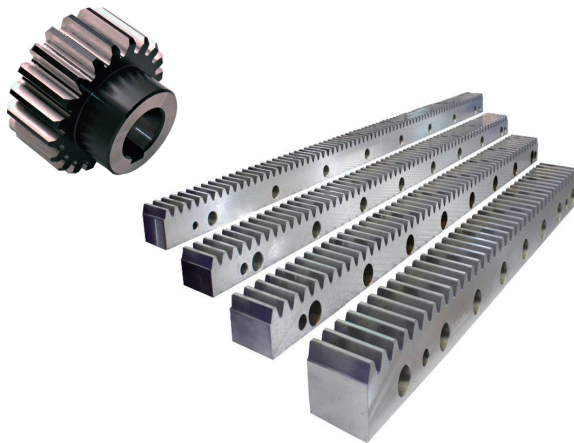


# H.Gear & Rack



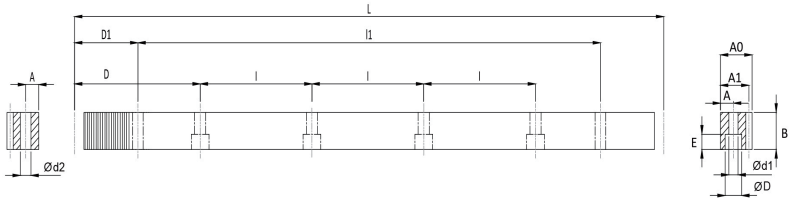
## 齒條型號說明 Rack Code Instruction



1st	2nd	3rd	4th	5th	6th	7th	8th
材料 Material	齒型 Type	棒型 Shape	齒面處理 Teeth Treatment	硬度處理 Hardness	模數 Module	長度 Length	等級 Grade
C	S	T	G	H	020	10	Q5
C= 中碳鋼	S=直齒 H=斜齒	T=四角棒	M=精銑 G=齒研	Q=調質 H=硬化處理	M1.5~M10	05=500mm 10=1000mm 15=1500mm 20=2000mm	Q=DIN Q5~Q10
C= S45C	S=Straight H=Helical	T=Tetragon	M=Milled G=Ground	H=Hardened Q=Quenched			

備註：長度、鑽孔、材質、表面處理(噴砂、磷酸鹽、研磨)等特殊需求，皆可客製。

Remarks: Lengths, holes, materials, surface treatments (sandblasted, phosphated, sides ground) and other requirements all could be customized.



單位 / Dimension : mm

型號 Code	Q	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	$\phi d1$	$\phi D$	E	D1	I1	$\phi d2$	KG
CSTGH01510	-Q6	1.5	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
CSTGH02010	-Q6	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	3.9
CSTGH02020	-Q6	2	2010.62	320	24	24	22	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	7.8
CSTGH03010	-Q6	3	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.10	7.7	5.8
CSTGH03020	-Q6	3	2035.75	216	29	29	26	63.62	127.23	16	9	10	15	9	34.4	1967.00	7.7	11.5
CSTGH04010	-Q6	4	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.30	7.7	10.3
CSTGH04020	-Q6	4	2010.62	160	39	39	35	62.83	125.66	16	12	10	15	9	37.5	1935.60	7.7	20.5
CSTGH05010	-Q6	5	1005.31	64	49	49	34	62.83	125.66	8	12	14	20	13	30.1	945.00	11.7	12.9
CSTGH05020	-Q6	5	2010.62	128	49	49	34	62.83	125.66	16	12	14	20	13	30.1	1950.40	11.7	25.8
CSTGH06010	-Q6	6	1017.88	54	59	59	43	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
CSTGH06020	-Q6	6	2035.75	108	59	59	43	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
CSTGH08010	-Q6	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.00	19.7	42.1
CSTGH08020	-Q6	8	2010.61	80	79	79	71	62.83	125.66	16	25	22	33	21	26.6	1957.40	19.7	84.2
CSTGH10010	-Q6	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.66	754.00	19.7	66.1
CSTGH12010	-Q6	12	1017.88	27	120	120	108	63.62	127.23	8	40	39	58	38	127.23	763.40	19.7	98.3

品質等級/Quality Grade

DIN 6

系列 CSTGH-Q6 直齒齒研齒條

材料 45C (中碳鋼)

硬度 HRC 50~55°

硬化處理後四面研磨與齒研

總齒距誤差/Total Pitch Error:

$GTf/1000 \leq 0.036 \text{ mm}$

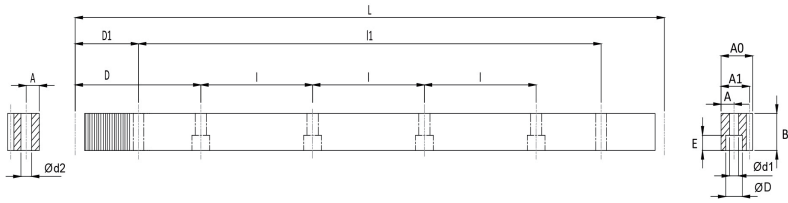
$GTf/2000 \leq 0.047 \text{ mm} (\leq 0.024/1000 \text{ mm})$

Series CSTGH-Q6 Straight Teeth Ground Racks

Material 45C (Medium Carbon Steel)

Hardness HRC 50~55°

Ground on all sides after hardening.



單位 / Dimension : mm

型號 Code	Q	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	Ød1	ØD	E	D1	I1	Ød2	KG
CSTGH01510	-Q7	1.5	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
CSTGH02010	-Q7	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	3.9
CSTGH02020	-Q7	2	2010.62	320	24	24	22	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	7.8
CSTGH03010	-Q7	3	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.10	7.7	5.8
CSTGH03020	-Q7	3	2035.75	216	29	29	26	63.62	127.23	16	9	10	15	9	34.4	1967.00	7.7	11.5
CSTGH04010	-Q7	4	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.30	7.7	10.3
CSTGH04020	-Q7	4	2010.62	160	39	39	35	62.83	125.66	16	12	10	15	9	37.5	1935.60	7.7	20.5
CSTGH05010	-Q7	5	1005.31	64	49	49	34	62.83	125.66	8	12	14	20	13	30.1	945.00	11.7	12.9
CSTGH05020	-Q7	5	2010.62	128	49	49	34	62.83	125.66	16	12	14	20	13	30.1	1950.40	11.7	25.8
CSTGH06010	-Q7	6	1017.88	54	59	59	43	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
CSTGH06020	-Q7	6	2035.75	108	59	59	43	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
CSTGH08010	-Q7	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.00	19.7	42.1
CSTGH08020	-Q7	8	2010.61	80	79	79	71	62.83	125.66	16	25	22	33	21	26.6	1957.40	19.7	84.2
CSTGH10010	-Q7	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.66	754.00	19.7	66.1
CSTGH12010	-Q7	12	1017.88	27	120	120	108	63.62	127.23	8	40	39	58	38	127.23	763.40	19.7	98.3

品質等級/Quality Grade

DIN 7

系列 CSTGH-Q7 直齒齒研齒條

材料 45C (中碳鋼)

硬度 HRC 50~55°

硬化處理後四面研磨與齒研

總齒距誤差/Total Pitch Error:

GTf/1000 ≤ 0.048 mm

GTf/2000 ≤ 0.062 mm (≤ 0.034/1000 mm)

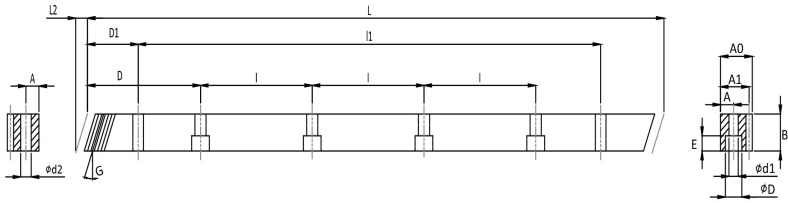
Series CSTGH-Q7 Straight Teeth Ground Racks

Material 45C (Medium Carbon Steel)

Hardness HRC 50~55°

Ground on all sides after hardening.





單位 / Dimension : mm

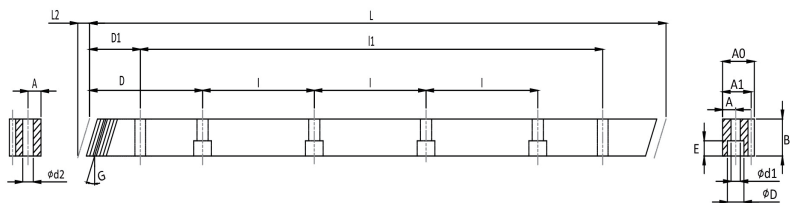
型號 Code	齒數 No. of Teeth	模數 Module	L	L2	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG	
CHTGH02010	-Q5	2	1000.00	8.50	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.60	5.7	3.9
CHTGH03010	-Q5	3	1000.00	10.30	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.00	7.7	5.7
CHTGH04010	-Q5	4	1000.00	13.80	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.40	7.7	10.2
CHTGH05010	-Q5	5	1000.00	17.40	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.00	11.7	12.8

品質等級/Quality Grade  
DIN 5

系列 CHTGH-Q5 斜齒齒研齒條  
材料 45C (中碳鋼)  
右旋角 19°31'42"  
硬度 HRC 50~55°  
硬化處理後四面研磨與齒研  
室溫在攝氏25°為準

總齒距誤差 / Total Pitch Error :  
G<sub>Tf</sub> / 1000 ≤ 0.026 mm

Series CHTGH-Q5 Helical Teeth Ground Racks  
Material 45C (Medium Carbon Steel)  
Right Hand Angle 19°31'42"  
Hardness HRC 50~55°  
Ground on all sides after hardening.  
Room Temperature is 25°C



單位 / Dimension : mm

型號 Code	齒數 Q	模數 Module	L	L2	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	φd1	φD	E	D1	I1	φd2	KG
CHTGH01510	-Q7	1.5	1000.00	6.00	200	17	17	15.50	62.5	125	8	7	6	9.5	7	31.7	936.60	5.7	1.9
CHTGH02010	-Q7	2	1000.00	8.50	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.60	5.7	3.9
CHTGH02020	-Q7	2	2000.00	8.50	300	24	24	22	62.5	125	16	8	7	11	7	31.7	1936.60	5.7	7.7
CHTGH03010	-Q7	3	1000.00	10.30	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.00	7.7	5.7
CHTGH03020	-Q7	3	2000.00	10.30	200	29	29	26	62.5	125	16	9	10	15	9	35.0	1930.00	7.7	11.3
CHTGH04010	-Q7	4	1000.00	13.80	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.40	7.7	10.2
CHTGH04020	-Q7	4	2000.00	13.80	150	39	39	35	62.5	125	16	12	10	15	9	33.3	1933.40	7.7	20.4
CHTGH05010	-Q7	5	1000.00	17.40	60	49	49	34	62.5	125	8	12	14	20	13	37.5	925.00	11.7	12.8
CHTGH05020	-Q7	5	2000.00	17.40	120	49	49	34	62.5	125	16	12	14	20	13	37.5	1925.00	11.7	25.6
CHTGH06010	-Q7	6	1000.00	20.90	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.00	15.7	19.4
CHTGH06020	-Q7	6	2000.00	20.90	100	59	49	43	62.5	125	16	16	18	26	17	37.5	1925.00	15.7	38.8
CHTGH08010	-Q7	8	960.00	28.00	36	79	79	71	60.0	120	8	25	22	33	21	120	720.00	19.7	40.2
CHTGH08020	-Q7	8	1920.00	28.00	72	79	79	71	60.0	120	16	25	22	33	21	120	1680.00	19.7	80.4
CHTGH10010	-Q7	10	1000.00	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125	750.00	19.7	65.7
CHTGH12010	-Q7	12	1000.00	42.56	25	120	120	108	40.0	125	8	40	39	58	38	125	750.00	19.7	96.6

品質等級/Quality Grade

DIN 7

系列 CHTGH-Q7 斜齒齒研齒條

材料 45C (中碳鋼)

右旋角 19°31'42"

硬度 HRC 50~55°

硬化處理後四面研磨與齒研

總齒距誤差/Total Pitch Error:

GTf/1000 ≤ 0.048 mm

GTf/2000 ≤ 0.062 mm (≤ 0.034/1000 mm)

Series CHTGH-Q7 Helical Teeth Ground Racks

Material 45C (Medium Carbon Steel)

Right Hand Angle 19°31'42"

Hardness HRC 50~55°

Ground on all sides after hardening.

## 齒輪型號說明 Pinion Code Instruction



1st	2nd	3rd	4th	5th	6th	7th	8th
材料 Material	齒型 Type	系列 Series	齒面處理 Teeth Treatment	硬度處理 Hardness	模數 Module	齒數 No of Teeth	等級 Grade
C	S	(F)	G	H	020	21	Q6
C= 中碳鋼 M=合金鋼	S=直齒 H=斜齒	F=法蘭式	M=精銑 G=齒研	H=硬化處理	M1.5~M10	16~95	Q=DIN Q6~Q10
C= S45C M=SCM440	S=Straight H=Helical	F=Flange	M=Milled G=Ground	H=Hardened			

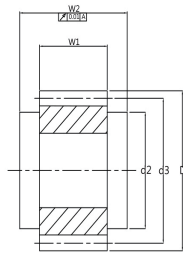


圖1/ Fig1.

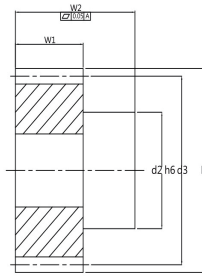
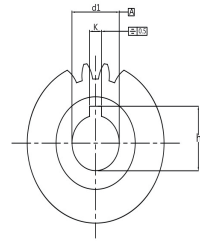


圖2/ Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 <sub>H6</sub>	d2	d3	D	w1	w2	k	h	KG
<b>模數 2 Module 2</b>												
CSGH 02016 1	1	-Q6	16	15	25	32	36	28	30	5	17.3	0.1
CSGH 02018 1	1	-Q6	18	15	30	36	40	28	30	5	17.3	0.2
CSGH 02018 2	1	-Q6	18	20	25	36	40	28	30	6	22.8	0.2
CSGH 02020 1	1	-Q6	20	15	25	40	44	28	30	6	17.8	0.2
CSGH 02020 2	1	-Q6	20	19	30	40	44	28	30	6	21.8	0.2
CSGH 02020 3	2	-Q6	20	19	30	40	44	28	56	6	21.8	0.2
CSGH 02020 4	1	-Q6	20	20	30	40	44	28	30	6	22.8	0.2
CSGH 02020 5	1	-Q6	20	22	30	40	44	28	30	6	24.8	0.2
CSGH 02020 6	2	-Q6	20	22	36	40	44	28	56	6	24.8	0.3
CSGH 02022 1	1	-Q6	22	15	25	44	48	28	30	5	17.3	0.3
CSGH 02022 2	1	-Q6	22	19	30	44	48	28	30	6	21.8	0.3
CSGH 02022 3	2	-Q6	22	19	30	44	48	28	56	6	21.8	0.3
CSGH 02022 4	1	-Q6	22	20	30	44	48	28	30	6	22.8	0.3
CSGH 02022 5	2	-Q6	22	22	36	44	48	28	56	6	24.8	0.3
CSGH 02022 6	1	-Q6	22	22	30	44	48	28	30	6	24.8	0.3
CSGH 02022 7	1	-Q6	22	25	36	44	48	28	30	8	28.3	0.2
CSGH 02025 1	2	-Q6	25	16	30	50	54	28	54	5	18.3	0.3
CSGH 02025 2	1	-Q6	25	19	30	50	54	28	30	6	21.8	0.3
CSGH 02025 3	2	-Q6	25	19	30	50	54	28	56	6	21.8	0.3
CSGH 02025 4	1	-Q6	25	20	30	50	54	28	30	6	22.8	0.4
CSGH 02025 5	1	-Q6	25	22	30	50	54	28	30	6	24.8	0.3
CSGH 02025 6	2	-Q6	25	22	36	50	54	28	56	6	24.8	0.4
CSGH 02025 7	1	-Q6	25	25	36	50	54	28	30	8	28.3	0.3
CSGH 02025 8	1	-Q6	25	30	45	50	54	28	30	8	33.3	0.3
CSGH 02028 1	1	-Q6	28	19	30	56	60	28	30	6	21.8	0.5
CSGH 02028 2	2	-Q6	28	19	30	56	60	28	56	6	21.8	0.5
CSGH 02028 3	1	-Q6	28	20	30	56	60	28	30	6	22.8	0.5
CSGH 02028 4	1	-Q6	28	22	30	56	60	28	30	6	24.8	0.3
CSGH 02028 5	2	-Q6	28	22	36	56	60	28	56	6	24.8	0.3
CSGH 02028 6	1	-Q6	28	25	36	56	60	28	30	8	28.3	0.4
CSGH 02028 7	1	-Q6	28	30	45	56	60	28	30	8	33.3	0.4
CSGH 02028 8	2	-Q6	28	30	50	56	60	28	60	8	33.3	0.4
CSGH 02028 9	1	-Q6	28	35	48	56	60	28	30	10	38.3	0.3
CSGH 02032 1	2	-Q6	32	16	30	64	68	28	54	5	18.3	0.6

品質等級

DIN 6

系列 CSGH-Q6 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CSGH-Q6 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

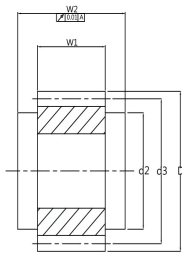


圖1/ Fig1.

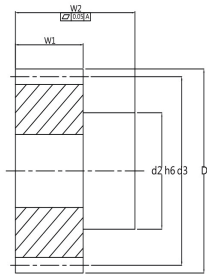
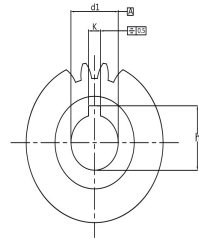


圖2/ Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 <sub>H6</sub>	d2	d3	D	w1	w2	k	h	KG
<b>模數 3 Module 3</b>												
CSGH 030 18 1	1	-Q6	18	25	36	54	60	28	30	8	28.3	0.4
CSGH 030 20 1	1	-Q6	20	25	36	60	66	28	30	8	28.3	0.5
CSGH 030 20 2	1	-Q6	20	30	45	60	66	28	30	8	33.3	0.5
CSGH 030 20 3	1	-Q6	20	35	48	60	66	28	30	10	38.3	0.5
CSGH 030 22 1	2	-Q6	22	22	36	66	72	28	56	6	24.8	0.8
CSGH 030 22 2	1	-Q6	22	25	36	66	72	28	30	8	28.3	0.6
CSGH 030 22 3	2	-Q6	22	25	44	66	72	28	60	8	28.3	0.9
CSGH 030 22 4	1	-Q6	22	30	45	66	72	28	30	8	33.3	0.6
CSGH 030 22 5	2	-Q6	22	32	55	66	72	28	65	10	35.3	1.1
CSGH 030 22 6	2	-Q6	22	30	50	66	72	28	60	8	33.3	0.9
CSGH 030 22 7	1	-Q6	22	35	48	66	72	28	30	10	38.3	0.6
CSGH 030 22 8	2	-Q6	22	35	55	66	72	28	65	10	38.3	0.9
CSGH 030 22 9	2	-Q6	22	40	62	66	72	28	65	12	43.3	1.1
CSGH 030 25 1	1	-Q6	25	25	36	75	81	28	30	8	28.3	0.9
CSGH 030 25 2	1	-Q6	25	30	45	75	81	28	30	8	33.3	0.9
CSGH 030 25 3	2	-Q6	25	32	55	75	81	28	65	10	35.3	1.3
CSGH 030 25 4	1	-Q6	25	35	48	75	81	28	30	10	38.3	0.9
CSGH 030 25 5	2	-Q6	25	40	62	75	81	28	65	12	43.3	1.3
CSGH 030 25 6	1	-Q6	25	45	58	75	81	28	30	14	48.8	0.7
CSGH 030 28 1	2	-Q6	28	22	36	84	90	28	56	6	24.8	1.4
CSGH 030 28 2	1	-Q6	28	25	36	84	90	28	30	8	28.3	1.2
CSGH 030 28 3	2	-Q6	28	25	44	84	90	28	60	8	28.3	1.4
CSGH 030 28 4	1	-Q6	28	30	45	84	90	28	30	8	33.3	1.2
CSGH 030 28 5	2	-Q6	28	30	50	84	90	28	60	8	33.3	1.4
CSGH 030 28 6	2	-Q6	28	32	55	84	90	28	65	10	35.3	1.5
CSGH 030 28 7	1	-Q6	28	35	48	84	90	28	30	10	38.3	1.0
CSGH 030 28 8	2	-Q6	28	35	55	84	90	28	65	10	38.3	1.5
CSGH 030 28 9	2	-Q6	28	40	62	84	90	28	65	12	43.3	1.5

品質等級

DIN 6

系列 CSGH-Q6 直齒齒研齒輪

材料 45C (中碳鋼)

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CSGH-Q6 Straight Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Hardness: HRC 50~55°

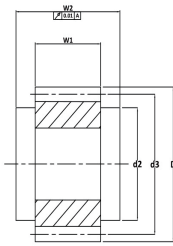


圖1/Fig1.

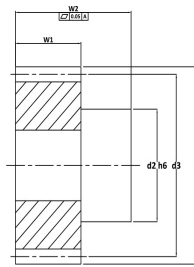
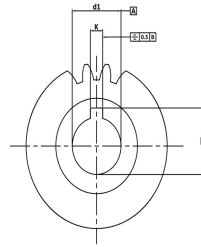


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	Q	齒數 No. of Teeth	d1 <sub>H6</sub>	d2	d3	D	w1	w2	k	h	KG
<b>模數 1.5 Module 1.5</b>												
CHGH 015 20 1	1	-Q6	20	11	25	31.83	34.83	20	22	4	12.8	0.1
CHGH 015 20 2	1	-Q6	20	14	25	31.83	34.83	20	22	5	16.3	0.1
CHGH 015 20 3	1	-Q6	20	16	25	31.83	34.83	20	22	5	18.3	0.1
CHGH 015 21 1	2	-Q6	21	16	30	33.42	36.42	20	46	5	18.3	0.2
<b>模數 2 Module 2</b>												
CHGH 020 18 1	1	-Q6	18	16	25	38.197	42.2	28	30	5	18.3	0.2
CHGH 020 20 1	1	-Q6	20	19	30	42.44	46.4	28	30	6	21.8	0.2
CHGH 020 20 2	2	-Q6	20	19	30	42.44	46.4	28	56	6	21.8	0.2
CHGH 020 20 3	1	-Q6	20	20	30	42.44	46.4	28	30	6	22.8	0.2
CHGH 020 20 4	2	-Q6	20	22	36	42.44	46.4	28	56	6	24.8	0.2
CHGH 020 20 5	1	-Q6	20	22	30	42.44	46.4	28	30	6	24.8	0.2
CHGH 020 21 1	1	-Q6	21	16	25	44.56	48.6	28	30	5	18.3	0.3
CHGH 020 21 2	2	-Q6	21	22	36	44.56	48.6	28	56	6	24.8	0.3
CHGH 020 22 1	1	-Q6	22	19	30	46.69	50.7	28	30	6	21.8	0.3
CHGH 020 22 2	2	-Q6	22	19	30	46.69	50.7	28	56	6	21.8	0.3
CHGH 020 22 3	1	-Q6	22	22	30	46.69	50.7	28	30	6	24.8	0.3
CHGH 020 22 4	2	-Q6	22	22	36	46.69	50.7	28	56	6	24.8	0.3
CHGH 020 25 1	1	-Q6	25	19	30	53.05	57.1	28	30	6	21.8	0.4
CHGH 020 25 2	2	-Q6	25	19	30	53.05	57.1	28	56	6	21.8	0.4
CHGH 020 25 3	1	-Q6	25	20	30	53.05	57.1	28	30	6	22.8	0.4
CHGH 020 25 4	1	-Q6	25	22	30	53.05	57.1	28	30	6	24.8	0.4
CHGH 020 25 5	2	-Q6	25	22	36	53.05	57.1	28	56	6	24.8	0.4
CHGH 020 25 6	1	-Q6	25	25	36	53.05	57.1	28	30	6	27.8	0.4

品質等級

DIN 6

系列 CHGH-Q6 斜齒齒研齒輪

材料 45C (中碳鋼)

左旋角 19°31'42"

硬度 HRC 50~55°

Quality Grade

DIN 6

Series CHGH-Q6 Helical Teeth Ground Pinions

Material 45C (Medium Carbon Steel)

Left Hand Angle 19°31'42"

Hardness: HRC 50~55°