



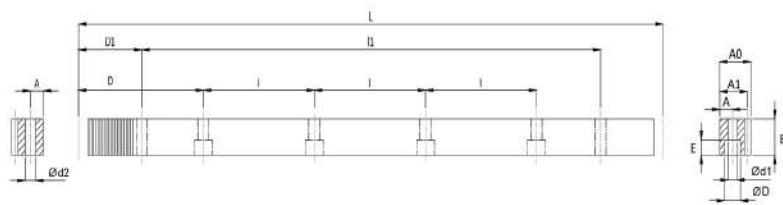
## 齒輪齒條



1st	2st	3nd	4rd	5th	6th	7th	8th	9th
代号	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
T	C	S	T	G	H	020	10	Q5
公称代号	C= 中碳鋼	S=直齒 H=斜齒	T= 四角棒	M=精洗 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

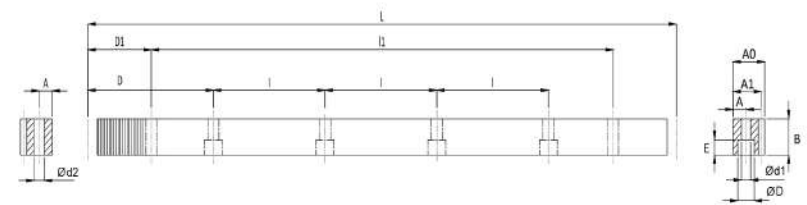
型號 Code	齒數 Q	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
TCSTGH01510	-Q6	1.5	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
TCSTGH02010	-Q6	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	3.9
TCSTGH02020	-Q6	2	2010.62	320	24	24	22	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	7.8
TCSTGH03010	-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
TCSTGH03020	-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
TCSTGH04010	-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
TCSTGH04020	-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
TCSTGH05010	-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
TCSTGH05020	-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
TCSTGH06010	-Q6	6	1017.88	54	59	49	43	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
TCSTGH06020	-Q6	6	2035.75	108	59	49	43	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
TCSTGH08010	-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
TCSTGH08020	-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
TCSTGH10010	-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
TCSTGH12010	-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 TCSTGH-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 ≤0.036 mm  
GTf/2000 ≤0.047 mm (≤0.024/1000 mm)

Series TCSTGH-Q6 Straight Teeth Ground Racks  
Material 45C (Medium Carbon Steel)  
Hardness HRC 50~55°  
Ground on all sides after hardening.



單位 / Dimension : mm

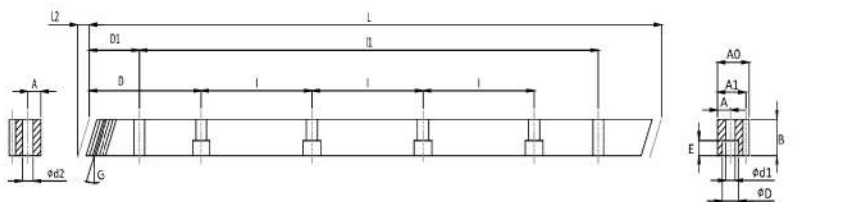
型號 Code	齒數 Q	模數 Module	L	齒數 No. of Teeth	B	A0	A1	D	I	孔數 No. of Holes	A	ød1	øD	E	D1	I1	ød2	KG
TCSTGH01510	-Q7	1.5	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.00	5.7	1.9
TCSTGH02010	-Q7	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.70	5.7	3.9
TCSTGH02020	-Q7	2	2010.62	320	24	24	22	62.83	125.66	16	8	7	11	7	31.3	1948.00	5.7	7.8
TCSTGH03010	-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
TCSTGH03020	-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
TCSTGH04010	-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
TCSTGH04020	-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
TCSTGH05010	-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
TCSTGH05020	-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
TCSTGH06010	-Q7	6	1017.88	54	59	49	43	63.62	127.23	8	16	18	26	17	31.4	955.00	15.7	19.7
TCSTGH06020	-Q7	6	2035.75	108	59	49	43	63.62	127.23	16	16	18	26	17	31.4	1973.00	15.7	39.5
TCSTGH08010	-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
TCSTGH08020	-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
TCSTGH10010	-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
TCSTGH12010	-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 TCSTGH-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 TCSTGH-Q7 Straight Teeth Ground Racks  
Material 45C (Medium Carbon Steel)  
Hardness HRC 50~55°  
Ground on all sides after hardening.



單位 / Dimension : mm

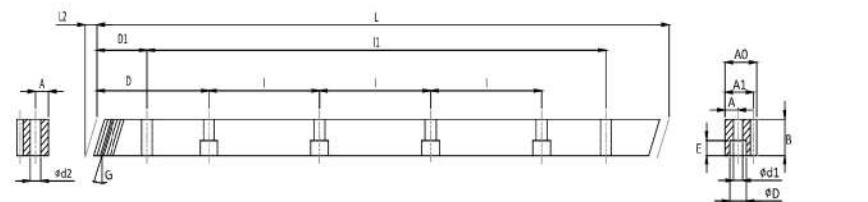
型號 Code	齒數 No. of Teeth	模數 Module	L	L2	B	A0	A1	D	I	A	ød1	øD	E	D1	I1	ød2	KG		
TCHTGH02010	-Q5	2	1000.00	8.50	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.60	5.7	3.9
TCHTGH03010	-Q5	3	1000.00	10.30	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.00	7.7	5.7
TCHTGH04010	-Q5	4	1000.00	13.80	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.40	7.7	10.2
TCHTGH05010	-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 TCHTGH-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 :  
GTf /1000 ≤0.026 mm

Series TCHTGH-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 No. of Teeth	模數 Module	L	L2	B	A0	A1	D	I	A	ød1	øD	E	D1	I1	ød2	KG		
TCHTGH01510	-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
TCHTGH02010	-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
TCHTGH02020	-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
TCHTGH03010	-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
TCHTGH03020	-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
TCHTGH04010	-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
TCHTGH04020	-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
TCHTGH05010	-Q7	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
TCHTGH05020	-Q7	5	2000.00	17.40	120	49	39	34	62.5	125	16	12	14	20	13	37.5	1925.00	11.7	25.6
TCHTGH06010	-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
TCHTGH06020	-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
TCHTGH08010	-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
TCHTGH08020	-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
TCHTGH10010	-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
TCHTGH12010	-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 TCHTGH-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 TCHTGH-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	2st	3nd	4rd	5th	6th	7th	8th	9th
代号	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
T	C	S	(F)	G	H	020	21	Q6
公称代号	C=中碳鋼 M=合金鋼	S=直齒 H=斜齒	F=法蘭式	M=鏟齒 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			

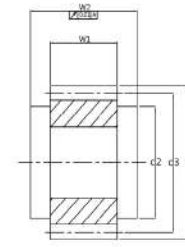


圖1/Fig1.

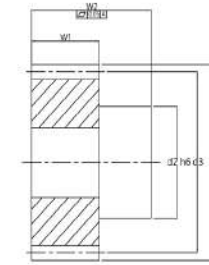
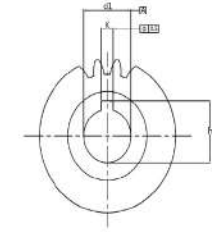


圖2/Fig2.



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
模數 2 Module 2												
TCSGH 020 16 1	1	-Q6	16	15	25	32	36	28	30	5	17.3	0.1
TCSGH 020 18 1	1	-Q6	18	15	30	36	40	28	30	5	17.3	0.2
TCSGH 020 18 2	1	-Q6	18	20	25	36	40	28	30	6	22.8	0.2
TCSGH 020 20 1	1	-Q6	20	15	25	40	44	28	30	6	17.8	0.2
TCSGH 020 20 2	1	-Q6	20	19	30	40	44	28	30	6	21.8	0.2
TCSGH 020 20 3	2	-Q6	20	19	30	40	44	28	56	6	21.8	0.2
TCSGH 020 20 4	1	-Q6	20	20	30	40	44	28	30	6	22.8	0.2
TCSGH 020 20 5	1	-Q6	20	22	30	40	44	28	30	6	24.8	0.2
TCSGH 020 20 6	2	-Q6	20	22	36	40	44	28	56	6	24.8	0.3
TCSGH 020 22 1	1	-Q6	22	15	25	44	48	28	30	5	17.3	0.3
TCSGH 020 22 2	1	-Q6	22	19	30	44	48	28	30	6	21.8	0.3
TCSGH 020 22 3	2	-Q6	22	19	30	44	48	28	56	6	21.8	0.3
TCSGH 020 22 4	1	-Q6	22	20	30	44	48	28	30	6	22.8	0.3
TCSGH 020 22 5	2	-Q6	22	22	36	44	48	28	56	6	24.8	0.3
TCSGH 020 22 6	1	-Q6	22	22	30	44	48	28	30	6	24.8	0.3
TCSGH 020 22 7	1	-Q6	22	25	36	44	48	28	30	8	28.3	0.2
TCSGH 020 25 1	2	-Q6	25	16	30	50	54	28	54	5	18.3	0.3
TCSGH 020 25 2	1	-Q6	25	19	30	50	54	28	30	6	21.8	0.3
TCSGH 020 25 3	2	-Q6	25	19	30	50	54	28	56	6	21.8	0.3
TCSGH 020 25 4	1	-Q6	25	20	30	50	54	28	30	6	22.8	0.4
TCSGH 020 25 5	1	-Q6	25	22	30	50	54	28	30	6	24.8	0.3
TCSGH 020 25 6	2	-Q6	25	22	36	50	54	28	56	6	24.8	0.4
TCSGH 020 25 7	1	-Q6	25	25	36	50	54	28	30	8	28.3	0.3
TCSGH 020 25 8	1	-Q6	25	30	45	50	54	28	30	8	33.3	0.3
TCSGH 020 28 1	1	-Q6	28	19	30	56	60	28	30	6	21.8	0.5
TCSGH 020 28 2	2	-Q6	28	19	30	56	60	28	56	6	21.8	0.5
TCSGH 020 28 3	1	-Q6	28	20	30	56	60	28	30	6	22.8	0.5
TCSGH 020 28 4	1	-Q6	28	22	30	56	60	28	30	6	24.8	0.3
TCSGH 020 28 5	2	-Q6	28	22	36	56	60	28	56	6	24.8	0.3
TCSGH 020 28 6	1	-Q6	28	25	36	56	60	28	30	8	28.3	0.4
TCSGH 020 28 7	1	-Q6	28	30	45	56	60	28	30	8	33.3	0.4
TCSGH 020 28 8	2	-Q6	28	30	50	56	60	28	60	8	33.3	0.4
TCSGH 020 28 9	1	-Q6	28	35	48	56	60	28	30	10	38.3	0.3
TCSGH 020 32 1	2	-Q6	32	16	30	64	68	28	54	5	18.3	0.6

品質等級  
DIN 6

系列 TCSGH-Q6 直齒齒研齒輪  
材料 45C (中碳鋼)  
硬度 HRC 50~55°

Quality Grade  
DIN 6

Series TCSGH-Q6 Straight Teeth Ground Pinions  
Material 45C (Medium Carbon Steel)  
Hardness: HRC 50~55°

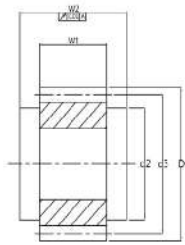


圖1/Fig1.

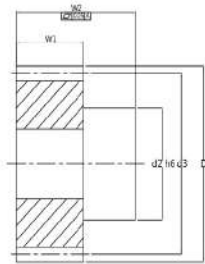
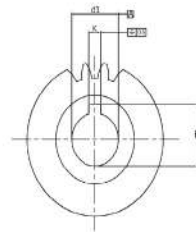


圖2/Fig2.



單位 / Dimension : mm

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

Quality Grade  
DIN 6  
Series TCSGH-Q6 Straight Teeth Ground Pinions  
Material 45C (Medium Carbon Steel)  
Hardness: HRC 50~55°

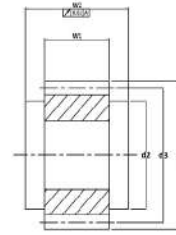


圖1/Fig1.

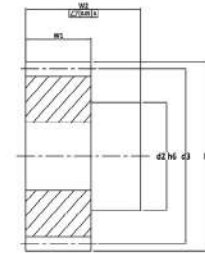
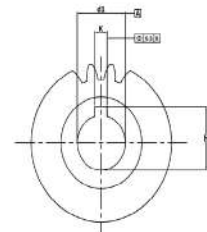


圖2/Fig2.



單位 / Dimension : mm

型號 Code	圖 Fig.	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>												
TCHGH 015 20 1	1	-Q6	20	11	25	31.83	34.83	20	22	4	12.8	0.1
TCHGH 015 20 2	1	-Q6	20	14	25	31.83	34.83	20	22	5	16.3	0.1
TCHGH 015 20 3	1	-Q6	20	16	25	31.83	34.83	20	22	5	18.3	0.1
TCHGH 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>												
TCHGH 020 18 1	1	-Q6	18	16	25	38.197	42.2	28	30	5	18.3	0.2
TCHGH 020 20 1	1	-Q6	20	19	30	42.44	46.4	28	30	6	21.8	0.2
TCHGH 020 20 2	2	-Q6	20	19	30	42.44	46.4	28	56	6	21.8	0.2
TCHGH 020 20 3	1	-Q6	20	20	30	42.44	46.4	28	30	6	22.8	0.2
TCHGH 020 20 4	2	-Q6	20	22	36	42.44	46.4	28	56	6	24.8	0.2
TCHGH 020 20 5	1	-Q6	20	22	30	42.44	46.4	28	30	6	24.8	0.2
TCHGH 020 21 1	1	-Q6	21	16	25	44.56	48.6	28	30	5	18.3	0.3
TCHGH 020 21 2	2	-Q6	21	22	36	44.56	48.6	28	56	6	24.8	0.3
TCHGH 020 22 1	1	-Q6	22	19	30	46.69	50.7	28	30	6	21.8	0.3
TCHGH 020 22 2	2	-Q6	22	19	30	46.69	50.7	28	56	6	21.8	0.3
TCHGH 020 22 3	1	-Q6	22	22	30	46.69	50.7	28	30	6	24.8	0.3
TCHGH 020 22 4	2	-Q6	22	22	36	46.69	50.7	28	56	6	24.8	0.3
TCHGH 020 25 1	1	-Q6	25	19	30	53.05	57.1	28	30	6	21.8	0.4
TCHGH 020 25 2	2	-Q6	25	19	30	53.05	57.1	28	56	6	21.8	0.4
TCHGH 020 25 3	1	-Q6	25	20	30	53.05	57.1	28	30	6	22.8	0.4
TCHGH 020 25 4	1	-Q6	25	22	30	53.05	57.1	28	30	6	24.8	0.4
TCHGH 020 25 5	2	-Q6	25	22	36	53.05	57.1	28	56	6	24.8	0.4
TCHGH 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 TCHGH-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 TCHGH-Q6 Helical Teeth Ground Pinions  
Material 45C (Medium Carbon Steel)  
Left Hand Angle 19°31'42"  
Hardness: HRC 50~55°

