



起升 Hoisting 15kW/15kW/3.5kW	工作级别 Classification group		M4		回转 Hoisting	工作级别 Classification group		M3			
	钢丝绳倍率 Ropes					速度 Speed m/min			0.7		
	速度 Speed m/min										
	30.5	61	15	30.5	≤7						
载重 t Weight	2.5	1.25	5	2.5							
						变幅 Hoisting	工作级别 Classification group		M3		
						速度 Speed m/min					
								21		31.5	

- 1、QTZ75 (TC5010) 塔式起重机是按GB/T5031-2008要求, 用最大起重力矩命名的塔机, 其额定起重力矩达到63t.m, 因此该塔机素有“小63塔机”之称, 该产品在机构和结构设计上具有显著优点。
- 2、标准节主肢采用角钢 $\angle 160 \times 160 \times 16$ /Q235B, 塔身强度高、稳定性好。起重臂下弦杆采用Q345B的尖角方管, 自重轻、使用寿命长。
- 3、起升机构采用三速电机, 获得多种运行速度; 起升减速机为四轴式, 卷筒的粗短型, 减小钢丝绳的出绳偏角, 改善钢丝绳的使用寿命。
- 4、回转机构采用对称布置的双行星齿轮减速机, 并配置液力偶合器联结, 回转平稳、冲击小。变幅机构采用行星齿轮减速机设置于卷筒内, 结构紧凑, 便于安装。

Technical drawing of a crane structure. The drawing shows a side view of the crane with various dimensions and labels. The main dimensions are:

- Overall length: 50.3m
- Height of the crane: 44.5m
- Horizontal distance from the crane to the first support: 11.6m
- Horizontal distance between supports: 1.6m, 7.5m, 7.5m, 7.5m, 7.5m, 7.5m, 7.5m, 5m
- Horizontal distance from the crane to the second support: 2.5m
- Horizontal distance from the second support to the third support: 13.1m
- Horizontal distance from the third support to the fourth support: 50m
- Horizontal distance from the fourth support to the fifth support: 36m
- Weight of the crane: 5000kg
- Weight of the load: 1000kg

The drawing also includes labels for the crane (1), the load (2), and the supports (3, 4, 5, 6, 7). The crane is shown in a side view, and the load is shown in a top view.

job (m)		m/kg																																															
		13.1	15	16	17	18	19	20	21	22	23	24.3	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50											
50	a=2	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2415	2306	2205	2111	2024	1943	1867	1795	1728	1665	1606	1550	1497	1446	399	1353	1310	1269	1230	1192	1157	1123	1090	1058	1028	1000									
	a=4	5000	4301	4006	3746	3515	3308	3122	2954	2800	2661	2500																																					

The graph displays the relationship between job (m) and m/kg for two different values of 'a'. The y-axis represents job (m) from 1000 to 5000, and the x-axis represents m/kg from 13.1 to 50. The blue curve (a=2) starts at approximately 2500 m for m/kg = 13.1 and decreases to 1000 m at m/kg = 50. The red curve (a=4) starts at 5000 m for m/kg = 13.1 and decreases to 1000 m at m/kg = 50. Both curves are concave up, indicating a decreasing rate of change.

