Tab. 4.2 Cost categories for mechanical tubes perdormed in Workshop no. 3 Cold Rolling and Drawing -imperial units

WT	mm	1.600	1.800	2.000	2.300	2.600	2.900	3.200	3.600	4.000	4.500	5.000	5.600	6.300	7.100	8.000	8.800	10.000	11.000	12.500	14.200	16.000	17.500	19.500	20.000	22.200	25.000	28.000	30.000
	inch	0.063	0.071	0.079	0.091	0.102	0.114	0.126	0.142	0.157	0.177	0.197	0.220	0.248	0.280	0.315	0.346	0.394	0.433	0.492	0.559	0.630	0.689	0.768	0.787	0.874	0.984	1.102	1.181
OD																													
mm	inch	Length min-max (ft)																											
15.880	0.625	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00																					
17.100	0.673	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00																				
19.050	0.750	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00																	
20.000	0.787	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00															
21.300	0.839	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00														
25.000	0.984	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00													
25.400	1.000	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00													
26.900	1.059			17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00													
30.000	1.181			17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00												
31.800	1.252			17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00												
33.700	1.327			17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00												
38.000	1.496			17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00										
40.000	1.575			17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-37.5	17.00-37.50										
42.400	1.669			17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-36.00	17.00-36.00	17.00-36.00	17.00-32.50	17.00-32.5	17.00-32.50										
44.500	1.752			17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00										
48.300	1.902					17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-29.50	17.00-34.00	17.00-37.5	17.00-37.50	17.00-36.00	17.00-32.50										
51.000	2.008					17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-27.50	17.00-34.00	17.00-36.00	17.00-36.00	17.00-32.5	17.00-31.00	17.00-32.50									
54.000	2.126						17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-31.00	17.00-31.00	17.00-27.5	17.00-36.00	17.00-34.00	17.00-31.00	17.00-31.00									
57.000	2.244						17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-29.50	17.00-31.00	17.00-32.50	17.00-34.00	17.00-29.50	17.00-29.50									
60.300	2.374						17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-27.50	17.00-27.50	17.00-27.5	17.00-39.00	17.00-39.00	17.00-39.00	17.00-26.00									
63.500	2.500						17.00-32.00	17.00-32.00	17.00-32.00	17.00-39.00	17.00-37.50	17.00-39.00	17.00-36.00	17.00-32.50	17.00-27.50	17.00-26.00	17.00-29.50	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00									
70.000	2.756							17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-32.5	17.00-39.00	17.00-39.00	17.00-27.50	17.00-27.50	17.00-29.5	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00									
73.000	2.874							17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-31.00	17.00-39.00	17.00-39.00	17.00-26.00	17.00-26.00	17.00-27.5	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00								
76.100	2.996							17.00-32.00	17.00-32.00	17.00-37.5	17.00-36	17.00-31.00	17.00-36.00	17.00-32.5	17.00-26.00	17.00-26.00	17.00-27.5	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00								
82.500	3.248									17.00-36.50	17.00-36.50	17.00-31.00	17.00-34	17.00-32.5	17.00-32.50	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00								
88.900	3.500									17.00-36.00	17.00-36.00	17.00-31.00	17.00-34.00	17.00-31.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00							
95.000	3.740									17.00-36.00	17.00-36.00	17.00-31.00	17.00-34.00	17.00-31.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00							
101.600	4.000											17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-38.50	17.00-38.00	17.00-38.00	17.00-37.50	17.00-37.5	17.00-37.25	17.00-36.50				
108.000	4.252												17.00-36.50	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-38.50	18.00-38.00	17.00-38.00	17.00-37.25	17.00-37.25	17.00-36.50	17.00-36.50				
114.300	4.500													17.00-34.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-38.50	17.00-38.00	17.00-37.50	17.00-37.00	17.00-37.25	17.00-36.50	17.00-36.00				
121.000	4.764														17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	17.00-38.50	17.00-37.50	17.00-37.00	17.00-36.5	17.00-36.50	17.00-36.00	23.00-36.75	23.00-37.25	23.00-37.25	23.00-37.25
127.000	5.000														17.00-39.00	17.00-39.00	17.00-39.00	17.00-39.00	18.00-38.00	20.00-37.50	20.00-36.00	20.00-35.25	20.00-34.25	20.00-33.25	20.00-33.75	23.00-36.25	23.00-36.25	23.00-36.25	23.00-36.25
133.000	5.236														17.00-39.00	17.00-39.00	17.00-39.00	18.00-38.00	18.00-37.50	18.00-37.00	18.00-35.75	20.00-34.25	20.00-33.25	20.00-32.75	20.00-32.75	23.00-35.25	23.00-35.25	23.00-35.25	23.00-35.25
139.700	5.500														26.00-39.25	26.00-39.25	26.00-39.25	26.00-39.25	24.50-38.50	24.25-38.00	24.5-36.75	23.00-36.00	21.25-33.00	20.00-33.00	21.25-32.75	21.00-30.75	21.00-31.00	20.00-30.00	20.00-29.5
146.000	5.748														25.50-39.25	26.00-39.25	26.00-39.25	26.00-39.25	23.50-39.00	24.50-38.00	24.00-37.00	23.00-35.75	23.00-35.75	23.00-35.75	23.00-35.25	23.00-33.75	20.5-32.75	20.00-31.50	20.00-30.50
152.400	6.000															26.00-39.25	26.00-39.25	26.00-39.25	25.25-38.50	24.50-37.50	23.50-36.00	23.00-36.00	23.00-35.00	23.00-33.25	23.00-33.25	21.25-32.75	21.00-31.00	20.00-30.00	20.00-29.75
159.000	6.260																	29.50-39.25	27.25-39.25	27.25-39.25	26.00-39.25	26.00-39.25	24.50-37.50	23.50-37.25	23.50-37.00	23.00-36.00	21.25-34.25	21.25-33.00	21.00-32.75
160.000	6.299																	29.50-39.25	27.25-39.25	27.25-39.25	26.00-39.25	26.00-39.25	24.50-37.50	23.50-37.25	23.50-37.00	23.00-36.00	21.25-34.25	21.25-33.00	21.00-32.75
165.100	6.500																	26.00-39.25	24.50-38.00	24.00-37.00	23.00-36.00	23.00-35.25	23.00-34.00	21.25-32.75	21.00-32.25	20.50-31.75	20.00-31.00	20.00-30.00	20.00-29.50
168.300	6.626																	29.50-39.25	28.50-39.25	27.75-39.25	26.00-39.25	24.50-38.50	24.50-37.00	23.00-35.25	23.00-35.25	23.00-34.25	21.25-33.00	21.25-32.00	20.25-31.00
177.800	7.000																	29.50-39.25	29.50-39.25	29.5-39.25	27.75-39.25	27.75-39.25	26.00-39.25	24.5-37.50	24.50-37.50	24.50-37.00	23.50-36.00	23.00-35.00	23.00-34.00
193.700	7.626																	29.50-39.25	29.50-39.25	29.5-39.25	27.75-39.25	26.00-39.25	24.50-37.50	23.00-36.00	23.00-36.00	22.25-34.75	21.25-33.25	21.25-32.00	20.25-31.75
203.000	7.992																	27.75-39.25	27.25-39.25	26.00-39.25	24.50-37.50	23.00-36.00	23.00-34.75	21.25-33.25	21.25-33.25	21.25-32.25	20.00-31.50	20.00-30.50	20.00-29.75
210.000	8.268																				21.25-32.75	20.00-31.50	20.00-30.00	20.00-29.50	20.00-29.50	20.00-28.75	18.00-27.50	18.00-27.50	18.00-27.00
219.100	8.626																								18.00-26.75	17.00-26.25	17.00-26.00	17.00-25.50	17.00-25.00
244.500	9.626																									17.00-26.25	17.00-26.00	17.00-25.50	17.00-25.00

MC1 Category - one cold drawing or one cold rollings

MC2 Category - two cold drawings

MC3 Category - two cold rollings