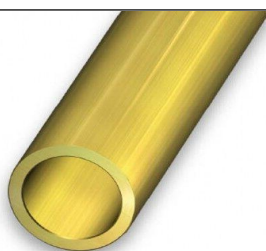


Brass Pipe



Commodity	BRASS PIPE										
GRADE	IS319 : GRADE1 & GRADE2										
	S.No	Constituent				Grade 1			Grade 2		
	1	Copper				56.0 – 59.0 %			60.0 – 63.0 %		
	2	Lead				2.02 – 3.50 %			2.50 – 3.70 %		
	3	Iron (Max)				0.35 %			0.35%		
	4	Other Impurties (Excluding Iron) Max				0.70 %			0.50 %		
	5	Zinc				Reminder			Reminder		
GRADE EQUIVALENT ALLOY	IS		ISO		UNS		EN		BS		JIS
	IS 319 Gr II		CuZn36Pb3		C36000 C35600 C36010		CW603N		CZ124		C3601 C3602
	IS 319 Gr I		CuZn39Pb3		C38500		CW614N		CZ121PB3		C3603 C3604
Mechanical Properties	S.No	Condition	Size		Tensil Strength Min, MPa (1N=mm² 0.102 kgf/mm² =1 MPa)		Elongation on Gauge length 5.65, vA, Present, Min		Hardness Properties (Vickers Hardness(HV))		
			Over	Up to & Including	Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2	
	1	Anneled (O)	6	25	345	325	12	15	100 Max	90 Max	
			25	50	315	305	17	20			
			50	0	285	325	22	25			
	2	Half Hard (HB)6	6	12	405	395	4	7	125-155	120-150	
			12	25	395	385	6	10	120-150	115-145	
			25	50	355	345	12	15	110-140	100-130	
			50	-	325	315	17	20	100-130	90-120	
	3	Hard (HD)	6	12	550	510	-	-	160-185	155-185	
12			25	490	485	4	-	155-180	145-175		
Size	Outer Dia				Length				Thick		
	3.0 – 219mm				1000 – 6000mm				0.3 – As per Customer Requirement		
FINISH	Polished										
PACKAGE	HDPE – SEA WORTHY PACKING										
APPLICATION	• Automotive and transportation... • Medical technology. ... • Building trade. ... • Aircraft construction. ... • Food and the catering industry. ... • Vessel manufacture...										