

## Tutorial de Planilha de Auxílio à Inspeção de Recebimento

1. Na aba Planilha Principal, preencher os campos em amarelo, com as informações referentes à ordem de compra.

Prominp		PLANILHA DE AUXÍLIO À INSPEÇÃO DE RECEBIMENTO A312/A312M - 2013 - TP304N Seamless and Welded Austenitic Stainless Steel Pipes		PUC		
<b>ORDERING INFORMATION - A999</b>						
ASTM product specification		A312/A312M	2013			
Name of product		Seamless and Welded Austenitic Stainless Steel Pipes				
Quantity		15	number of pieces			
Method of manufacture		Seamless				
Specific type of melting		Not Required -				
Grade or UNS number		Grade	TP304N	UNS	Use Grade	
Specification designation and year of issue		ASME B36.19	2004			
Size (NPS and Schedule)		10	Sch. 10S			
Length		Specific -				
End finish		Plain End				
Optional requirements		Not Required -				
Specific Certification		Not Required -				
Special requirements or any supplementary requirements, or both		Not Required -				
<b>PLANO DE AMOSTRAGEM N-115</b>						
Nível Geral de Inspeção	II	Plano de Amostragem	Simples	Risco do Consumidor	5%	Ac = 0
Qualidade Limite	10	Codificação de Amostragem	B	Tamanho da Amostra	3	Re = 1

- a. Se for informar o Grade, preencha "Use Grade" no campo UNS.
- b. Se for informar o UNS Number, preencha "Use UNS" no campo Grade.
- c. Os campos "Specific Type of Melting", "Optional Requirements", "Specific Certification" e "Special Requirements / Supplementary Requirements" não são obrigatórios de ser preenchidos para o funcionamento da planilha.

2. Os dados Dimensionais e a marcação do produto serão apresentados automaticamente:

STD	NPS	Schedule No. Identification or Thickness	DN	Outside Diameter	Wall Thickness	Plain End Weight	Thin-Wall Pipe? A 999	
ASME B36.19	10	Sch. 10S	250	273.10 mm	4.19 mm	27.79 kg/m	YES	
				10.750 in	0.165 in	18.67 lb/ft		
<b>GENERAL PERMISSIBLE DIMENSIONS (A999)</b>								
	Outside Diameter	Inside Diameter	Wall Thickness	Plain End Weight		Length		NOTE 1: For thin-wall pipe, the difference in extreme outside readings (ovality) in any one cross-section shall not exceed 1.5 % of the specified outside diameter.
MIN	272.30 mm	-	3.67 mm	26.82 kg/m	-	over	6.00 mm	
MAX	275.50 mm	-	-	30.57 kg/m	-	under	0.00 mm	
MIN	10.719 in	-	0.144 in	18.02 lb/ft	-	over	0.250 in	
MAX	10.843 in	-	-	20.54 lb/ft	-	under	0.000 in	
<b>PRODUCT MARKING</b>								
Manufacturer's name or brand _ A312/A312M _ TP304N _ WR(if weld repaired) 10" / Sch. 10S / Heat number / SML / HCW (if heavily cold worked ) / NH (if hydrotesting is not performed) / ET (if eddy-current testing is performed ) / UT (ultrasonic testing is performed)								

3. Na aba “Planilha Secundária”, basta visualizar que, com os dados fornecidos na planilha principal, os dados de composição química, tratamento térmico e itens relevantes da norma, até mesmo itens específicos dimensionais, serão apresentados, individualmente, para o material escolhido.

Chemical Requirements			Annealing Requirements			
Composition, %			Fahrenheit		1900	
Carbon	Min		Heat Treating Temperature (B)	min	-	
	Max	0.08		max	-	
Manganese	Min		Celsius	min	1040	
	Max	2.00		max	-	
Phosphorus	Min		Cooling/Testing Requirements			C
	Max	0.05	<p>Quenched in water or rapidly cooled by other means, at a rate sufficient to prevent re-precipitation of carbides, as demonstrable by the capability of pipes, heat treated by either separate solution annealing or by direct quenching, of passing Practices A262, Practice E. The manufacturer is not required to run the test unless it is specified on the purchase order (see Supplementary Requirement S7). Note that Practices A262 requires the test to be performed on sensitized specimens in the low-carbon and stabilized types and on specimens representative of the as-shipped condition for other types. In the case of low-carbon types containing 3% or more molybdenum, the applicability of the sensitizing treatment prior to testing shall be a matter for negotiation between the seller and the purchaser.</p>			
Sulfur	Min					
	Max	0.03				
Silicon	Min					
	Max	1.00				
Chromium	Min	18.00				
	Max	20.00				
Nickel	Min	8.00				
	Max	18.00				
Molybdenum	Min					
	Max					
Titanium	Min					
	Max					
Columbium	Min					
	Max					
Tantalum	Min					
	Max					
Nitrogen (C)	Min	0.10				
	Max	0.16				
Vanadium	Min					
	Max					
			Tensile Requirements			
			Tensile Strength, min	ksi	80	
				MPa	550	
			Yield Strength, min	ksi	35	
				MPa	240	