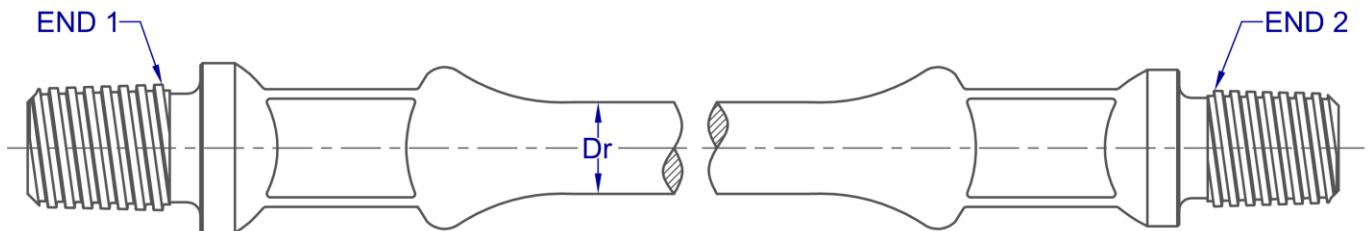


AlphaRod™ Pony Crossover

Dimensions:*



End Combination	Dr	Available Grades
7/8" Blue® - 7/8" API SR	0.875" (-0.016/+0.008)"	AlphaRod™ CS
	22.225 mm (-0.41/+0.2)mm	
1" Blue® - 1" API SR	1" (-0.018/+0.009)"	AlphaRod™ CS
	25.4 mm (-0.46/+0.23)mm	
1" Blue® - 7/8" Blue®	1" (-0.018/+0.009)"	AlphaRod™ CS
	25.4 mm (-0.46/+0.23)mm	
7/8" Blue® - 1" API SR	1" (-0.018/+0.009)"	AlphaRod™ CS
	25.4 mm (-0.46/+0.23)mm	
1 1/8" Blue® - 1" Blue®	1.125" (-0.02/+0.01)"	AlphaRod™ CS
	28.575 mm (-0.51/+0.25)mm	
1" Blue® - 1 1/8" API SR	1.125" (-0.02/+0.01)"	AlphaRod™ CS
	28.575 mm (-0.51/+0.25)mm	

Nominal Lengths:^a 2, 4 ft
(0.61, 1.22 m)

*For pins' dimensions refer to corresponding Sucker & Pony Rod PDS.

^aOther lengths might be available upon request.

Steel Grades:

The AlphaRod™ series was created to overcome more demanding requirements and offer a solution to fatigue and corrosion-fatigue problems. During oil production sucker rods face operative productions that get tougher by the day. Mature conventional wells and non-conventional wells expose sucker rods in such ways that lead to an increase in premature fails. The new steel grades of the AlphaRod™ generation were specially designed to satisfy these operative conditions.

Chemical Composition:

Typical chemical compositions (wt%) listed in the following table.

Grade	C (%)	Mn (%)	Si (%)	S (%)	P (%)	Cr (%)	Ni (%)	Mo (%)	Other (%)
AlphaRod™ CS	0.23	0.55	0.25	0.01 max	0.010 max	0.95	0.30 max	0.70	B: 0.01 max, Ti: 0.1 max, Nb: 0.1 max

Mechanical Properties:

Mechanical properties are listed in the following table.

Grade	Yield Strength (0.2% offset)	Ultimate Tensile Stress	Elongation (8")	Reduction of Area	Hardness
AlphaRod™ CS	Min 110 kpsi (Min 758 MPa)	Min 118 kpsi (Min 814 MPa)	14% Min	70% Min	26 HRC

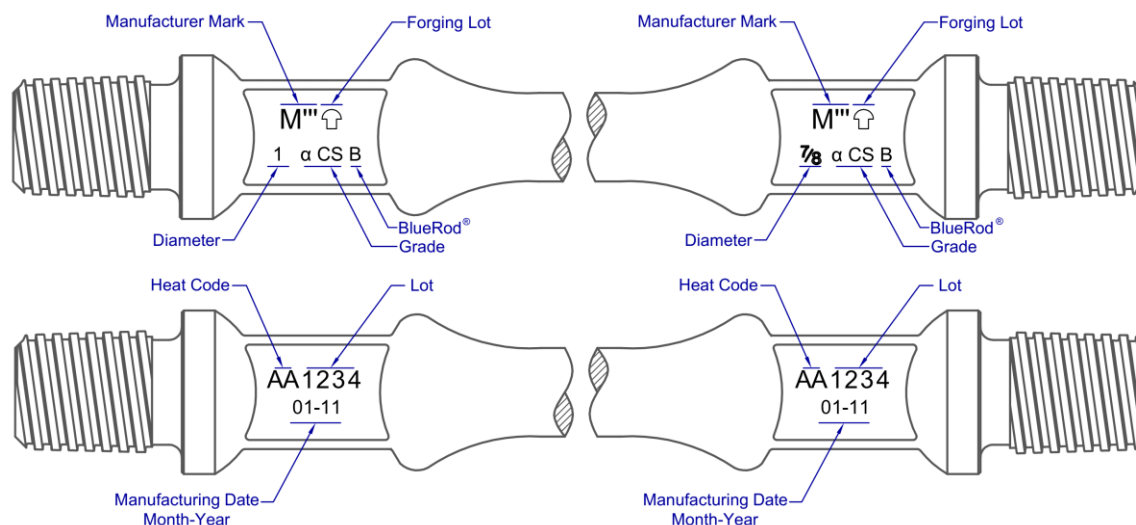
Performance Data:

For performance data information please refer to corresponding Rod & Pup Joint PDS.

Non Destructive Testing:

All raw material is carefully inspected using electromagnetic and/or ultrasonic methods to ensure the soundness of the final product.

Marking:



Non Destructive Testing:

All raw material is carefully inspected using electromagnetic and/or ultrasonic methods to ensure the soundness of the final product.

Color Code:

Rod's ends are painted according to the following table:

Grade	Color Code
AlphaRod™ CS	Silver



*Displayed colors are for guidance only.

Ordering Information:

When placing an order please attach the following information:

PDS: SRPXAR
End Combination: 1 1/8" Blue® - 1" Blue®
Grade: AlphaRod™ CS
Length: 2 ft

Labeling:

		Metalmecánica S.A. Ruta 55 Km. 754,1 Villa Mercedes (San Luis) Made in Argentina	
		BOX N° 60000009	QTY:
PRODUCT:		DATE:	
SPECIFICATION: TENARIS PROPRIETARY PRODUCT			
ROD DIAM (in):	NET WEIGHT (kg):		
END DIAM (in):			
GRADE:			
LENGTH (ft):			
SALES ORDER:			
DESTINATION:			

*Image for reference only

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