

# AMERICAN MINING CONGRESS TURNOUT DATA



## Turnout Data for 18-in. Gage 20-lb to 60-lb ASCE rail, inclusive

American Mining Congress Standards

Cast Frog Design 269		Switch			Actual Lead	Closure Rails			
Frog No.	Frog Angle	Length	Switch Angle	Vertex Distance		Curved			Straight
						Radius	MO	Length	Length
2-1/2	22°37'12"	3'6"	6°19'20"	4"	7'5-1/16"	11'10-1/8"	1-7/16"	3'4-11/16"	3'2-3/16"
3	18°55'29"	5'0"	4°25'15"	5"	9'11-1/2"	17'2-1/8"	1-11/16"	4'4-7/16"	4'2-3/8"
4	14°15'00"	5'0"	4°25'15"	5"	11'3-5/8"	31'6-5/8"	1-13/32"	5'5-1/8"	5'3-9/16"
5	11°25'16"	7'6"	2°56'44"	8"	15'8-1/8"	47'4-13/16"	1-9/16"	7'0-5/16"	6'11-1/16"
6	9°31'38"	10'0"	2°12'32"	10"	20'0"	67'1-3/16"	1-11/16"	8'7"	8'5-15/16"

## Turnout Data for 24-in. Gage 20-lb to 60-lb ASCE rail, inclusive

American Mining Congress Standards

Cast Frog Design 289		Switch			Actual Lead	Closure Rails			
Frog No.	Frog Angle	Length	Switch Angle	Vertex Distance		Curved			Straight
						Radius	MO	Length	Length
2	28°04'21"	3'6"	6°19'20"	4"	8'3-5/8"	12'1-5/32"	2-17/32"	4'5-31/32"	4'2-3/16"
2-1/2	22°37'12"	5'0"	4°25'15"	5"	11'2-5/16"	18'2-9/32"	2-11/16"	5'8-3/16"	5'5-3/16"
3	18°55'29"	5'0"	4°25'15"	5"	12'3-1/4"	27'1-21/32"	2-1/2"	6'8-13/16"	6'6-5/16"
		7'6"	2°56'44"	8"	15'3-1/2"	26'2-1/4"	3"	7'2-1/2"	6'11-7/8"
3-1/2	16°15'38"	5'0"	4°25'15"	5"	13'4-5/8"	37'2-1/2"	2-3/8"	7'8-1/4"	7'6-1/16"
		7'6"	2°56'44"	8"	16'5-13/16"	35'7-7/16"	2-7/8"	8'3-3/8"	8'1-1/4"
4	14°15'00"	5'0"	4°25'15"	5"	14'2-13/16"	50'1-23/32"	2-1/8"	8'4-15/32"	8'2-1/2"
		7'6"	2°56'44"	8"	17'5-7/8"	46'11-15/16"	2-21/32"	9'1-21/32"	8'11-9/16"
5	11°25'16"	7'6"	2°56'44"	8"	19'6-1/4"	75'0-13/16"	2-13/32"	10'10-15/32"	10'8-15/16"
		10'0"	2°12'32"	10"	22'7-21/32"	72'5-15/16"	2-3/4"	11'5-13/16"	11'4-11/32"
6	9°31'38"	7'6"	2°56'44"	8"	21'4-7/8"	111'7-11/16"	2-1/8"	12'5-25/32"	12'4-9/16"
		10'0"	2°12'32"	10"	24'8-9/16"	106'1"	2-17/32"	13'3-23/32"	13'2-1/4"

## Turnout Data for 30-in. Gage Light Rail – 20-lb to 60-lb ASCE rail, inclusive

American Mining Congress Standards

Frog				Switch					Actual Lead	Closure Rails					
No.	Angle	Type	Rail Weight	Point	Actual Toe Length	Length	Angle	Point		Heel Spread	Vertex Distance	Curved			Straight
												Radius	MO	Length	Length
2	28°04'21"	Cast	20 to 60	1/4"	6-11/16"	3'6"	6°19'20"	3/8"	5"	4"	9'5"	13'0"	3-7/8"	5'9-1/2"	5'4-1/4"
		WPF	20 to 30	1/4"	17"	3'6"	6°19'20"	3/8"	5"	4"	9'5"	13'0"	2-13/16"	4'11"	4'6"
		WPF	40 to 60	3/8"	20"	3'6"	6°19'20"	3/8"	5"	4"	9'5"	13'0"	2-1/2"	4'8-1/4"	4'3"
2-1/2	22°37'12"	Cast	20 to 60	1/4"	8-1/4"	5'0"	4°25'15"	3/8"	5"	5"	12'10"	21'0"	4"	7'5-3/4"	7'1-3/4"
		WPF	20 to 30	1/4"	16-1/2"	5'0"	4°25'15"	3/8"	5"	5"	12'10"	21'0"	3-5/16"	6'9-1/2"	6'5-1/2"
		WPF	40 to 60	3/8"	20"	5'0"	4°25'15"	3/8"	5"	5"	12'10"	21'0"	3"	6'6"	6'2"
3	18°55'29"	Cast	20 to 60	1/4"	8-3/8"	5'0"	4°25'15"	3/8"	5"	5"	14'4"	32'0"	3-3/4"	8'11"	8'7-1/2"
		WPF	20 to 30	1/4"	16-1/2"	5'0"	4°25'15"	3/8"	5"	5"	14'4"	32'0"	3-3/16"	8'2-3/4"	7'11-1/2"
		WPF	40 to 60	3/8"	24"	5'0"	4°25'15"	3/8"	5"	5"	14'4"	32'0"	2-3/4"	7'7-1/2"	7'4"
4	14°15'00"	Cast	20 to 60	1/4"	11-1/16"	5'0"	4°25'15"	3/8"	5"	5"	17'0"	60'0"	3-1/8"	11'3-1/2"	11'1"
		WPF	40 to 60	3/8"	27"	5'0"	4°25'15"	3/8"	5"	5"	17'0"	60'0"	2-7/16"	9'11-1/2"	9'9"
5	11°25'16"	Cast	20 to 60	1/4"	13-13/16"	7'6"	2°56'44"	3/8"	5"	8"	23'0"	93'0"	3-3/8"	14'6-1/4"	14'4-1/4"
		WPF	40 to 60	3/8"	30"	7'6"	2°56'44"	3/8"	5"	8"	23'0"	93'0"	2-13/16"	13'2"	13'0"
6	9°31'38"	Cast	20 to 60	1/4"	16-9/16"	7'6"	2°56'44"	3/8"	5"	8"	25'7"	139'0"	3-1/16"	16'10"	16'8-1/2"
		WPF	40 to 60	3/8"	36"	7'6"	2°56'44"	3/8"	5"	8"	25'7"	139'0"	2-1/2"	15'2-3/4"	15'1"
6	9°31'38"	Cast	20 to 60	1/4"	16-9/16"	10'0"	2°12'32"	3/8"	5"	10"	29'0"	133'0"	3-9/16"	17'9"	17'7-1/2"
		WPF	40 to 60	3/8"	36"	10'0"	2°12'32"	3/8"	5"	10"	29'0"	133'0"	3"	16'1-3/4"	16'0"

Note: W.P.F. denotes "Welded Plate Frog."