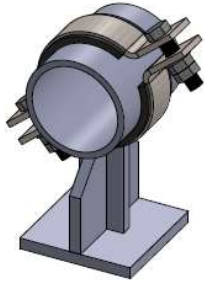
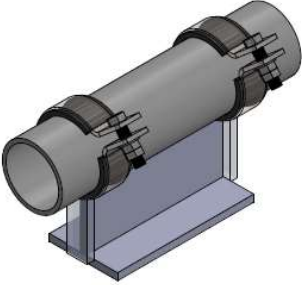
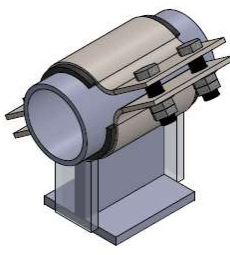
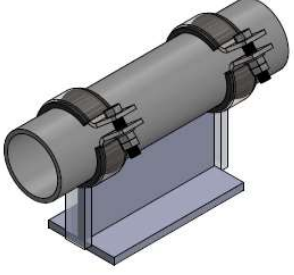
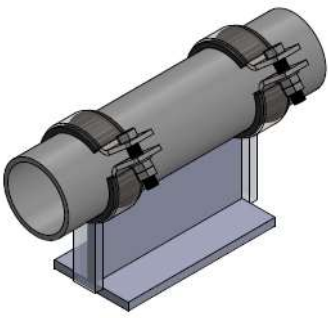
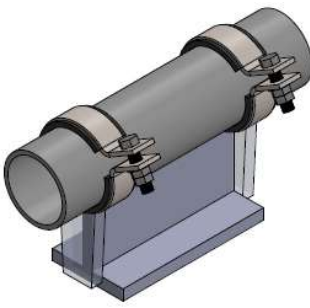
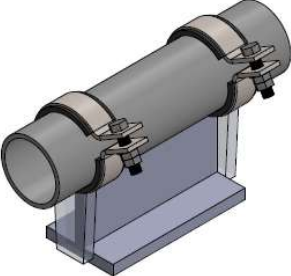
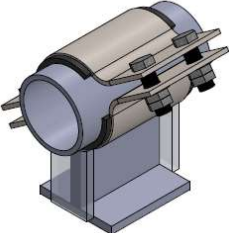
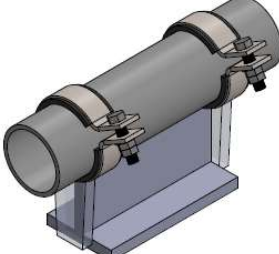
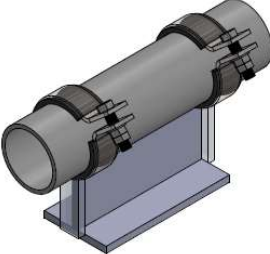
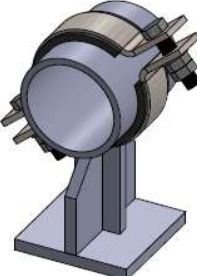
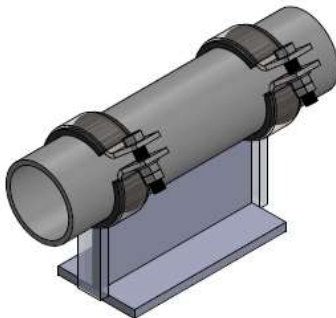
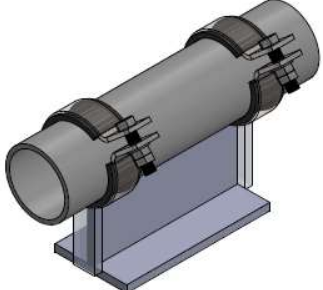
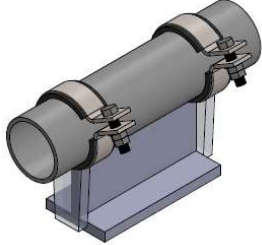
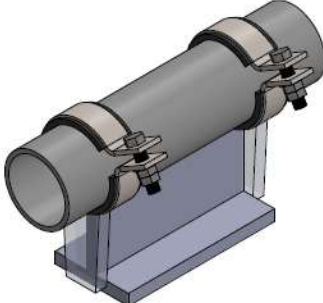
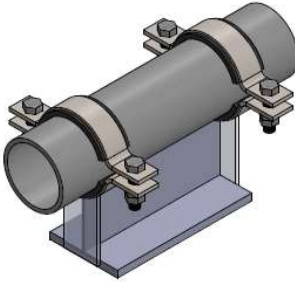
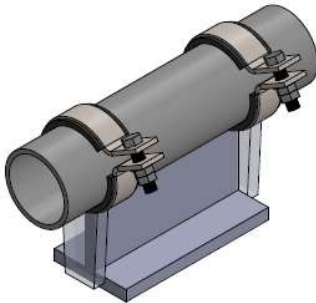
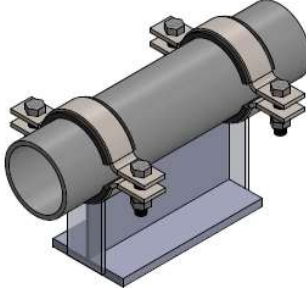
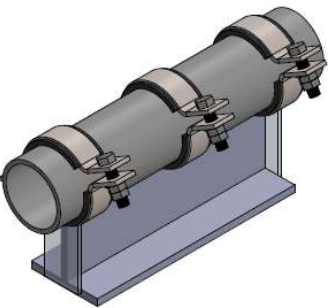
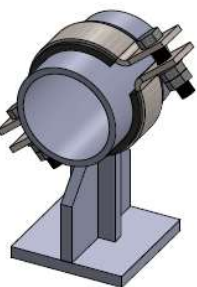
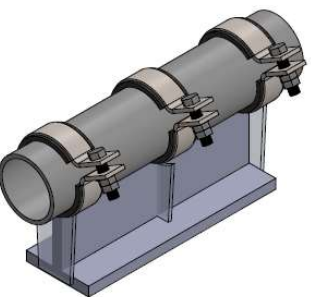
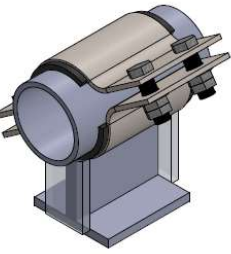
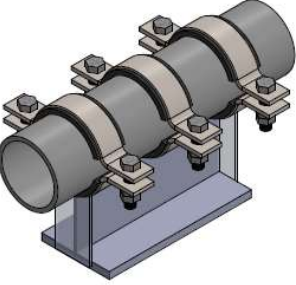


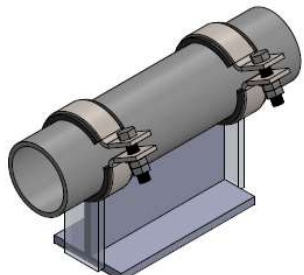
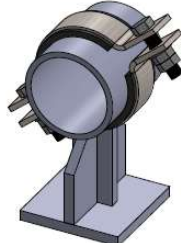
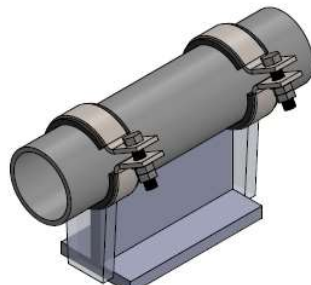
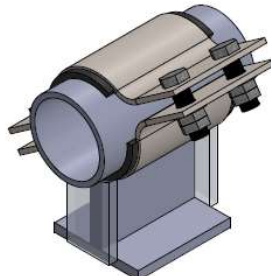
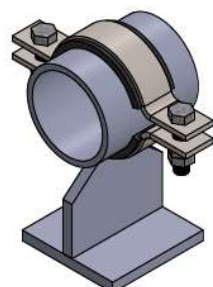
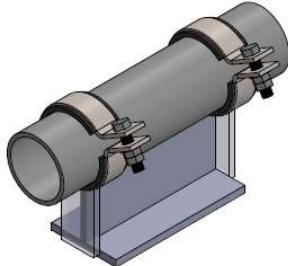
16	<b>CLAMPED SHOES</b>	
16.1	<p><b>T-SH-001</b>  <b>SHORT CLAMPED (2 Bolts) SHOE FOR CS , SS &amp; ALLOY LINES 2”- 6”</b></p> 	<p><b>16.4</b>     <b>T-SH-004</b>  <b>CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES 50 – 150 mm / 2 “ - 6 “ (100 HIGH - 400 LONG)</b></p> 
16.2	<p><b>T-SH-002</b>  <b>SHORT CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES 2” - 10”</b></p> 	<p><b>16.5</b>     <b>T-SH-005</b>  <b>CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES 50 – 150 mm / 2 “ - 6 “ (100 HIGH - 500 LONG)</b></p> 
16.3	<p><b>T-SH-003</b>  <b>CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES 50 – 150 mm / 2 “ - 6 “ (100 HIGH - 300 LONG)</b></p> 	<p><b>16.6</b>     <b>T-SH-006</b>  <b>CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES 100 – 300 mm / 8 “ - 24 “ (100 HIGH - 300 LONG)</b></p> 

16	<b>SHORT CLAMPED SHOES 100mm HIGH</b>		
16.7	<p><b>T-SH-007</b>  <b>CLAMPED SHOE FOR CS , SS &amp;ALLOY LINES</b>            200 – 600 mm / 8 “ - 24”            (100 HIGH - 400 LONG)</p> 	16.10	<p><b>T-SH-022</b>  <b>HIGH TEMP SHORT CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES</b>            8” - 10” , 100mm HIGH</p> 
16.8	<p><b>T-SH-008</b>  <b>CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES</b>            200 – 600 mm / 8 “ - 24” (100 HIGH - 500 LONG)</p> 	16.11	<p><b>T-SH-023</b>  <b>HIGH TEMP CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES 2” - 6” , 300mm Long</b></p> 
16.9	<p><b>T-SH-021</b>  <b>HIGH TEMP SHORT CLAMPED SHOE FOR CS , SS &amp; SMALL BORE ALLOY LINES 2” - 6” , 100mm HIGH</b></p> 	16.12	<p><b>T-SH-024</b>  <b>HIGH TEMP CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES 2” - 6” , 400mm Long</b></p> 

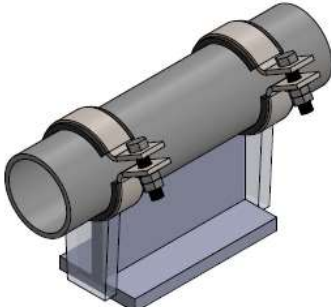
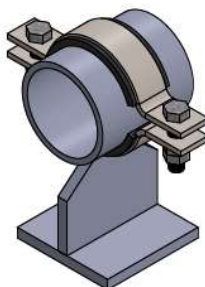
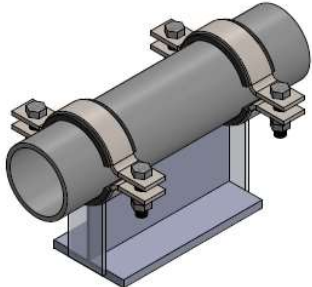
16	<b>CLAMPED SHOES</b>	
16.13	<p><b>T-SH-025</b>  <b>HIGH TEMP CLAMPED SHOE FOR CS ,  SS &amp; ALLOY LINES</b>  2" - 6" , 500mm Long</p> 	<p>16.16</p> <p><b>T-SH-028</b>  <b>HIGH TEMP CLAMPED SHOE FOR CS , SS &amp;  ALLOY LINES</b>  8" - 24" , 500mm Long</p> 
16.14	<p><b>T-SH-026</b>  <b>HIGH TEMP CLAMPED SHOE FOR CS ,  SS &amp; ALLOY LINES</b>  8" - 24" , 300mm Long</p> 	<p>16.17</p> <p><b>T-SH-030</b>  <b>CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES</b>  <b>SMALL BORE LINES</b>  15 – 40 mm / ½ “ - 1 ½”  (100 HIGH - 200 LONG)</p> 
16.15	<p><b>T-SH-027</b>  <b>HIGH TEMP CLAMPED SHOE FOR CS ,  SS &amp; ALLOY LINES</b>  8" - 24" , 400mm Long</p> 	<p>16.18</p> <p><b>T-SH-031</b>  <b>CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES</b>  <b>SMALL BORE LINES 15 – 40 mm / ½ “ - 1 ½”</b>  (100 HIGH - 300 LONG)</p> 

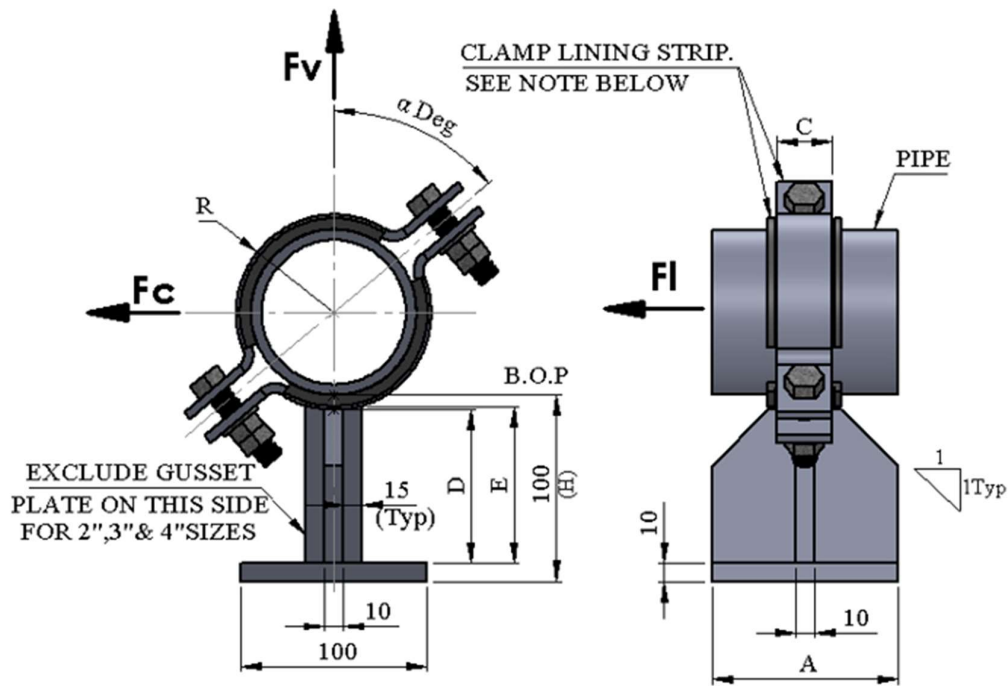
16	<b>SHORT CLAMPED SHOES 100mm HIGH</b>		
16.19	<b>T-SH-032</b> <b>HIGH TEMP CLAMPED SHOE FOR CS ,</b> <b>SS &amp; ALLOY SMALL BORE LINES</b> <b>½” - 1 ½” , 200mm Long</b>	16.16	<b>T-SH-035</b> <b>HIGH TEMP SHORT CLAMPED SHOE FOR CS</b> <b>, SS &amp; SMALL BORE</b> <b>ALLOY LINES ½” - 1 ½” , 100mm HIGH</b>
16.20	<b>T-SH-033</b> <b>HIGH TEMP CLAMPED SHOE FOR CS ,</b> <b>SS &amp; ALLOY SMALL BORE LINES</b> <b>½” - 1 ½” , 300mm Long</b>	16.17	<b>T-SH-800</b> <b>SPECIAL 3 CLAMPED SHOE FOR CS , SS &amp;</b> <b>ALLOY LINES</b> <b>50 – 150 mm / 2 “ - 6”</b> <b>(LENGTH &amp; HEIGHT DEFINABLE )</b>
16.21	<b>T-SH-034</b> <b>SHORT CLAMPED ( 2 Bolts) SHOE FOR</b> <b>CS , SS &amp; ALLOY LINES ½” - 1 ½”</b>	16.18	<b>T-SH-801</b> <b>SPECIAL 3 CLAMPED SHOE FOR CS , SS &amp;</b> <b>ALLOY LINES</b> <b>200 – 600 mm / 8 “ - 24”</b> <b>(LENGTH &amp; HEIGHT DEFINABLE )</b>

16	<b>SHORT CLAMPED SHOES 100mm HIGH</b>		
16.20	<p><b>T-SH-803</b>  <b>SPECIAL HIGH TEMP 3 CLAMPED SHOE</b>  <b>FOR CS , SS &amp; ALLOY LINES</b>  <b>2" - 6"</b></p> 	16.23	<p><b>T-SH-910</b>  <b>SPECIAL SHORT CLAMPED SHOE</b>  <b>FOR CS , SS &amp; ALLOY LINES</b>  <b>50 – 150 mm / 2 “ - 6 “</b>  <b>(LENGTH &amp; HEIGHT DEFINABLE)</b></p> 
16.21	<p><b>T-SH-804</b>  <b>SPECIAL HIGH TEMP 3 CLAMPED SHOE</b>  <b>FOR CS , SS &amp; ALLOY LINES</b>  <b>8" - 24"</b></p> 	16.24	<p><b>T-SH-911</b>  <b>SPECIAL SHORT CLAMPED SHOE</b>  <b>FOR CS , SS &amp; ALLOY LINES</b>  <b>50 – 250 mm / 2 “ - 10 “</b>  <b>(HEIGHT DEFINABLE)</b></p> 
16.22	<p><b>T-SH-805</b>  <b>SPECIAL HIGH TEMP 3 CLAMPED SHOE</b>  <b>FOR CS , SS &amp; ALLOY LINES</b>  <b>½" - 1 ½"</b></p> 		

16	<b>SHORT CLAMPED SHOES 100mm HIGH</b>	
16.25	<p><b>T-SH-912</b>  <b>SPECIAL CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES</b>  <b>50 – 150 mm / 2 “ - 6”</b>  <b>(LENGTH &amp; HEIGHT DEFINABLE )</b></p> 	<p><b>16.28</b>     <b>T-SH-960</b>  <b>SPECIAL HIGH TEMP SHORT CLAMPED (2 BOLTS) SHOE FOR CS , SS &amp; ALLOY LINES 2” - 6”</b></p> 
16.26	<p><b>T-SH-913</b>  <b>SPECIAL CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES</b>  <b>200 – 600 mm / 8 “ - 24”</b>  <b>(LENGTH &amp; HEIGHT DEFINABLE )</b></p> 	<p><b>16.29</b>     <b>T-SH-961</b>  <b>SPECIAL HIGH TEMP SHORT CLAMPED (4 BOLTS) SHOE FOR CS , SS &amp; ALLOY LINES 8” - 10”</b></p> 
16.27	<p><b>T-SH-919</b>  <b>SPECIAL SHORT CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES</b>  <b>SMALL BORE LINES 15 – 40 mm / ½ “ - 1 ½”(LENGTH &amp; HEIGHT DEFINABLE)</b></p> 	<p><b>16.30</b>     <b>T-SH-962</b>  <b>SPECIAL HIGH TEMP CLAMPED SHOE FOR CS , SS &amp; ALLOY LINES</b>  <b>2” - 6”</b></p> 



16	<b>SHORT CLAMPED SHOES 100mm HIGH</b>		
16.31	<b>T-SH-963</b> <b>SPECIAL HIGH TEMP CLAMPED SHOE</b> <b>FOR CS , SS &amp; ALLOY LINES</b> <b>8" - 24"</b>	16.33	<b>T-SH-965</b> <b>SPECIAL HIGH TEMP SHORT CLAMPED</b> <b>SHOE FOR CS , SS &amp; ALLOY</b> <b>SMALL BORE LINES 15 – 40 mm /</b> <b>½" - 1 ½"(LENGTH &amp; HEIGHT DEFINABLE)</b>
			
16.32	<b>T-SH-964</b> <b>SPECIAL HIGH TEMP CLAMPED SHOE</b> <b>FOR CS , SS &amp; ALLOY LINES</b> <b>½" - 1 ½"</b>		
			

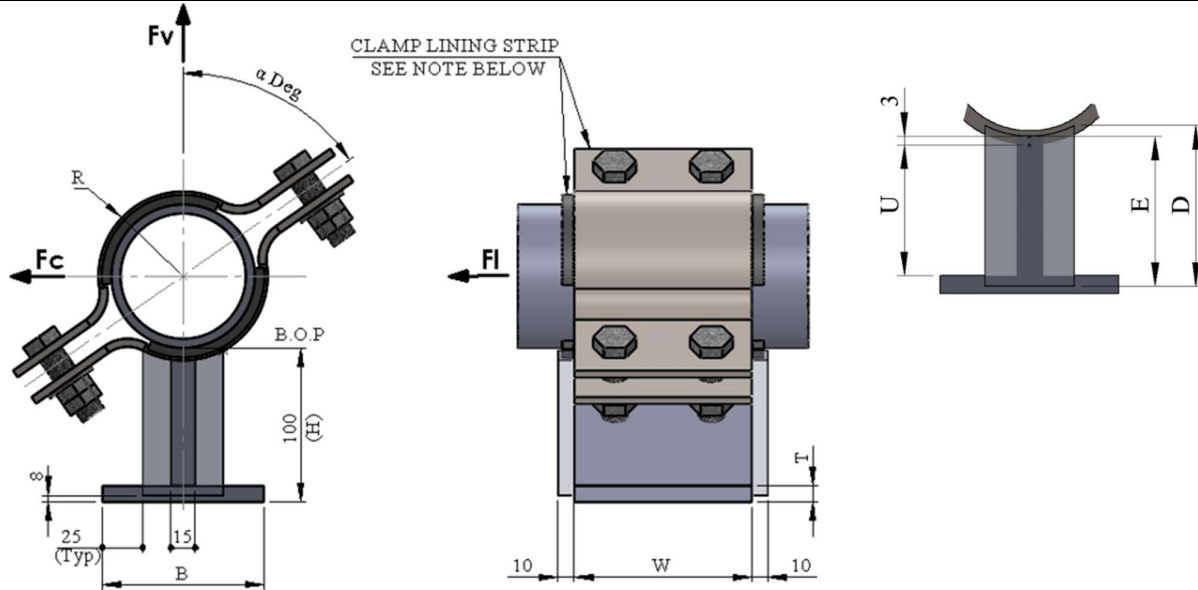
**16.1 SHORT CLAMPED SHOE FOR CS, SS & ALLOY LINES**  
**50 – 150 mm / 2" - 6" . 100 mm HIGH**
**SH - 001**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-001-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-001-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-001-(DN)- CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-001-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm					CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	A	C	D	E	R	W	NO. OFF	α°	Fv	Fc	Ff	CS	SS
T-SH-001-0050	DN 50	2"	60.3	100	40	81	87	39	T-PC-021	1	55	3	2	1.5	2.6	2.7
T-SH-001-0080	DN 80	3"	88.9	100	40	81	85	54	T-PC-021	1	50	9	5.5	4.5	3.2	3.3
T-SH-001-0100	DN 100	4"	114.3	100	50	77	80	70	T-PC-021	1	55	9.5	6	4.5	5.0	5.1
T-SH-001-0125	DN 125	5"	141.3	150	50	77	80	83	T-PC-021	1	55	9.5	6	4.5	6.1	6.2
T-SH-001-0150	DN 150	6"	168.3	150	70	75	77	99	T-PC-021	1	55	13	8	6	8.8	9.0

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining, between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-021.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

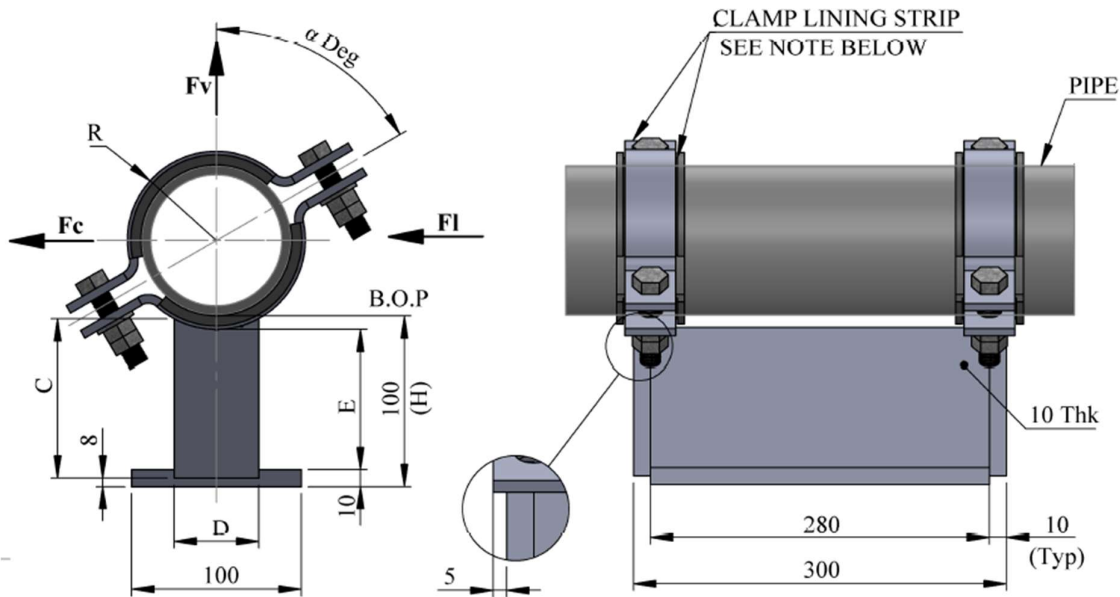


**16.2 SHORT CLAMPED SHOE FOR CS, SS & ALLOY LINES**  
**50 – 250 mm / 2" - 10" . 100 mm HIGH**
**SH - 002**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-002-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-002-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-002-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-002-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm							CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	B	D	E	R	W	U	T	W	NO. OFF	α°	Fv	Fc	FI	CS	SS
T-SH-002-0050	DN 50	2"	60.3	100	96	86	36	80	81	10	T-PC-022	1	70	3	2	1.5	3.9	4.0
T-SH-002-0080	DN 80	3"	88.9	100	88	81	55	110	76	10	T-PC-022	1	55	9	5.5	4.5	7.9	8.1
T-SH-002-0100	DN 100	4"	114.3	100	87	82	77	110	77	10	T-PC-022	1	55	9.5	6	4.5	8.7	8.8
T-SH-002-0125	DN 125	5"	141.3	100	86	82	81	110	77	10	T-PC-022	1	50	9.5	6	4.5	9.6	9.8
T-SH-002-0150	DN 150	6"	168.3	100	85	82	94	140	77	10	T-PC-022	1	50	13	5	4	13.4	13.7
T-SH-002-0200	DN 200	8"	219.1	100	82	80	122	140	70	15	T-PC-022	1	45	22	10	8	17.5	17.9
T-SH-002-0250	DN 250	10"	273	150	89	80	148	140	70	15	T-PC-022	1	45	22	10	8	21.2	21.6

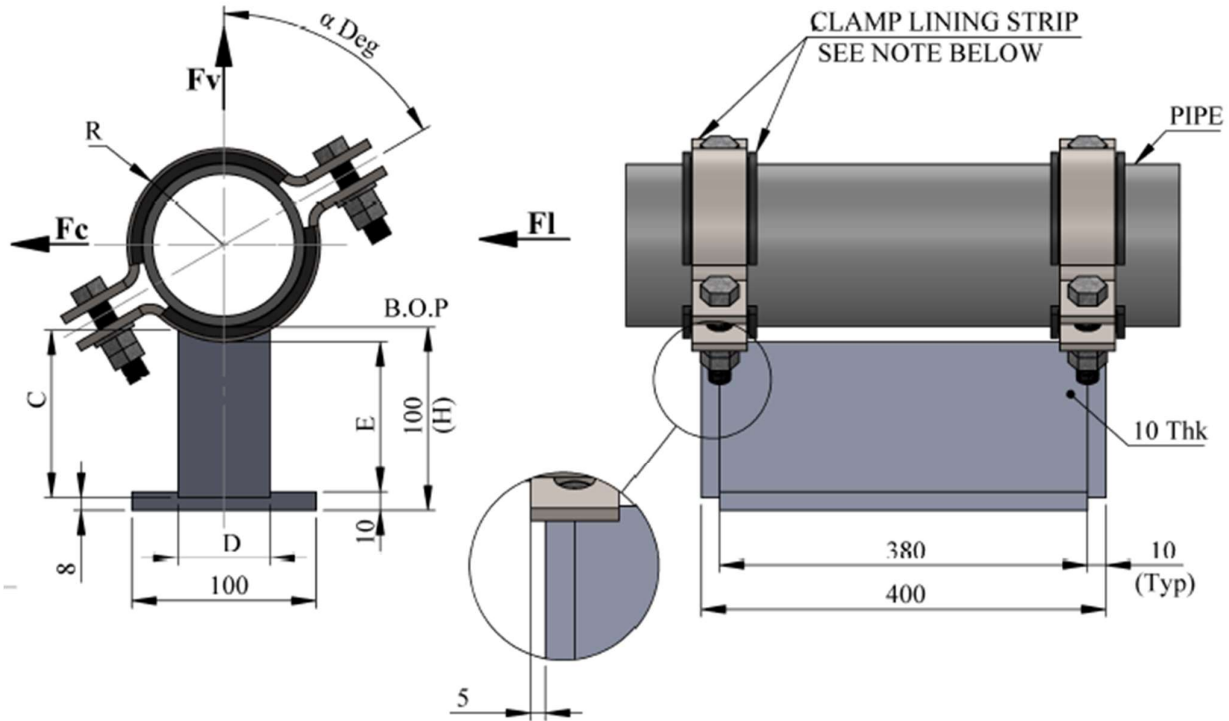
All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-022.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.3 CLAMPED SHOE FOR CS , SS & ALLOY LINES 50-150mm 2" - 6"**  
**(100 HIGH - 300 mm LONG)**
**SH-003**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-003-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-003-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-003-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-003-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm				CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS	SS
T-SH-003-0050	DN 50	2"	60.3	87	30	82	38	T-PC-020	2	60	5.5	4	1.5	5.6	5.7
T-SH-003-0080	DN 80	3"	88.9	86	30	82	53	T-PC-020	2	50	5.5	4	1.5	5.8	5.9
T-SH-003-0100	DN 100	4"	114.3	88	50	81	66	T-PC-020	2	50	5.5	5.5	2	7.4	7.6
T-SH-003-0125	DN 125	5"	141.3	87	50	81	79	T-PC-020	2	45	5.5	5.5	2	7.9	8.0
T-SH-003-0150	DN 150	6"	168.3	82	50	77	97	T-PC-020	2	50	8.7	8.7	5	10.7	10.9

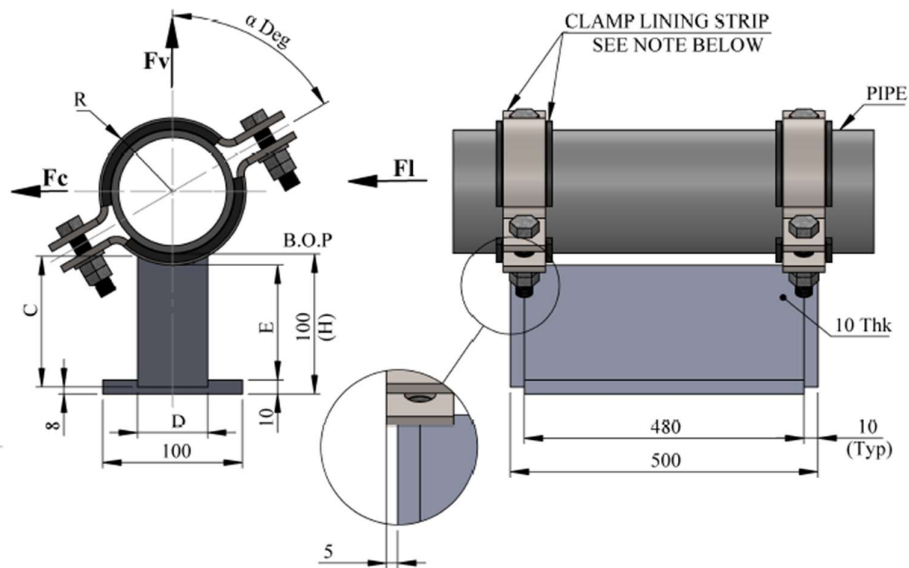
All welds to be a = 0.7 x W.T., but maximum 4mm CFW  
 Provide clamp lining between pipe and clamp (Ref. MI-006)  
 For temperatures above +150 Deg. C, use ref SH-023.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7

**16.4 CLAMPED SHOE FOR CS, SS & ALLOY LINES 50-150mm 2" - 6"**  
**(100 HIGH 400 mm LONG)**
**SH - 004**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-004-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-004-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-004-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-004-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm				CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS	SS
T-SH-004-0050	DN 50	2"	60.3	87	30	82	38	T-PC-020	2	60	5.5	4	1.5	7.0	7.2
T-SH-004-0080	DN 80	3"	88.9	86	30	82	53	T-PC-020	2	50	5.5	4	1.5	7.3	7.4
T-SH-004-0100	DN 100	4"	114.3	88	50	81	66	T-PC-020	2	50	5.5	5.5	2	8.9	9.0
T-SH-004-0125	DN 125	5"	141.3	87	50	81	79	T-PC-020	2	45	5.5	5.5	2	9.3	9.5
T-SH-004-0150	DN 150	6"	168.3	82	50	77	97	T-PC-020	2	50	8.7	8.7	5	12.1	12.4

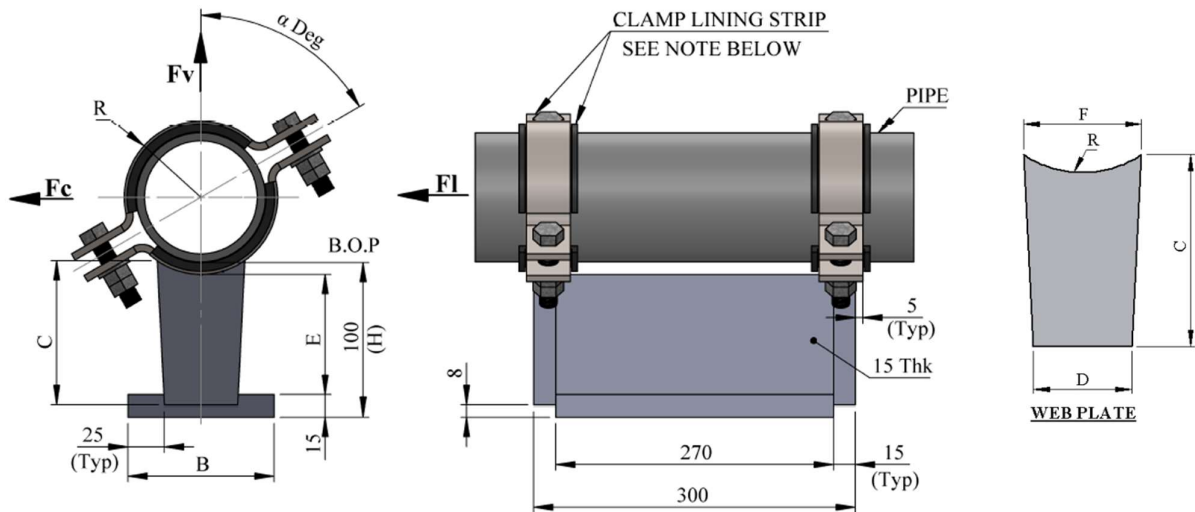
All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-024.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.5 CLAMPED SHOE FOR CS , SS & ALLOY LINES 50-150mm 2"- 6"**  
**(100 HIGH -500 mm LONG)**
**SH - 005**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-005-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-005-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-005-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-005-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm				CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv (kN)	Fc (kN)	F1 (kN)	CS	SS
T-SH-005-0050	DN 50	2"	60.3	87	30	82	38	T-PC-020	2	60	5.5	4	1.5	8.4	8.6
T-SH-005-0080	DN 80	3"	88.9	86	30	82	53	T-PC-020	2	50	5.5	4	1.5	8.7	8.8
T-SH-005-0100	DN 100	4"	114.3	88	50	81	66	T-PC-020	2	50	5.5	5.5	2	10.3	10.5
T-SH-005-0125	DN 125	5"	141.3	87	50	81	79	T-PC-020	2	45	5.5	5.5	2	10.7	10.9
T-SH-005-0150	DN 150	6"	168.3	82	50	77	97	T-PC-020	2	50	8.7	8.7	5	13.5	13.8

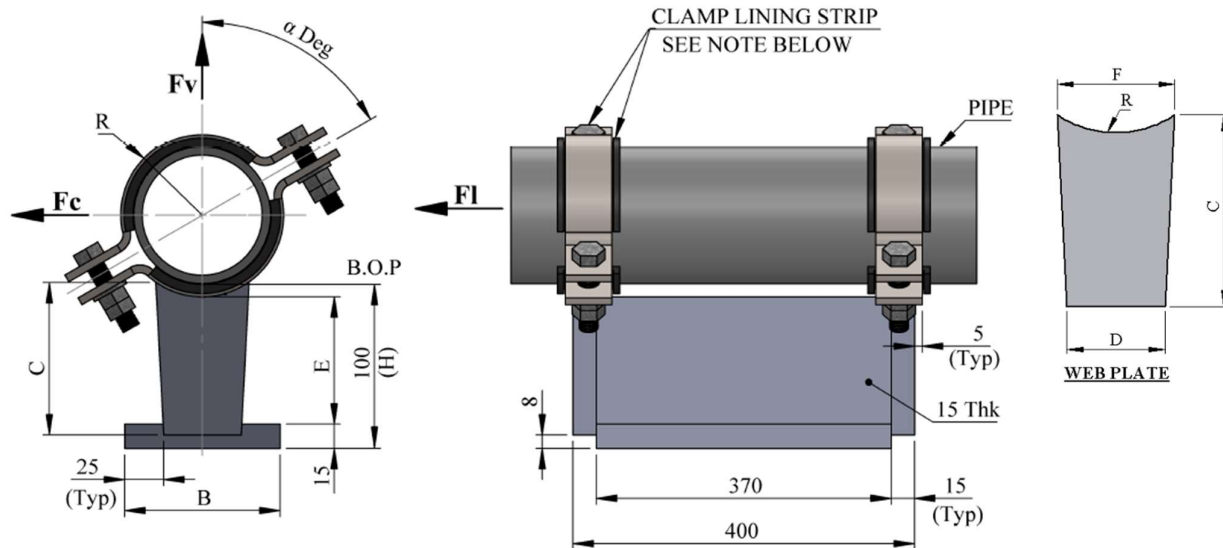
All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-025.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.6 CLAMPED SHOE FOR CS , SS & ALLOY LINESN 200-600mm 8" - 24"**  
**(100mm HIGH - 300 mm LONG)**
**SH - 006**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-006-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-006-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-006-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-006-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm						CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS	SS
T-SH-006-0200	DN 200	8"	219.1	100	90	50	72	100	123	T-PC-020	2	45	8.7	8.7	5	14.4	14.6
T-SH-006-0250	DN 250	10"	273	150	97	100	70	150	152	T-PC-020	2	50	13	13	8	22.9	23.4
T-SH-006-0300	DN 300	12"	323.8	150	94	100	70	150	177	T-PC-020	2	45	13	13	8	24.3	24.8
T-SH-006-0350	DN 350	14"	355.6	200	105	150	70	200	193	T-PC-020	2	45	13	13	10	34.1	34.7
T-SH-006-0400	DN 400	16"	406.4	200	101	150	70	200	218	T-PC-020	2	45	13	13	10	35.9	36.6
T-SH-006-0450	DN 450	18"	457.2	200	95	150	67	200	248	T-PC-020	2	45	16.3	16.3	10	44.2	45.0
T-SH-006-0500	DN 500	20"	508	250	105	200	67	250	273	T-PC-020	2	45	16.3	16.3	10	50.6	51.6
T-SH-006-0600	DN 600	24"	609.6	250	99	200	67	250	324	T-PC-020	2	45	16.3	16.3	10	64.3	65.6

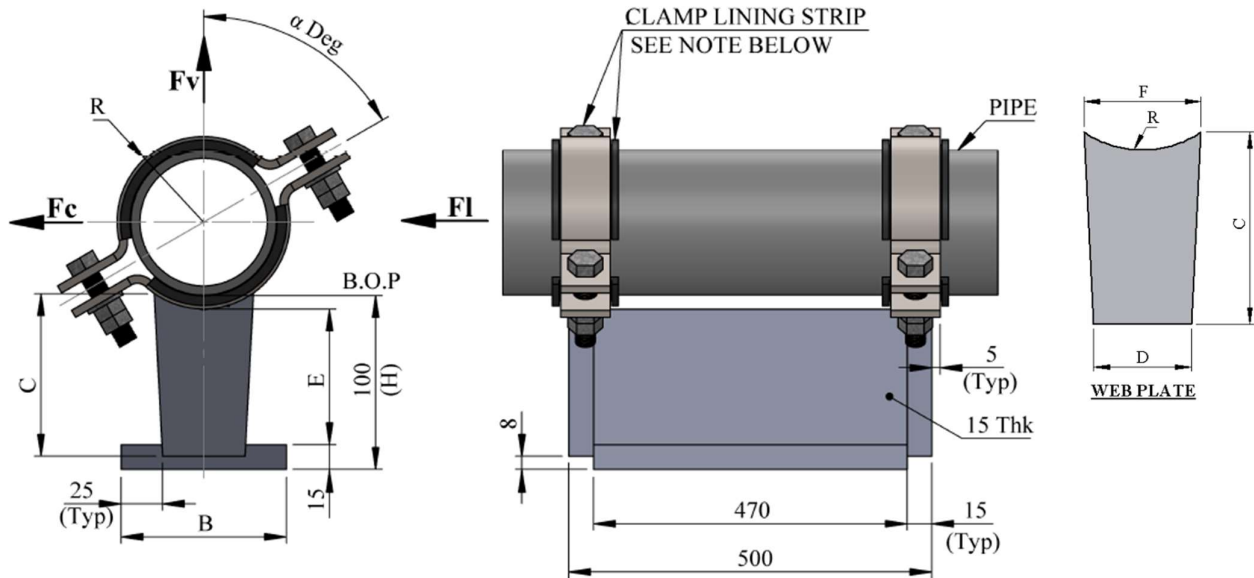
All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-026.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.7 CLAMPED SHOE FOR CS , SS & ALLOY LINES 200-600mm / 8" - 24"**  
**(100mm HIGH 400 mm LONG)**
**SH - 007**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-007-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-007-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-007-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-007-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm						CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS	SS
T-SH-007-0200	DN 200	8"	219.1	100	90	50	72	100	123	T-PC-020	2	45	8.7	8.7	5	16.4	16.7
T-SH-007-0250	DN 250	10"	273	150	97	100	70	150	152	T-PC-020	2	50	13	13	8	25.5	26.0
T-SH-007-0300	DN 300	12"	323.8	150	94	100	70	150	177	T-PC-020	2	45	13	13	8	26.9	27.4
T-SH-007-0350	DN 350	14"	355.6	200	105	150	70	200	193	T-PC-020	2	45	13	13	10	37.3	38.0
T-SH-007-0400	DN 400	16"	406.4	200	101	150	70	200	218	T-PC-020	2	45	13	13	10	39.1	39.9
T-SH-007-0450	DN 450	18"	457.2	200	95	150	67	200	248	T-PC-020	2	45	16.3	16.3	10	47.3	48.3
T-SH-007-0500	DN 500	20"	508	250	105	200	67	250	273	T-PC-020	2	45	16.3	16.3	10	54.4	55.4
T-SH-007-0600	DN 600	24"	609.6	250	99	200	67	250	324	T-PC-020	2	45	16.3	16.3	10	68.1	69.4

All welds to be a = 0,7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-027.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

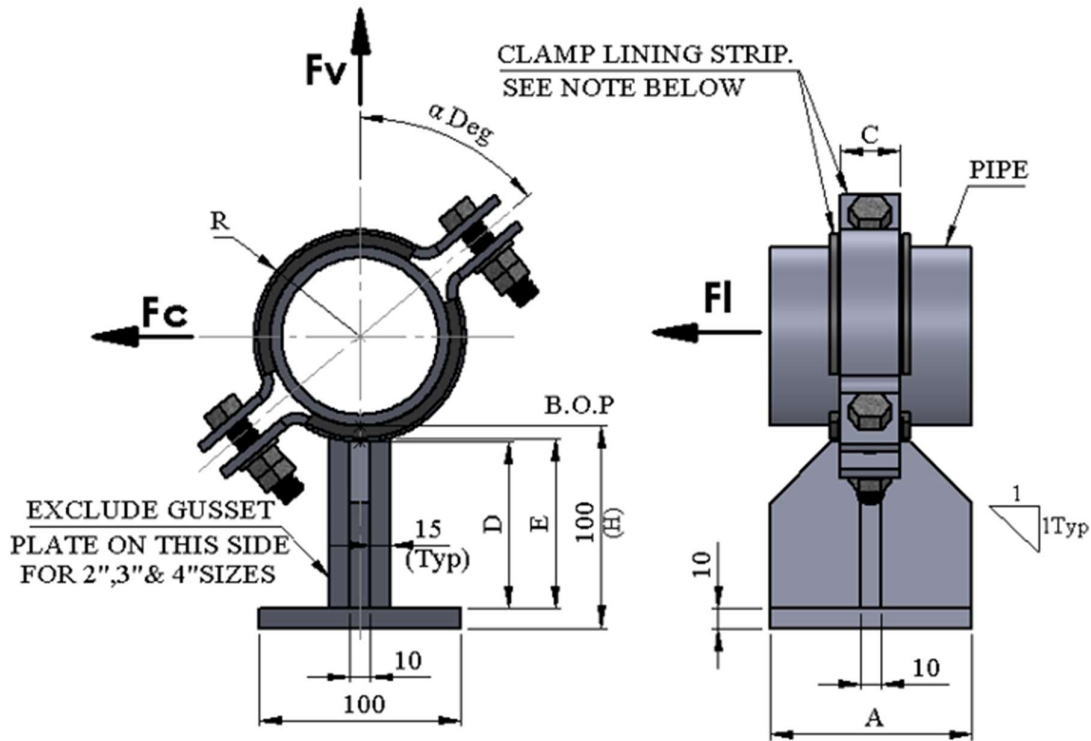
**16.8 CLAMPED SHOE FOR CS , SS & ALLOY LINES 200-600mm 8" - 24"**  
**(100mm HIGH -500 mm LONG)**
**SH - 008**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-008-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-008-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-008-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-008-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm						CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS	SS
T-SH-008-0200	DN 200	8"	219.1	100	90	50	72	100	123	T-PC-020	2	45	8.7	8.7	5	18.4	18.8
T-SH-008-0250	DN 250	10"	273	150	97	100	70	150	152	T-PC-020	2	50	13	13	8	28.1	28.6
T-SH-008-0300	DN 300	12"	323.8	150	94	100	70	150	177	T-PC-020	2	45	13	13	8	29.5	30.1
T-SH-008-0350	DN 350	14"	355.6	200	105	150	70	200	193	T-PC-020	2	45	13	13	10	40.4	41.2
T-SH-008-0400	DN 400	16"	406.4	200	101	150	70	200	218	T-PC-020	2	45	13	13	10	42.3	43.1
T-SH-008-0450	DN 450	18"	457.2	200	95	150	67	200	248	T-PC-020	2	45	16.3	16.3	10	50.5	51.5
T-SH-008-0500	DN 500	20"	508	250	105	200	67	250	273	T-PC-020	2	45	16.3	16.3	10	58.1	59.2
T-SH-008-0600	DN 600	24"	609.6	250	99	200	67	250	324	T-PC-020	2	45	16.3	16.3	10	71.8	73.2

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-028.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

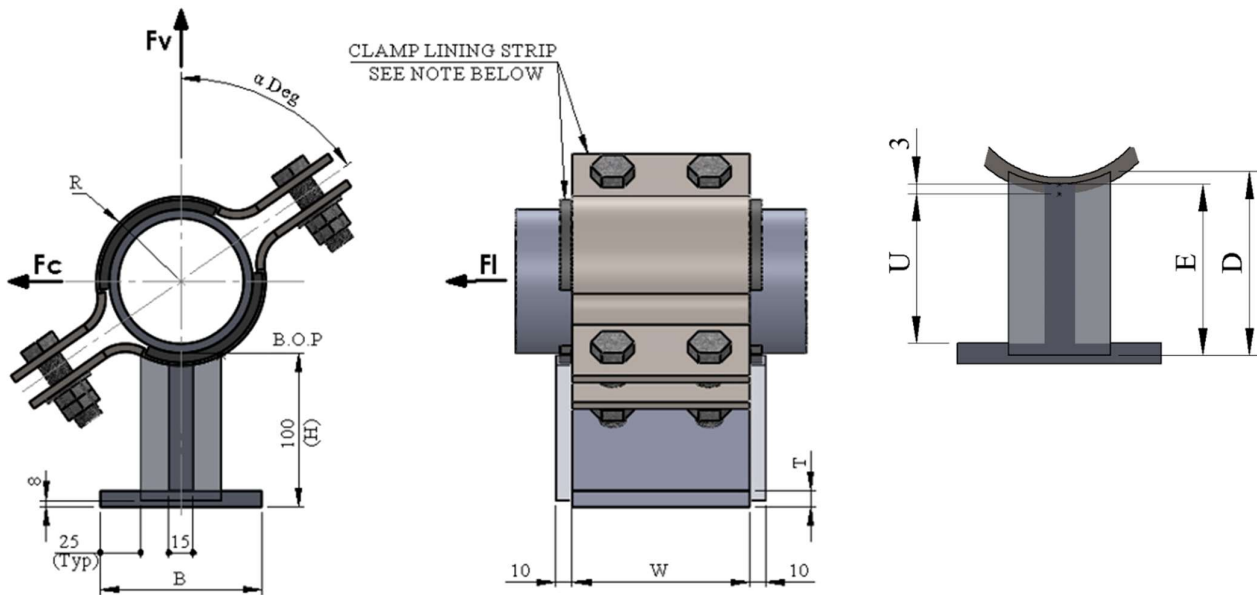


**16.9 HIGH TEMP SHORT CLAMPED SHOE FOR CS, SS & ALLOY LINES**  
**50- 150mm / 2" - 6" , 100mm HIGH**
**SH - 021**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-021-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-021-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS					CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	A	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	FI	CS	SS
T-SH-021-0050	DN 50	2"	60.3	100	40	81	87	39	T-PC-029	1	55	3	2	1.5	2.6	2.7
T-SH-021-0080	DN 80	3"	88.9	100	40	81	85	54	T-PC-029	1	50	9	5.5	4.5	3.2	3.3
T-SH-021-0100	DN 100	4"	114.3	100	50	77	80	70	T-PC-029	1	55	9.5	6	4.5	5.0	5.1
T-SH-021-0125	DN 125	5"	141.3	150	50	77	80	83	T-PC-029	1	55	9.5	6	4.5	6.1	6.2
T-SH-021-0150	DN 150	6"	168.3	150	70	75	77	99	T-PC-029	1	55	13	8	6	8.8	9.0

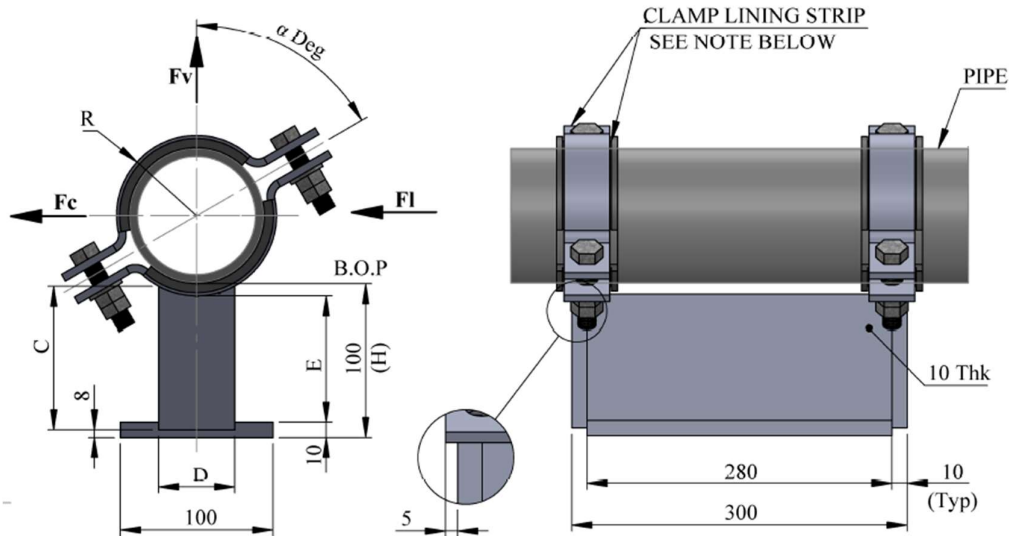
This detail only to be used subject to project approval  
 Provide high temperature clamp Lining between pipe and clamp (Ref. MI-009).  
 All Welds to be a= 0.7 x WT, but maximum 4mm CFW.  
 For maximum design temperatures above 350 Deg. C use welded attachments, below 150 Deg C use ref SH-001.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7

**16.10 HIGH TEMP SHORT CLAMPED SHOE FOR CS , SS & ALLOY LINES**  
**50 - 250mm / 2" - 10" , 100mm HIGH**
**SH - 022**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-022-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-022-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS							CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NP S in (in ch)	NPS in (mm)	B	D	E	R	W	U	T	TYPE	NO. OFF	α°	Fv (kN)	Fc (kN)	FI (kN)	CS	SS
T-SH-022-0050	DN 50	2"	60.3	100	82	80	36	80	75	10	T-PC-030	1	70	3	2	1.5	3.9	4.0
T-SH-022-0080	DN 80	3"	88.9	100	89	80	55	110	71	10	T-PC-030	1	55	9	5.5	4.5	7.9	8.1
T-SH-022-0100	DN 100	4"	114.3	100	82	80	77	110	71	10	T-PC-030	1	55	9.5	6	4.5	8.7	8.8
T-SH-022-0125	DN 125	5"	141.3	100	89	80	81	110	66	10	T-PC-030	1	50	9.5	6	4.5	9.6	9.8
T-SH-022-0150	DN 150	6"	168.3	100	82	80	94	140	71	10	T-PC-030	1	50	13	5	4	13.4	13.7
T-SH-022-0200	DN 200	8"	219.1	100	82	80	122	140	70	15	T-PC-030	1	45	22	10	8	17.5	17.9
T-SH-022-0250	DN 250	10"	273	150	89	80	148	140	70	15	T-PC-030	1	45	22	10	8	21.2	21.6

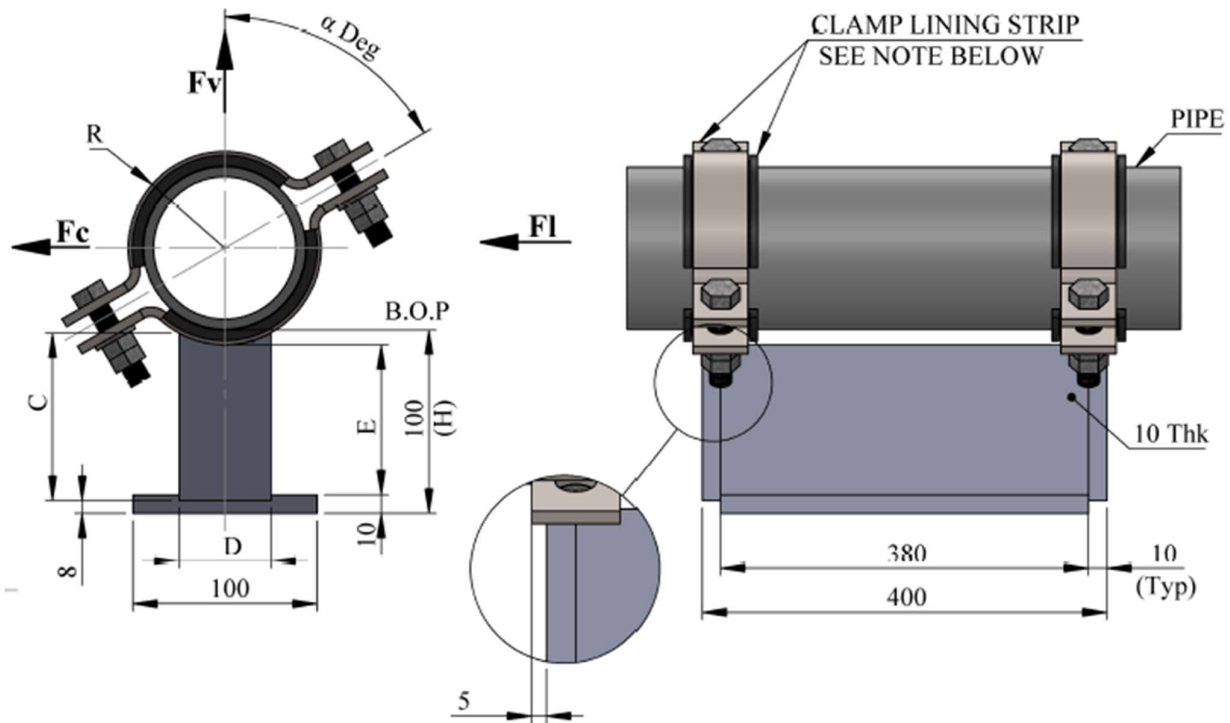
This detail only to be used subject to project approval  
 Provide high temperature clamp lining between pipe and clamp (Ref. MI-009).  
 All welds to be a= 0.7 x WT, but maximum 4mm CFW.  
 For maximum design temperatures above 350 Deg C use welded attachments, below 150 Deg C use ref SH-002.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7

**16.11 HIGH TEMP CLAMPED SHOE FOR CS , SS & ALLOY LINES 50-150mm 2" - 6"**  
**(100 HIGH - 300 mm LONG)**
**SH-023**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-023-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-023-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS	SS
T-SH-023-0050	DN 50	2"	60.3	87	30	82	38	T-PC-028	2	60	5.5	4	1.5	5.6	5.7
T-SH-023-0080	DN 80	3"	88.9	86	30	82	53	T-PC-028	2	50	5.5	4	1.5	5.8	5.9
T-SH-023-0100	DN 100	4"	114.3	88	50	81	66	T-PC-028	2	50	5.5	5.5	2	7.4	7.6
T-SH-023-0125	DN 125	5"	141.3	87	50	81	79	T-PC-028	2	45	5.5	5.5	2	7.9	8.0
T-SH-023-0150	DN 150	6"	168.3	82	50	77	97	T-PC-028	2	50	8.7	8.7	5	10.7	10.9

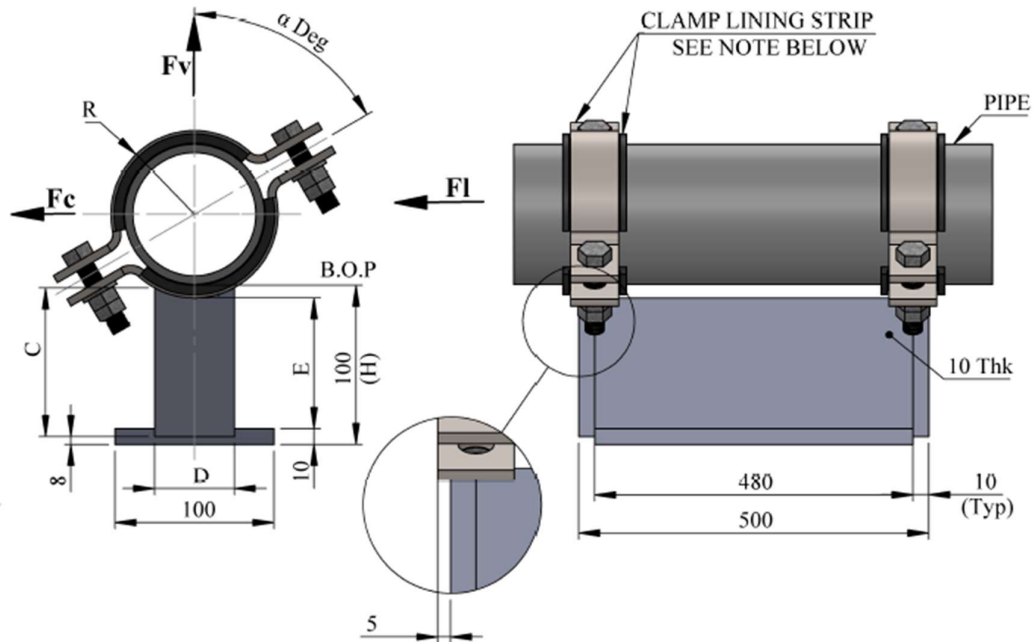
This detail only to be used subject to project approval.  
 Provide high temperature clamp lining between pipe and clamp (Ref. MI-009).  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 For maximum design temperatures above +350 Deg. C , use welded attachments , below 150 °C use SH-003.  
 Max loads shown are for SS Details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.12 HIGH TEMP CLAMPED SHOE FOR CS, SS & ALLOY LINES 2" - 6"**  
**(100 HIGH - 400 mm LONG)**
**SH - 024**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-024-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-024-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	FI	CS	SS
T-SH-024-0050	DN 50	2"	60.3	87	30	82	38	T-PC-028	2	60	5.5	4	1.5	7.0	7.2
T-SH-024-0080	DN 80	3"	88.9	86	30	82	53	T-PC-028	2	50	5.5	4	1.5	7.3	7.4
T-SH-024-0100	DN 100	4"	114.3	88	50	81	66	T-PC-028	2	50	5.5	5.5	2	8.9	9.0
T-SH-024-0125	DN 125	5"	141.3	87	50	81	79	T-PC-028	2	45	5.5	5.5	2	9.3	9.5
T-SH-024-0150	DN 150	6"	168.3	82	50	77	97	T-PC-028	2	50	8.7	8.7	5	12.1	12.4

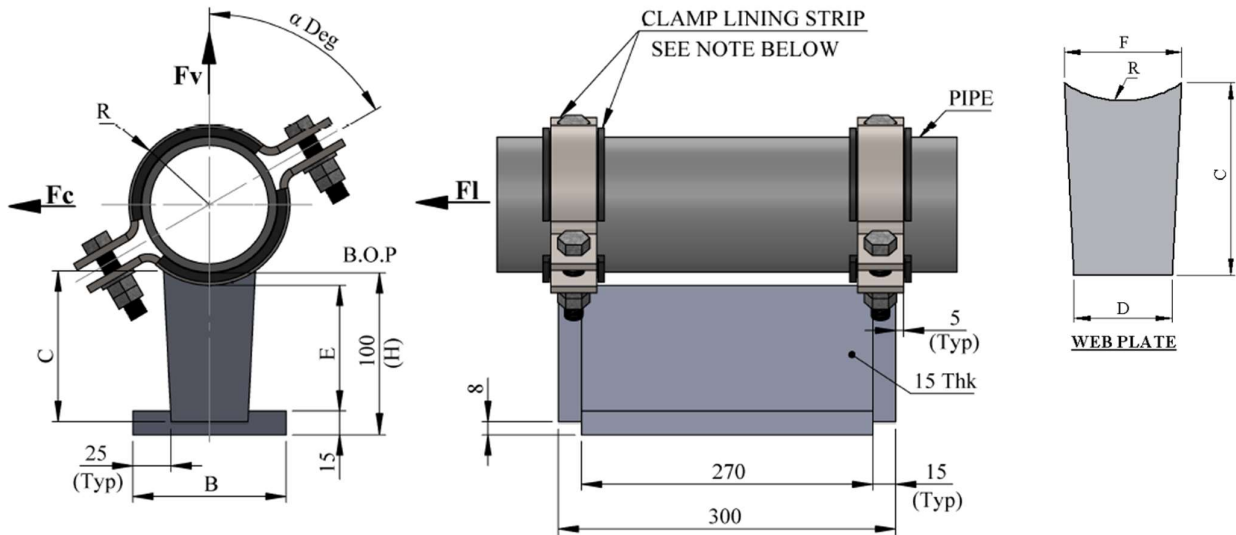
This detail only to be used subject to project approval.  
 Provide high temperature clamp lining between pipe and clamp (Ref. MI-009).  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 For maximum design temperatures above +350 Deg. C, use welded attachments, below 150 °C use SH-004.  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.13 HIGH TEMP CLAMPED SHOE FOR CS, SS & ALLOY LINES 50-150mm / 2"- 6"  
(100 HIGH - 500 mm LONG)**
**SH - 025**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-025-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-025-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	F1	CS	SS
T-SH-025-0050	DN 50	2"	60.3	87	30	82	38	T-PC-028	2	60	5.5	4	1.5	8.4	8.6
T-SH-025-0080	DN 80	3"	88.9	86	30	82	53	T-PC-028	2	50	5.5	4	1.5	8.7	8.8
T-SH-025-0100	DN 100	4"	114.3	88	50	81	66	T-PC-028	2	50	5.5	5.5	2	10.3	10.5
T-SH-025-0125	DN 125	5"	141.3	87	50	81	79	T-PC-028	2	45	5.5	5.5	2	10.7	10.9
T-SH-025-0150	DN 150	6"	168.3	82	50	77	97	T-PC-028	2	50	8.7	8.7	5	13.5	13.8

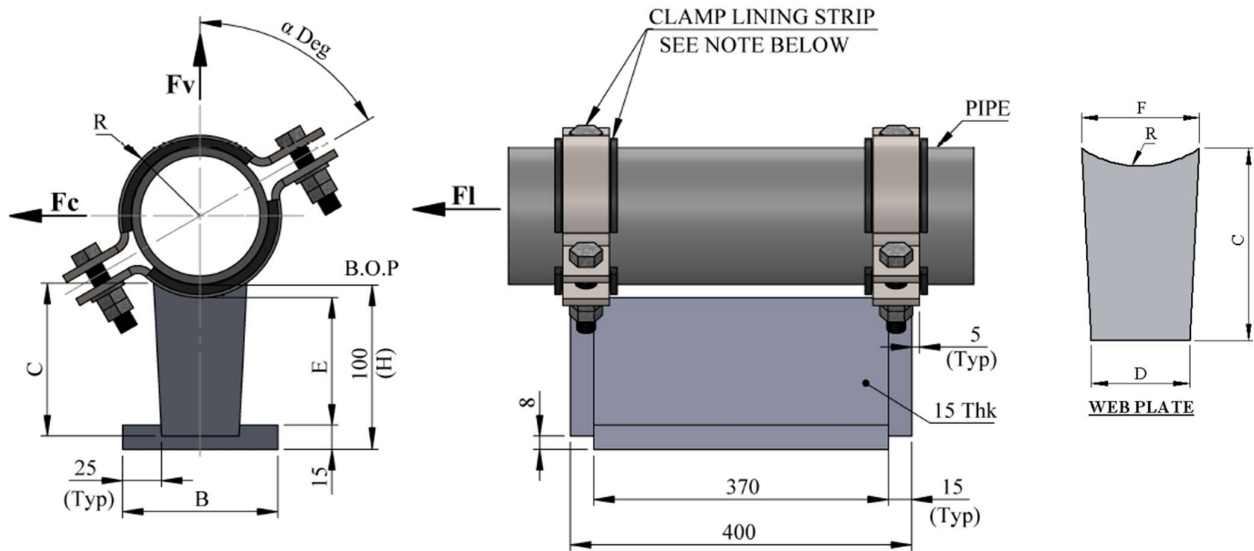
This detail only to be used subject to project approval  
 Provide high temperature clamp lining between pipe and clamp (Ref. MI-009)  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW  
 For maximum design temperatures above +350 Deg. C, use welded attachments, below 150 °C use SH-005  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7

**16.14 HIGH TEMP CLAMPED SHOE FOR CS, SS & ALLOY LINES 200-600mm 8" - 24"**  
**(100mm HIGH - 300 mm LONG)**
**SH - 026**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-026-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-026-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS						CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS	SS
T-SH-026-0200	DN 200	8"	219.1	100	90	50	72	100	123	T-PC-028	2	45	8.7	8.7	5	14.4	14.6
T-SH-026-0250	DN 250	10"	273	150	97	100	70	150	152	T-PC-028	2	50	13	13	8	22.9	23.4
T-SH-026-0300	DN 300	12"	323.8	150	94	100	70	150	177	T-PC-028	2	45	13	13	8	24.3	24.8
T-SH-026-0350	DN 350	14"	355.6	200	105	150	70	200	193	T-PC-028	2	45	13	13	10	34.1	34.7
T-SH-026-0400	DN 400	16"	406.4	200	101	150	70	200	218	T-PC-028	2	45	13	13	10	35.9	36.6
T-SH-026-0450	DN 450	18"	457.2	200	95	150	67	200	248	T-PC-028	2	45	16.3	16.3	10	44.2	45.0
T-SH-026-0500	DN 500	20"	508	250	105	200	67	250	273	T-PC-028	2	45	16.3	16.3	10	50.6	51.6
T-SH-026-0600	DN 600	24"	609.6	250	99	200	67	250	324	T-PC-028	2	45	16.3	16.3	10	64.3	65.6

This detail only to be used subject to project approval  
 Provide high temperature clamp lining between pipe and clamp (Ref. MI-009)  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW  
 For maximum design temperatures above +350 Deg. C, use welded attachments, below 150 °C use SH-006  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7

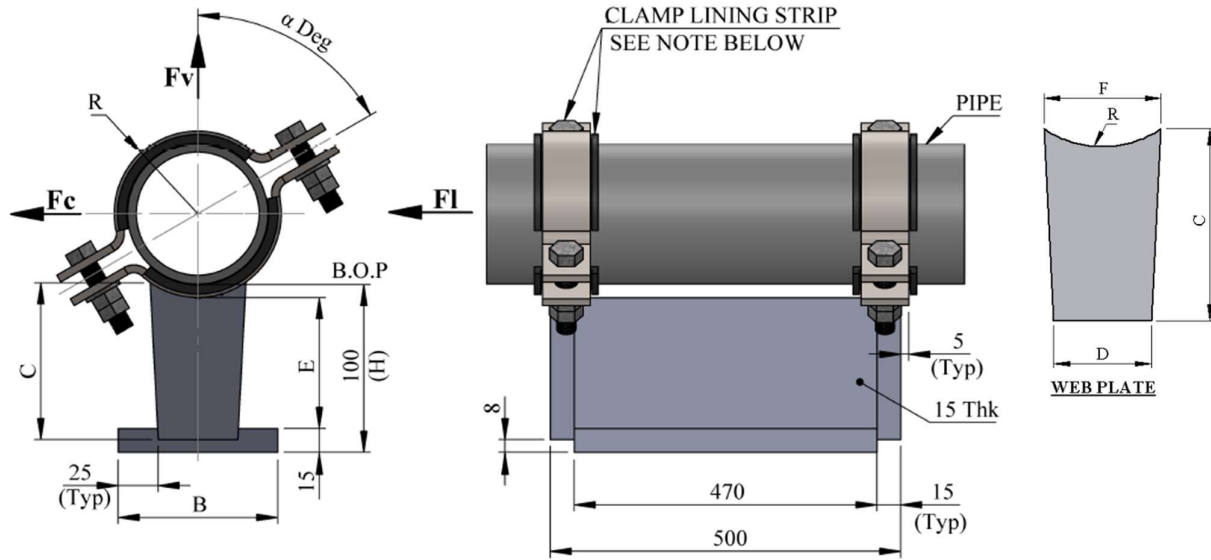
**16.15 HIGH TEMP CLAMPED SHOE FOR CS, SS & ALLOY LINES 200-600mm / 8" - 24"**  
**(100mm HIGH - 400 mm LONG)**
**SH - 027**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-027-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-027-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS						CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS	SS
T-SH-027-0200	DN 200	8"	219.1	100	90	50	72	100	123	T-PC-028	2	45	8.7	8.7	5	16.4	16.7
T-SH-027-0250	DN 250	10"	273	150	97	100	70	150	152	T-PC-028	2	50	13	13	8	25.5	26.0
T-SH-027-0300	DN 300	12"	323.8	150	94	100	70	150	177	T-PC-028	2	45	13	13	8	26.9	27.4
T-SH-027-0350	DN 350	14"	355.6	200	105	150	70	200	193	T-PC-028	2	45	13	13	10	37.3	38.0
T-SH-027-0400	DN 400	16"	406.4	200	101	150	70	200	218	T-PC-028	2	45	13	13	10	39.1	39.9
T-SH-027-0450	DN 450	18"	457.2	200	95	150	67	200	248	T-PC-028	2	45	16.3	16.3	10	47.3	48.3
T-SH-027-0500	DN 500	20"	508	250	105	200	67	250	273	T-PC-028	2	45	16.3	16.3	10	54.4	55.4
T-SH-027-0600	DN 600	24"	609.6	250	99	200	67	250	324	T-PC-028	2	45	16.3	16.3	10	68.1	69.4

This detail only to be used subject to project approval.  
 Provide high temperature clamp lining between pipe and clamp (Ref. MI-009).  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 For maximum design temperatures above +350 Deg C , use welded attachments , below 150 °C use SH-007.  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

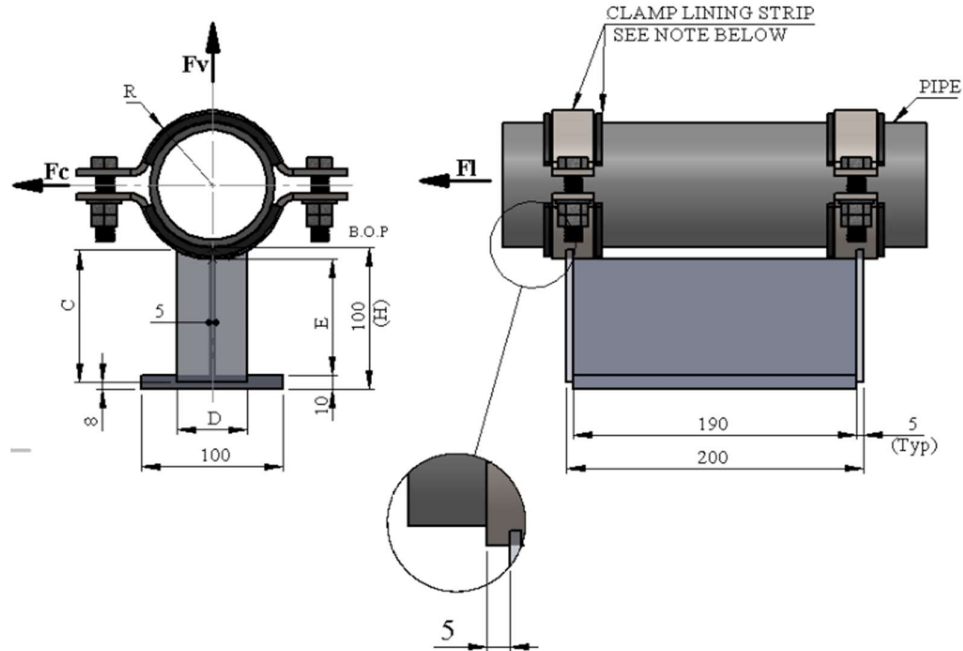


**16.16 HIGH TEMP. CLAMPED SHOE FOR CS, SS & ALLOY LINES 200-600mm / 8" - 24"**  
**(100mm HIGH - 500 mm LONG)**
**SH - 028**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-028-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-028-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS					CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg		
	DN (mm)	NPS in (inch)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	FI	CS	SS
T-SH-028-0200	DN 200	8"	219.1	100	90	50	72	100	123	T-PC-028	2	45	8.7	8.7	5	18.4	18.8
T-SH-028-0250	DN 250	10"	273	150	97	100	70	150	152	T-PC-028	2	50	13	13	8	28.1	28.6
T-SH-028-0300	DN 300	12"	323.8	150	94	100	70	150	177	T-PC-028	2	45	13	13	8	29.5	30.1
T-SH-028-0350	DN 350	14"	355.6	200	105	150	70	200	193	T-PC-028	2	45	13	13	10	40.4	41.2
T-SH-028-0400	DN 400	16"	406.4	200	101	150	70	200	218	T-PC-028	2	45	13	13	10	42.3	43.1
T-SH-028-0450	DN 450	18"	457.2	200	95	150	67	200	248	T-PC-028	2	45	16.3	16.3	10	50.5	51.5
T-SH-028-0500	DN 500	20"	508	250	105	200	67	250	273	T-PC-028	2	45	16.3	16.3	10	58.1	59.2
T-SH-028-0600	DN 600	24"	609.6	250	99	200	67	250	324	T-PC-028	2	45	16.3	16.3	10	71.8	73.2

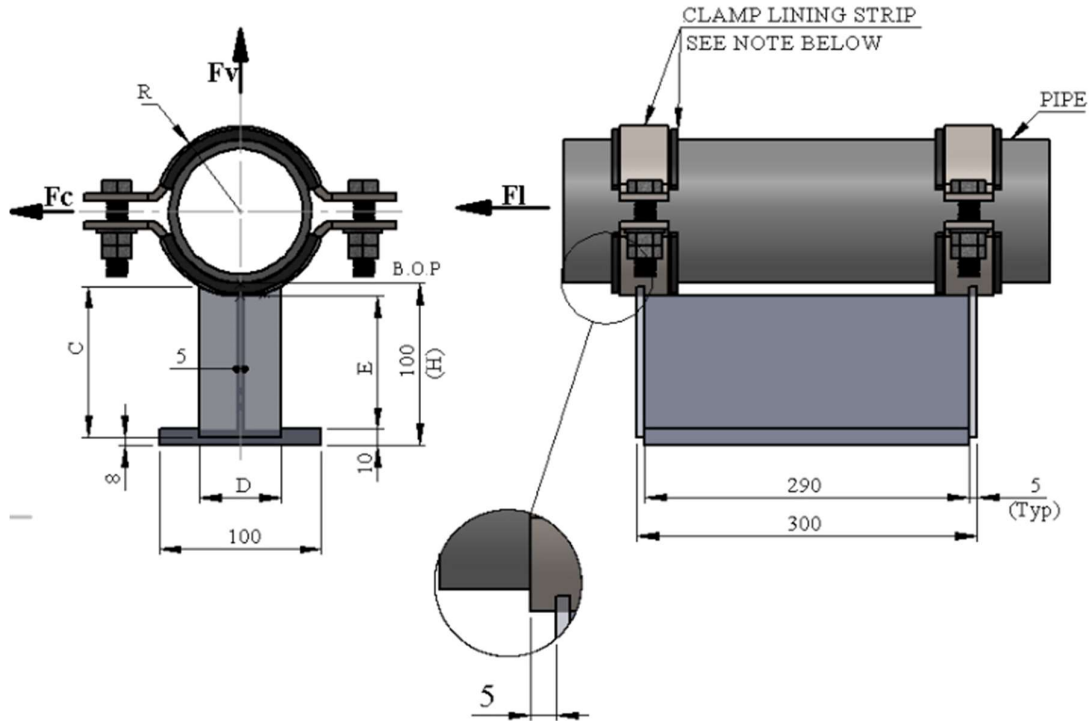
This detail only to be used subject to project approval.  
 Provide high temperature clamp lining between pipe and clamp (Ref. MI-009).  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 For maximum design temperatures above +350 Deg. C, use welded attachments, below 150 °C use SH-008.  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.17 CLAMPED SHOE FOR CS , SS & ALLOY SMALL BORE LINES 15-40mm 1/2" - 1 1/2"**  
**(100 HIGH - 200 mm LONG)**
**SH - 030**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-030-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-030-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-030-(DN)- CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-030-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm				CLAMP INFO		MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	Fv	Fc	Fl	CS	SS
T-SH-030-0015	DN 15	1/2"	21.3	95	30	84	17	T-PC-020	2	2.5	2	1	3.5	3.6
T-SH-030-0020	DN 20	3/4"	26.7	93	30	84	19	T-PC-020	2	2.5	2	1	3.8	3.8
T-SH-030-0025	DN 25	1"	33.4	91	30	84	23	T-PC-020	2	2.5	2	1	5.1	5.2
T-SH-030-0030	DN 30	1 1/4"	42.2	91	30	84	27	T-PC-020	2	2.5	2	1	5.5	5.6
T-SH-030-0040	DN 40	1 1/2"	48.3	87	30	82	32	T-PC-020	2	3	2.5	1	8.5	8.7

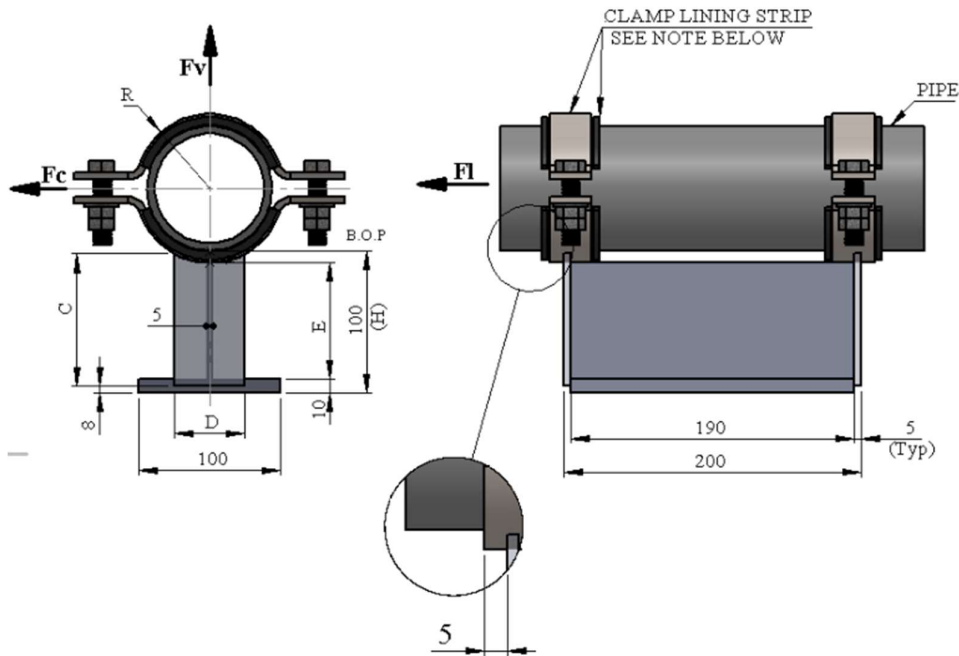
All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp Lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-032.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.18 CLAMPED SHOE FOR CS , SS & ALLOY SMALL BORE LINES 1/2" - 1 1/2"**  
**(100 HIGH - 300 mm LONG)**
**SH - 031**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-031-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-031-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-031-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-031-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm				CLAMP INFO		MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	Fv	Fc	Fl	CS	SS
T-SH-031-0015	DN 15	1/2"	21.3	95	30	84	17	T-PC-020	2	2.5	2	1	4.7	4.8
T-SH-031-0020	DN 20	3/4"	26.7	93	30	84	19	T-PC-020	2	2.5	2	1	4.9	5.1
T-SH-031-0025	DN 25	1"	33.4	91	30	84	23	T-PC-020	2	2.5	2	1	6.3	6.4
T-SH-031-0030	DN 30	1 1/4"	42.2	91	30	84	27	T-PC-020	2	2.5	2	1	6.7	6.9
T-SH-031-0040	DN 40	1 1/2"	48.3	87	30	82	32	T-PC-020	2	3	2.5	1	9.7	9.9

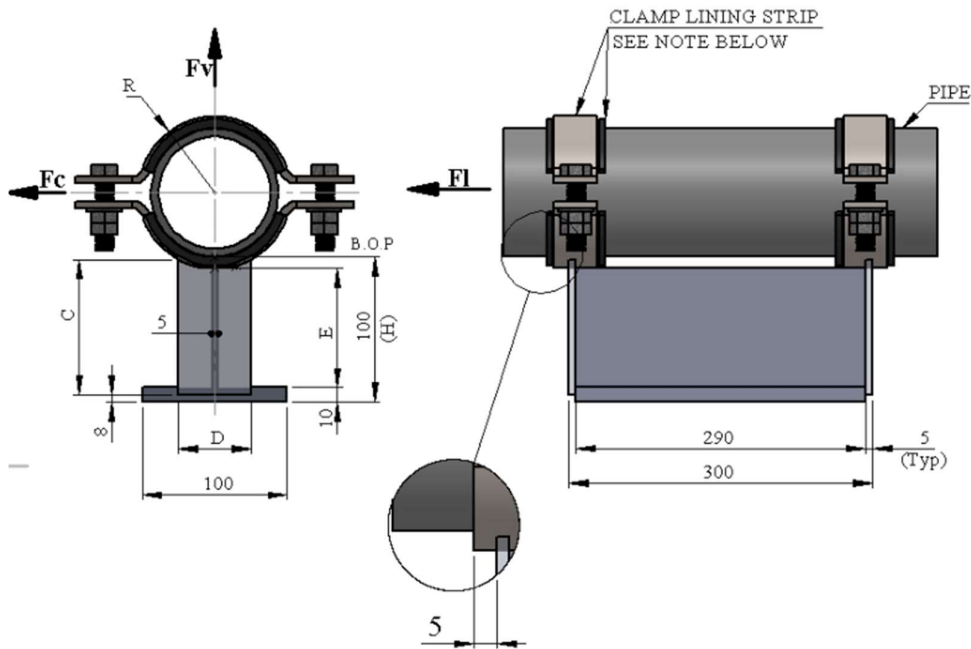
All welds to be a = 0.7 x W.T., but maximum 4mm CFW  
 Provide clamp lining between pipe and clamp (Ref. MI-006)  
 For temperatures above +150 Deg. C, use ref SH-033.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7

**16.19 HIGH TEMP CLAMPED SHOE FOR CS, SS & ALLOY SMALL BORE LINES**  
**15-40mm 1/2" - 1 1/2" (100 HIGH - 200 mm LONG)**
**SH - 032**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-032-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	350 °C	(-) 60 °C
T-SH-032-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-032-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	350 °C	(-) 60 °C
T-SH-032-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO		MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	Fv	Fc	Fl	CS	SS
T-SH-032-0015	DN 15	1/2"	21.3	95	30	84	17	T-PC-028	2	2.5	2	1	3.5	3.6
T-SH-032-0020	DN 20	3/4"	26.7	93	30	84	19	T-PC-028	2	2.5	2	1	3.8	3.8
T-SH-032-0025	DN 25	1"	33.4	91	30	84	23	T-PC-028	2	2.5	2	1	5.1	5.2
T-SH-032-0030	DN 30	1 1/4"	42.2	91	30	84	27	T-PC-028	2	2.5	2	1	5.5	5.6
T-SH-032-0040	DN 40	1 1/2"	48.3	87	30	82	32	T-PC-028	2	3	2.5	1	8.5	8.7

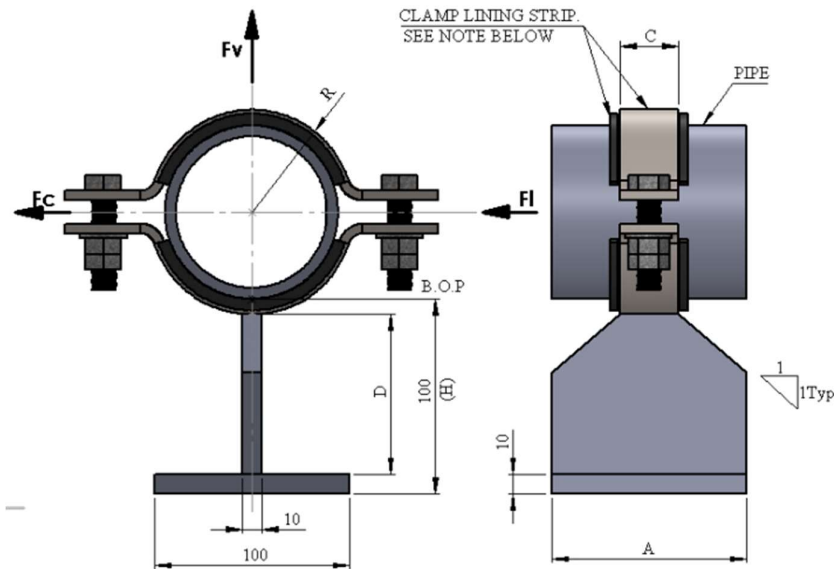
All welds to be a = 0.7 x W.T., but maximum 4mm CFW  
 Provide clamp lining between pipe and clamp (Ref. MI-009)  
 For maximum temperatures above +350 Deg. C, use welded attachments, below 150 Deg C, Use SH-030.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7

**16.20 HIGH TEMP CLAMPED SHOE FOR CS , SS & ALLOY SMALL BORE LINES 15-40mm  
 1/2" - 1 1/2" (100 HIGH - 300 mm LONG)**
**SH - 033**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-033-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	350 °C	(-) 60 °C
T-SH-033-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-033-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	350 °C	(-) 60 °C
T-SH-033-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO		MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	Fv	Fc	Fl	CS	SS
T-SH-033-0015	DN 15	1/2"	21.3	95	30	84	17	T-PC-028	2	2.5	2	1	4.71	4.80
T-SH-033-0020	DN 20	3/4"	26.7	93	30	84	19	T-PC-028	2	2.5	2	1	4.95	5.04
T-SH-033-0025	DN 25	1"	33.4	91	30	84	23	T-PC-028	2	2.5	2	1	6.31	6.43
T-SH-033-0030	DN 30	1 1/4"	42.2	91	30	84	27	T-PC-028	2	2.5	2	1	6.73	6.85
T-SH-033-0040	DN 40	1 1/2"	48.3	87	30	82	32	T-PC-028	2	3	2.5	1	9.69	9.88

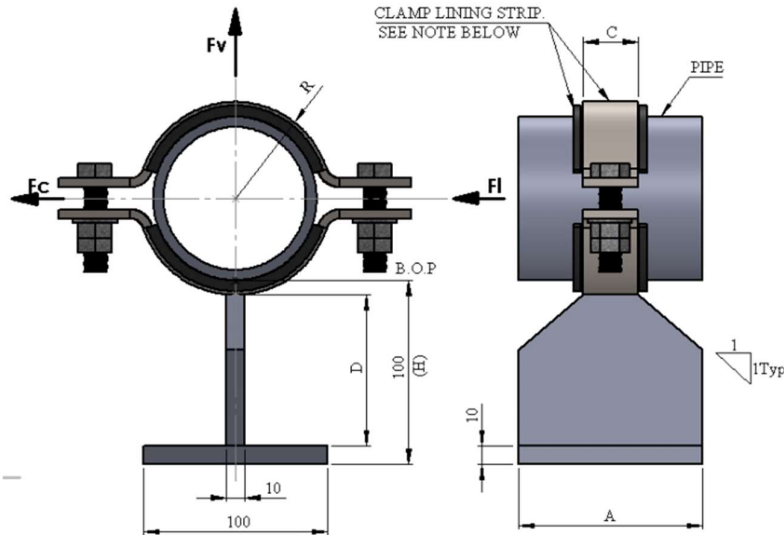
All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For maximum design temperatures above +350 Deg. C, use welded attachments, below 150 °C use SH-030.  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.21 SHORT CLAMPED SHOE FOR CS , SS & SMALL BORE ALLOY LINES**  
**15 - 40mm / ½" - 1 ½" , 100 mm HIGH**
**SH - 034**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-034-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-034-(DN)-CS	CS	150 °C	(-) 46 °C
T-SH-034-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-034-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm				CLAMP INFO		MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	A	C	D	R	W	NO. OFF	Fv	Fc	Fl	CS	SS
T-SH-034-0015	DN 15	1/2"	21.3	100	30	84	17	T-PC-020	1	2.5	2	1	1.6	1.7
T-SH-034-0020	DN 20	3/4"	26.7	100	30	84	19	T-PC-020	1	2.5	2	1	1.6	1.7
T-SH-034-0025	DN 25	1"	33.4	100	30	84	23	T-PC-020	1	2.5	2	1	1.7	1.7
T-SH-034-0030	DN 30	1 1/4"	42.2	100	30	84	27	T-PC-020	1	2.5	2	1	1.7	1.7
T-SH-034-0040	DN 40	1 1/2"	48.3	100	30	82	32	T-PC-020	1	3	2.5	1	1.9	1.9

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp Lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-035.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

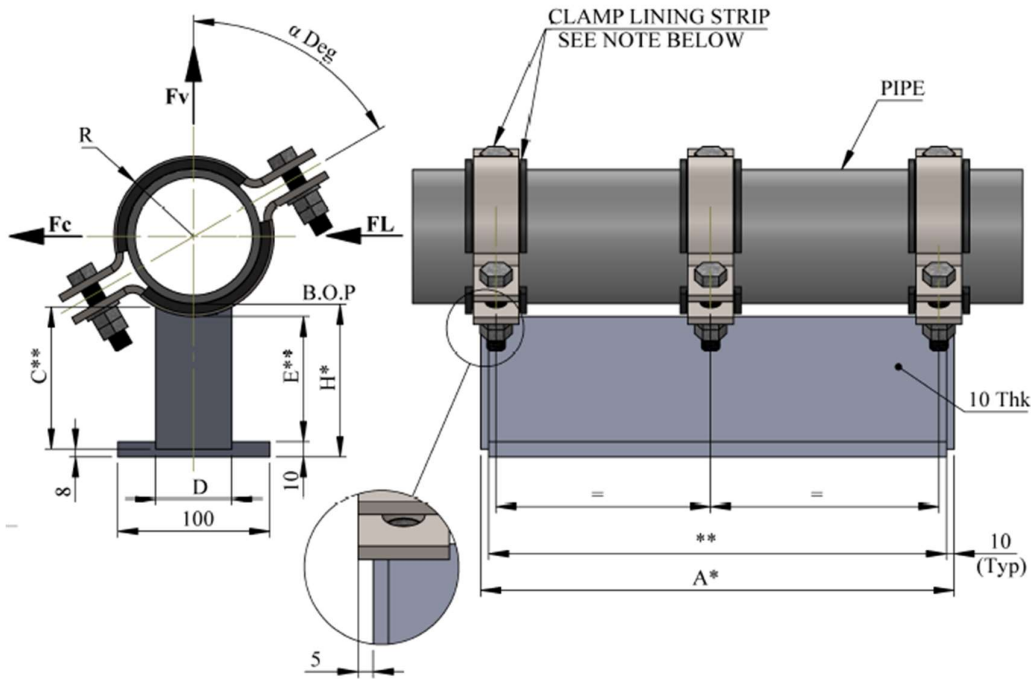
**16.22 HIGH TEMP SHORT CLAMPED SHOE FOR CS , SS & SMALL BORE  
ALLOY LINES 15 - 40mm / 1/2" - 1 1/2", 100mm HIGH**
**SH - 035**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-035-(DN)-SS/CS (CS BOTTOM PLATE)	SS / CS	350 °C	(-) 60 °C
T-SH-035-(DN)-CS	CS	350 °C	(-) 60 °C
T-SH-035-(DN)-CS/SS (SS BOTTOM PLATE)	CS / SS	350 °C	(-) 60 °C
T-SH-035-(DN)-SS	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO		MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg	
	DN (mm)	NPS in (inch)	NPS in (mm)	A	C	D	R	TYPE	NO. OFF	Fv	Fc	Fl	CS	SS
T-SH-035-0015	DN 15	1/2"	21.3	100	30	84	17	T-PC-028	1	2.5	2	1	1.6	1.7
T-SH-035-0020	DN 20	3/4"	26.7	100	30	84	19	T-PC-028	1	2.5	2	1	1.6	1.7
T-SH-035-0025	DN 25	1"	33.4	100	30	84	23	T-PC-028	1	2.5	2	1	1.7	1.7
T-SH-035-0030	DN 30	1 1/4"	42.2	100	30	84	27	T-PC-028	1	2.5	2	1	1.7	1.7
T-SH-035-0040	DN 40	1 1/2"	48.3	100	30	82	32	T-PC-028	1	3	2.5	1	1.9	1.9

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
Provide clamp lining between pipe and clamp (Ref. MI-009).  
For maximum temperatures above +350 Deg. C, use welded attachments, below +150 Deg C ref SH-034.  
Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

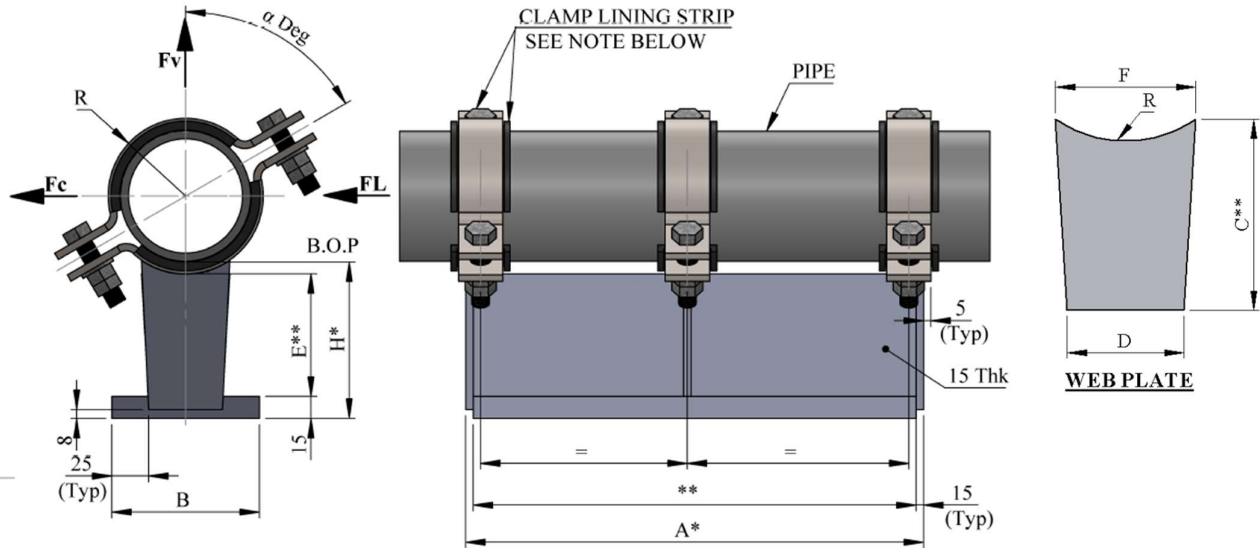


**16.23 SPECIAL 3 CLAMPED SHOE FOR CS , SS & ALLOY LINES**  
**50 – 150 mm / 2 “ - 6” (LENGTH & HEIGHT DEFINABLE)**
**SH - 800**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-800-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-800-(DN)-CS#A=(DIM)H=(DIM)	CS	150 °C	(-) 46 °C
T-SH-800-(DN)-CS/SS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-800-(DN)-SS#A=(DIM)H=(DIM)	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS / SS
T-SH-800-0050	DN 50	2"	60.3	**	30	**	38	T-PC-020	3	60	5.5	4	3	TBA
T-SH-800-0080	DN 80	3"	88.9	**	30	**	53	T-PC-020	3	50	5.5	4	3	TBA
T-SH-800-0100	DN 100	4"	114.3	**	50	**	66	T-PC-020	3	50	5.5	5.5	5	TBA
T-SH-800-0125	DN 125	5"	141.3	**	50	**	79	T-PC-020	3	45	5.5	5.5	5	TBA
T-SH-800-0150	DN 150	6"	168.3	**	50	**	97	T-PC-020	3	50	8.7	8.7	8.7	TBA

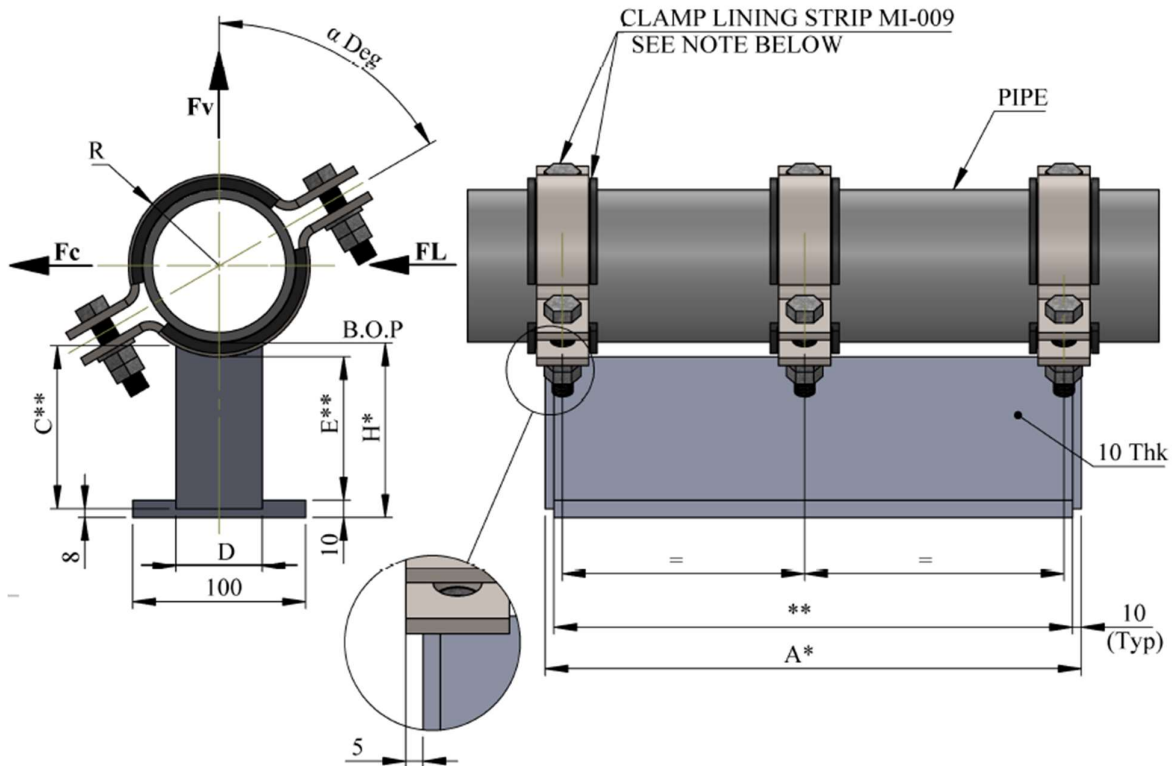
This detail to be used only after approval.  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-803.  
 For standard shoe sizes see SH-003, 004, 005 & SH-303, 304, 305.  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes. dim A to be above 500mm.  
 Other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.24 SPECIAL 3 CLAMPED SHOE FOR CS, SS & ALLOY LINES**  
**200 – 600 mm / 8" – 24" (LENGTH & HEIGHT DEFINABLE)**
**SH - 801**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-801-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-801-(DN)-CS#A=(DIM)H=(DIM)	CS	150 °C	(-) 46 °C
T-SH-801-(DN)-CS/SS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-801-(DN)-SS#A=(DIM)H=(DIM)	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS						CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	$\alpha^\circ$	Fv	Fc	Ff	CS / SS
T-SH-801-0200	DN 200	8"	219.1	100	**	50	**	100	123	T-PC-020	3	45	10	10	10	TBA
T-SH-801-0250	DN 250	10"	273	150	**	150	**	150	152	T-PC-020	3	50	15	15	12	TBA
T-SH-801-0300	DN 300	12"	323.8	150	**	150	**	150	177	T-PC-020	3	45	15	15	12	TBA
T-SH-801-0350	DN 350	14"	355.6	200	**	150	**	200	193	T-PC-020	3	45	15	15	15	TBA
T-SH-801-0400	DN 400	16"	406.4	200	**	150	**	200	218	T-PC-020	3	45	15	15	15	TBA
T-SH-801-0450	DN 450	18"	457.2	200	**	150	**	200	248	T-PC-020	3	45	19	19	15	TBA
T-SH-801-0500	DN 500	20"	508	250	**	200	**	250	273	T-PC-020	3	45	19	19	15	TBA
T-SH-801-0600	DN 600	24"	609.6	250	**	200	**	250	324	T-PC-020	3	45	19	19	15	TBA

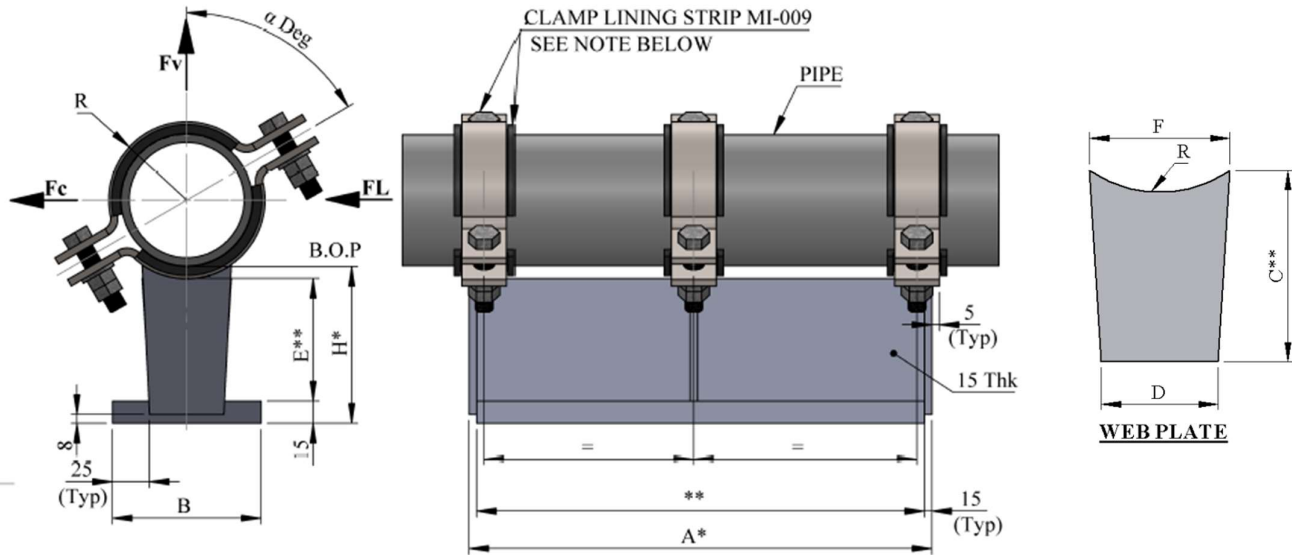
This detail only to be used subject to company approval.  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006)  
 For temperatures above +150 Deg. C, use ref SH-804.  
 For standard shoe size see SH-006, 007, 008 & SH-306, 307, 308.  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes. Dim A to be above 500mm  
 Other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.25 SPECIAL HIGH TEMP 3CLAMPED SHOE FOR CS , SS & ALLOY LINES**  
**50 - 150mm / 2" - 6" , (LENGTH & HEIGHT DEFINABLE)**
**SH - 803**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-803-(DN)-CS #A=(DIM)H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-803-(DN)-SS#A=(DIM)H=(DIM)	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS / SS
T-SH-803-0050	DN 50	2"	60.3	**	30	**	38	T-PC-028	3	60	5.5	4	1.5	TBA
T-SH-803-0080	DN 80	3"	88.9	**	30	**	53	T-PC-028	3	50	5.5	4	1.5	TBA
T-SH-803-0100	DN 100	4"	114.3	**	50	**	66	T-PC-028	3	50	5.5	5.5	2	TBA
T-SH-803-0125	DN 125	5"	141.3	**	50	**	79	T-PC-028	3	45	5.5	5.5	2	TBA
T-SH-803-0150	DN 150	6"	168.3	**	50	**	97	T-PC-028	3	50	8.7	8.7	5	TBA

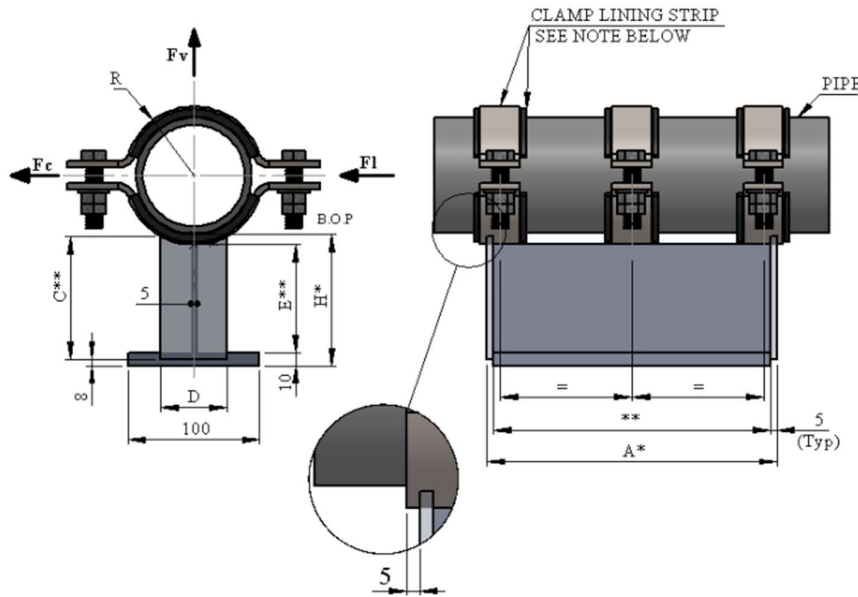
This detail only to be used subject to company approval.  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For maximum temperatures above +350 Deg. C, use welded attachments, below 150 Deg. C, use SH-800.  
 For standard shoe size see SH-023, 024, 025 & SH- 323, 324, 325.  
 Only dimensions marked \* (Length & Height) can vary from the standard shoe sizes. Dim A to be above 500mm.  
 Other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.26 SPECIAL HIGH TEMP 3 CLAMPED SHOE FOR CS, SS & ALLOY LINES**  
**200 - 600mm / 8" - 24" , (LENGTH & HEIGHT DEFINABLE)**
**SH - 804**


TYPICAL PART NO NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-804-(DN)-CS#A=(DIM)H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-804-(DN)-SS#A=(DIM)H=(DIM)	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS						CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	
T-SH-804-0200	DN 200	8"	219.1	100	**	50	**	100	123	T-PC-028	3	45	8.7	8.7	5	TBA
T-SH-804-0250	DN 250	10"	273	150	**	100	**	150	152	T-PC-028	3	50	13	13	8	TBA
T-SH-804-0300	DN 300	12"	323.8	150	**	100	**	150	177	T-PC-028	3	45	13	13	8	TBA
T-SH-804-0350	DN 350	14"	355.6	200	**	150	**	200	193	T-PC-028	3	45	13	13	10	TBA
T-SH-804-0400	DN 400	16"	406.4	200	**	150	**	200	218	T-PC-028	3	45	13	13	10	TBA
T-SH-804-0450	DN 450	18"	457.2	200	**	150	**	200	248	T-PC-028	3	45	16.3	16.3	10	TBA
T-SH-804-0500	DN 500	20"	508	250	**	200	**	250	273	T-PC-028	3	45	16.3	16.3	10	TBA
T-SH-804-0600	DN 600	24"	609.6	250	**	200	**	250	324	T-PC-028	3	45	16.3	16.3	10	TBA

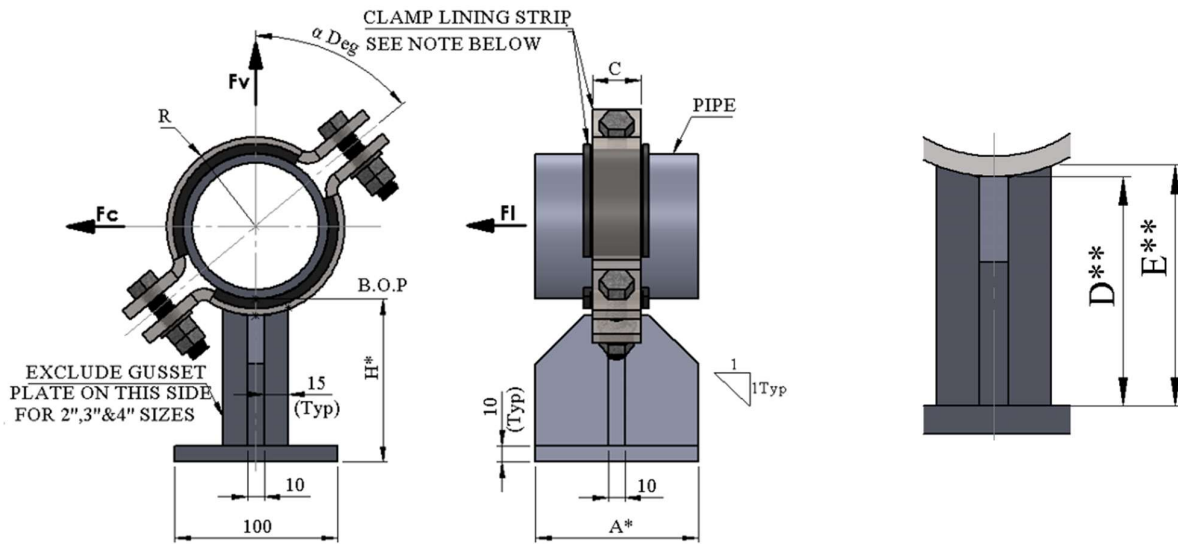
This detail only to be used subject to company approval.  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For maximum temperatures above +350 Deg. C, use welded attachments, below 150 Deg. C, use SH-801.  
 For standard shoe size see SH-026, 027, 028 & SH- 326, 327, 328  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes. Dim A to be above 500mm.  
 Other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.27 SPECIAL HIGH TEMP 3 CLAMPED SHOE FOR CS , SS & ALLOY SMALL BORE LINES 15 - 40mm / 1/2" - 1 1/2" , (LENGTH & HEIGHT DEFINABLE) MINIMUM 500mm LONG**
**SH - 805**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-805-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	350 °C	(-) 60 °C
T-SH-805-(DN)-CS#A=(DIM)H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-805-(DN)-CS/SS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	350 °C	(-) 60 °C
T-SH-805-(DN)-SS#A=(DIM)H=(DIM)	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO		MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	Fv	Fc	F1	CS / SS
T-SH-805-0015	DN 15	1/2"	21.3	**	30	**	17	T-PC-028	3	2.5	2	1	TBA
T-SH-805-0020	DN 20	3/4"	26.7	**	30	**	19	T-PC-028	3	2.5	2	1	TBA
T-SH-805-0025	DN 25	1"	33.4	**	30	**	23	T-PC-028	3	2.5	2	1	TBA
T-SH-805-0030	DN 30	1 1/4"	42.2	**	30	**	27	T-PC-028	3	2.5	2	1	TBA
T-SH-805-0040	DN 40	1 1/2"	48.3	**	30	**	32	T-PC-028	3	3	2.5	1	TBA

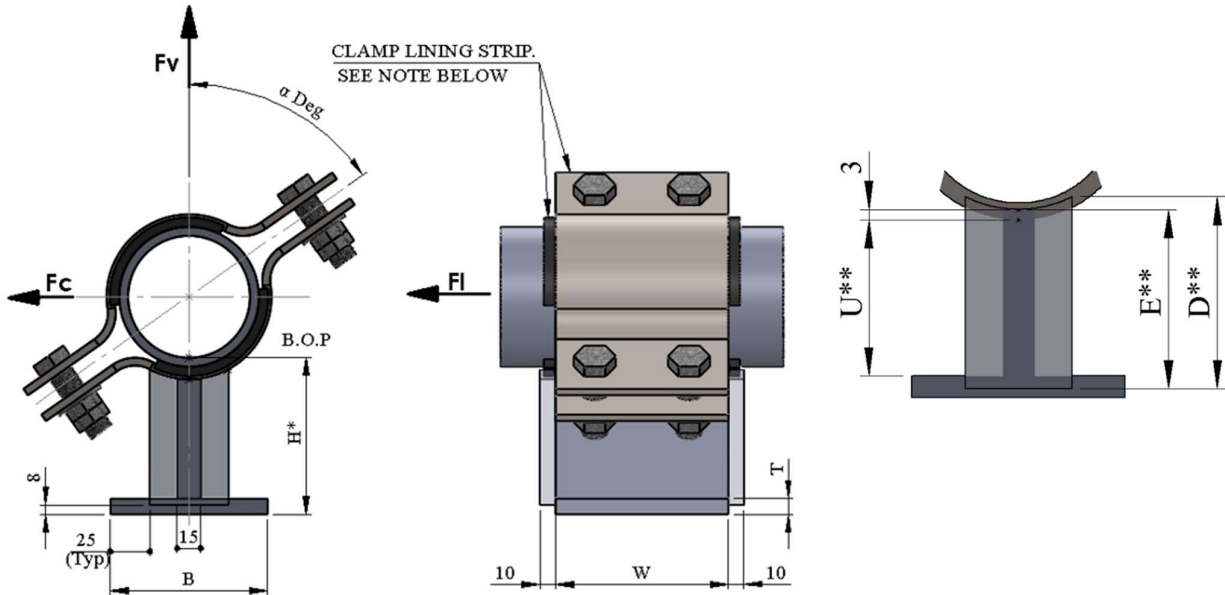
This detail only to be used subject to company approval.  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For temperatures above +350 Deg. C, use welded attachments, below 150 Deg. C, use SH-802.  
 For standard shoe size see SH-032, 033 & SH- 332, 333  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes, minimum length 500mm.  
 Other affected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.28 SPECIAL SHORT CLAMPED (2 Bolts) SHOE FOR CS, SS & ALLOY LINES**  
**50 - 150mm / 2" - 6", (LENGTH AND HEIGHT DEFINABLE)**
**SH-910**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-910-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-910-(DN)-CS#A=(DIM)H=(DIM)	CS	150 °C	(-) 46 °C
T-SH-910-(DN)-CS/SS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-910-(DN)-SS#A=(DIM)H=(DIM)	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm					CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inc h)	NPS in (mm)	A	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	FI	CS/SS
T-SH-910-0050	DN 50	2"	60.3	*	40	**	**	39	T-PC-021	1	55	3	2	1.5	TBA
T-SH-910-0080	DN 80	3"	88.9	*	40	**	**	54	T-PC-021	1	50	9	5.5	4.5	TBA
T-SH-910-0100	DN 100	4"	114.3	*	50	**	**	70	T-PC-021	1	55	9.5	6	4.5	TBA
T-SH-910-0125	DN 125	5"	141.3	*	50	**	**	83	T-PC-021	1	55	9.5	6	4.5	TBA
T-SH-910-0150	DN 150	6"	168.3	*	70	**	**	99	T-PC-021	1	55	13	8	6	TBA

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp Lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-960.  
 For standard shoe size see SH-001 & SH- 301.  
 Only dimension marked \* (Length & Height) can vary from the standard shoe Sizes. Other affected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

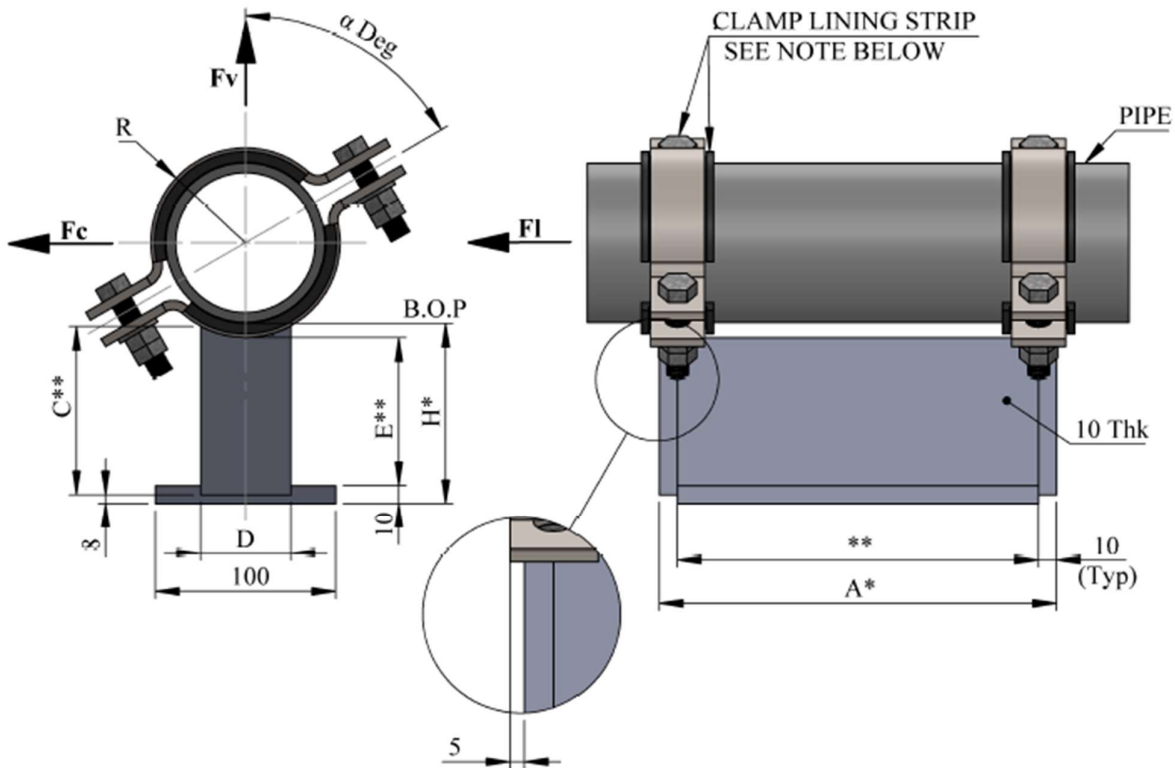
**16.29 SPECIAL SHORT CLAMPED SHOE FOR CS, SS & ALLOY LINES**  
**50 – 250 mm / 2” - 10” (HEIGHT DEFINABLE)**
**SH - 911**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-911-(DN)-SS/CS#H=(DIM) (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-911-(DN)-CS#H=(DIM)	CS	150 °C	(-) 46 °C
T-SH-911-(DN)-CS/SS#H=(DIM) (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-911-(DN)-SS#H=(DIM)	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm							CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	B	D	E	R	W	U	T	TYPE	NO. OFF	α°	Fv	Fc	FI	CS/SS
T-SH-911-0050	DN 50	2"	60.3	100	**	**	36	80	**	10	T-PC-022	1	70	3	2	1.5	TBA
T-SH-911-0080	DN 80	3"	88.9	100	**	**	55	110	**	10	T-PC-022	1	55	9	5.5	4.5	TBA
T-SH-911-0100	DN 100	4"	114.3	100	**	**	77	110	**	10	T-PC-022	1	55	9.5	6	4.5	TBA
T-SH-911-0125	DN 125	5"	141.3	100	**	**	81	110	**	10	T-PC-022	1	50	9.5	6	4.5	TBA
T-SH-911-0150	DN 150	6"	168.3	100	**	**	94	140	**	10	T-PC-022	1	50	13	5	4	TBA
T-SH-911-0200	DN 200	8"	219.1	100	**	**	122	140	**	15	T-PC-022	1	45	22	10	8	TBA
T-SH-911-0250	DN 250	10"	273	150	**	**	148	140	**	15	T-PC-022	1	45	22	10	8	TBA

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref. SH-961.  
 For standard shoe size see SH-002 & SH- 302.  
 Only dimension marked \* (Height) can vary from the standard shoe sizes. other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

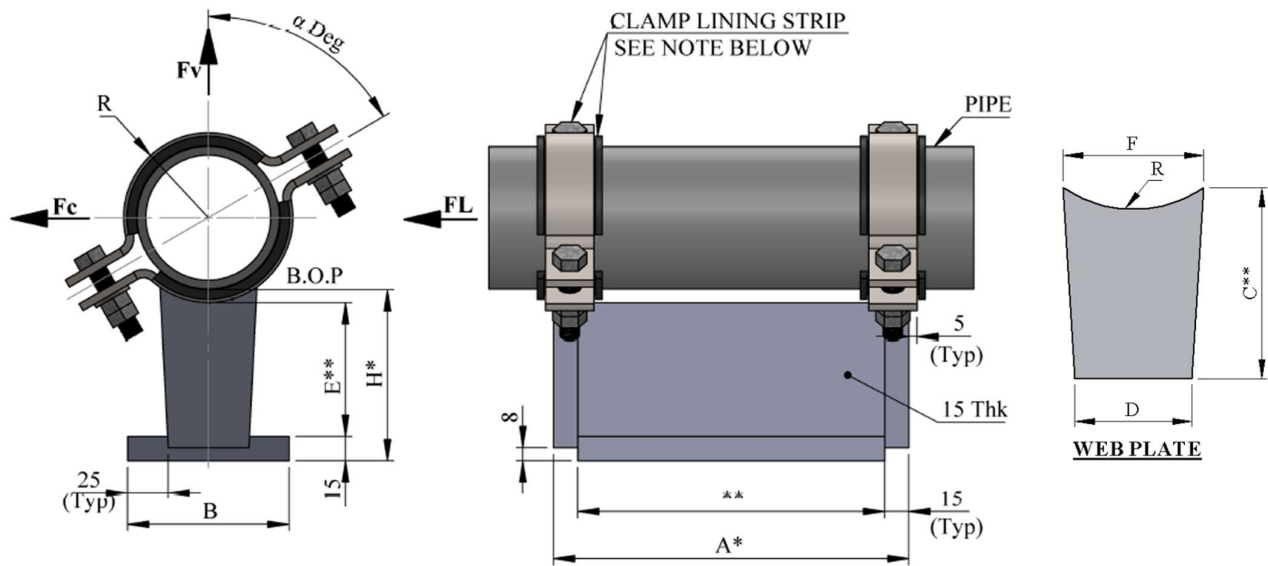


**16.30 SPECIAL CLAMPED SHOE FOR CS , SS & ALLOY LINES**  
**LINES 50 - 150 mm 2" - 6" (LENGTH & HEIGHT DEFINABLE)**
**SH - 912**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-912-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-912-(DN)-CS#A=(DIM)H=(DIM)	CS	150 °C	(-) 46 °C
T-SH-912-(DN)-CS/SS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-912-(DN)-SS#A=(DIM)H=(DIM)	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	FI	
T-SH-912-0050	DN 50	2"	60.3	**	30	**	38	T-PC-020	2	60	5.5	4	1.5	TBA
T-SH-912-0080	DN 80	3"	88.9	**	30	**	53	T-PC-020	2	50	5.5	4	1.5	TBA
T-SH-912-0100	DN 100	4"	114.3	**	50	**	66	T-PC-020	2	50	5.5	5.5	2	TBA
T-SH-912-0125	DN 125	5"	141.3	**	50	**	79	T-PC-020	2	45	5.5	5.5	2	TBA
T-SH-912-0150	DN 150	6"	168.3	**	50	**	97	T-PC-020	2	50	8.7	8.7	5	TBA

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-962.  
 For standard shoe size see SH-003, 004, 005 & SH-303, 304, 305.  
 Only dimension marked \* (Length & Height) can vary from standard shoe sizes. other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.31 SPECIAL CLAMPED SHOE FOR CS, SS & ALLOY LINES**  
**200 – 600 mm / 8 “ - 24” (LENGTH & HEIGHT DEFINABLE)**
**SH-913**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-913-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-913-(DN)-CS#A=(DIM)H=(DIM)	CS	150 °C	(-) 46 °C
T-SH-913-(DN)-CS/SS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-913-(DN)-SS#A=(DIM)H=(DIM)	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS						CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHT in kg
	DN (mm)	NPS in (inc h)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	
T-SH-913-0200	DN 200	8"	219.1	100	**	50	**	100	123	T-PC-020	2	45	8.7	8.7	5	TBA
T-SH-913-0250	DN 250	10"	273	150	**	150	**	150	152	T-PC-020	2	50	13	13	8	TBA
T-SH-913-0300	DN 300	12"	323.8	150	**	150	**	150	177	T-PC-020	2	45	13	13	8	TBA
T-SH-913-0350	DN 350	14"	355.6	200	**	150	**	200	193	T-PC-020	2	45	13	13	10	TBA
T-SH-913-0400	DN 400	16"	406.4	200	**	150	**	200	218	T-PC-020	2	45	13	13	10	TBA
T-SH-913-0450	DN 450	18"	457.2	200	**	150	**	200	248	T-PC-020	2	45	16.3	16.3	10	TBA
T-SH-913-0500	DN 500	20"	508	250	**	200	**	250	273	T-PC-020	2	45	16.3	16.3	10	TBA
T-SH-913-0600	DN 600	24"	609.6	250	**	200	**	250	324	T-PC-020	2	45	16.3	16.3	10	TBA

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.

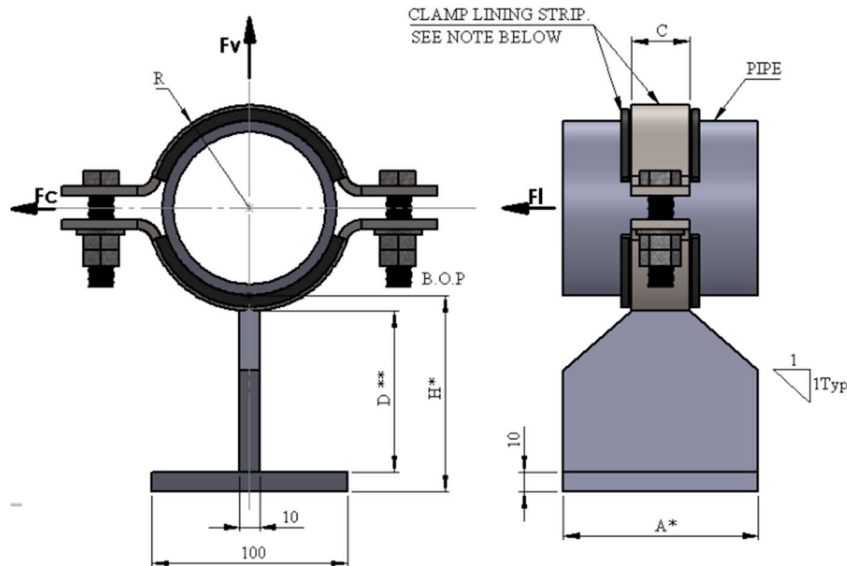
Provide clamp lining between pipe and clamp (Ref. MI-006).

For temperatures above +150 Deg. C, use ref SH-963.

For standard shoe size see SH-006, 007, 008 & SH-306, 307, 308

Only dimension marked \* (Length & Height) can vary from the standard shoe sizes. other effected dimensions marked \*\* to be calculated by manufacturer.

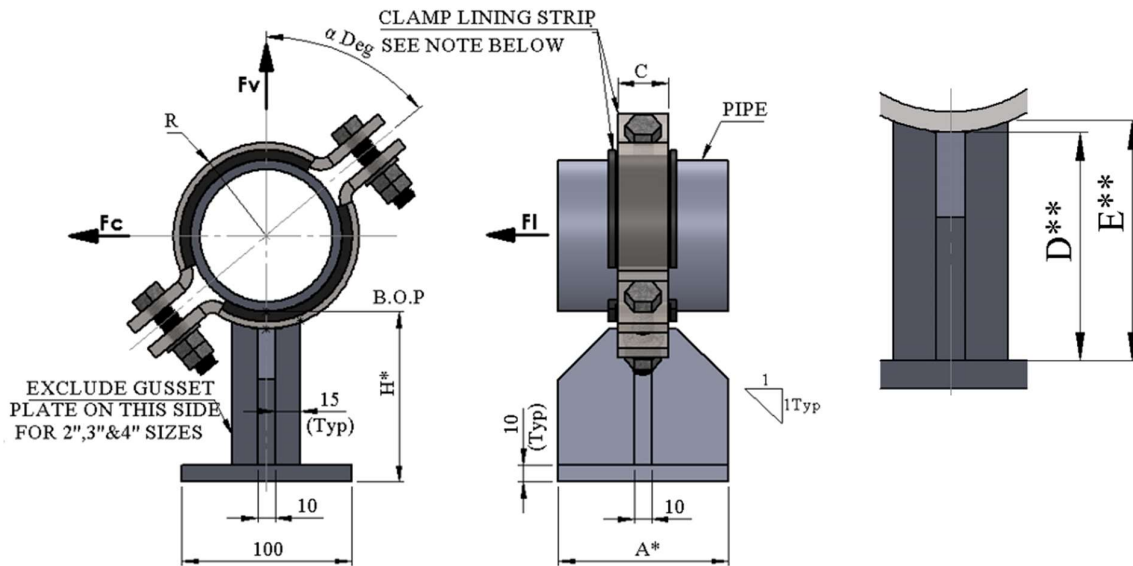
Max loads shown are for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.32 SPECIAL SHORT CLAMPED (2 Bolts) SHOE FOR CS, SS & ALLOY SMALL BORE LINES SH - 919**  
**15 - 40mm / 1/2" - 1 1/2" (LENGTH & HEIGHT DEFINABLE)**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-919-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	150 °C	(-) 46 °C
T-SH-919-(DN)-CS#A=(DIM)H=(DIM)	CS	150 °C	(-) 46 °C
T-SH-919-(DN)- CS/SS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	150 °C	(-) 46 °C
T-SH-919-(DN)-SS#A=(DIM)H=(DIM)	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			SHOE DIMENSIONS in mm				CLAMP INFO		MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	A	C	D	R	TYPE	NO. OFF	Fv	Fc	FI	CS/SS
T-SH-919-0015	DN 15	1/2"	21.3	*	30	**	17	T-PC-020	1	2.5	2	1	TBA
T-SH-919-0020	DN 20	3/4"	26.7	*	30	**	19	T-PC-020	1	2.5	2	1	TBA
T-SH-919-0025	DN 25	1"	33.4	*	30	**	23	T-PC-020	1	2.5	2	1	TBA
T-SH-919-0030	DN 30	1 1/4"	42.2	*	30	**	27	T-PC-020	1	2.5	2	1	TBA
T-SH-919-0040	DN 40	1 1/2"	48.3	*	30	**	32	T-PC-020	1	3	2.5	1	TBA

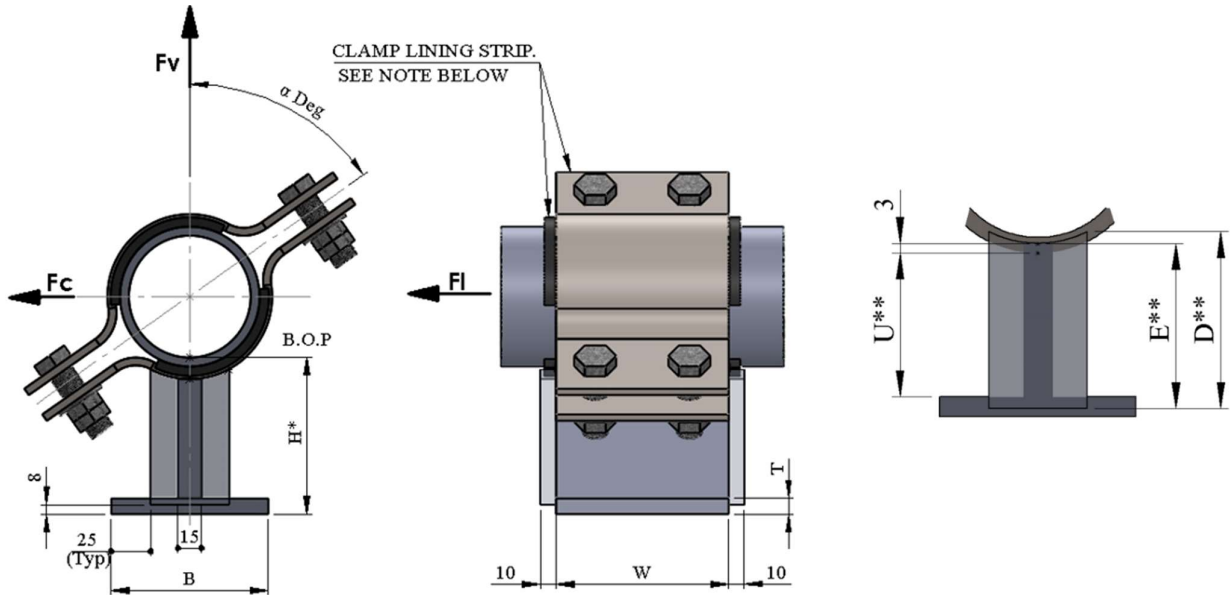
All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-006).  
 For temperatures above +150 Deg. C, use ref SH-965.  
 For standard shoe size see SH-034 & SH- 334.  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes. other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7

**16.33 SPECIAL HIGH TEMP SHORT CLAMPED SHOE FOR CS , SS & ALLOY LINES**  
**50 - 150mm / 2" - 6" , (LENGTH & HEIGHT DEFINABLE)**
**SH - 960**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-960-(DN)-CS#A=(DIM)H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-960-(DN)-SS#A=(DIM)H=(DIM)	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS					CLAMP INFO			MAXIMUM LOADS kN (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	A	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	FI	CS / SS
T-SH-960-0050	DN 50	2"	60.3	*	40	**	**	39	T-PC-029	1	55	3	2	1.5	TBA
T-SH-960-0080	DN 80	3"	88.9	*	40	**	**	54	T-PC-029	1	50	9	5.5	4.5	TBA
T-SH-960-0100	DN 100	4"	114.3	*	50	**	**	70	T-PC-029	1	55	9.5	6	4.5	TBA
T-SH-960-0125	DN 125	5"	141.3	*	50	**	**	83	T-PC-029	1	55	9.5	6	4.5	TBA
T-SH-960-0150	DN 150	6"	168.3	*	70	**	**	99	T-PC-029	1	55	13	8	6	TBA

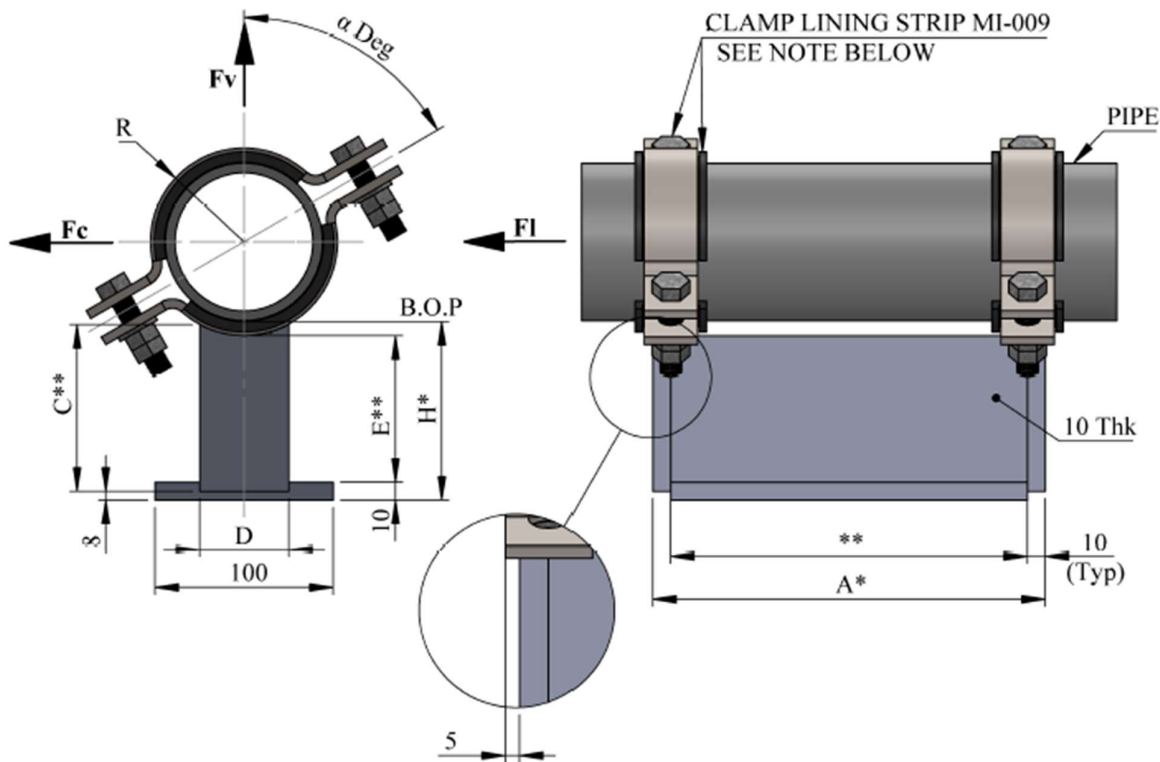
This detail only to be used subject to project approval.  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For maximum design temperatures above +350 Deg. C, use welded attachments, below +150 Deg. C ref SH-910.  
 For standard shoe size see SH-021 & SH- 321.  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes. other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.34 SPECIAL HIGH TEMP SHORT CLAMPED SHOE FOR CS , SS & ALLOY LINES**  
**50 - 250mm / 2" - 10" , (HEIGHT DEFINABLE)**
**SH - 961**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-961-(DN)-CS # H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-961-(DN)-SS#H=(DIM)	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS							CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	B	D	E	R	W	U	T	TYPE	NO. OFF	α°	Fv	Fc	F1	
T-SH-961-0050	DN 50	2"	60.3	100	**	**	36	80	**	10	T-PC-030	1	70	3	2	1.5	TBA
T-SH-961-0080	DN 80	3"	88.9	150	**	**	55	110	**	10	T-PC-030	1	55	9	5.5	4.5	TBA
T-SH-961-0100	DN 100	4"	114.3	150	**	**	77	110	**	10	T-PC-030	1	55	9.5	6	4.5	TBA
T-SH-961-0125	DN 125	5"	141.3	150	**	**	81	110	**	10	T-PC-030	1	50	9.5	6	4.5	TBA
T-SH-961-0150	DN 150	6"	168.3	150	**	**	94	140	**	10	T-PC-030	1	50	13	5	4	TBA
T-SH-961-0200	DN 200	8"	219.1	100	**	**	122	140	**	15	T-PC-030	1	45	22	10	8	TBA
T-SH-961-0250	DN 250	10"	273	150	**	**	148	140	**	15	T-PC-030	1	45	22	10	8	TBA

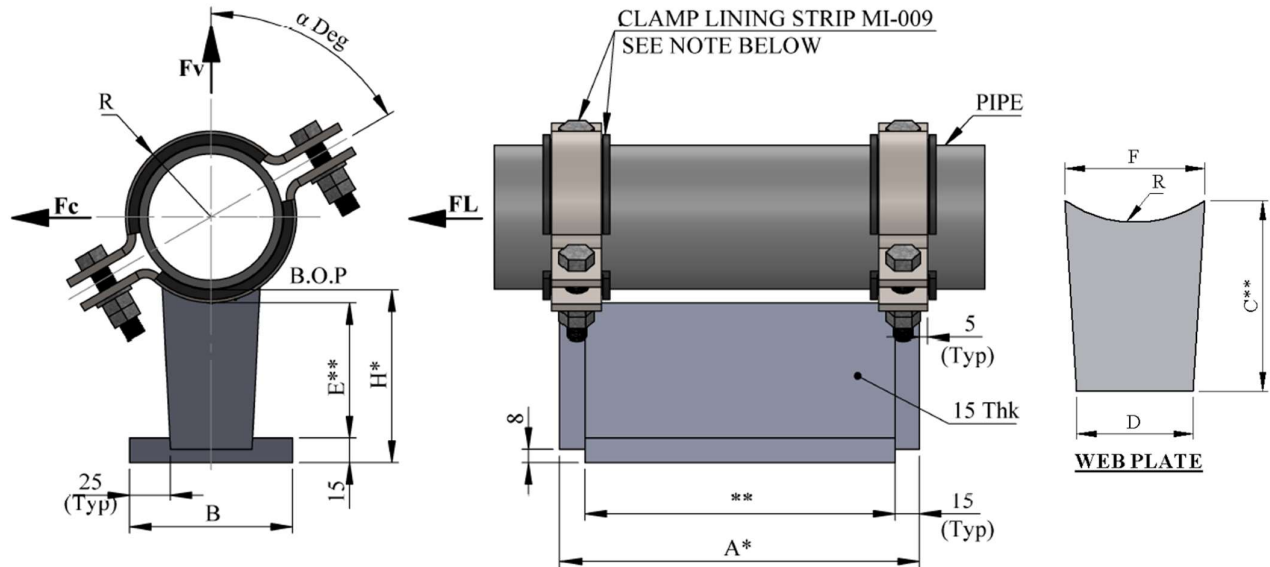
This detail only to be used subject to project approval.  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For maximum design temperatures above +350 Deg. C , use welded attachments , below +150 Deg. C ref SH-911.  
 For standard shoe size see SH-022 & SH- 322  
 Only dimension marked \* (Height) can vary from the standard shoe sizes. other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.35 SPECIAL HIGH TEMP CLAMPED SHOE FOR CS , SS & ALLOY LINES**  
**50 - 150mm / 2" - 6" , (LENGTH & HEIGHT DEFINABLE)**
**SH - 962**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-962-(DN)-CS #A=(DIM)H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-962-(DN)-SS#A=(DIM)H=(DIM)	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	CS / SS
T-SH-962-0050	DN 50	2"	60.3	**	30	**	38	T-PC-028	2	60	5.5	4	1.5	TBA
T-SH-962-0080	DN 80	3"	88.9	**	30	**	53	T-PC-028	2	50	5.5	4	1.5	TBA
T-SH-962-0100	DN 100	4"	114.3	**	50	**	66	T-PC-028	2	50	5.5	5.5	2	TBA
T-SH-962-0125	DN 125	5"	141.3	**	50	**	79	T-PC-028	2	45	5.5	5.5	2	TBA
T-SH-962-0150	DN 150	6"	168.3	**	50	**	97	T-PC-028	2	50	8.7	8.7	5	TBA

This detail to be used only after project approval.  
 All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For maximum temperatures above +350 Deg. C, use welded attachments, below 150 Deg. C, use SH-912.  
 For standard shoe size see SH-023, 024 ,025 & SH- 323, 324, 325.  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes.  
 Other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

**16.36 SPECIAL HIGH TEMP CLAMPED SHOE FOR CS , SS & ALLOY LINES**  
**200 - 600mm / 8" - 24" , (LENGTH & HEIGHT DEFINABLE)**
**SH - 963**


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-963-(DN)-CS#A=(DIM)H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-963-(DN)-SS#A=(DIM)H=(DIM)	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS						CLAMP INFO			MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHT in kg
	DN (mm)	NPS in (inc h)	NPS in (mm)	B	C	D	E	F	R	TYPE	NO. OFF	α°	Fv	Fc	Fl	
T-SH-963-0200	DN 200	8"	219.1	100	**	50	**	100	123	T-PC-028	2	45	8.7	8.7	5	TBA
T-SH-963-0250	DN 250	10"	273	150	**	100	**	150	152	T-PC-028	2	50	13	13	8	TBA
T-SH-963-0300	DN 300	12"	323.8	150	**	100	**	150	177	T-PC-028	2	45	13	13	8	TBA
T-SH-963-0350	DN 350	14"	355.6	200	**	150	**	200	193	T-PC-028	2	45	13	13	10	TBA
T-SH-963-0400	DN 400	16"	406.4	200	**	150	**	200	218	T-PC-028	2	45	13	13	10	TBA
T-SH-963-0450	DN 450	18"	457.2	200	**	150	**	200	248	T-PC-028	2	45	16.3	16.3	10	TBA
T-SH-963-0500	DN 500	20"	508	250	**	200	**	250	273	T-PC-028	2	45	16.3	16.3	10	TBA
T-SH-963-0600	DN 600	24"	609.6	250	**	200	**	250	324	T-PC-028	2	45	16.3	16.3	10	TBA

This detail to be used only after project approval.

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.

Provide clamp lining between pipe and clamp (Ref. MI-009)

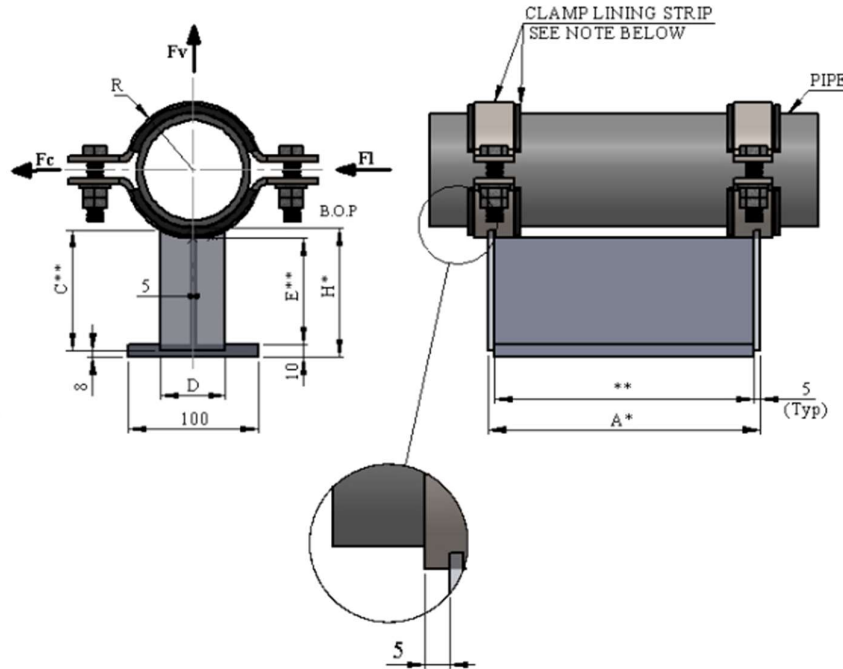
For maximum temperatures above +350 Deg. C, use welded attachments, below 150 Deg. C, use SH-913.

For standard shoe size see SH-026, 027, 028 & SH- 326, 327, 328

Only dimension marked \* (Length & Height) can vary from the standard shoe sizes.

Other effected dimensions marked \*\* to be calculated by manufacturer.

Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.

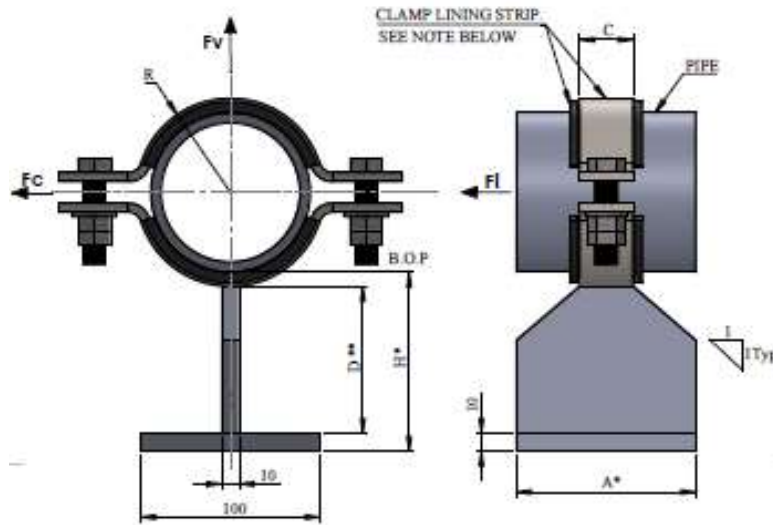
**16.37 SPECIAL HIGH TEMP CLAMPED SHOE FOR CS , SS & ALLOY SMALL BORE LINES**  
**15 - 40mm / 1/2" - 1 1/2" , (LENGTH & HEIGHT DEFINABLE)**
**SH - 964**


TYPICAL PART NAME	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-964-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	350 °C	(-) 60 °C
T-SH-964-(DN)-CS#A=(DIM)H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-964-(DN)-CS/SS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	350 °C	(-) 60 °C
T-SH-964-(DN)-SS#A=(DIM)H=(DIM)	SS	350 °C	(-)60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO		MAXIMUM LOADS (kN) (SEE NOTE BELOW)			WEIGHTS in kg
	DN (mm)	NPS in (inch)	NPS in (mm)	C	D	E	R	TYPE	NO. OFF	Fv	Fc	Fl	
T-SH-964-0015	DN 15	1/2"	21.3	**	30	**	17	T-PC-028	2	2.5	2	1	TBA
T-SH-964-0020	DN 20	3/4"	26.7	**	30	**	19	T-PC-028	2	2.5	2	1	TBA
T-SH-964-0025	DN 25	1"	33.4	**	30	**	23	T-PC-028	2	2.5	2	1	TBA
T-SH-964-0030	DN 30	1 1/4"	42.2	**	30	**	27	T-PC-028	2	2.5	2	1	TBA
T-SH-964-0040	DN 40	1 1/2"	48.3	**	30	**	32	T-PC-028	2	3	2.5	1	TBA

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For maximum temperatures above +350 Deg. C , use welded attachments , below 150 Deg. C , use SH-918.  
 For standard shoe size see SH-032, 033 & SH- 332 , 333  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes.  
 Other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.



**16.38 SPECIAL HIGH TEMP SHORT CLAMPED SHOE FOR CS , SS & ALLOY SMALL BORE LINES 15 - 40mm / 1/2" - 1 1/2" , (LENGTH & HEIGHT DEFINABLE)**
**SH - 965**


TYPICAL PART NAME	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-SH-965-(DN)-SS/CS#A=(DIM)H=(DIM) (CS BOTTOM PLATE)	SS / CS	350 °C	(-) 60 °C
T-SH-965-(DN)-CS#A=(DIM)H=(DIM)	CS	350 °C	(-) 60 °C
T-SH-965-(DN)-SS/CS#A=(DIM)H=(DIM) (SS BOTTOM PLATE)	CS / SS	350 °C	(-) 60 °C
T-SH-965-(DN)-SS#A=(DIM)H=(DIM)	SS	350 °C	(-) 60 °C

TYPE	LINE SIZE			SHOE DIMENSIONS				CLAMP INFO		MAXIMUM LOADS (SEE NOTE BELOW)			WEIGHT in kgs
	DN (mm)	NPS in (inch)	NPS in (mm)	A	C	D	R	TYPE	NO. OFF	Fv (kN)	Fc (kN)	FI (kN)	CS / SS
T-SH-965-0015	DN 15	1/2"	21.3	*	30	**	17	T-PC-028	1	2.5	2	1	TBA
T-SH-965-0020	DN 20	3/4"	26.7	*	30	**	19	T-PC-028	1	2.5	2	1	TBA
T-SH-965-0025	DN 25	1"	33.4	*	30	**	23	T-PC-028	1	2.5	2	1	TBA
T-SH-965-0030	DN 30	1 1/4"	42.2	*	30	**	27	T-PC-028	1	2.5	2	1	TBA
T-SH-965-0040	DN 40	1 1/2"	48.3	*	30	**	32	T-PC-028	1	3	2.5	1	TBA

All welds to be a = 0.7 x W.T., but maximum 4mm CFW.  
 Provide clamp lining between pipe and clamp (Ref. MI-009).  
 For maximum design temperatures above +350 Deg. C, use welded attachment, below +150 Deg. C ref SH-919.  
 For standard shoe size see SH-035 & SH- 335  
 Only dimension marked \* (Length & Height) can vary from the standard shoe sizes. other effected dimensions marked \*\* to be calculated by manufacturer.  
 Max loads are shown for SS details. For CS details increase loads Fv and Fc by a factor of 1.7.