



MS 1058:PART 3:2006

# ELECTROFUSION JOINTS

FOR HDPE PIPES



## THE INTELLIGENT SYSTEM SOLUTION

Print Edition for March 2024

# Introduction

## Sansico Industries Sdn Bhd

In the past decade, Sansico Industries Sdn Bhd, has progressed to be a market leader in the manufacture of fittings for internal plumbing systems.

## The Intelligent System Solution

The Sansico Electrofusion fittings system is specifically designed for reliable, high performance jointing and long service life for polyethylene piping systems. Our automated jointing system has been proven to be the most economical as it eliminates the potential for operator error.

We offer quality tools and micro processor electrofusion machines, which when combined with our fittings offer state-of-the-art high performance pipe jointing solutions. Our intelligent electrofusion machine is able to ensure quality control by data retrieval of measurements and records. This together with our SIRIM certified and SPAN approved BS EN 12201-3 electrofusion HDPE fittings assure you of a minimum 50 years life span for your potable water needs.

## Fittings

Our fittings comply to MS 1058:PART 3:2006 and are PN16 rated. The Sansico Electrofusion Fittings system comes in sizes from 20mm to 315mm and is manufactured using PE100 materials.

The benefits of the Sansico HDPE potable water system over other systems are low installation cost, non toxicity, corrosion resistance, high flow capacity and long life span. Material wise, HDPE has superior properties compared to other plastic material in relation to water hammer problems.



# INTRODUCTION

# Advantages

BBB SANSICO/CS SANSICO HDPE pipes strictly conform to MS1058: Part 2: 2002 standard specifications. Our products are licensed by SIRIM and approved by the local water authorities to be used as the top mark for quality. The granting of the top mark confirms that the company's manufacturing, testing and quality control systems comply with the stringent licensing requirements and thus ensures that the products quality is consistently maintained.

## Advantages for using BBB SANSICO/CS SANSICO HDPE Pipe

### HIGH DENSITY POLYETHYLENE (HDPE)

### PIPES FOR COLD WATER SYSTEM

Our pipes are SIRIM approved and manufactured using approved raw materials, high density polyethylene and comply to MS 1058. The main advantages of polyethylene pipes for the transport of pressure fluids can be summarised as follow:

- ease, reliability and cost efficiency of jointing and laying operations.
- non toxic, low abrasion and flexibility.
- excellent resistance to water hammer phenomena.
- absence of scale on inside walls results in consistency of pipeline hydraulic performance.
- immune to corrosion phenomena and has very good resistance to a wide range of chemicals.

The products are examined and tested to ensure the compliance with all the relevant standard specification. The specified tests carried out are:-

- Appearance, dimensions and ovality
- Hydrostatic strength at 80° C for 165 hours
- Hydrostatic strength for 80°C for 1000 hours
- Oxidation Induction Time (OIT)
- Melt Flow Rate (MFR)

Pipe OD mm	OD Size		Pipe Series SDR	PE 100			
	Min mm	Max mm		PN	e min mm	e max mm	Weight kg/m
20	20.0	20.3	11	16	2.0	2.3	0.117
25	25.0	25.3	11	16	2.3	2.7	0.171
32	32.0	32.3	11	16	3.0	3.4	0.279
40	40.0	40.4	11	16	3.7	4.2	0.431
50	50.0	50.4	11	16	4.6	5.2	0.669
63	63.0	63.4	11	16	5.8	6.5	1.057
75	75.0	75.5	11	16	6.8	7.6	1.48
90	90.0	90.6	11	16	8.2	9.2	2.14
110	110.0	110.7	11	16	10.0	11.1	3.17
125	125.0	125.8	11	16	11.4	12.7	4.12
160	160.0	161.0	11	16	14.6	16.2	6.73
180	180.0	181.0	11	16	16.4	18.2	8.51
200	200.0	201.2	11	16	18.2	20.2	10.50
225	225.0	226.4	11	16	20.5	22.7	13.28
250	250.0	251.5	11	16	22.7	25.1	16.33
280	280.0	281.7	11	16	25.4	28.1	20.48
315	315.0	316.9	11	16	28.6	31.6	25.92

# Electrofusion Fittings Specifications

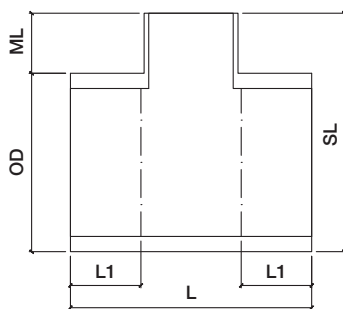
## Features

- **Material:** PE 100
- **Size:** 20mm to 315mm
- **Pressure Rating:** PN 16 bar / SDR11
- **Standard:** BS EN 12201-3:2003
- **Color:** Black
- **Joint:** electrofusion joint

## Advantages

- **Non-toxic:** no heavy metal additives, would not to be covered with dirt or contaminated by bacterium.
- **Corrosion Resistance:** resist chemical matters and electron chemical corrosion
- **Low Installation Costs:** light weight and ease of installation can reduce installation costs
- **High Flow Capacity:** smooth interior walls result in low pressure loss and high volume
- **Longevity:** more than 50 years under proper use

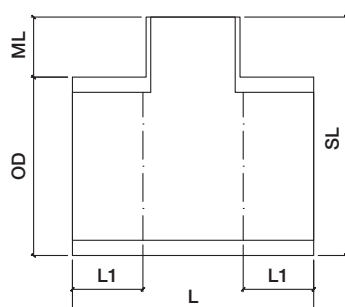
### Reducing Tee



Code	Size (mm)	OD	L1	L	ML	SL
SRT 32.20	32 x 20	44.5	44.5	116.0	48.2	92.1
SRT 32.25	32 x 25	43.9	43.9	111.7	48.2	92.3
SRT 40.20	40 x 20	57.0	50.0	120.0	58.0	115.0
SRT 40.25	40 x 25	49.6	49.6	123.6	48.6	103.1
SRT 40.32	40 x 32	57.5	47.9	107.0	79.1	136.4
SRT 50.20	50 x 20	64.5	55.5	130.0	46.3	112.5
SRT 50.25	50 x 25	67.2	59.6	135.2	70.8	137.7
SRT 50.32	50 x 32	64.7	53.1	142.0	51.2	117.1
SRT 50.40	50 x 40	67.0	55.0	149.0	73.0	140.0
SRT 63.20	63 x 20	82.0	63.0	154.0	58.0	140.0
SRT 63.25	63 x 25	82.0	63.0	159.8	59.0	141.0
SRT 63.32	63 x 32	82.0	63.0	165.5	77.0	159.0
SRT 63.40	63 x 40	82.0	63.0	172.5	73.0	155.0
SRT 63.50	63 x 50	82.0	87.5	175.0	55.0	137.0
SRT 75.40	75 x 40	98.0	70.0	186.3	73.0	171.0
SRT 75.50	75 x 50	98.0	79.0	209.5	69.0	167.0
SRT 75.63	75 x 63	98.0	100.0	200.0	63.0	161.0
SRT 90.40	90 x 40	117.0	79.0	230.0	73.0	190.0
SRT 90.50	90 x 50	117.0	82.0	218.0	69.0	186.0
SRT 90.63	90 x 63	117.0	112.5	225.0	63.0	180.0
SRT 90.75	90 x 75	117.0	112.5	225.0	70.0	187.0
SRT 110.50	110 x 50	142.0	82.0	250.0	69.0	211.0
SRT 110.63	110 x 63	142.0	124.0	248.0	63.0	205.0
SRT 110.75	110 x 75	142.0	124.0	248.0	70.0	212.0
SRT 110.90	110 x 90	142.0	124.0	248.0	79.0	221.0
SRT 125.63	125 x 63	160.0	135.0	270.0	63.0	223.0
SRT 125.75	125 x 75	160.0	135.0	270.0	70.0	230.0

# Electrofusion Fittings Specifications

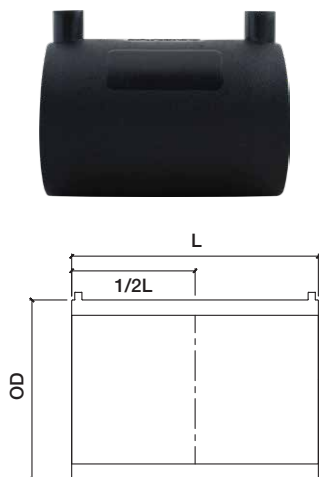
## Reducing Tee



Code	Size (mm)	OD	L1	L	ML	SL
SRT 125.90	125 x 90	160.0	135.0	270.0	79.0	239.0
SRT 125.110	125 x 110	160.0	135.0	270.0	82.0	242.0
SRT 160.50	160 x 50	193.0	98.0	249.0	69.0	232.0
SRT 160.63	160 x 63	195.0	155.0	310.0	63.0	232.0
SRT 160.75	160 x 75	195.0	155.0	310.0	70.0	258.0
SRT 160.90	160 x 90	195.0	155.0	310.0	79.0	265.0
SRT 160.110	160 x 110	195.0	155.0	310.0	82.0	274.0
SRT 160.125	160 x 125	195.0	155.0	310.0	87.0	277.0
SRT 180.160	180 x 160	216.0	105.0	352.0	98.0	287.0
SRT 200.50	200 x 50	240.5	112.0	308.0	69.0	314.0
SRT 200.63	200 x 63	240.5	112.0	308.0	63.0	309.0
SRT 200.75	200 x 75	240.5	112.0	308.0	70.0	303.0
SRT 200.90	200 x 90	240.5	112.0	308.0	79.0	310.0
SRT 200.110	200 x 110	240.5	112.0	365.0	82.0	319.0
SRT 200.160	200 x 160	240.5	112.0	365.0	98.0	322.0
SRT 250.50	250 x 50	296.0	129.0	338.0	69.0	338.0
SRT 250.63	250 x 63	296.0	129.0	338.0	63.0	365.0
SRT 250.75	250 x 75	296.0	129.0	338.0	70.0	356.0
SRT 250.90	250 x 90	296.0	129.0	338.0	79.0	366.0
SRT 250.110	250 x 110	296.0	129.0	338.0	82.0	375.0
SRT 250.160	250 x 160	296.0	129.0	430.0	98.0	378.0
SRT 250.200	250 x 200	296.0	129.0	430.0	128.0	394.0
SRT 315.90	315 x 90	380.0	150.0	440.0	79.0	459.0
SRT 315.110	315 x 110	380.0	150.0	440.0	82.0	462.0
SRT 315.160	315 x 160	380.0	150.0	440.0	98.0	478.0
SRT 315.200	315 x 200	380.0	150.0	514.0	128.0	508.0
SRT 315.250	315 x 250	380.0	150.0	514.0	154.0	534.0

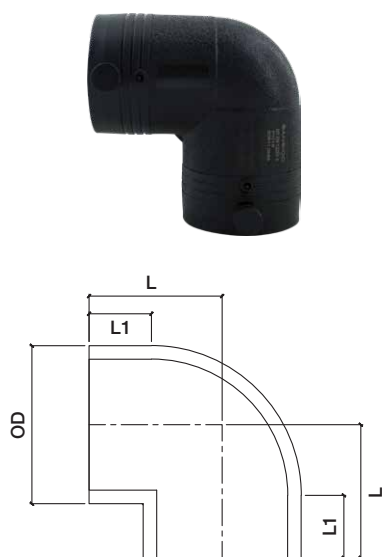
# Electrofusion Fittings Specifications

## Equal Coupler



Code	Size (mm)	OD	L	1/2L
SEC 20	20	31.9	85.1	42.5
SEC 25	25	36.4	84.5	42.2
SEC 32	32	44.0	89.4	44.7
SEC 40	40	53.4	89.3	44.6
SEC 50	50	64.0	113.2	56.6
SEC 63	63	79.9	130.1	65.1
SEC 75	75	94.1	144.0	72.0
SEC 90	90	112.4	160.9	80.5
SEC 110	110	142.0	145.0	72.5
SEC 125	125	160.0	155.0	77.5
SEC160	160	195.0	165.0	82.5
SEC 180	180	220.0	180.0	90.0
SEC 200	200	245.0	200.0	100.0
SEC 225	225	266.0	217.0	108.5
SEC 250	250	296.0	218.0	109.0
SEC 280	280	355.0	220.0	110.0
SEC 315	315	380.0	265.0	132.5

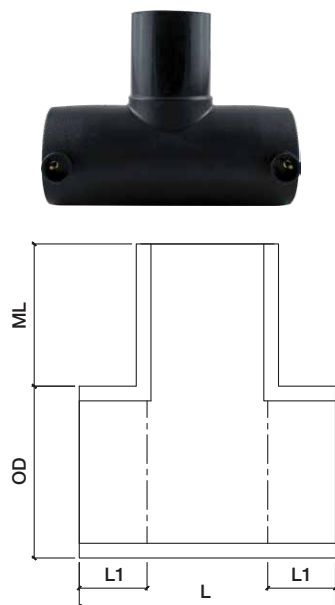
## Equal 90 elbow



Code	Size (mm)	OD	L	L1
SEE 20	20	31.5	53.8	38.1
SEE 25	25	36.4	56.3	38.1
SEE 32	32	43.6	63.8	42.0
SEE 40	40	53.1	72.9	46.4
SEE 50	50	65.0	84.1	51.6
SEE 63	63	80.7	99.3	58.9
SEE 75	75	94.0	102.5	65.5
SEE 90	90	111.3	130.4	74.8
SEE 110	110	136.0	141.0	82.9
SEE 125	125	150.0	150.7	75.3
SEE 160	160	192.0	177.5	81.5
SEE 180	180	220.0	206.0	105.0
SEE 200	200	245.0	225.0	112.0
SEE 250	250	296.0	265.0	129.0
SEE 315	315	380.0	320.0	15.0

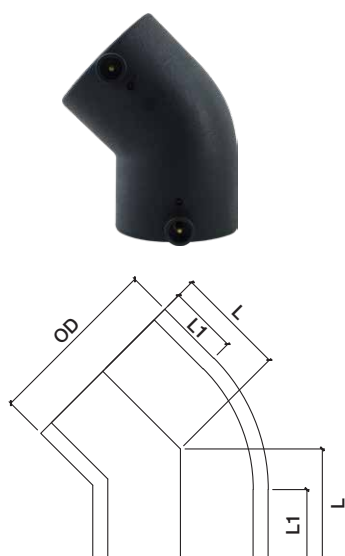
# Electrofusion Fittings Specifications

## Equal Tee



Code	Size (mm)	OD	L1	L	ML
SET 20	20	36.0	41.0	99.0	58.0
SET 25	25	36.0	43.5	103.0	59.0
SET 32	32	44.0	44.0	118.0	77.0
SET 40	40	57.0	49.0	136.0	73.0
SET 50	50	67.0	55.0	157.0	69.0
SET 63	63	82.0	87.5	191.0	63.0
SET 75	75	98.0	100.0	216.0	70.0
SET 90	90	117.0	112.5	225.0	79.0
SET 110	110	142.0	124.0	248.0	82.0
SET 125	125	160.0	135.0	270.0	87.0
SET 160	160	195.0	155.0	310.0	98.0
SET 180	180	220.0	105.0	368.0	126.0
SET 200	200	245.0	112.0	398.0	128.0
SET 250	250	296.0	129.0	472.0	154.0
SET 315	315	380.0	150.0	567.0	315.0

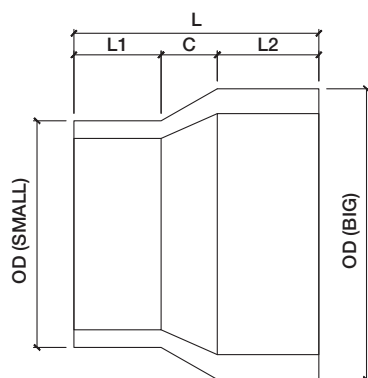
## Equal 45 elbow



Code	Size (mm)	OD	L	L1
S45 EE 20	20	36.0	54.0	42.0
S45 EE 25	25	36.0	54.0	43.0
S45 EE 32	32	44.0	56.0	44.0
S45 EE 40	40	57.0	64.0	49.0
S45 EE 50	50	67.0	83.0	62.0
S45 EE 63	63	82.0	75.0	58.0
S45 EE 75	75	98.0	82.0	63.0
S45 EE 90	90	117.0	91.0	68.0
S45 EE 110	110	142.0	98.0	72.0
S45 EE 125	125	160.0	118.0	83.0
S45 EE 160	160	195.0	128.0	90.0
S45 EE 180	180	220.0	157.0	105.0
S45 EE 200	200	245.0	170.0	112.0
S45 EE 250	250	296.0	202.0	129.0
S45 EE 315	315	380.0	238.0	150.0

# Electrofusion Fittings Specifications

## Reducing Coupler

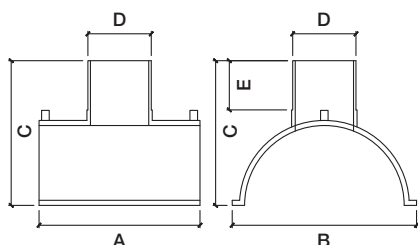


Code	Size (mm)	OD (BIG)	OD (SMALL)	L	L1 (SMALL)	L2 (BIG)
SRC 25.20	25 x 20	36.4	36.2	86.5	39.0	45.0
SRC 32.20	32 x 20	43.8	27.0	86.6	39.0	44.7
SRC 32.25	32 x 25	44.3	37.1	86.5	39.5	44.2
SRC 40.25	40 x 25	56.9	35.9	87.0	33.0	48.9
SRC 40.32	40 x 32	57.1	44.0	86.0	32.2	49.0
SRC 50.25	50 x 25	67.6	46.1	85.6	35.8	43.1
SRC 50.32	50 x 32	62.8	41.6	113.3	44.3	70.1
SRC 50.40	50 x 40	63.3	51.7	115.0	49.8	64.7
SRC 63.32	63 x 32	79.0	42.5	132.0	44.5	63.2
SRC 63.40	63 x 40	79.0	52.3	130.7	45.2	66.5
SRC 63.50	63 x 50	79.1	64.7	130.1	53.4	79.1
SRC 75.63	75 x 63	100.0	80.0	145.0	70.0	79.0
SRC 90.50	90 x 50	112.0	80.0	140.0	45.0	79.0
SRC 90.63	90 x 63	113.0	80.2	175.0	79.0	82.0
SRC 90.75	90 x 75	113.0	100.0	175.0	79.0	82.0
SRC 110.50	110 x 50	135.0	67.0	160.0	43.0	73.0
SRC 110.63	110 x 63	135.0	80.2	180.0	82.0	73.0
SRC 110.75	110 x 75	135.0	100.0	180.0	82.0	73.0
SRC 110.90	110 x 90	135.0	113.0	180.0	82.0	73.0
SRC 125.90	125 x 90	166.0	113.0	195.0	85.0	77.5
SRC 125.110	125 x 110	150.0	131.9	180.1	76.0	104.3
SRC 160.90	160 x 90	193.0	113.0	224.0	79.0	98.0
SRC 160.110	160 x 110	193.0	135.0	224.0	73.0	98.0
SRC 160.125	160 x 125	190.3	150.6	194.3	76.9	118.8
SRC 200.63	200 x 63	240.5	80.2	250.0	63.0	103.0
SRC 200.90	200 x 90	240.5	113.0	215.0	95.0	103.0
SRC 200.110	200 x 110	240.5	135.0	250.0	82.0	103.0
SRC 200.160	200 x 160	240.5	193.0	250.0	98.0	103.0
SRC 250.110	250 x 110	296.0	135.0	280.0	66.0	114.0
SRC 250.160	250 x 160	296.0	193.0	280.0	85.0	114.0
SRC 250.200	250 x 200	296.0	240.0	280.0	103.0	114.0
SRC 315.160	315 x 160	380.0	193.0	320.0	77.0	132.5
SRC 315.200	315 x 200	380.0	240.0	320.0	94.0	132.5
SRC 315.250	315 x 250	380.0	296.0	320.0	114.0	132.5



# Electrofusion Fittings Specifications

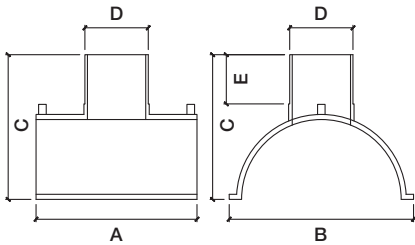
## Branch Saddle



Code	Size (mm)	A	B	C	D	E
SSS 40.32	40 x 32	107.0	95.0	103.0	32	65.0
SSS 50.32	50 x 32	107.0	95.0	108.0	32	65.0
SSS 63.32	63 x 32	114.0	107.4	100.0	32	42.7
SSS 75.32	75 x 32	116.0	121.3	108.0	32	42.3
SSS 75.63	75 x 63	116.0	121.3	145.0	63	90.0
SSS 90.32	90 x 32	117.6	136.8	125.0	32	42.3
SSS 90.63	90 x 63	117.6	136.8	143.0	63	64.0
SSS 110.32	110 x 32	127.0	156.8	140.0	32	43.0
SSS 110.63	110 x 63	127.0	156.8	156.0	63	143.0
SSS 110.90	110 x 90	127.0	156.8	173.0	90	173.0
SSS 125.32	125 x 32	126.0	157.8	140.0	32	132.0
SSS 125.63	125 x 63	126.0	157.8	154.0	63	165.0
SSS 125.90	125 x 90	126.0	157.8	162.0	90	180.0
SSS 160.32	160 x 32	129.0	226.0	165.0	32	165.0
SSS 160.63	160 x 63	129.0	217.0	182.5	63	182.5
SSS 160.90	160 x 90	129.0	217.5	198.0	90	198.0
SSS 160.110	160 x 110	129.0	217.5	210.0	110	210.0
SSS 160.125	160 x 125	129.0	217.5	210.0	125	210.0
SSS 180.32	180 x 32	129.0	213.5	182.5	32	182.5
SSS 180.63	180 x 63	129.0	213.5	192.5	63	192.5
SSS 180.90	180 x 90	129.0	213.5	208.0	90	208.0
SSS 180.110	180 x 110	129.0	213.5	220.0	110	220.0
SSS 180.125	180 x 125	129.0	213.5	220.0	125	220.0
SSS 200.32	200 x 32	165.0	250.0	192.5	32	192.5
SSS 200.63	200 x 63	165.0	250.0	202.5	63	202.5
SSS 200.90	200 x 90	165.0	250.0	218.0	90	218.0
SSS 200.110	200 x 110	165.0	250.0	228.0	110	228.0
SSS 200.125	200 x 125	165.0	250.0	228.0	125	228.0
SSS 225.32	225 x 32	165.0	255.0	205.0	32	205.0
SSS 225.63	225 x 63	165.0	255.0	215.0	63	215.0
SSS 225.90	225 x 90	165.0	255.0	240.5	90	240.5
SSS 225.110	225 x 110	165.0	255.0	240.5	110	240.5
SSS 225.125	225 x 125	165.0	255.0	240.5	125	240.5
SSS 250.32	250 x 32	210.5	295.0	217.5	32	217.5
SSS 250.63	250 x 63	210.5	295.0	227.5	63	227.5
SSS 250.90	250 x 90	210.5	295.0	253.0	90	253.0
SSS 250.110	250 x 110	210.5	295.0	253.0	110	253.0
SSS 250.125	250 x 125	210.5	295.0	253.0	125	250.0
SSS 280.32	280 x 32	278.0	310.0	232.5	32	232.5
SSS 280.63	280 x 63	278.0	310.0	242.5	63	242.5
SSS 280.90	280 x 90	278.0	310.0	268.0	90	268.0
SSS 280.110	280 x 110	278.0	310.0	268.0	110	268.0

# Electrofusion Fittings Specifications

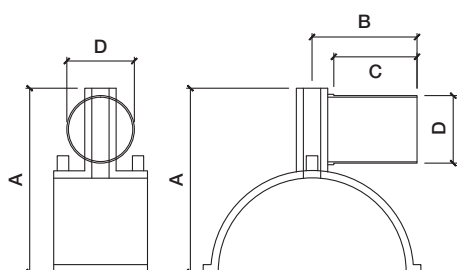
## Branch Saddle



Code	Size (mm)	A	B	C	D	E
SSS 280.125	280 x 125	278.0	310.0	268.0	125	268.0
SSS 315.32	315 x 32	317.6	367.0	250.0	32	250.0
SSS 315.63	315 x 63	317.6	367.0	260.0	63	260.0
SSS 315.90	315 x 90	317.6	367.0	285.5	90	285.5
SSS 315.110	315 x 110	317.6	367.0	285.5	110	285.5
SSS 315.125	315 x 125	317.6	367.0	285.5	125	285.5
SSS 315.160	315 x 160	317.6	367.0	285.5	160	285.5

# Electrofusion Fittings Specifications

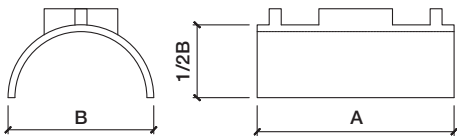
## Tapping Tee / Saddle



Code	Size (mm)	A	B	C	D
STS 40.32	40 x 32	130.0	118.0	76.0	32
STS 50.32	50 x 32	149.0	105.0	67.0	32
STS 63.25	63 x 25	184.0	105.0	67.0	25
STS 63.32	63 x 32	149.0	105.0	67.0	32
STS 63.40	63 x 40	149.0	105.0	67.0	40
STS 63.63	63 x 63	187.5	157.0	67.0	63
STS 75.32	75 x 32	151.0	105.0	67.0	32
STS 75.63	75 x 63	193.0	105.0	100.0	63
STS 90.32	90 x 32	235.0	140.0	110.0	32
STS 90.63	90 x 63	235.0	140.0	110.0	63
STS 110.25	110 x 25	175.0	105.0	66.0	25
STS 110.32	110 x 32	175.0	105.0	66.0	32
STS 110.40	110 x 40	175.0	105.0	66.0	40
STS 110.63	110 x 63	245.0	140.0	111.0	63
STS 125.32	125 x 32	175.0	105.0	66.0	32
STS 125.63	125 x 63	245.0	105.0	109.0	63
STS 160.32	160 x 32	275.0	140.0	111.0	32
STS 160.63	160 x 63	275.0	140.0	111.0	63
STS 180.32	180 x 32	275.0	140.0	111.0	32
STS 180.63	180 x 63	275.0	140.0	111.0	63
STS 200.32	200 x 32	270.0	140.0	111.0	32
STS 200.63	200 x 63	270.0	140.0	111.0	63
STS 200.90	200 x 90	245.0	140.0	111.0	90
STS 225.32	225 x 32	245.0	140.0	111.0	32
STS 225.63	225 x 63	245.0	140.0	111.0	63
STS 250.90	250 x 90	245.0	140.0	111.0	90

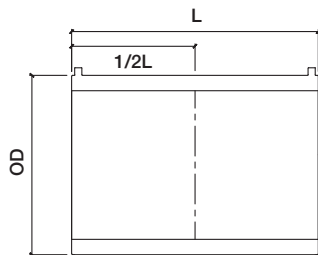
# Electrofusion Fittings Specifications

## Stop Saddle



Code	Size (mm)	A	B	½B
SPS 90	90	181.0	102.0	51.0
SPS 110	110	181.0	127.0	63.5
SPS 125	125	181.0	127.0	63.5
SPS 160	160	181.0	135.0	67.5
SPS 200	200	-	-	-
SPS 250	250	246.0	182.0	91.0
SPS 315	315	-	-	-

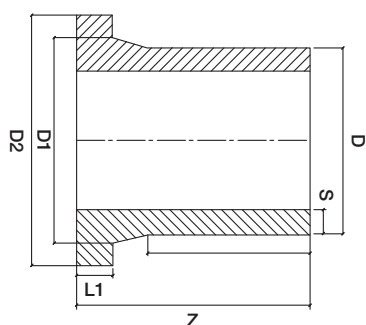
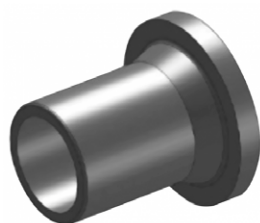
## End Cap



Code	Size (mm)	ID	OD	L
SECP 20	20	20	36	91
SECP 25	25	25	36	91
SECP 32	32	32	44	91
SECP 40	40	40	50	95
SECP 50	50	50	68	95
SECP 63	63	63	80	119
SECP 75	75	75	100	136
SECP 90	90	90	109	156
SECP 110	110	110	130	166
SECP 125	125	125	147	171
SECP 160	160	160	189	187
SECP 180	180	180	211	261
SECP 200	200	200	238	274
SECP 225	225	225	265	313
SECP 250	250	250	292	329
SECP 280	280	280	336	360
SECP 315	315	315	374	385

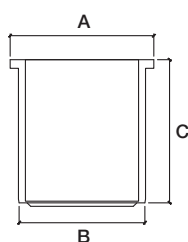
# Electrofusion Fittings Specifications

## Spigot Flange Adaptor



Code	D (mm)	D1	D2	L	L1	Z
SPFA 20	20	28	45	41	7	76
SPFA 25	25	34	58	41	9	81
SPFA 32	32	55.4	88.2	44	10.2	89.1
SPFA 40	40	48.6	78.7	49	11.7	95.2
SPFA 50	50	59.4	86.3	55	12.2	102.7
SPFA 63	63	67.4	101.5	63	14	102.4
SPFA 75	75	80.2	120	70	16	122.3
SPFA 90	90	96	136	79	17.1	137.9
SPFA 110	110	115	153	82	20.1	156.7
SPFA 125	125	127	156	87	25.1	167.8
SPFA 140	140	158	188	92	25	175
SPFA 160	160	178	212	98	25	180
SPFA 180	180	188	212	105	30	190
SPFA 200	200	235	268	112	32	200
SPFA 225	225	238	268	120	32	200
SPFA 250	250	288	320	129	35	205
SPFA 280	280	294	320	139	35	215
SPFA 315	315	338	370	150	35	220

## Stub Flange

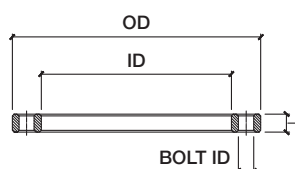


Code	Size (mm)	A	B	C
SSF 110	110	158.0	142.0	104.5
SSF 160	160	212.0	195.0	117.5
SSF 200	200	280.0	240.0	278.0
SSF 250	250	340.0	295.0	361.0
SSF 315	315	400.0	350.0	398.0

## Flange (Steel Tray for Stub Flange)



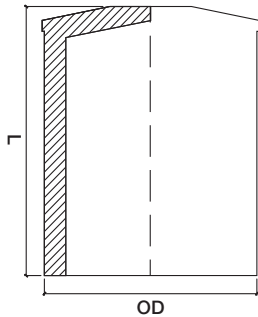
GB/T 9113  
ISO 7005-1



Code	ID	OD	T	BOLT ID
SF 110	144.85	222.27	22.30	17.61
SF 160	201.43	289.47	24.65	21.78
SF 180	-	-	-	-
SF 200	226.80	340.00	26.75	22.84
SF 250	302.72	405.00	29.30	26.19
SF 315	367.00	460.00	32.61	26.36

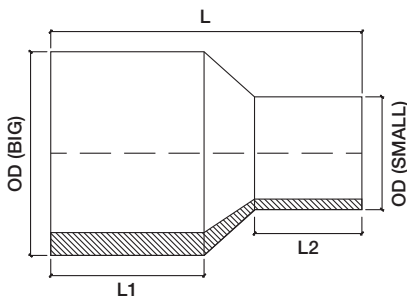
# Electrofusion Fittings Specifications

## Spigot End Cap



Code	Size (mm)	OD	L	S
SPSCP 32	32	41.4	84.0	3.0
SPSCP 40	40	50.5	87.4	3.7
SPSCP 50	50	61.1	92.5	4.6
SPSCP 63	63	77	114.2	5.8
SPSCP 75	75	94.5	136.3	6.8
SPSCP 90	90	109.2	148.4	8.2
SPSCP 110	110	130.5	156.7	10.0
SPSCP 125	125	147.5	167.5	11.4
SPSCP 160	160	189.3	187.3	14.6

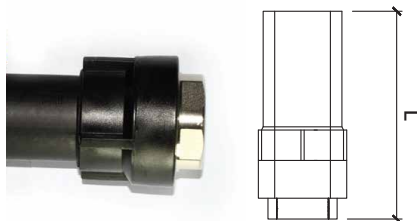
## Spigot Reducer



Code	Size (mm)	OD (BIG)	OD (SMALL)	L	L1 (SMALL)	L2 (BIG)
SPSRC 160.90	160 x 90	160.3	90.2	244.8	83.8	100.8
SPSRC 180.110	180x110	180.5	110.9	277.5	92.6	122.4

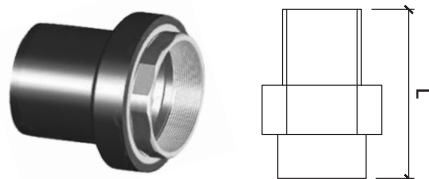
# Electrofusion Fittings Specifications

## Transition Female Brass Thread Adaptor (Fabricated Items)



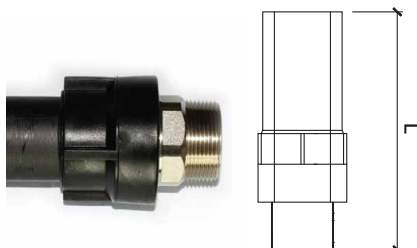
Code	Size	L
STFTA 50.1½	50 x 1½"	220.0
STFTA 63.2	63 x 2"	220.0
STFTA 75.2	75 x 2"	220.0

## Transition Brass Female Thread Adaptor



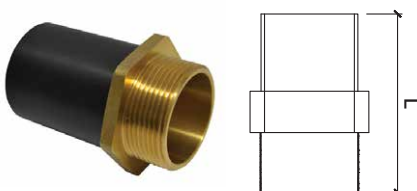
Code	Size	L
STFTA-F 20.½	20 x ½"	80.1
STFTA-F 25.¾	25 x ¾"	78.9
STFTA-F 32.1	32 x 1"	83.3
STFTA-F 40.1¼	40 x 1¼"	79.4
STFTA-F 50.1½	50 x 1½"	124
STFTA-F 63.2	63 x 2"	141.5
STFTA-F 75.2½	75 x 2½"	161.8
STFTA-F 90.3	90 x 3"	147.1
STFTA-F 110.4	110 x 4"	160.7

## Transition Male Brass Thread Adaptor (Fabricated Items)



Code	Size	L
STMTA 32.1	32 x 1"	220.0
STMTA 40.1¼	40 x 1¼"	220.0
STMTA 50.1½	50 x 1½"	220.0
STMTA 63.2	63 x 2"	220.0
STMTA 75.2	75 x 2"	220.0

## Transition Brass Male Thread Adaptor



Code	Size	L
STMTA-F 20.½	20 x ½"	94.8
STMTA-F 25.¾	25 x ¾"	75.5
STMTA-F 32.1	32 x 1"	102.0
STMTA-F 40.1¼	40 x 1¼"	80.0
STMTA-F 50.1½	50 x 1½"	88.6
STMTA-F 63.2	63 x 2"	88.7
STMTA-F 75.2½	75 x 2½"	-
STMTA-F 90.3	90 x 3"	-
STMTA-F 110.4	110 x 4"	200.0

# Electrofusion Fittings Specifications

## Female Thread Tee



Code	Size	OD	ML
SFTT 50.1½	50 x 1½"	66.5	109.9
SFTT 63.2	63 x 2"	80.5	122.1
SFTT 75.2	75 x 2"	93.8	130.8

## Male Thread Tee



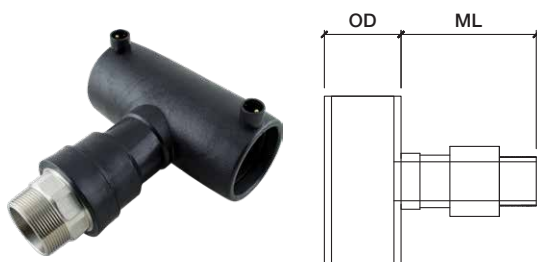
Code	Size	OD	ML
SMTT 50.1½	50 x 1½"	63.7	127.2
SMTT 63.2	63 x 2"	80.2	145.6
SMTT 75.2	75 x 2"	93.6	157.1

## Female Thread Reducing Tee



Code	Size	OD	ML
SFTRT 63.50.1½	63 x 50 x 1½"	78.9	112.6
SFTRT 75.63.2	75 x 63 x 2"	92.5	122.1
SFTRT 90.63.2	90 x 63 x 2"	110.1	123.9
SFTRT 110.63.2	110 x 63 x 2"	136	131.2

## Male Thread Reducing Tee



Code	Size	OD	ML
SMTRT 63.50.1½	63 x 50 x 1½"	78.9	132.9
SMTRT 75.63.2	75 x 63 x 2"	93.6	148.2
SMTRT 90.63.2	90 x 63 x 2"	111.5	153.4
SMTRT 110.63.2	110 x 63 x 2"	151.8	155.8
SMTRT 125.63.2	125 x 63 x 2"	151.0	153.5
SMTRT 160.63.2	160 x 63 x 2"	196.0	256.0



# Accessories

## 1. Pipe Cutter



Code	Application Range (mm)
SPC140	50 - 140
SPC160	100 - 160
SPC315	180 - 315

## 2. Manual Pipe Scraper



Code	Application Range (mm)
SMPS-50	1.5"

## 3. Rotation Scraper



Code	Application Range (mm)
SRS160	50 - 160
SRS315	75 - 315

# Electrofusion Welding Machine

## Elektra Light



Code	Application Range (mm)
SEL125	20 - 125 mm

\*with data logger

## Technical Features

	230V
Max welding diameter:	Ø 20 - Ø 125 (*)
Welding materials:	PE, PP, PP-R
Dimensions (DxWxH):	200x250x210 mm
Weight (with the bag):	7.6 Kg
Power Supply:	230 VAC 50-60 HZ
Max total power absorbed:	2700W
Nominal absorbed current:	8A
Welding nominal current Duty Cycle 60% (ISO 12176-2):	23A
Working temperature:	-10°C / +40°C
Welding voltage:	8 / 48 V
Peak electric power:	60A
Protection degree:	IP54
Connectors diameter:	F - 4 mm
Adapters diameter:	F - 4,7 mm
Memory capacity:	350 reports

(\*) OD 160mm couplers can also be welded but with precaution; wait for the machine to cool off completely after each welding cycle.

## Standard Equipment

- Connector adapters F 4mm / 4,7mm
- Transport case
- Manual scraper
- Scanner for barcode reading
- Data transfer software

## On Request

- Serial portable printer + connection cable

# Electrofusion Welding Machine

## Elektra 315



Code	Application Range (mm)
SEM315	20 - 315 mm

\*with data logger

## Technical Features

Max welding diameter:	Ø 20 - Ø 315
Welding materials:	PE, PP, PP-R
Dimensions (DxWxH):	358x285x302 mm
Weight (with the box):	19 Kg
Power Supply:	230 VAC 50-60 Hz
Max total power absorbed:	2700W
Working temperature:	-10°C / +40°C
Welding voltage:	8 / 48 V
Peak electric power:	80A
Protection degree:	IP54
Connectors diameter:	F - 4 mm
Adapters diameter:	F - 4,7 mm
Memory capacity:	4000 reports

## Standard Equipment

- Connector adapters F 4mm / 4,7mm
- Transport case
- Manual scraper
- Scanner for barcode reading
- Data transfer software

## On Request

- Serial portable printer + connection cable

# Electrofusion Welding Machine

## Elektra 500



Code	Application Range (mm)
SEM500	20 - 500 mm

\*with data logger

## Technical Features

Materials:	HDPE/PP/PP-R
Working range:	Ø 20 ÷ 500 mm
Power supply:	110 V single phase 50/60 Hz 230 V single phase 50/60 Hz
Total absorbed power:	5500 W (110 V) - 6400 W (230 V)
Max output current:	100 A (110 V) - 120 A (230 V)
60% Duty Cycle output:	70 A
Memory capacity:	4000 reports
Protection degree:	IP 54
Dimensions:	255x270x385 mm
Dimensions carrying case:	410x290x485 mm
Weight:	24 Kg

## Standard Equipment

- Universal adapter Ø 4,0 - 4,7mm
- Laser scanner
- Manual scraper
- Transport case

## On Request

- GPS
- Printer ESC-POS

# Electrofusion Welding Machine

## Elektra 1000



Code	Application Range (mm)
SEM1000	20 - 1000* mm

\* Contact manufacturer for further information on electrofusion fittings above Ø 1200 mm

## Technical Features

Materials:	HDPE/PP/PP-R
Working range:	Ø 20 ÷ > 1000* mm
Power supply:	230 V single phase 50/60 Hz
Total absorbed power:	6400 W
Max output current:	120 A
60% Duty Cycle output:	90 A
Memory capacity:	4000 reports
Protection degree:	IP 54
Dimensions:	255x270x385 mm
Dimensions carrying case:	410x290x485 mm
Weight:	26 Kg

## Standard Equipment

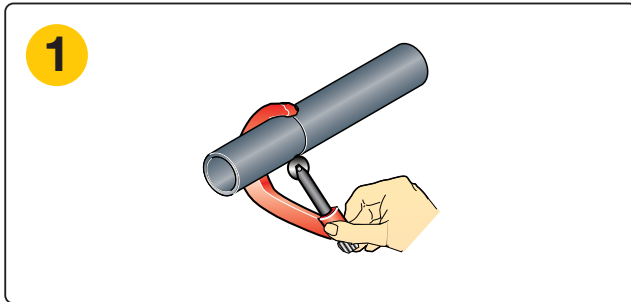
- Universal adapter Ø 4,0 - 4,7mm
- Laser scanner
- Manual scraper
- Transport case

## On Request

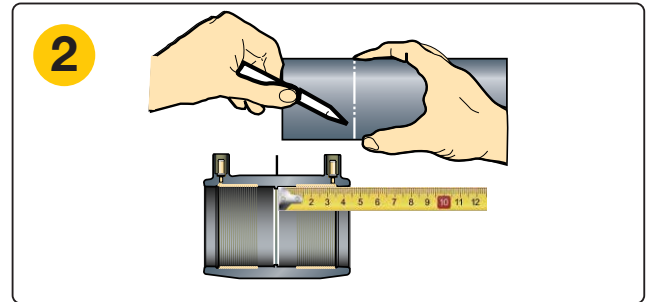
- GPS
- Printer ESC-POS

# Installations

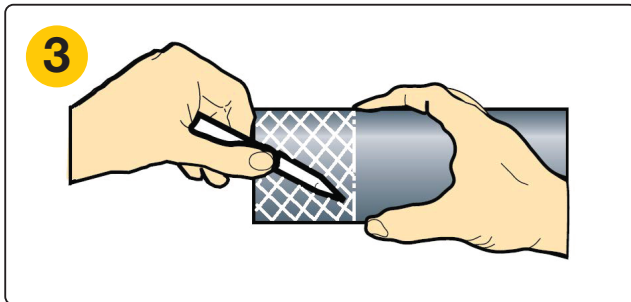
## Electrofusion Joint



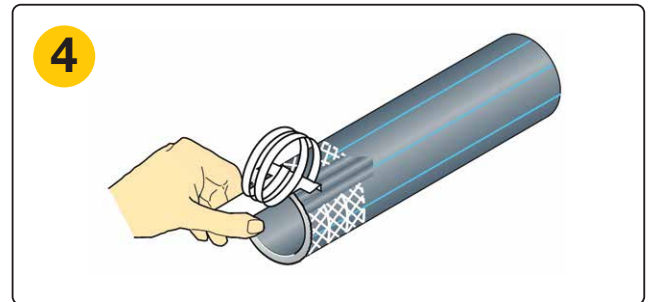
Clean pipe and cut ends squarely



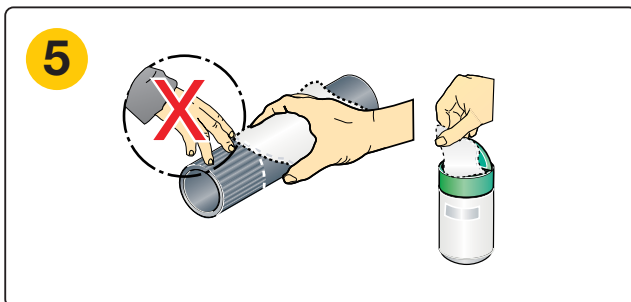
Measure and mark stab depth on pipe



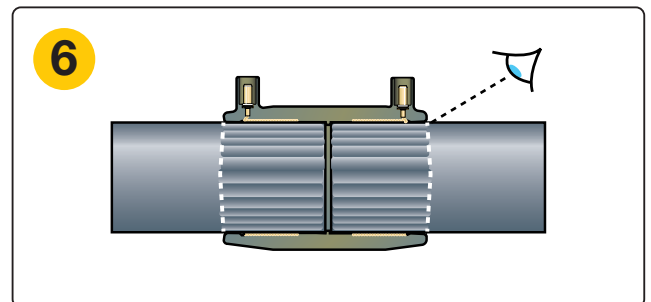
Mark the stab depth area with criss-cross pattern using bright color marker



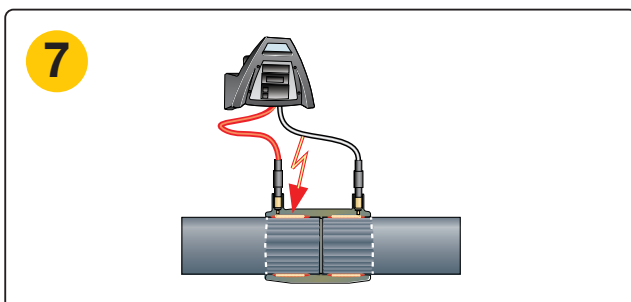
Scrape the pipe and all the criss-cross pattern



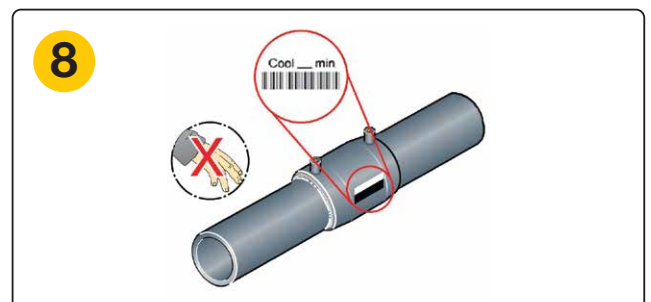
Clean with suitable degreasing agent



Stab pipe completely into fitting



Fuse the joint



Do not disturb joint during cooling time

# Product Warranty

Sansico Industries Sdn Bhd warrants its materials to be free of defects in workmanship and under normal use, service and when used for the purposes under the conditions for which they are intended.

This warranty shall not apply to any Sansico Industries Sdn Bhd material that has been altered, repaired and/or used in any way, stored outside, or has been subject to misuse, negligence, accident and/or has not been installed in accordance with installation instructions.

Installation of Sansico Electrofusion fittings requiring 40V to fuse must be carried out using a Sansico Electrofusion processor. The Sansico processor is a 8-48 volt output multi-voltage fusion processor with temperature compensating feature operating at 230/240 VAC requiring power supplied through portable power generator rated at 3000 watts (minimum) - 6500 watts (maximum). If pipe is more than 1.5% out of round the use of a ReRound Clamp is recommended to ensure proper installation.

Installation instruction must be adhered to, or our Product Warranty is null and void. Installation of electrofusion fittings must be carried out by properly trained and qualified operator(s) and/or by witness of the factory representative.

The obligation of Sansico Industries Sdn Bhd under this warranty shall be limited to replacement of any part that may prove defective under normal use.

Sansico Industries Sdn Bhd shall have the right to inspect the said material and purchaser shall, if requested, return defective product prepaid to the Sansico Industries Sdn Bhd. Purchaser shall assume all responsibility and expenses for removal, reinstallation and freight charges in connection with the foregoing remedy.

Sansico Industries Sdn Bhd shall not be liable for indirect, special, incidental or consequential damage or penalties and does not assume any liability of purchaser to other, or to anyone for injury to persons and/or property.

Any claim regarding shortage or damages from shipment of material must be submitted in writing to Sansico Industries Sdn Bhd within 10 days after receipts of shipment. Buyer shall note loss or damage on delivery order and provide a delivery receipt stating such with driver's signature.

Purchaser is responsible for passing on this Limited Warranty to their customer.

[www.sansico.com.my](http://www.sansico.com.my)

**SANSICO**

**HANSEN**

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