



STAINLESS STEEL MILL SPOUTING

Most of our mild steel spouting can be manufactured in stainless steel if required

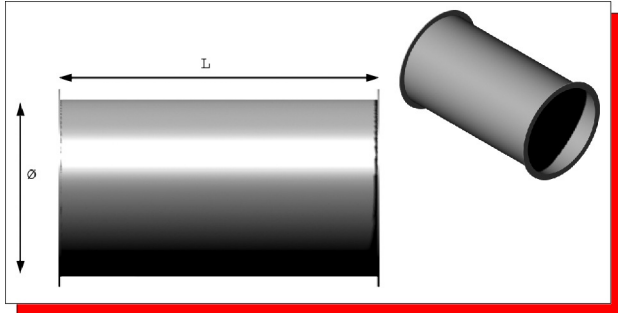


ON-SITE POWDER COATING



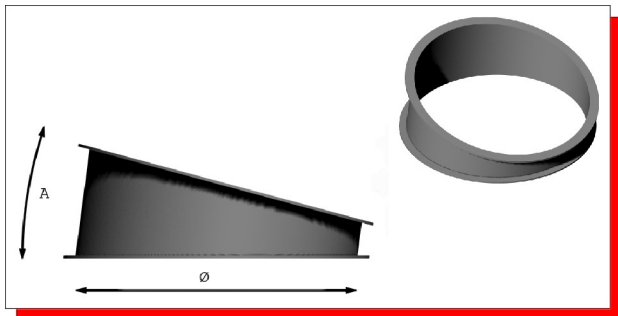
MILL SPOUTING – LIGHT DUTY

STRAIGHT PIPE



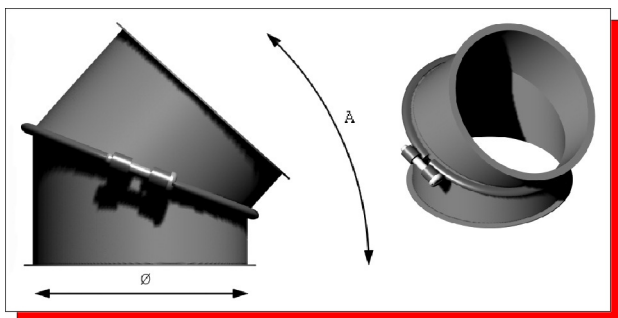
CODE	DIA. (mm)	LENGTH (mm)
PIPE-120	120	2 000
PIPE-150	150	2 000
PIPE-200	200	2 000
PIPE-250	250	2 000

SEGMENT



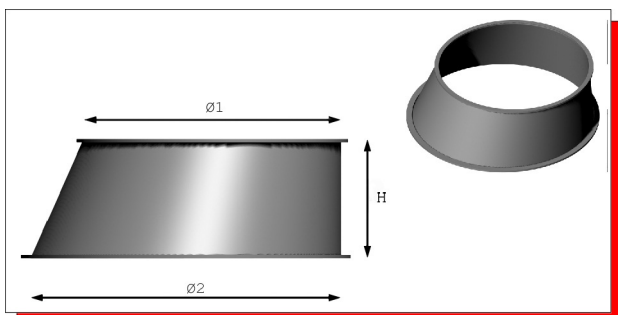
CODE	DIA. (mm)	ANGLE (deg)
SEG-120-05	120	5
SEG-120-10	120	10
SEG-120-15	120	15
SEG-150-05	150	5
SEG-150-10	150	10
SEG-150-15	150	15
SEG-200-05	200	5
SEG-200-10	200	10
SEG-200-15	200	15
SEG-250-05	250	5
SEG-250-10	250	10
SEG-250-15	250	15

UNIVERSAL JOINT



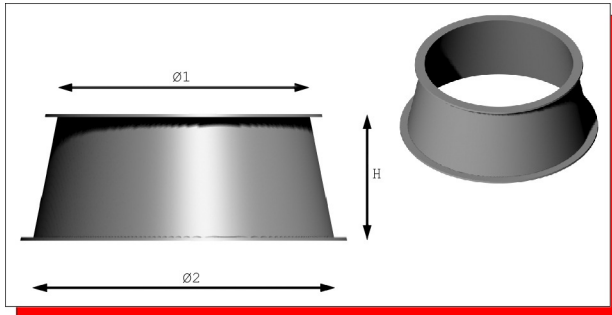
CODE	DIA. (mm)	ANGLE (deg)
UJ-120	120	45
UJ-150	150	45
UJ-200	200	45
UJ-250	250	45

CONE (ASYMMETRICAL)



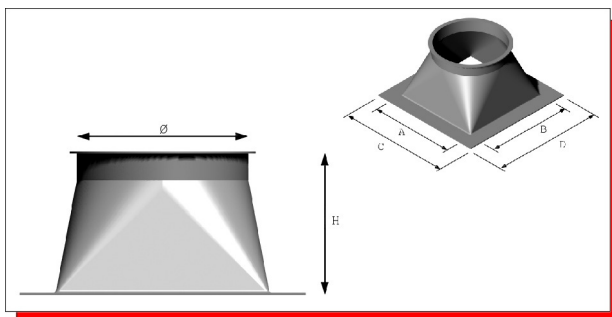
CODE	DIA. 1 (mm)	DIA. 2	HEIGHT
COA-120-150	120	150	50

CONE (SYMMETRICAL)



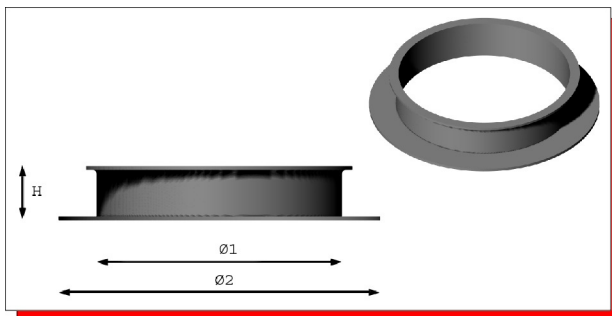
CODE	DIA. 1 (mm)	DIA. 2	HEIGHT
COS-120-150	120	150	50
COS-120-200	120	200	180
COS-150-200-1	150	200	105
COS-150-200-2	150	200	150
COS-150-200-3	150	200	60
COS-150-250	150	250	150
COS-200-250	200	250	100

SQUARE TO ROUND



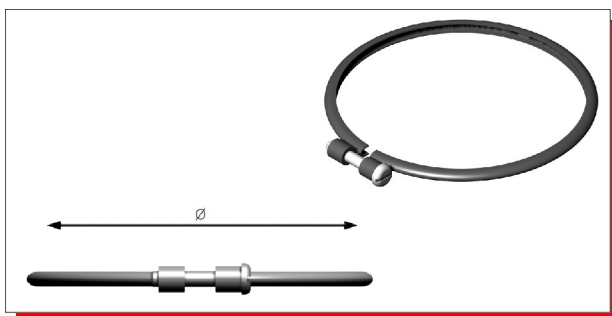
CODE	DIA	A	B	C	D	H
SQR-120-120	120	120	120	170	170	80
SQR-120-150	120	150	150	200	200	80
SQR-150-150	150	150	150	200	200	80

FLANGE PIECE



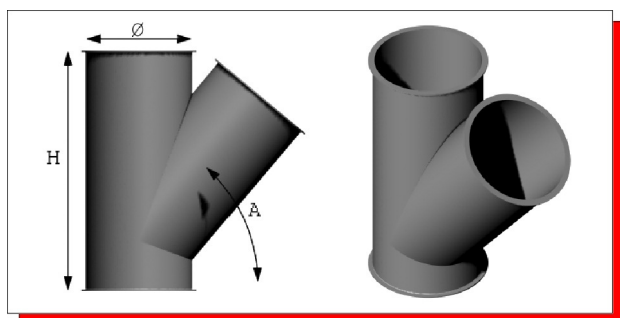
CODE	DIA. 1 (mm)	DIA. 2	HEIGHT
FP-120	120	156	25
FP-150	150	186	25
FP-200	200	236	25
FP-250	250	286	25
FP-300	300	336	25

TENSION RING



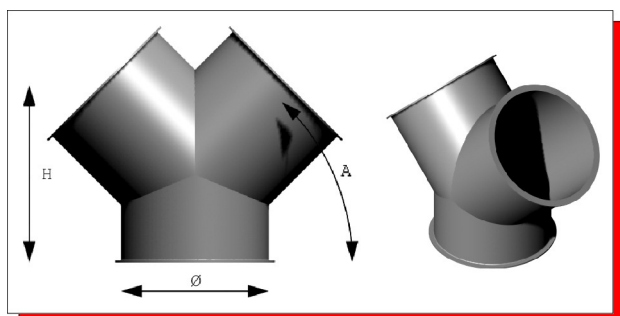
CODE	DIA. (mm)
TR-120	120
TR-150	150
TR-200	200
TR-250	250

BRANCH PIPE (ASYMMETRICAL)



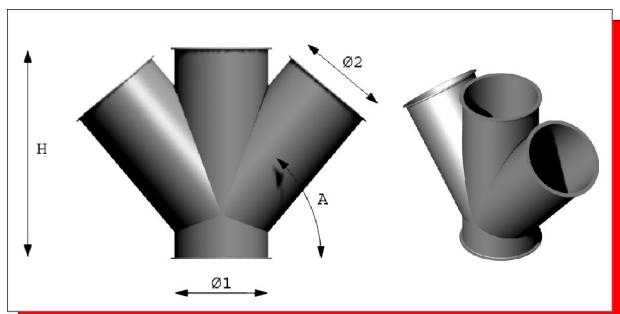
CODE	DIA. (mm)	ANGLE (deg)	HEIGHT
BPA-120-45	120	45	245
BPA-120-50	120	50	270
BPA-120-55	120	55	285
BPA-150-45	150	45	285
BPA-150-50	150	50	310
BPA-150-55	150	55	340
BPA-200-45	200	45	375
BPA-200-50	200	50	410
BPA-200-55	200	55	445
BPA-250-45	250	45	455
BPA-250-50	250	50	505
BPA-250-55	250	55	555

BRANCH PIPE (SYMMETRICAL)



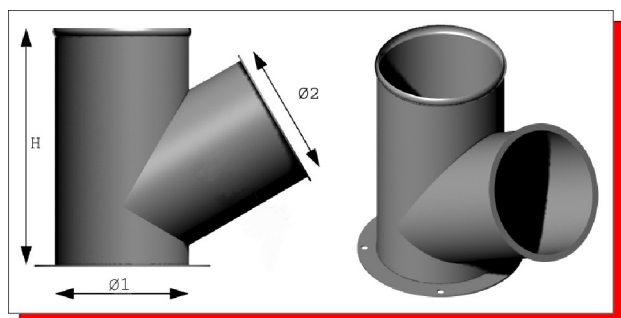
CODE	DIA. (mm)	ANGLE (deg)	HEIGHT
BPS-120-45	120	45	145
BPS-120-50	120	50	145
BPS-120-55	120	55	145
BPS-150-45	150	45	195
BPS-150-50	150	50	195
BPS-150-55	150	55	195
BPS-200-45	200	45	250
BPS-200-50	200	50	250
BPS-200-55	200	55	250

BRANCH PIPE (3-WAY)



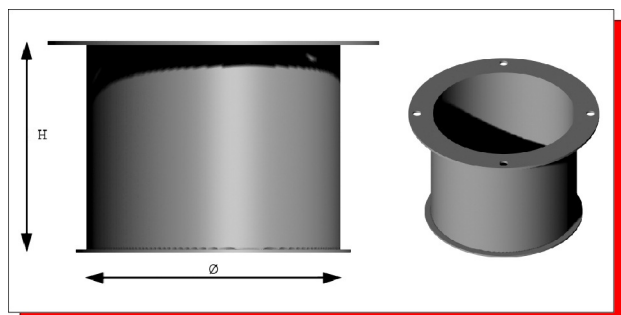
CODE	DIA. 1 & 2 (mm)	ANGLE (deg)	HEIGHT
BP3-120-45	120	45	245
BP3-120-50	120	50	270
BP3-120-55	120	55	285
BP3-150-45	150	45	285
BP3-150-50	150	50	310
BP3-150-55	150	55	340
BP3-200-45	200	45	375
BP3-200-50	200	50	410
BP3-200-55	200	55	445
BP3-250-45	250	45	455
BP3-250-50	250	50	505
BP3-250-55	250	55	555

SIFTER OUTLET



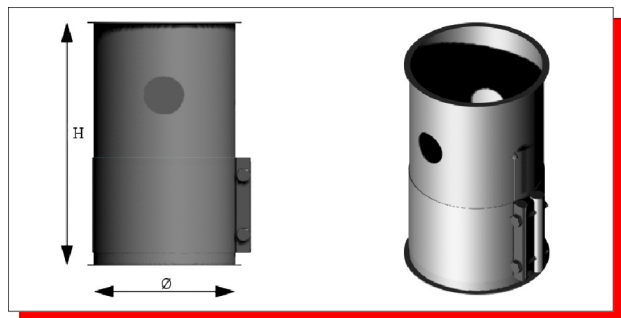
CODE	DIA. 1 (mm)	DIA. 2	HEIGHT
SO-120	120	120	220
SO-150	150	150	220

SIFTER OUTLET EXTENSION PIECE



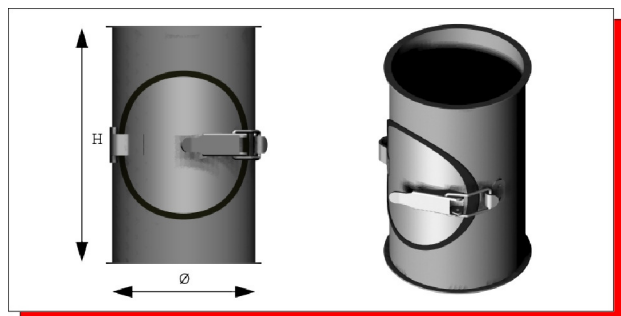
CODE	DIA. (mm)	HEIGHT
SOEP-120	120	100
SOEP-150	150	100

POKER PIECE



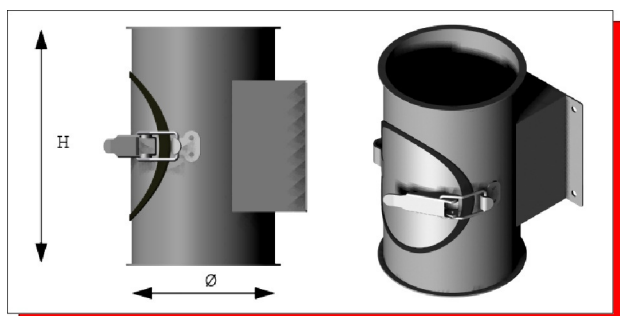
CODE	DIA. (mm)	HEIGHT
PP-120	120	200
PP-150	150	200

HAND HOLE



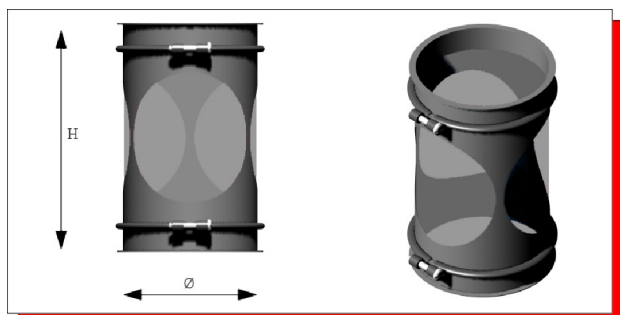
CODE	DIA. (mm)	HEIGHT
HH-120	120	200
HH-150	150	200
HH-200	200	200
HH-250	250	200

SPOUT MAGNET



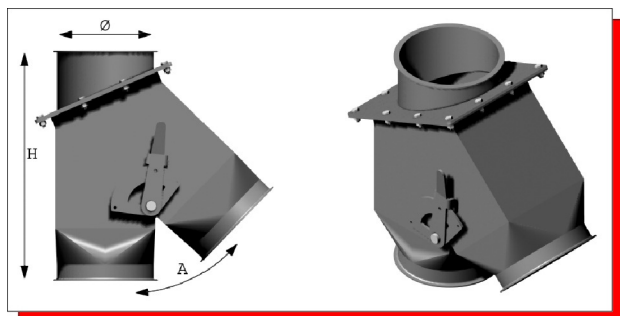
CODE	DIA. (mm)	HEIGHT
SM-120	120	200
SM-150	150	200
SM-200	200	200

SIGHT SPOUT



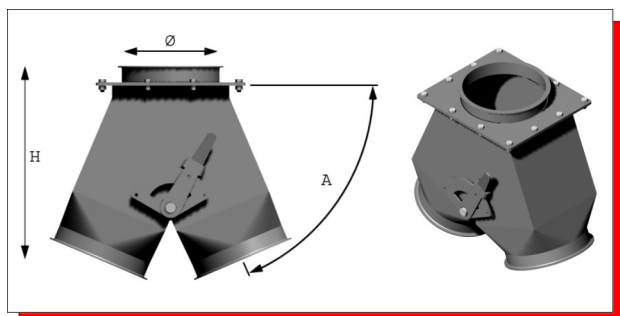
CODE	DIA. (mm)	HEIGHT
SS-120	120	200
SS-150	150	200
SS-200	200	200

DIVIDER BOX (ASYMMETRICAL)



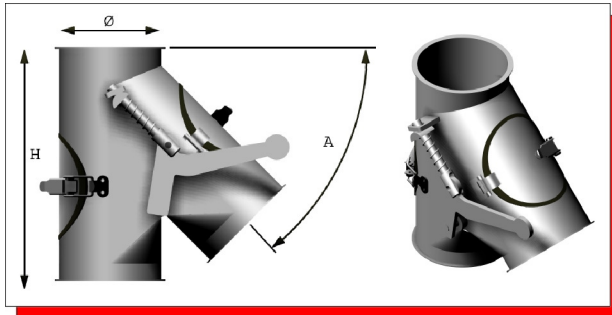
CODE	DIA. (mm)	ANGLE (deg)	HEIGHT
DBA-120	120	45	280
DBA-150	150	45	330
DBA-200	200	45	400

DIVIDER BOX (SYMMETRICAL)



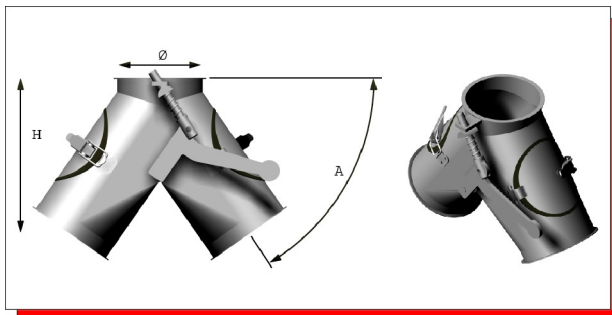
CODE	DIA. (mm)	ANGLE (deg)	HEIGHT
DBS-120	120	67.5	240
DBS-150	150	67.5	270
DBS-200	200	67.5	360

FLAP BOX (ASYMMETRICAL)



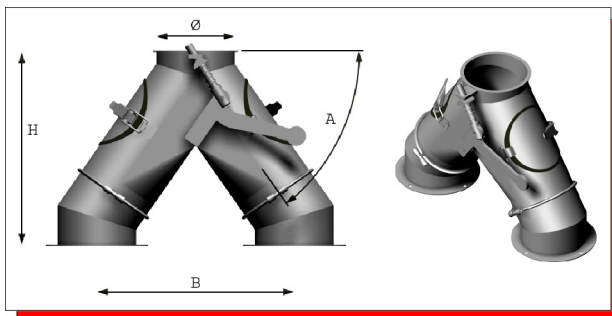
CODE	DIA. (mm)	ANGLE (deg)	HEIGHT
FBA-120	120	50	250
FBA-150	150	50	300
FBA-200	200	50	380

FLAP BOX (SYMMETRICAL)



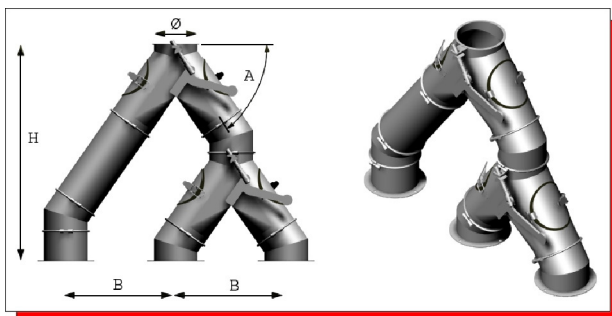
CODE	DIA. (mm)	ANGLE (deg)	HEIGHT
FBS-120	120	50	250
FBS-150	150	50	310
FBS-200	200	50	350

COLLECTING SCREW FLAP BOX (DOUBLE)



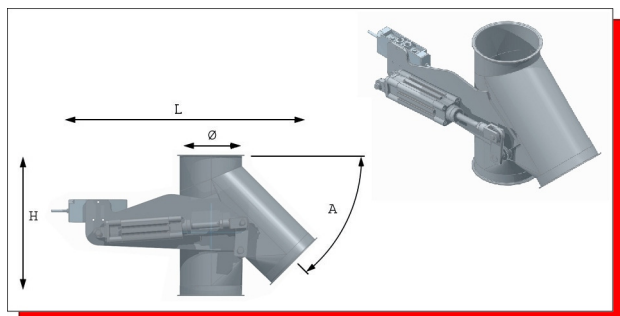
CODE	DIA.	ANGLE	B	HEIGHT
CSFD-120	120	50	300	250

COLLECTING SCREW FLAP BOX (TRIPLE)



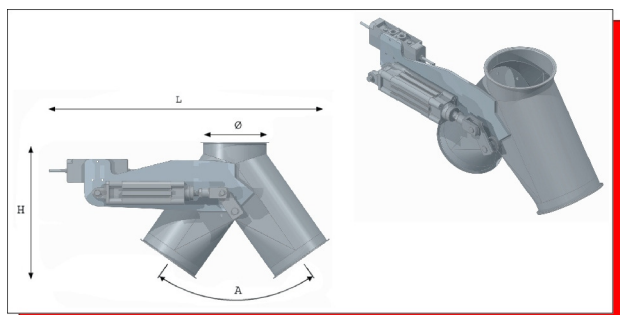
CODE	DIA.	ANGLE	B	HEIGHT
CSFT-120	120	50	300	590

PNEUMATIC FLAP BOX (ASYMMETRICAL)



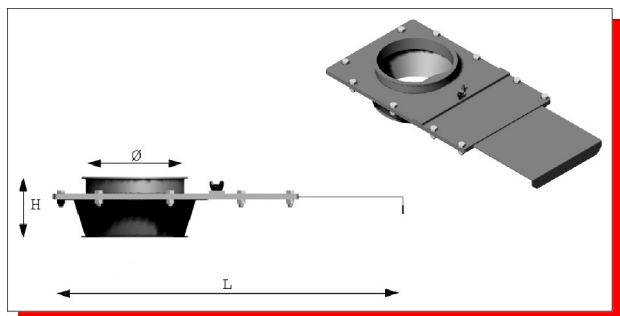
CODE	DIA.	ANGLE	LENGTH	HEIGHT
PFBA-120	120	45	520	270
PFBA-150	150	45	550	310
PFBA-200	200	45	570	450
PFBA-250	250	45	580	490
PFBA-300	300	45	740	510

PNEUMATIC FLAP BOX (SYMMETRICAL)



CODE	DIA.	ANGLE	LENGTH	HEIGHT
PFBS-120	120	55	544	250
PFBS-150	150	55	568	310
PFBS-200	200	50	575	350
PFBS-250	250	50	618	380

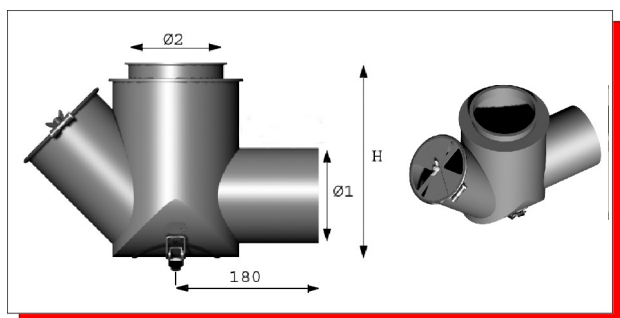
HAND SLIDE



CODE	DIA. (mm)	LENGTH	HEIGHT
HS-120	120	300	85
HS-150	150	320	85
HS-200	200	450	85
HS-250	250	550	85

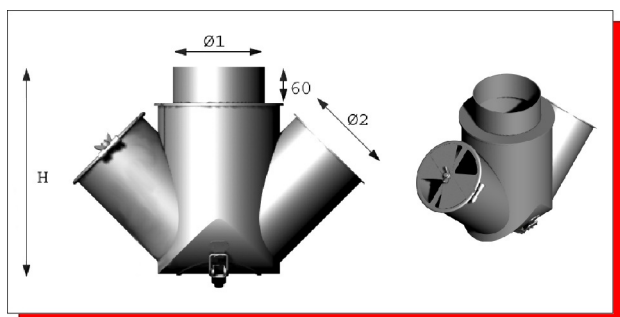
Also Available As Pneumatically Operated

SUCTION NOZZLE (HORIZONTAL)



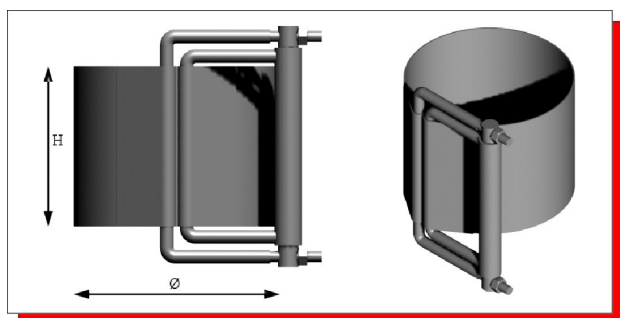
CODE	DIA. 1 (mm)	DIA. 2	HEIGHT
SNH-60	60	120	245
SNH-63.5	63.5	120	245
SNH-65	65	120	245
SNH-70	70	120	245
SNH-76.2	76.2	120	245
SNH-80	80	120	245
SNH-85	85	120	245
SNH-88.9	88.9	120	245
SNH-90	90	120	245
SNH-95	95	120	245
SNH-100	100	120	245
SNH-101.6	101.6	120	245
SNH-105	105	120	245
SNH-110	110	120	245
SNH-114.3	114.3	120	245
SNH-120	120	120	245
SNH-127	127	120	245
SNH-139.7	139.7	120	245
SNH-152.4	152.4	120	245
SNH-165.1	165.1	120	245

SUCTION NOZZLE (VERTICAL)



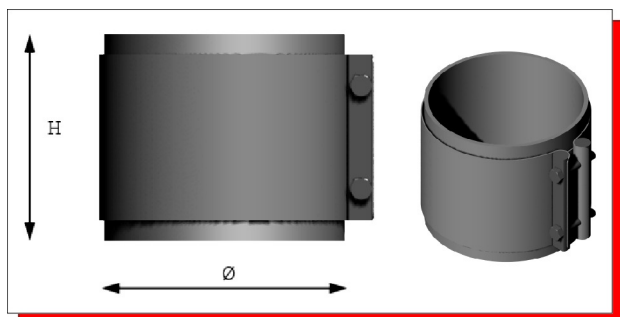
CODE	DIA. 1 (mm)	DIA. 2	HEIGHT
SNV-60	60	120	245
SNV-63.5	63.5	120	245
SNV-65	65	120	245
SNV-70	70	120	245
SNV-76.2	76.2	120	245
SNV-80	80	120	245
SNV-85	85	120	245
SNV-88.9	88.9	120	245
SNV-90	90	120	245
SNV-95	95	120	245
SNV-100	100	120	245
SNV-101.6	101.6	120	245
SNV-105	105	120	245
SNV-110	110	120	245
SNV-114.3	114.3	120	245
SNV-120	120	120	245
SNV-127	127	120	245
SNV-139.7	139.7	120	245
SNV-152.4	152.4	120	245
SNV-165.1	165.1	120	245

QUICK-RELEASE CLAMP



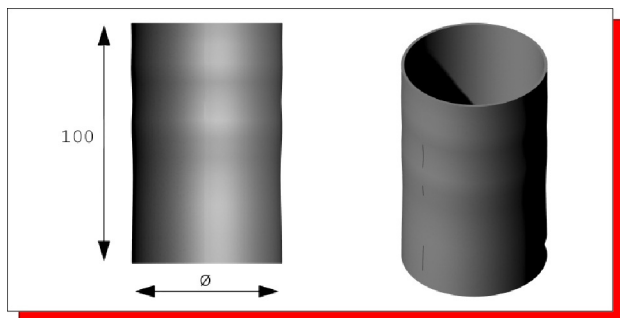
CODE	DIA. (mm)	HEIGHT
QRC-63.5	63.5	100
QRC-76.2	76.2	100
QRC-88.9	88.9	100
QRC-101.6	101.6	100
QRC-114.3	114.3	100
QRC-127	127	100
QRC-139.7	139.7	100
QRC-152.4	152.4	100

CLAMP WITH RUBBER



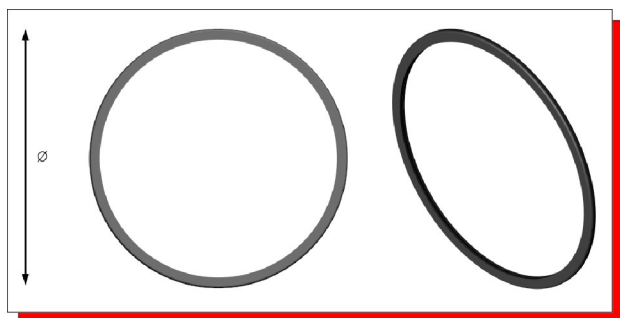
CODE	DIA. (mm)	HEIGHT
CWR-63.5	63.5	100
CWR-76.2	76.2	100
CWR-88.9	88.9	100
CWR-101.6	101.6	100
CWR-114.3	114.3	100
CWR-127	127	100
CWR-139.7	139.7	100
CWR-152.4	152.4	100

RUBBER SLEEVE



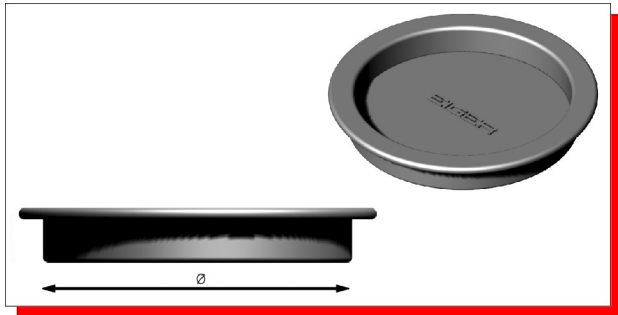
CODE	DIA. (mm)
RS-63.5	63.5
RS-76.2	76.2
RS-88.9	88.9
RS-101.6	101.6
RS-114.3	114.3
RS-127	127
RS-139.7	139.7
RS-152.4	152.4

RUBBER RING



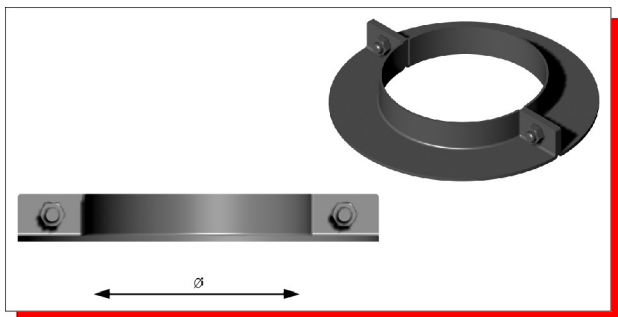
CODE	DIA. (mm)
RR-120	120

RUBBER LID



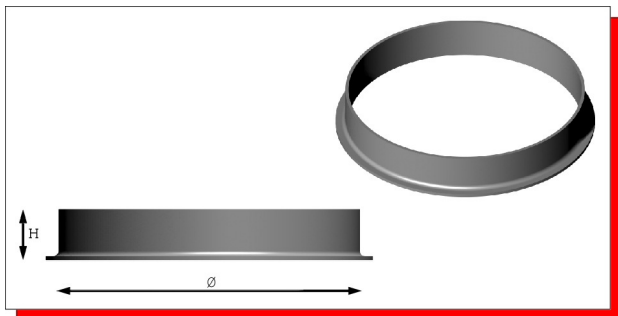
CODE	DIA. (mm)
RL-100	100
RL-120	120

FLOOR CLAMP



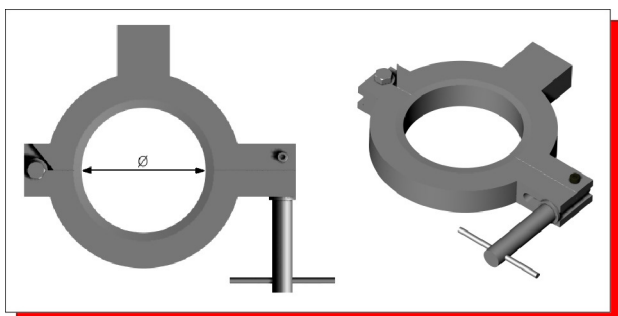
CODE	DIA. (mm)
FC-120	120
FC-150	150
FC-200	200
FC-250	250

WELD-ON-PIECE



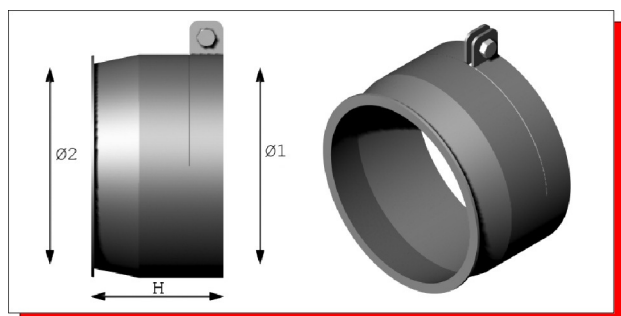
CODE	DIA. (mm)	HEIGHT
WOP-120	120	20
WOP-150	150	20
WOP-200	200	20
WOP-250	250	20

FLARING TOOL



CODE	DIA. (mm)
FT-120	120
FT-150	150
FT-200	200

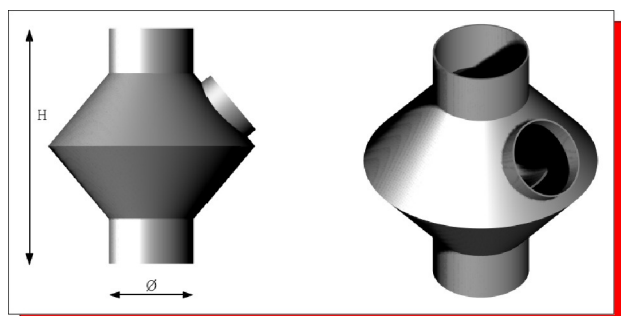
ADAPTER PIECE



CODE	DIA. 1 (mm)	DIA. 2	HEIGHT
AP-127	127	120	70
AP-152	152	150	70

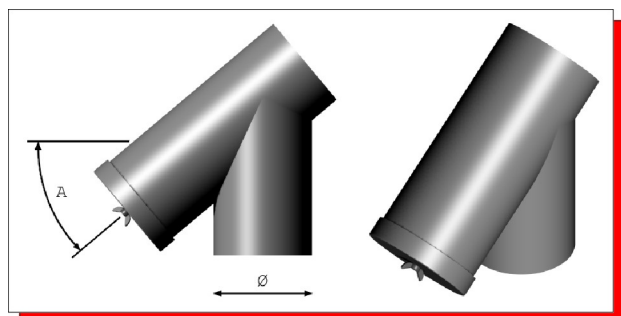
MILL SPOUTING – HEAVY DUTY

BREAKER VERTICAL FLOW BOX



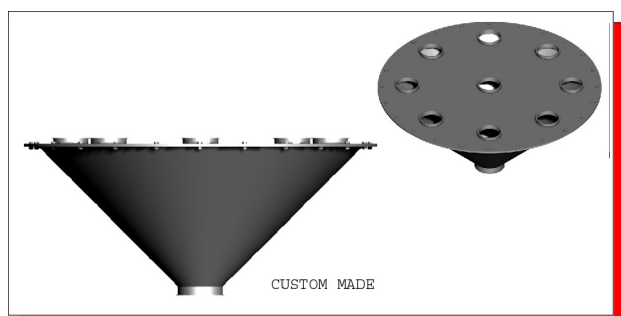
CODE	DIA. (mm)	HEIGHT
BVFB-127	127	420
BVFB-152	152	420

BREAKER ANGLE FLOW BOX



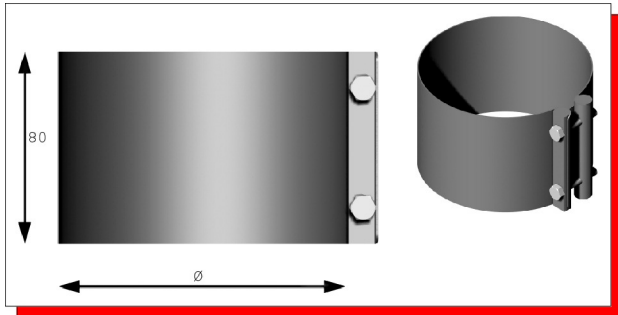
CODE	DIA. (mm)	ANGLE (deg)
BAFB-127-35	127	35
BAFB-127-40	127	40
BAFB-127-45	127	45
BAFB-152-35	152	35
BAFB-152-40	152	40
BAFB-152-45	152	45

MULTIPLE OUTLET



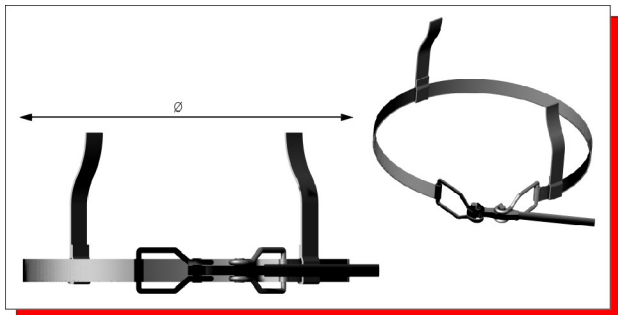
CODE	DIA. (mm)	OUTLETS
MO	Custom Made	Custom Made

SPOUT CLAMP



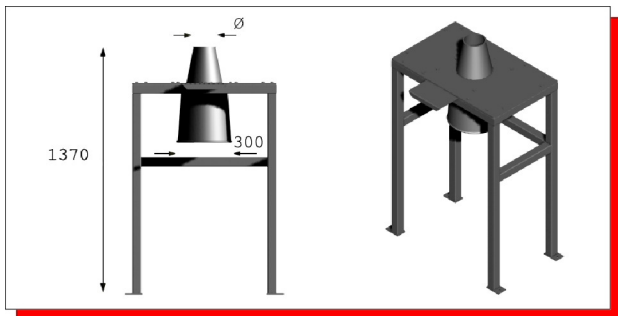
CODE	DIA. (mm)
SC-63.5	63.5
SC-76.2	76.2
SC-88.9	88.9
SC-101.6	101.6
SC-114.3	114.3
SC-127	127
SC-139.7	139.7
SC-152.4	152.4

BELT BUCKLE



CODE	DIA. (mm)
BB-250 TO 350	Adjustable Sizes

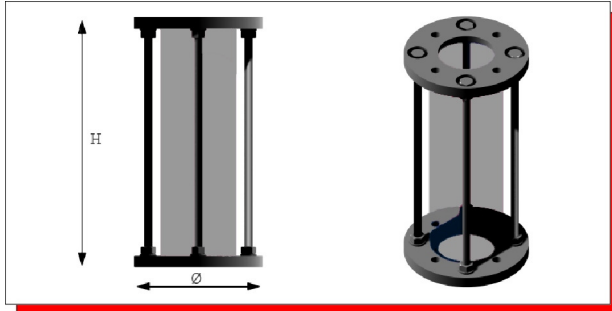
BAG-OFF TABLE



CODE	DIA. (mm)
BOT-120	120
BOT-150	150
BOT-200	200
Available In Single, Double & Triple Inlet	

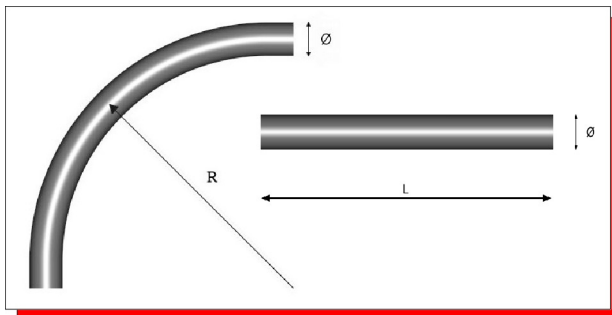
BLOWLINE EQUIPMENT

BLOWLINE SIGHT GLASS



CODE	DIA. (mm)	HEIGHT
BSG-63.5	63.5	300
BSG-76.2	76.2	300
BSG-88.9	88.9	300
BSG-101.6	101.6	300
BSG-114.3	114.3	300
BSG-127	127	300
BSG-139.7	139.7	300
BSG-152.4	152.4	300
BSG-165.1	165.1	300

PNEUMATIC BEND – 90 DEGREE (PNB); HEAVY DUTY STRAIGHT PIPE (HDSP)



CODE	DIA. 1 (mm)	WALL	RADIUS
PNB-63.5	63.5	3.0	800
PNB-76.2	76.2	3.0	800
PNB-88.9	88.9	3.0	800
PNB-101.6	101.6	3.0	800
PNB-114.3	114.3	3.5	800
PNB-127	127	3.5	800
PNB-139.7	139.7	4.0	800
PNB-152.4	152.4	4.0	800

Also Available As A Wearing Bend

CODE	DIA. 1 (mm)	WALL	LENGTH
HDSP-63.5	63.5	3.0	1000 – 6000
HDSP-76.2	76.2	3.0	1000 – 6000
HDSP-88.9	88.9	3.0	1000 – 6000
HDSP-101.6	101.6	3.0	1000 – 6000
HDSP-114.3	114.3	3.0	1000 – 6000
HDSP-127	127	3.0	1000 – 6000
HDSP-139.7	139.7	3.0	1000 – 6000
HDSP-152.4	152.4	3.0	1000 – 6000

GALVANISED ASPIRATION DUCTING

**STRAIGHT PIPE;
BEND (DEG: 90 / 45 / 18 / 9)**



STRAIGHT PIPE		BEND	
DIA. (mm)	LENGTH	DIA.	RADIUS
70	915	70	200
80	915	80	200
90	915	90	200
100	915	100	200
120	915	120	200
130	915	130	200
150	915	150	200
180	915	180	200
210	915	210	250
250	915	250	300
300	915	300	400
350	915	350	400
400	915	400	400
450	915	450	450
500	915	500	500
550	915	550	500
600	915	600	500
650	915	650	500
700	915	700	550
750	915	750	600
800	915	800	800

BRANCH PIPE

RUBBER DAMPER



SQUARE TO ROUND WEATHER COWL

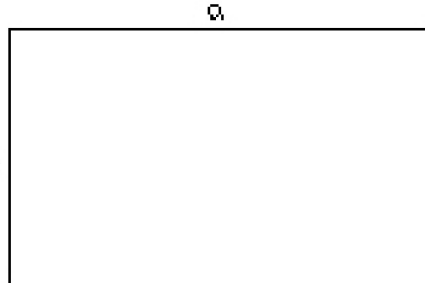


Also Manufactured:

Butterfly	False Air
Clamp	Air Regulator
Silencer	Cleaning Door
Cone	Hanger Bracket

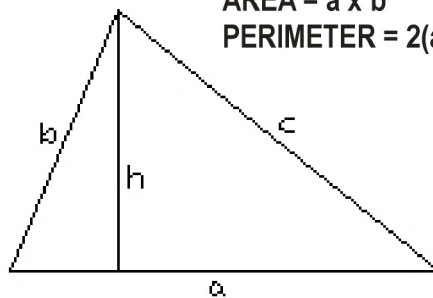
USEFUL FORMULAS & TABLES

MEASUREMENT:



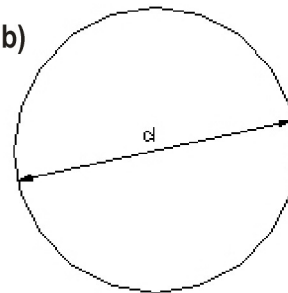
$$\text{AREA} = a \times b$$

$$\text{PERIMETER} = 2(a + b)$$



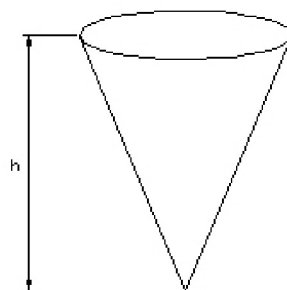
$$\text{AREA} = \frac{a \times h}{2}$$

$$\text{PERIMETER} = a + b + c$$

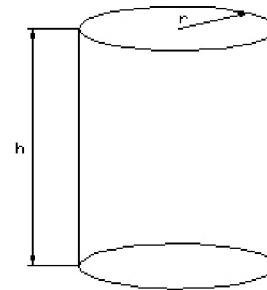


$$\text{AREA} = \frac{d^2 \times \pi}{4}$$

$$\text{CIRCUMFERENCE} = \pi \times d$$



$$\text{VOLUME} = \frac{(\text{AREA OF BASE} \times h)}{3}$$



$$\text{VOLUME} = r^2 \times \pi \times h$$

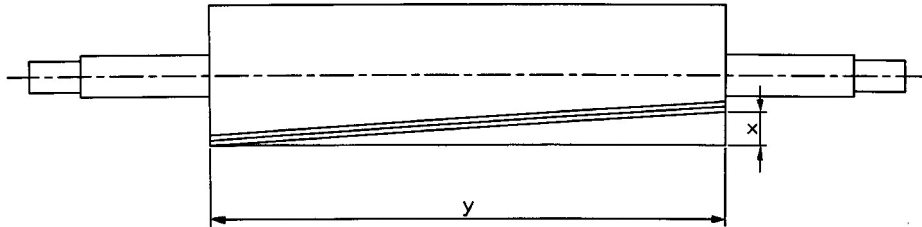
$$\pi = 3.14$$

SPOUTING PIPE FLOW RATE (TONS / HOUR):

Pipe Dia.	Grain		1BK	Flour
mm	Vertical	45 Deg.	Vertical	60 Deg.
100	15	11	4	2.5
120	22	17	6	3.5
150	37	26.5	9	7
200	63	45	15	12
250	99	70.5	25	21
300	142	100	37	31
350	190	136	50	42

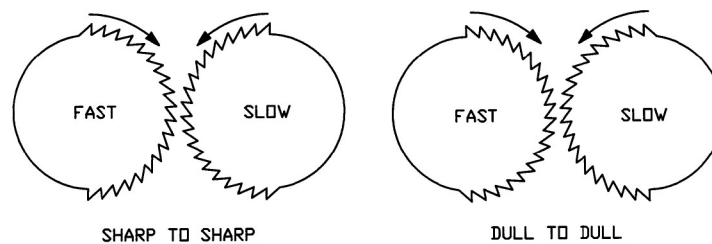
FLUTE SPIRAL:

The following formula is used to calculate the percentage spiral used on fluted rolls:



- The distance the spiral moves around the circumference of the roll (x)
- The length of the roll (y)
- % spiral = $x \div y \times 100$

ROLL DISPOSITION:



LENGTH:

1 centimetre (cm) = 10 millimetre (mm)
1 metre (m) = 100 cm / 1 000 mm
1 kilometre (km) = 1 000 m

SURFACE / AREA:

1 sq cm (cm²) = 100 mm²
1 sq metre (m²) = 10 000 cm²
1 sq km (km²) = 100 hectares

TEMPERATURE:

Celsius = $(F - 32) \times 0.556$
Fahrenheit = $1.8 \times C + 32$

VOLUME & CAPACITY:

1 cu metre (m³) = 1 000 dm³
1 litre (ℓ) = 1 cu decimetre (dm³)
1 hectolitre (hl) = 100 ℓ
1 kilolitre (kl) = 1 000 ℓ

WEIGHT:

1 gram (g) = 1 000 milligram (mg)
1 kilogram (kg) = 1 000 g
1 tonne (t) = 1 000 kg

MATERIAL DENSITY (KG / M³):

These figures are typical but may vary subject to conditions and granulation.

Wheat	= 750
Cake flour	= 550
Bread flour	= 530
Brown bread meal	= 520
Pollard	= 360
Bran	= 300
Digestive bran	= 160
Maize	= 750
Samp	= 700
Maize rice	= 650
Grits	= 600
Super maize meal	= 580
Special maize meal	= 570
Maize flour	= 560
Maize offal	= 350-400
Rye	= 680
Rye flour	= 510
Oats	= 570
Rice	= 700

WATER ADDITION:

The following formula is used to calculate the amount of water added to increase the dry moisture of grain to a target moisture suitable for processing:

$$\frac{\text{MATERIAL FLOW RATE IN KG} \times (\text{TARGET MOISTURE} - \text{DRY MOISTURE})}{100 - \text{TARGET MOISTURE}}$$

eg. 12 t/hour mill with a 15% target moisture. Dry moisture is 12%:

$$\frac{12\,000 \times (15 - 12)}{100 - 15} = \frac{12\,000 \times 3}{85} = 423.5 \text{ litres per hour water addition.}$$

The following formula is used to calculate the percentage increase in mass due to the addition of water:

$$\frac{100 \times (\text{TARGET MOISTURE} - \text{DRY MOISTURE})}{100 - \text{TARGET MOISTURE}}$$

DIFFERENTIAL DRIVES:

The following formula is used to calculate the speed of the **driven pulley**:

$$\frac{\text{DIAMETER OF THE DRIVER PULLEY} \times \text{SPEED OF THE DRIVER PULLEY}}{\text{DIAMETER OF THE DRIVEN PULLEY}}$$

or with **gears**:

$$\frac{\text{NUMBER OF TEETH ON THE DRIVER GEAR} \times \text{SPEED OF THE DRIVER GEAR}}{\text{NUMBER OF TEETH ON THE DRIVEN GEAR}}$$

WIRE MESH SELECTION CHART:

The aperture size will vary, dependant on wire diameter used by various suppliers.

Mesh Count	Aperture (Microns)	Wire Dia.	Mesh Count	Aperture (Microns)	Wire Dia.
3	7 550	0.700	32	634	0.160
3.5	6 600	0.700	34	587	0.160
4	5 650	0.700	36	558	0.150
5	4 380	0.700	38	518	0.140
6	3 690	0.550	40	485	0.140
7	3 080	0.550	42	465	0.140
8	2 680	0.550	44	437	0.140
10	2 200	0.340	46	422	0.130
12	1 807	0.310	48	399	0.130
14	1 534	0.280	50	378	0.130
16	1 308	0.280	52	368	0.120
18	1 171	0.260	54	350	0.120
20	1 030	0.240	56	338	0.115
22	953	0.220	60	308	0.115
24	858	0.200	62	298	0.115
26	820	0.200	64	287	0.115
28	727	0.180	70	263	0.110
30	667	0.180	80	228	0.100

MILLING EQUIPMENT & MACHINERY

VOLUMETRIC MEASURER WITH INVERTER DRIVE



CAPACITY OPTIONS (TONS PER HOUR)

3.2

4.1

5.1

5.6

7.1

8.6

11.0

13.6

14.3

DAMPENING UNIT – FLOW METER & FLOW BOX



FLOW METER OPTIONS (LITRES PER HOUR)

4 – 40
5 – 60
10 – 100
15 – 160
20 – 250
40 – 400
50 – 500
60 – 600
60 – 640
100 – 1 000
150 – 1 600

ASPIRATOR – COMPLETE WITH EIGER AIRLOCK

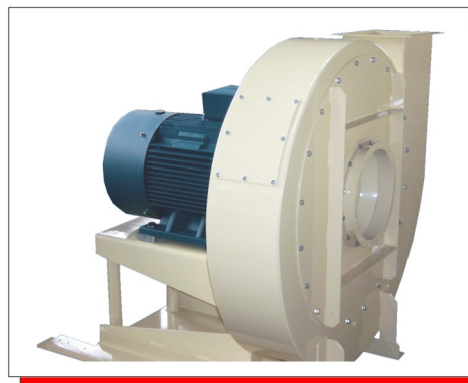
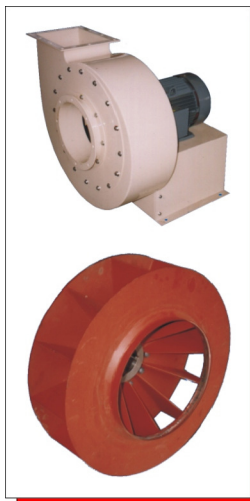


SIZES (mm)

500
750
1 000

FAN & IMPELLER

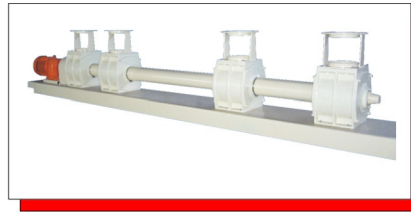
HIGH PRESSURE FAN



AIRLOCK (7 LITRE) & SIGHT GLASS



AIRLOCK TABLE



FILTER: (7 BAG)



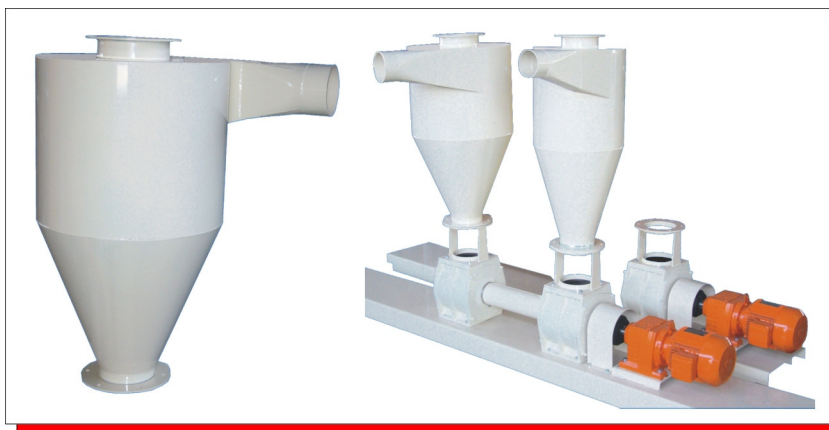
(14 BAG)



FILTER CONTROL



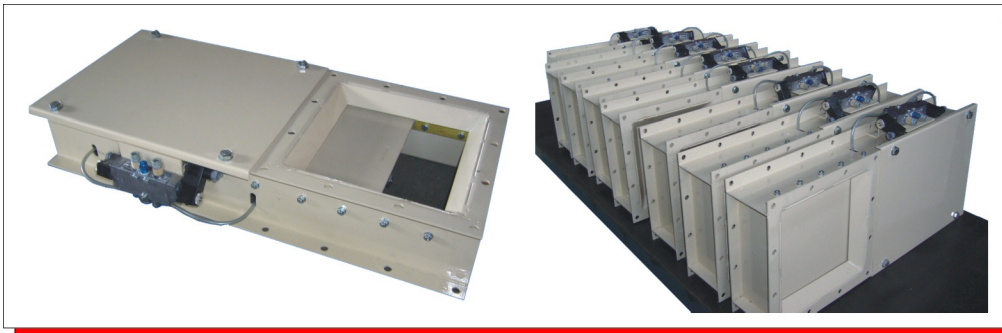
CYCLONE



TURBO SIFTER



PNEUMATIC SLIDE



ELEVATOR



(HEAD)



(BOOT)



(BUCKETS)



SCREW CONVEYOR & TWIN SCREW FEEDER



TUFF BAG PACKER

