

2.4.3 HAR-U "Euro" Hot Air Recycler

2.4.3.1 General Description

HAR-U "Euro" hot air recycler has energy saving and dust-collecting function, its design is for working with "Euro" dryers to form a sealed loop. This machine has a simple structure and very easy for installation. High efficiency in hot air recycling use will save energy up to 40% and improve the production efficiency greatly. The built-in filter can maintain the air clean so to ensure production quality. The machine has a backup air adjusting valve and moisture drainage bore to make better recycling use of hot air.



Model: SHD-80U+HAR-80U

Picture 2-29: "Euro" Hot Air Recycler

Features:

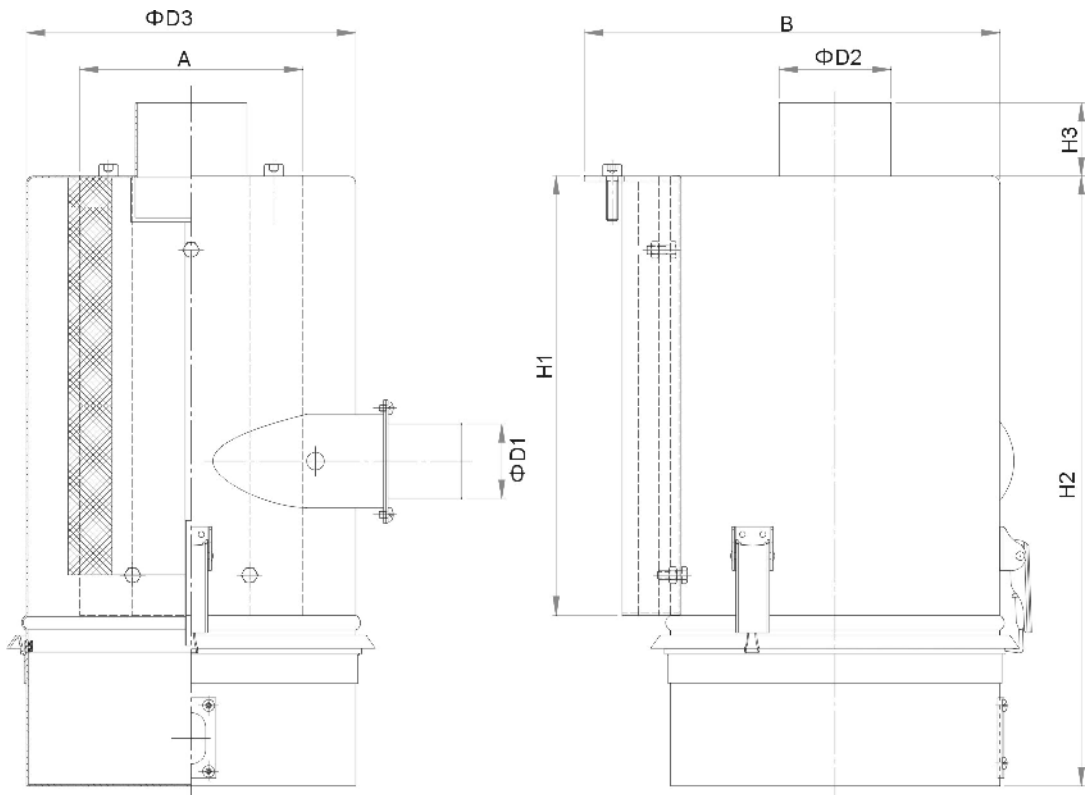
1. Hot air recycling can reduce the temperature of the plant.
2. Keep the air in the plant clean so can ensure production quality.
3. Because the hot air heats up faster, so can greatly cut the energy consumption up to 40%.
4. Economical and less space occupation, can work on the original "Euro" hopper dryer.
5. Adjustable backup air device.
6. Beautiful appearance, optimal structure and especially easy for installation.

2.4.3.2 Technical Specification

1) Specifications

Table 2-25: Specifications

Model	Filtering Barrel Dia. (Mm)	Air inlet Pipe Dia.	Air Outlet Pipe Dia.	Applicable Models	Fixed Plate	Blower Flange (With Air Quantity Adaptor)
HAR-20U	160	1.5"	2"	SHD-20U	SHD-20U	Air Inlet Flange for 0.12kW blower
HAR-40U				SHD-40U	SHD-40U	
HAR-80U	225	2"	3"	SHD-80U~120U	SHD-80U~120U	
HAR-160U	225	2.5"	3"	SHD-160U~230U	SHD-160U~230U	Air Inlet Flange for 0.18kW blower
HAR-300U	225	2.5"	4"	SHD-300U~450U	SHD-300U~450U	Air Inlet Flange for 0.25kW blower
HAR-600U	225	3"		SHD-600U~750U	SHD-600U~750U	Air Inlet Flange for 0.55kW blower
HAR-900U	225	4"		SHD-900U	SHD-900U	
HAR-1200U	225	4"	4"	SHD-1200U	SHD-1200U	Air Inlet Flange for 1.1kW blower



Picture 2-30: Technical Specifications

2) Technical Specifications

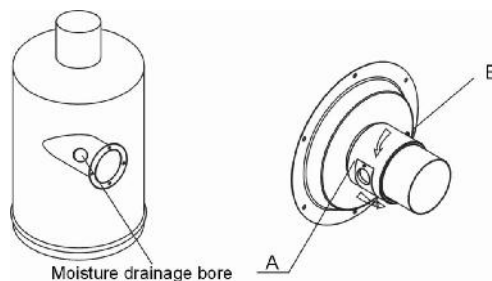
Table 2-26: Out Dimensions

Model	A(mm)	B(mm)	D1(mm)	D2(mm)	D3(mm)	H1(mm)	H2(mm)	H3(mm)
HAR-20U	125	260	38	50.8	160	170	277	50
HAR-40U								
HAR-80U	152	314	51	76.2	225	303	405	50
HAR-120U								
HAR-160	152	314	63.5	76.2	225	303	405	50
HAR-230U								
HAR-300U	152	310	63.5	101.6	225	345	450	50
HAR-450U								
HAR-600U	152	322	76.2	101.6	225	345	450	50
HAR-750U								
HAR-900U	152	322	101.6	101.6	225	345	450	50
HAR-1200U								

2.4.3.3 Working Principle

HAR-U "Euro" hot air recycler has filter built in to connect the air vent of the dryer and backup air inlet of the blower. The hot air that discharged from dryer's air vent has moisture and dust powder, within which the humid air is discharged from the bores on filter barrel. After filtering by the filter, the residual hot air will be heated by the electric heater, and will enter the dry drum again to dry the materials, so it can be used repeatedly.

HAR-U hot air recycler has rotary air adjusting aluminum sleeve (A), customer can unscrew the lockup screw (B) according to practical requirement to adjust the coming air in the dryer.



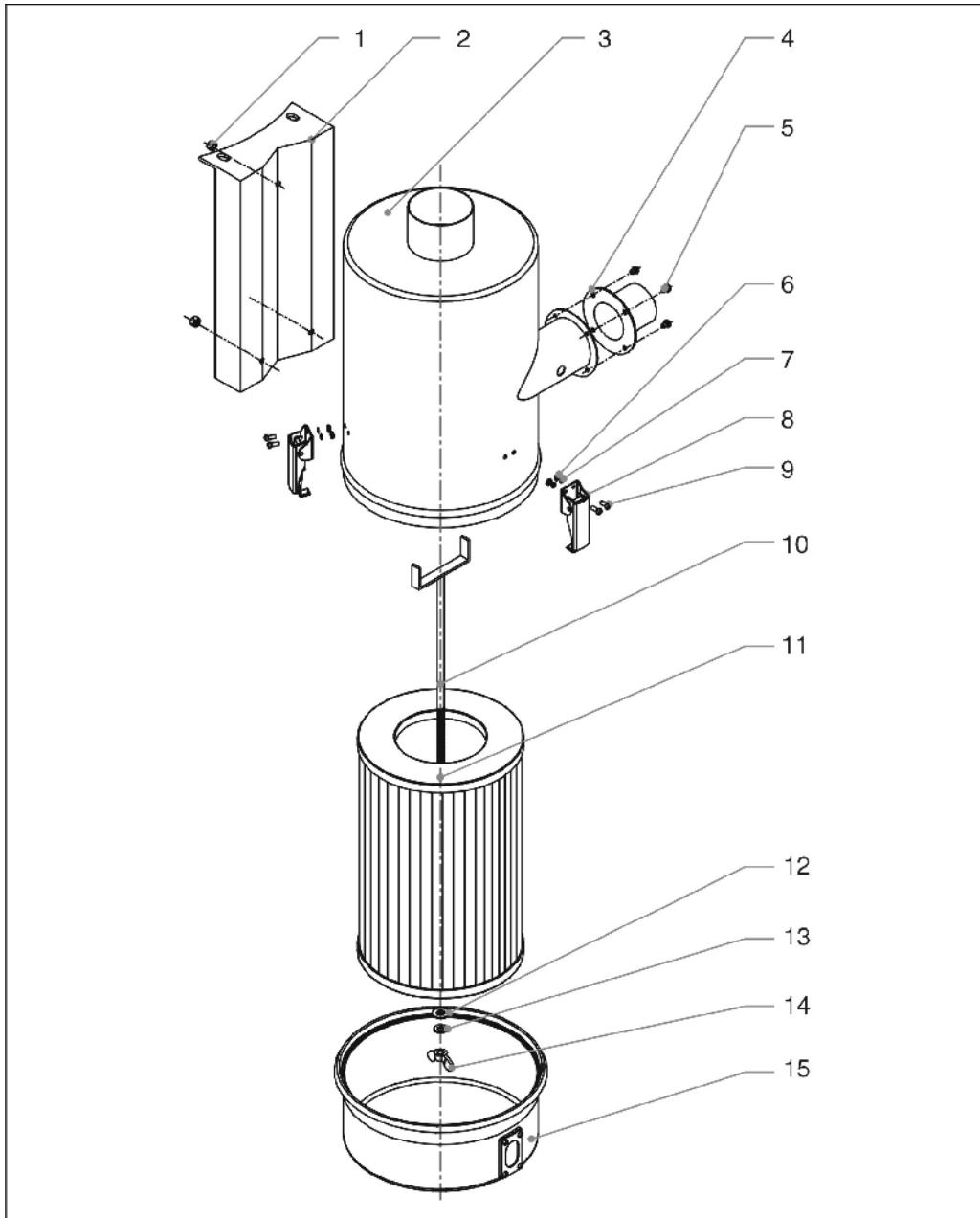
Picture 2-31: Working Principle



Caution!

If there happens to be no moisture drainage bore on the air inlet pipe of filter barrel, please drill one or contact our company directly.

2.4.3.4 Assembly Drawing



Picture 2-32: Assembly Drawing

Table 2-27: Parts List

No.	Description	Part No.						
		HAR-20U/40U	HAR-80U	HAR-160U	HAR-300U	HAR-600U	HAR-900U	HAR-1200U
1	Nut	-	-	-	-	-	-	-
2	Installation plate	-	-	-	-	-	-	-
3	Filter barrel	-	-	-	-	-	-	-
4	Flange of air inlet	-	-	-	-	-	-	-
5	Screw	-	-	-	-	-	-	-
6	Nut	-	-	-	-	-	-	-
7	Washer	-	-	-	-	-	-	-
8	Spring clip	YW02003000400	YW02003000400	YW02003000400	YW02003000400	YW02003000400	YW02003000400	YW02003000400
9	Screw	-	-	-	-	-	-	-
10	Fixing screw	YW69061000100	YW69061000100	YW69061000100	YW69061000100	YW69061000100	YW69061000100	YW69061000100
11	Filter*	YR50138000000	YR50181100000	YR50181100000	YR50181100000	YR50181100000	YR50181100000	YR50181100000
12	Lockup ring	YR10016000000	YR10708000100	YR10708000100	YR10708000100	YR10708000100	YR10708000100	YR10708000100
13	Washer	-	-	-	-	-	-	-
14	Butterfly nut	YW69051600000	YW69051600000	YW69051600000	YW69051600000	YW69051600000	YW69051600000	YW69051600000
15	Assembly parts of dust collecting barrel	-	-	-	-	-	-	-

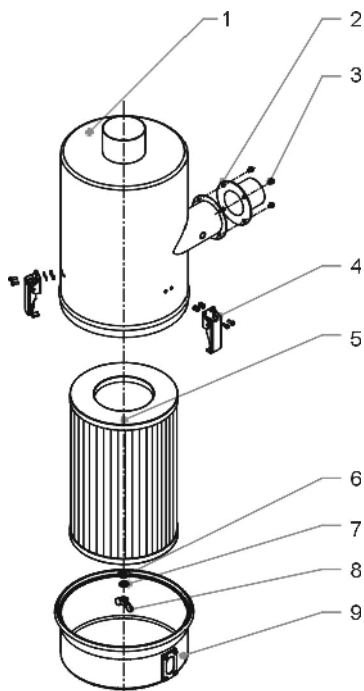
* means possible broken parts.

** means easy broken part. and spare backup is suggested.

2.4.3.5 Installation Steps

1 Installation of Filter and Dust Collecting Barrel

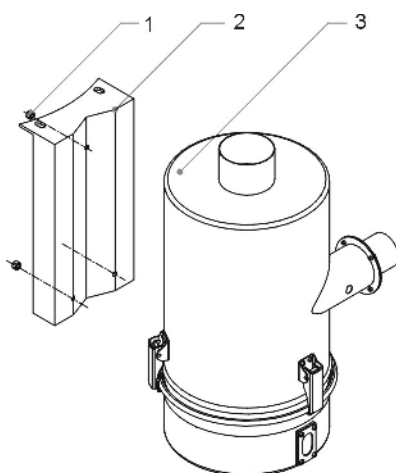
- 1) Mount the three spring clips of the assembly parts (4) on a proper place of filter barrel at first.
- 2) Mount filter (5) inside the filter barrel (1) and lock it with lockup washer (6), flat washer (7) and butterfly nut (8).
- 3) Install dust collecting barrel and lock it up with spring clip.
- 4) Mount the flange (2) for air inlet pipe and lock it with screw (3).



Picture 2-33: Installation of Filter and Dust Collecting Barrel

2 Installation of the Assembly Parts for the Cylinder Filter

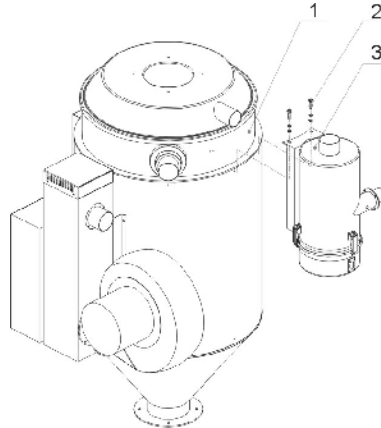
- 1) First install filter barrel components (3) The bolt is installed in the installation board of filtering bucket.
- 2) Tighten up the fixing screw (1).



Picture 2-34: Installation of the Assembly Parts for the Cylinder Filter

3 Install "Euro" Hot Air Recycler on Hopper Dryer

- 1) Put hot air recycler (3) on a proper place of hopper dryer (1), and confirm the location of installation bores on the aluminum ring of the hopper dryer (1).
- 2) Drill out respective installation bores.
- 3) Mount on the hot air recycler (3), lock up the fixing screw (2).



Picture 2-35: Install "Euro" Hot Air Recycler on Hopper Dryer

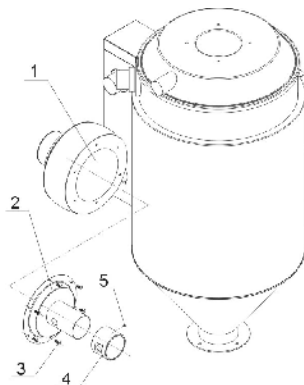
4 Installation of the Flange of Blower Inlet

- 1) First insert the aluminum made air volume adjusting ring assembly parts (4) onto the coupling flange (2), to align the air adjusting bore, then screw the insertive screw (5).
- 2) Mount coupling flange at the blower's air inlet (5), tighten up the screw (3).



Warning!

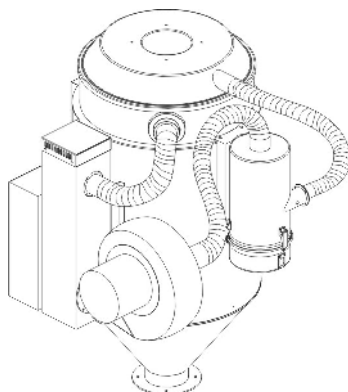
If blower has standard flange, please disassembly it.



Picture 2-36: Installation of the Flange of Blower Inlet

5 Connection of Air Pipe

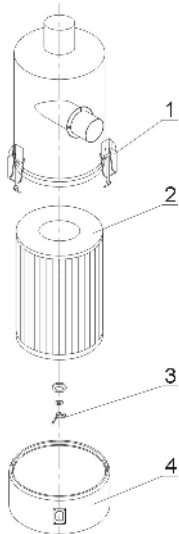
- 1) Mount on air pipe in suitable size according.



Picture 2-37: Connection of Air Pipe

2.4.3.6 Clean up the "Euro" Hot Air Recycler

- 1) Loosen the spring clip (1), and take out the dust collecting barrel (4) of the hot air recycler.
- 2) Unscrew the butterfly nut (3), and take out the filter (2) then clean it with a high pressure air jetter.
- 3) Install the filter in opposite steps.



Picture 2-38: Clean up the "Euro" Hot Air Recycler

2.4.4 AIF-U "Euro" Blower Inlet Filter

2.4.4.1 General Description

AIF-U "Euro" blower inlet filter has filtering and dust-collecting function. Its design is for working with "Euro" dryers and can be installed at the backup air inlet of the blower. This machine features simple structure, easier installation and greatly improves the production efficiency. The built-inside filter can maintain the air clean so to ensure production quality. The machine has also configured with a backup air adjusting valve.



Model: SHD-80U+AIF-80U

Picture 2-39: "Euro" Blower Inlet Filter

Features:

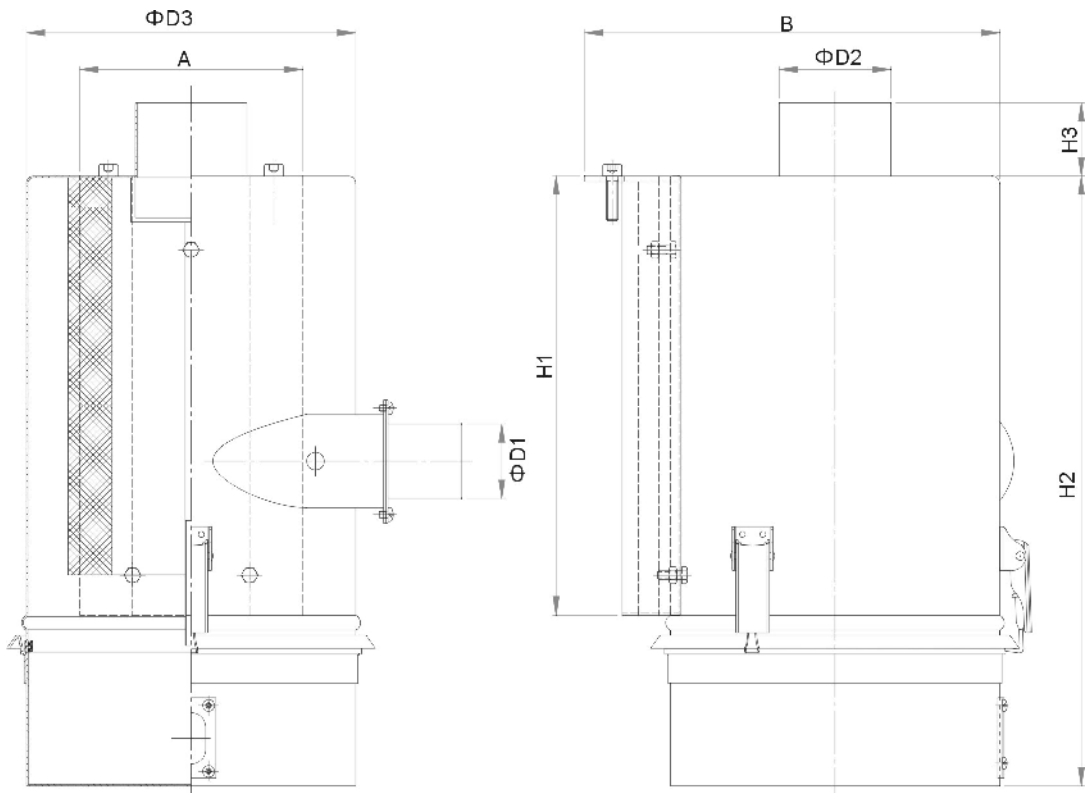
1. Filter the air at the blower inlet to improve the production quality.
2. Economical and less space occupation, can work on the original "Euro" hopper dryer.
3. Beautiful appearance, optimal structure and especially easy for installation.

2.4.4.2 Technical Specification

1) Specifications

Table 2-28: Specifications

Model	Filtering Barrel Dia. (Mm)	Air inlet Pipe Dia.	Air Outlet Pipe Dia.	Applicable Models	Fixed Plate	Blower Flange (With Air Quantity Adaptor)
AIF-20U	160	1.5"	2"	SHD-20U	SHD-20U	Air Inlet Flange for 0.12kW blower
AIF-40U				SHD-40U	SHD-40U	
AIF-80U	225	2"	3"	SHD-80U~120U	SHD-80U~120U	
AIF-160U	225	2.5"	3"	SHD-160U~230U	SHD-160U~230U	Air Inlet Flange for 0.18kW blower
AIF-300U	225	2.5"	4"	SHD-300U~450U	SHD-300U~450U	Air Inlet Flange for 0.25kW blower
AIF-600U	225	3"		SHD-600U~750U	SHD-600U~750U	Air Inlet Flange for 0.55kW blower
AIF-900U	225	4"		SHD-900U	SHD-900U	
AIF-1200U	225	4"	4"	SHD-1200U	SHD-1200U	Air Inlet Flange for 1.1kW blower



Picture 2-40: Technical Specifications

2) Technical Specifications

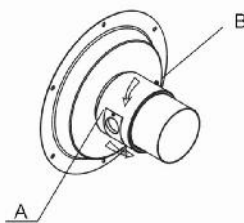
Table 2-29: Out Dimensions

Model	A(mm)	B(mm)	D1(mm)	D2(mm)	D3(mm)	H1(mm)	H2(mm)	H3(mm)
AIF -20U	125	260	38	50.8	160	170	277	50
AIF -40U								
AIF -80U	152	314	51	76.2	225	303	405	50
AIF -120U								
AIF -160	152	314	63.5	76.2	225	303	405	50
AIF -230U								
AIF -300U	152	310	63.5	101.6	225	345	450	50
AIF -450U								
AIF -600U	152	322	76.2	101.6	225	345	450	50
AIF 750U								
AIF -900U	152	322	101.6	101.6	225	345	450	50
AIF -1200U								

2.4.4.3 Working Principle

AIF-U "Euro" blower inlet filter has filter built in to connect the air vent of backup air inlet of the dryer blower and air vent of filter blower to improve production quality.

AIF-U "Euro" blower inlet filter has rotary air adjusting aluminum sleeve (A), customer can unscrew the lockup screw (B) according to practical requirement to adjust the coming air in the dryer.



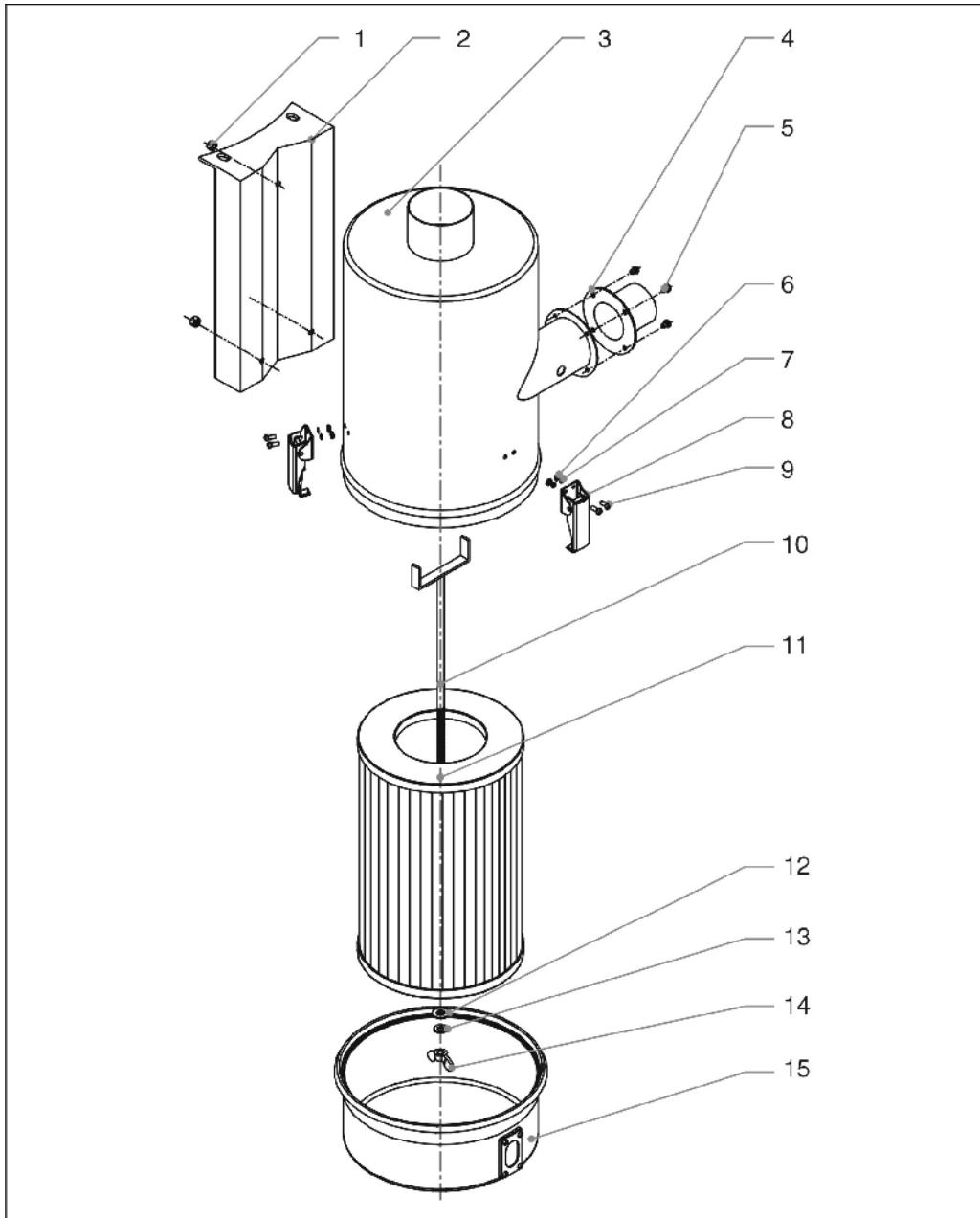
Picture 2-41: Working Principle



Caution!

If there happens to be no moisture drainage bore on the air inlet pipe of filter barrel, please drill one or contact our company directly.

2.4.4.4 Assembly Drawing



Picture 2-42: Assembly Drawing

Table 2-30: Parts List

No.	Description	Part No.					
		AIF-20U/40U	AIF -80U/160U	AIF -300U	AIF -600U	AIF -900U	AIF -1200U
1	Nut	-	-	-	-	-	-
2	Installation plate	-	-	-	-	-	-
3	Filter barrel	-	-	-	-	-	-
4	Flange of air inlet	-	-	-	-	-	-
5	Screw	-	-	-	-	-	-
6	Nut	-	-	-	-	-	-
7	Washer	-	-	-	-	-	-
8	Spring clip	YW02003000400	YW02003000400	YW02003000400	YW02003000400	YW02003000400	YW02003000400
9	Screw	-	-	-	-	-	-
10	Fixing screw	YW69061000100	YW69061000100	YW69061000100	YW69061000100	YW69061000100	YW69061000100
11	Filter*	YR50138000000	YR50181100000	YR50181100000	YR50181100000	YR50181100000	YR50181100000
12	Lockup ring	YR10016000000	YR10708000100	YR10708000100	YR10708000100	YR10708000100	YR10708000100
13	Washer	-	-	-	-	-	-
14	Butterfly nut	YW69051600000	YW69051600000	YW69051600000	YW69051600000	YW69051600000	YW69051600000
15	Assembly parts of dust collecting barrel	-	-	-	-	-	-

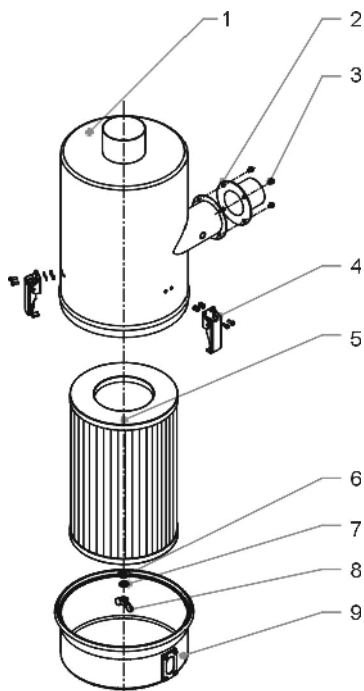
* means possible broken parts.

** means easy broken part. and spare backup is suggested.

2.4.4.5 Installation Steps

1 Installation of Filter and Dust Collecting Barrel

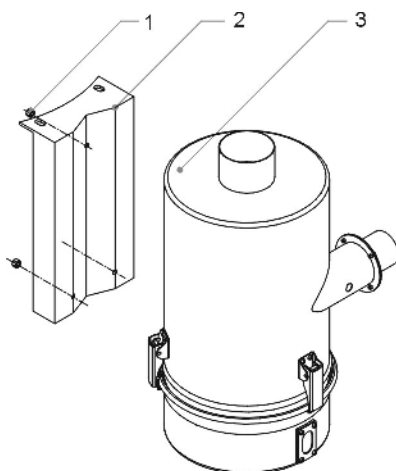
- 1) Mount the three spring clips of the assembly parts (4) on a proper place of filter barrel at first.
- 2) Mount filter (5) inside the filter barrel (1) and lock it with lockup washer (6), flat washer (7) and butterfly nut (8).
- 3) Install dust collecting barrel and lock it up with spring clip.
- 4) Mount the flange (2) for air inlet pipe and lock it with screw (3).



Picture 2-43: Installation of Filter and Dust Collecting Barrel

2 Installations of the Assembly Parts for the Cylinder Filter

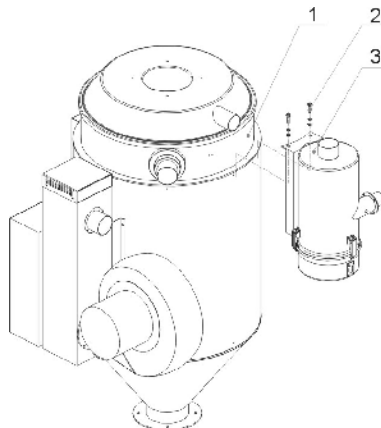
- 1) First install filter barrel components (3) the bolt is installed in the installation board of filtering bucket.
- 2) Tighten up the fixing screw (1).



Picture 2-44: Installation of the Assembly Parts for the Cylinder Filter

3 Install "Euro" Hot Air Recycler on Hopper Dryer

- 1) Put hot air recycler (3) on a proper place of hopper dryer (1), and confirm the location of installation bores on the aluminum ring of the hopper dryer (1).
- 2) Drill out respective installation bores.
- 3) Mount on the hot air recycler (3), lock up the fixing screw (2).



Picture 2-45: Install "Euro" Hot Air Recycler on Hopper Dryer

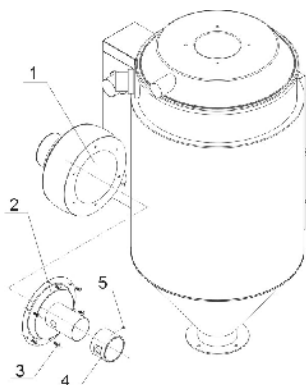
4 Installation of the Flange of Blower Inlet

- 1) First insert the aluminum made air volume adjusting ring assembly parts (4) onto the coupling flange (2), to align the air adjusting bore, then screw the insertive screw (5).
- 2) Mount coupling flange at the blower's air inlet (5), tighten up the screw (3).



Warning!

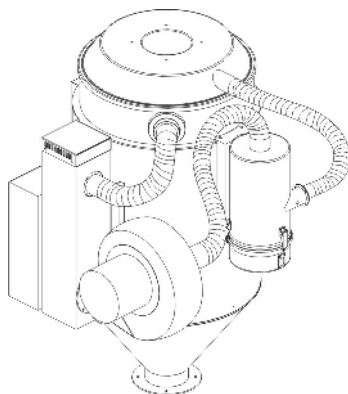
If blower has standard flange, please disassembly it.



Picture 2-46: Installation of the Flange of Blower Inlet

5 Connection of Air Pipe

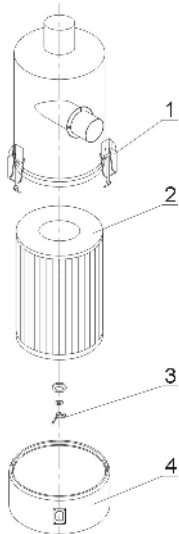
- 1) Mount on air pipe in suitable size according.



Picture 2-47: Connection of Air Pipe

2.4.4.6 Clean up the "Euro" Hot Air Recycler

- 1) Loosen the spring clip (1), and take out the dust collecting barrel (4) of the hot air recycler.
- 2) Unscrew the butterfly nut (3), and take out the filter (2) then clean it with a high pressure air jetter.
- 3) Install the filter in opposite steps.



Picture 2-48: Clean up the "Euro" Hot Air Recycler

2.4.5 ADC-U "Euro" Air Filter

2.4.5.1 General Description

ADC-U "Euro" air filter can 100% avoid the dust discharging. This machine features simple structure and easier for installation. The built-in filter can keep the air within the plant clean and improves the production efficiency.



Model: SHD-80U+ADC-80U

Picture 2-49: "Euro" Air Filter

Features:

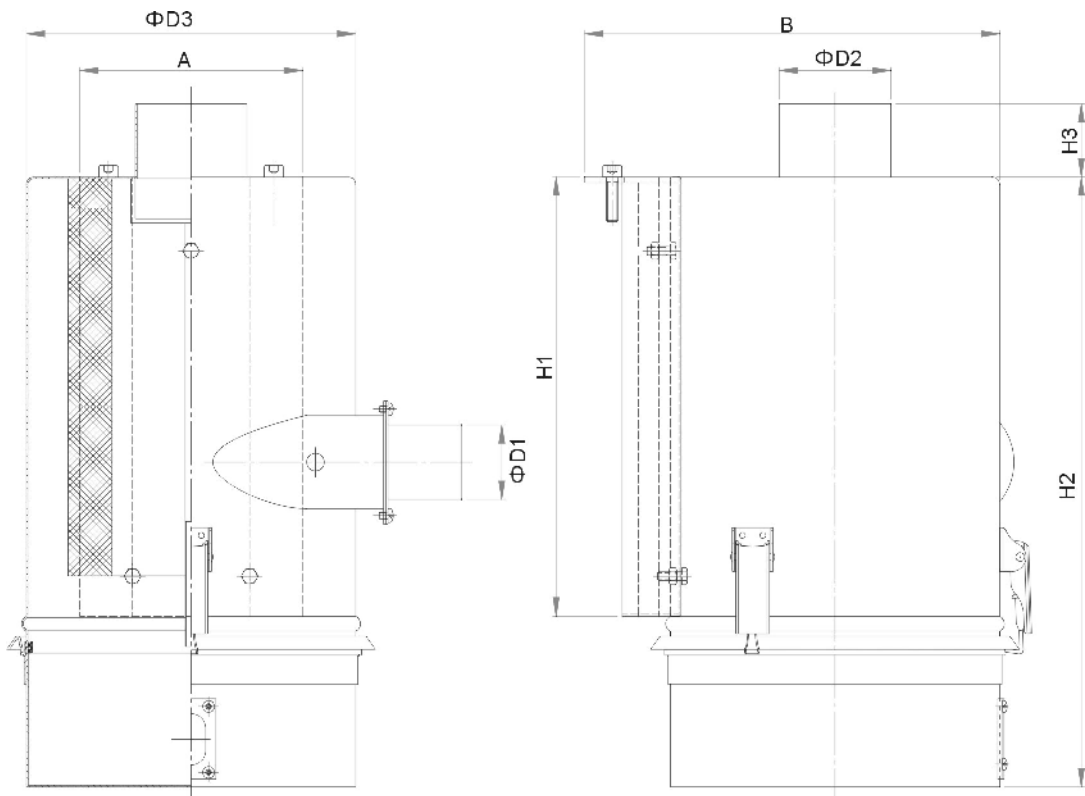
1. Keep the air in the plant clean so can ensure production quality.
2. 100% avoid the dust discharging.
3. Economical and less space occupation, can work on the original "Euro" hopper dryer.
4. Beautiful appearance, optimal structure and especially easy for installation.

2.4.5.2 Technical Specification

1) Specifications

Table 2-31: Specifications

Model	Filtering Barrel Dia. (Mm)	Air inlet Pipe Dia.	Air Outlet Pipe Dia.	Applicable Models	Fixed Plate
ADC-20U	160	1.5"	2"	SHD-20U	SHD-20U
ADC-40U				SHD-40U	SHD-40U
ADC-80U	225	2"	3"	SHD-80U~120U	SHD-80U~120U
ADC-160U	225	2.5"	3"	SHD-160U~230U	SHD-160U~230U
ADC-300U	225	2.5"	4"	SHD-300U~450U	SHD-300U~450U
ADC-600U	225	3"		SHD-600U~750U	SHD-600U~750U
ADC-900U	225	4"		SHD-900U~1200U	SHD-900U~1200U



Picture 2-50: Technical Specifications

2) Technical Specifications

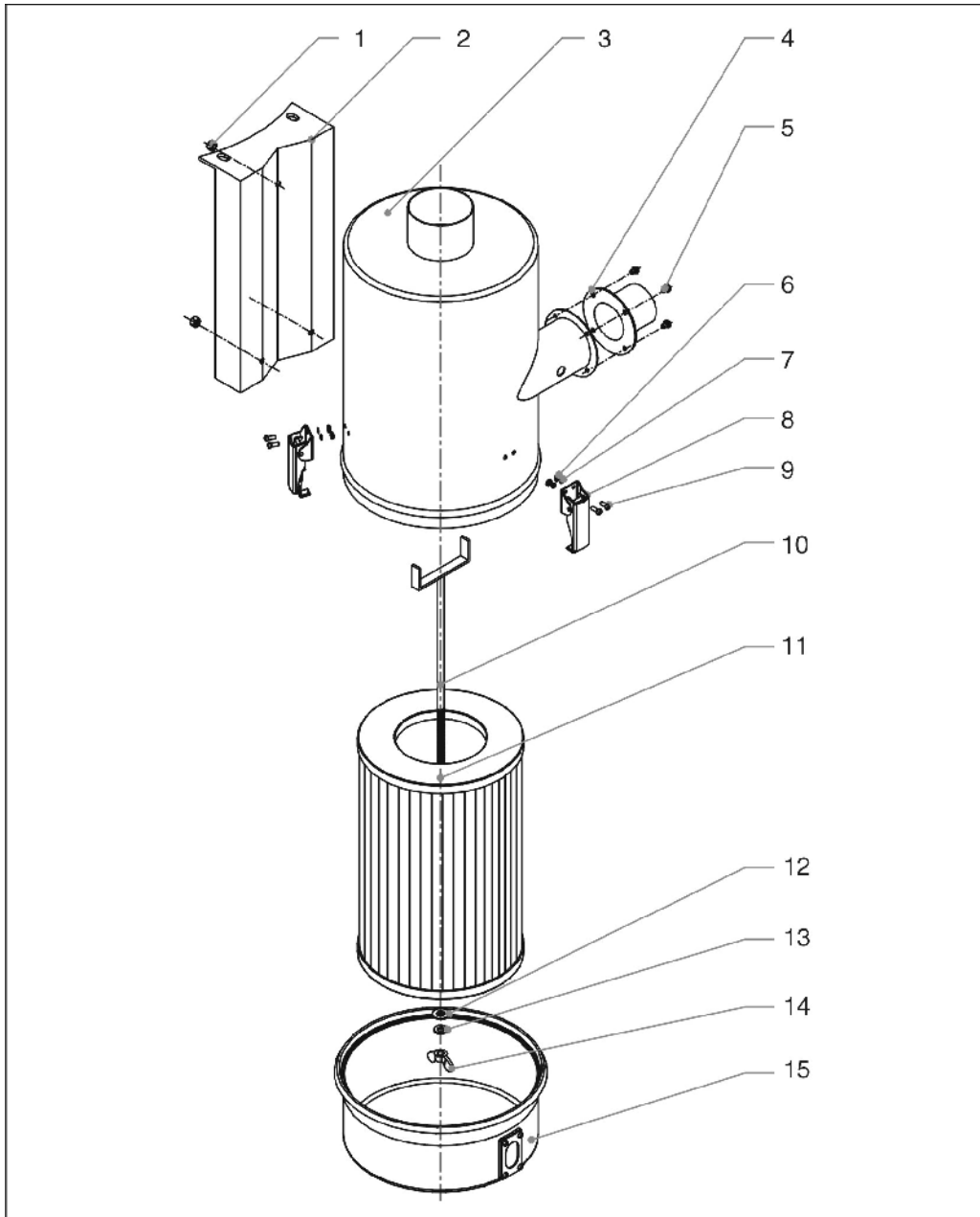
Table 2-32: Out Dimensions

Model	A(mm)	B(mm)	D1(mm)	D2(mm)	D3(mm)	H1(mm)	H2(mm)	H3(mm)
ADC -20U	125	260	38	50.8	160	170	277	50
ADC -40U								
ADC -80U	152	314	51	76.2	225	303	405	50
ADC -120U								
ADC -160	152	314	63.5	76.2	225	303	405	50
ADC -230U								
ADC -300U	152	310	63.5	101.6	225	345	450	50
ADC -450U								
ADC -600U	152	322	76.2	101.6	225	345	450	50
ADC 750U								
ADC -900U	152	322	101.6	101.6	225	345	450	50
ADC -1200U								

2.4.5.3 Working Principle

ADC-U "Euro" air filter can 100% avoid the dust discharging. This machine features simple structure and easier for installation. The built-in cylinder filter can keep the air within the plant clean and improves the production efficiency.

2.4.5.4 Assembly Drawing



Picture 2-51: Assembly Drawing

Table 2-33: Parts List

No.	Description	Part No.				
		HAR-20U/40U	HAR-80U/160U	HAR-300U	HAR-600U	HAR-900U
1	Nut	-	-	-	-	-
2	Installation plate	-	-	-	-	-
3	Filter barrel	-	-	-	-	-
4	Flange of air inlet	-	-	-	-	-
5	Screw	-	-	-	-	-
6	Nut	-	-	-	-	-
7	Washer	-	-	-	-	-
8	Spring clip	YW02003000400	YW02003000400	YW02003000400	YW02003000400	YW02003000400
9	Screw	-	-	-	-	-
10	Fixing screw	YW69061000100	YW69061000100	YW69061000100	YW69061000100	YW69061000100
11	Filter*	YR50138000000	YR50181100000	YR50181100000	YR50181100000	YR50181100000
12	Lockup ring	YR10016000000	YR10708000100	YR10708000100	YR10708000100	YR10708000100
13	Washer	-	-	-	-	-
14	Butterfly nut	YW69051600000	YW69051600000	YW69051600000	YW69051600000	YW69051600000
15	Assembly parts of dust collecting barrel	-	-	-	-	-

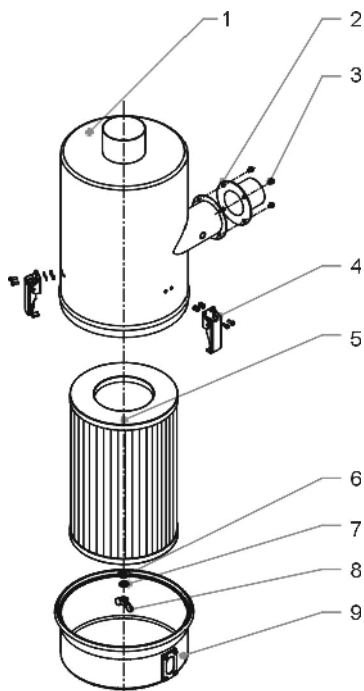
* means possible broken parts.

** means easy broken part. and spare backup is suggested.

2.4.5.5 Installation Steps

1 Installation of Filter and Dust Collecting Barrel

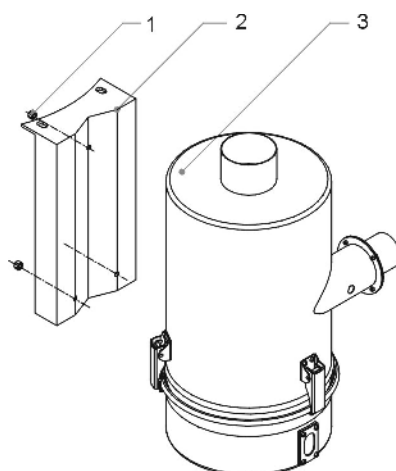
- 1) Mount the three spring clips of the assembly parts (4) on a proper place of filter barrel at first.
- 2) Mount filter (5) inside the filter barrel (1) and lock it with lockup washer (6), flat washer (7) and butterfly nut (8).
- 3) Install dust collecting barrel and lock it up with spring clip.
- 4) Mount the flange (2) for air inlet pipe and lock it with screw (3).



Picture 2-52: Installation of Filter and Dust Collecting Barrel

2 Installations of the Assembly Parts for the Cylinder Filter

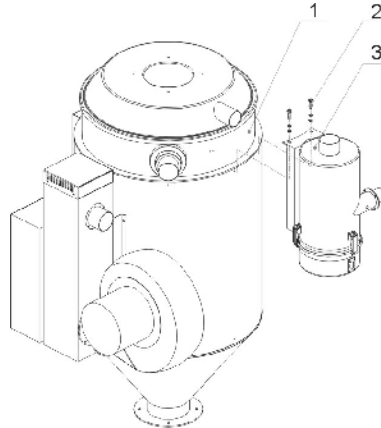
- 1) First install filter barrel components (3) the bolt is installed in the installation board of filtering bucket.
- 2) Tighten up the fixing screw (1).



Picture 2-53: Installation of the Assembly Parts for the Cylinder Filter

3 Install "Euro" Hot Air Recycler on Hopper Dryer

- 1) Put hot air recycler (3) on a proper place of hopper dryer (1), and confirm the location of installation bores on the aluminum ring of the hopper dryer (1).
- 2) Drill out respective installation bores.
- 3) Mount on the hot air recycler (3), lock up the fixing screw (2).



Picture 2-54: Install "Euro" Hot Air Recycler on Hopper Dryer

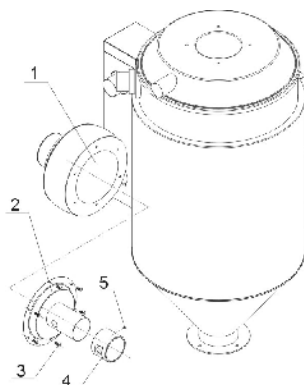
4 Installation of the Flange of Blower Inlet

- 1) First insert the aluminum made air volume adjusting ring assembly parts (4) onto the coupling flange (2), to align the air adjusting bore , then screw the insertive screw (5).
- 2) Mount coupling flange at the blower's air inlet (5), tighten up the screw (3).



Warning!

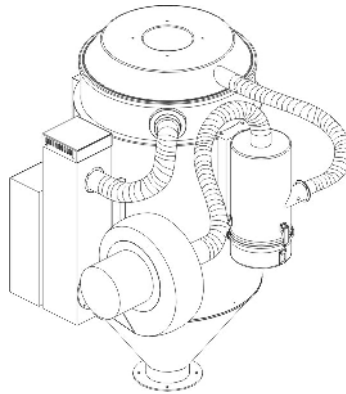
If blower has standard flange, please disassembly it.



Picture 2-55: Installation of the Flange of Blower Inlet

5 Connection of Air Pipe

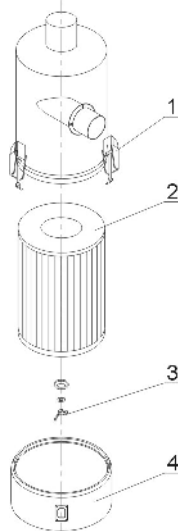
- 1) Mount on air pipe in suitable size according.



Picture 2-56: Connection of Air Pipe

2.4.5.6 Clean up the "Euro" Hot Air Recycler

- 1) Loosen the spring clip (1), and take out the dust collecting barrel (4) of the hot air recycler.
- 2) Unscrew the butterfly nut (3), and take out the filter (2) then clean it with a high pressure air jetter.
- 3) Install the filter in opposite steps.



Picture 2-57: Clean up the "Euro" Hot Air Recycler