

Cleaning Technology

- *technology for free-flowing bulk materials*
- *grain chilling technology*
- *drying technology*
- *warm air heater*
- *bulkstorage technology*
- *conveying technology*

SIVO UL

**available for
capacities of
20 to 200 t per hour**

business worldwide



www.goldsaat.com

goldsaat[®]
AGRARTECHNIK



goldsaat PRECLEANER SIVO

The well proven **goldsaat precleaner** of series **SIVO** (not shown), is characterized by following features:

- all-steel construction
- easy erection and little space requirements
- universal application
- dust and vibration free operation
- low noise operation
- no loss of capacity at higher moisture contents

The special constructional features of **goldsaat SIVO** ensure an absolutely reliable operation, independent of the moisture content or the degree of pollution of the incoming product.

Whilst flat screen machines are vulnerable by high moisture and dirt and might even fail, the precleaner **SIVO** obtains a perfectly precleaned product because of its rotating screen drums with incorporated guide plates. The screen drum, being effective over its total width, separates all coarse foreign matters from the fed product.

The following very active aspiration in the wind sifter is getting off the light particles like husks, leaves, green parts, weed seeds, hollow grains, pieces of straw and dust. The exchangeable screen drum does not only allow for the cleaning of wheat, barley, oat, rye and rice but also permits handling of all kind of other products.

Excellent cleaning is achieved with:

Cereals, rice, maize, pulses, fine seeds, beet seeds, soya beans, peanuts, coffee, cocoa beans, sesame, milo corn, buckwheat, and much more.

Driers of all brands operate safer and more efficiently with our precleaner **SIVO** being installed upstream; a fact that is highly appreciated by users and clearly shown with every day practice. Furthermore, the **SIVO** helps to avoid fire in the driers, as it removes light particles which tend to form nests in the drier or to block it up.

Also when employing the cooling process for conservation, precleaner **SIVO** is used before storage. Foreign matters are reduced and formation of nests almost fully avoided, consequently, the cooling process is improved and becomes safer and more efficient.

The standard unit embodies following components:

- feeding system & screen drum
- fan with motor
- wind sifter
- outlet socket for coarse impurities
- geared motor for drive of drum and screw
- separating chamber with discharge screw and air connection
- collection hopper for cleaned products and distribution pipe for feeding

goldsaat PRECLEANER SIVO UL

Special advantages of **goldsaat precleaner** series **SIVO UL** with incorporated air recirculation system:

- compact design for easy installation
- only 20 % of exhaust air volume compared to former values
- applicable regulations for immission are fully complied with
- small sized and efficient dust filters and exhaust air pipes
- reduced power consumption

Precleaner **SIVO UL** is a non-polluting machine that has been developed from our proven series **SIVO**. It is available for **grain capacities of 20 to 120 t/h**.

Small sized dust filters and exhaust air pipes benefit the overall compact design. Due to the reduced volume of exhaust air, a smaller separator may be installed, consequently, less space is required for a filter unit that is eventually fitted downstream.

Precise adjustment of regulating flaps ensures an extraordinary good precleaning.

The design of the **SIVO UL** series with air recirculation system has been consequently adapted to the latest requirements, both economically and ecologically.

All hourly capacities indicated for types **SIVO** and **SIVO UL** refer to input of heavy grain with a moisture of 21 % and impurities of about 4 % (coarse foreign matters, husks, green and straw pieces, weed seeds, hollow grains, dust and light shell particles)



← SIVO 50 UL

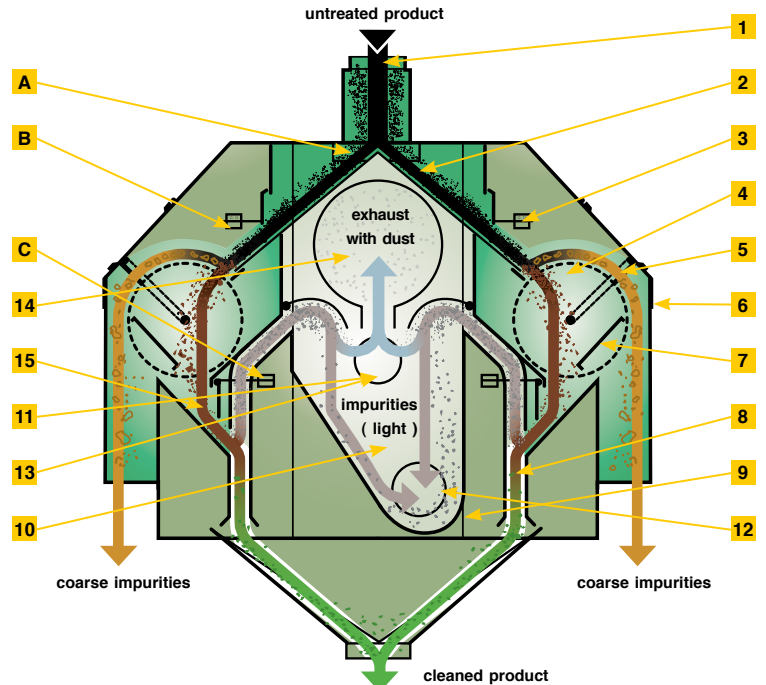
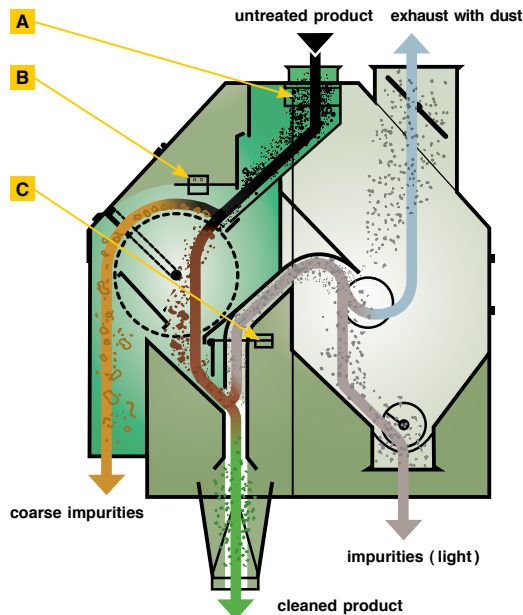
Working principle of PRECLEANER SIVO (UL)

The product being cleaned passes through a distribution system, a self-regulating feeding flap, equipped with weights, and finally reaches the screening drum. Due to the rotary motion, coarse foreign matters separate from the product, pass a sluice and fall into a wind sifter. There an intensive air flow takes off dust and specific light items. Thereafter the precleaned product falls into a collection

hopper with outlet socket. Within the separating chamber the air separates from light particles which are picked up by a screw conveyor and transported to the outlet. Only very light particles such as dust and shells are blown into the cyclones and bagged.

section drawing of SIVO 60, 100, 120 and 140 t

section drawing of SIVO 20, 30 and 50 t



Designation of machine parts:

- | | |
|----------------------------------|--------------------------------------|
| 1. intake socket | 7. deflector plates |
| 2. intake- und distribution case | 8. wind sifter |
| 3. accumulation valve | 9. assembly rule |
| 4. screening drum | 10. separating chamber |
| 5. drum changing device | 11. viewing window |
| 6. observation valve | 12. screw conveyor (light particles) |
| | 13. inspection fitting |

14. connector for fan pipes
15. intake sluice and wind sifter

A feeding regulation

B weight regulation of accumulation valve

C weight regulation of intake sluice leading to the wind sifter

Three kinds of impurities are sorted out:

- Coarse foreign matters (straw, green parts, remainders of ears)
- Impurities in the cyclone (dust, lighter pieces of shells)
- Lighter foreign matters (hollow grains, husks, beards, green parts, pieces of straw, knots of straw, weed seeds, seed capsules)

- ▶ untreated product
- ▶ coarse impurities
- ▶ light impurities
- ▶ exhaust with dust vented to fan and cyclone
- ▶ cleaned product

Type-Overview, SIVO (UL)

Type	Capacity t/h (heavy grain)	Sizes dependent on design (consult manufacturer)	Connected Load W fan and drive	Quantity screen drums	Exhaust air volume m³/min		Approx. net weight kg, excl. cyclone, incl. fan
					min	max	
20	20	—	4370	1		110	460
30	30	—	6050	1		145	520
50	50	—	8050	1		180	800
60	60	—	11500	2		230	1150
100	100	—	16100	2		380	1360
120	120	—	16100	2		400	1450
20 (UL)	20	—	4370	1	11	16	750
30 (UL)	30	—	4550	1	14	25	810
50 (UL)	50	—	4550	1	17	30	1100
60 (UL)	60	—	6050	2	28	45	1550
100 (UL)	100	—	8600	2	35	60	1750
120 (UL)	120	—	12100	2	40	75	1900
150 (UL)	150	—	12100		60	95	3035
200 (UL)	200	—	12100		60	95	3400

- *technology for free-flowing bulk materials*
- *grain chilling technology*
- *drying technology*
- *warm air heater*
- *bulk storage technology*
- *conveying technology*

business worldwide

Grain: cleaning, drying and chilling



goldsaat[®]
A G R A R T E C H N I K



Conveying Technology:

Gentle conveying of pourable goods



Drying Technology:

biological and economical ideal to ensure your profits.



Chilling Technology:

for a chemical-free conservation



Cleaning Technology:

SIVO UL - available for capacities of 20 - 200 t per hour

Goldsaat Agrartechnik GmbH & Co. KG

Prümtalstraße 20
D-54595 Prüm/Eifel

Fon. +49 (0) 65 51 / 95 07 - 0

Fax. +49 (0) 65 51 / 95 07 34

e-mail: info@goldsaat.de

Internet: www.goldsaat.com

For many decades, goldsaat has been operating successfully in the area of cleaning, drying, and cooling technology. We offer you an extensive range of products and accessories!

- chillers
- warm air dryers
- air heaters
- dust removal systems
- high cell exhaust fans
- portable samplers
- grain silo duct systems
- ventilation systems with and without temperature difference control

Our products and expertise will ensure and preserve the quality of your harvest!