an ACS Group company

Manual

CS/CT Screw Feeders – volumetric, with agitator

Operating Instructions

CS65 Single Screw Feeder

CT22/36 Twin Screw Feeders

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The feeder range **CT22**, **CT36** and **CS65** features Single and Twin Screw Feeders for volumetric feeding of pelletized materials and powder. The agitator and the straight inlet section of the screws prevent the product from bridging over the screws and assure a constant screw filling.
All parts which come in contact with the product are made of stainless steel which is electropolished additionally, the proven gaskets are made of Teflon PTFE. The light-weight aluminium casting body with the integral gear transmission for screws and agitator assure sturdiness of the machine.
Careful attention to the operating instructions will definitely in-crease the reliability and service life of the Screw Feeders.

1.0 Construction

1.1 The basic unit consists of the gearbox body (1), the inter-mediate body (2) and the agitator hopper (3).
Drive motor: Permanent magnet field DC motor or three phase AC motor (4). Specifically product-suited parts such as feed screw tube (5) and feed screw (6) can be easily re-placed and cleaned any time.

1.2 Gear reduction can be seen under point 10.0 ' Technical Data' or on the name plate and, for defining the optimum speed and torque values, three standard gear reductions can be chosen.

1.3 The agitator (7) is always rotating correspondingly to the screw speed.

2.0 Transportation

2.1 For transportation of the feeder, the red locking bolt (10) must be screwed into the gearbox body.

2.2 Any slipping or damage of the machine must be preven-ted by proper packing.

3.0 Mounting

3.1 The Screw Feeders including base plate should be moun-ted onto a stable base by using four bolts (M6). In addi-tion, two threads (M8) for overhead mounting are located next to the quick clamps on top of the body.

3.2 Storage hoppers which have more than 85 liters capacity should be supported seperately. Be careful that the con-nections to the storage hopper do not cause distortion of the feeder inlet hopper.

3.3 Electrical connections are to be made by the customer in accordance with schematic diagrams and the applicable codes and regulations. Always compare voltage indicated on the name plate.

4.0 Safety

4.1 This machine is, depending on the specified equipment, not ready for operation. Certificates of origin and confor-mity are part of this operation instruction. All described re-gulations regarding safety requirements must be fully con-sidered.

4.2 Mounting, dismounting and maintenance must be perfor-med at dead conditions.

5.0 Placement in Operation

5.1 Prior to operation, the red locking bolt (10) must be replaced by the black vent screw (11).

5.2 Check rotation direction of the agitator. It must correspond with the arrow marked on the unit.

5.3 Please pay attention to the manual of the control unit, par-ticularly for fine-adjustment of speed or any other para-meters.

6.0 Replacement of Feed Screws

6.1 The feed screws (6) are equipped with a special locking system. By quarter-turn rotating the screw counterclock-wise, (looking from the product discharge side), the lock is releasing itself and the feed tools can be pulled out easily.

6.2 Reinstallation of the feed tools to be done in reverse order following careful cleaning of the locking area.

7.0 Removal of Feed Screw Tube, Agitator and Agitator Hopper

7.1 Remove outlet tube (5) by loosen the bolts (17).

7.2 Agitator (7) can be removed by loosen the screw (18) .

7.3 Agitator hopper (3) can be removed by loosen the quick clamp (19) and the two bolts (20).

7.4 Reinstallation of the components to be in reverse order.

8.0 Cleaning

8.1 For quick cleaning, the entire product handling system of the feeder can be cleaned by using water or any suitable solvents.

8.2 For thorough cleaning of the feed screws (6), feed screw tube (5), agitator (7) and agitator hopper (3), disassemble according to **6.0** and **7.0**.

9.0 Maintenance

9.1 The feeder gearbox is lubricated with grease for life. As long as no grease seeps out of the body (1), maintenance is not required.

9.2 If there is any seeping of grease noticeable, the unit must be newly sealed and filled with new grease by an authori-zed distributor. Grease fill and type are described under point 10.0 'Technical Data'.

9.3 The agitator sealing arrangement (13) should be checked periodically and replaced, if necessary.

9.4 The feed screw sealing arrangement (14) should also be checked periodically and replaced, if necessary.

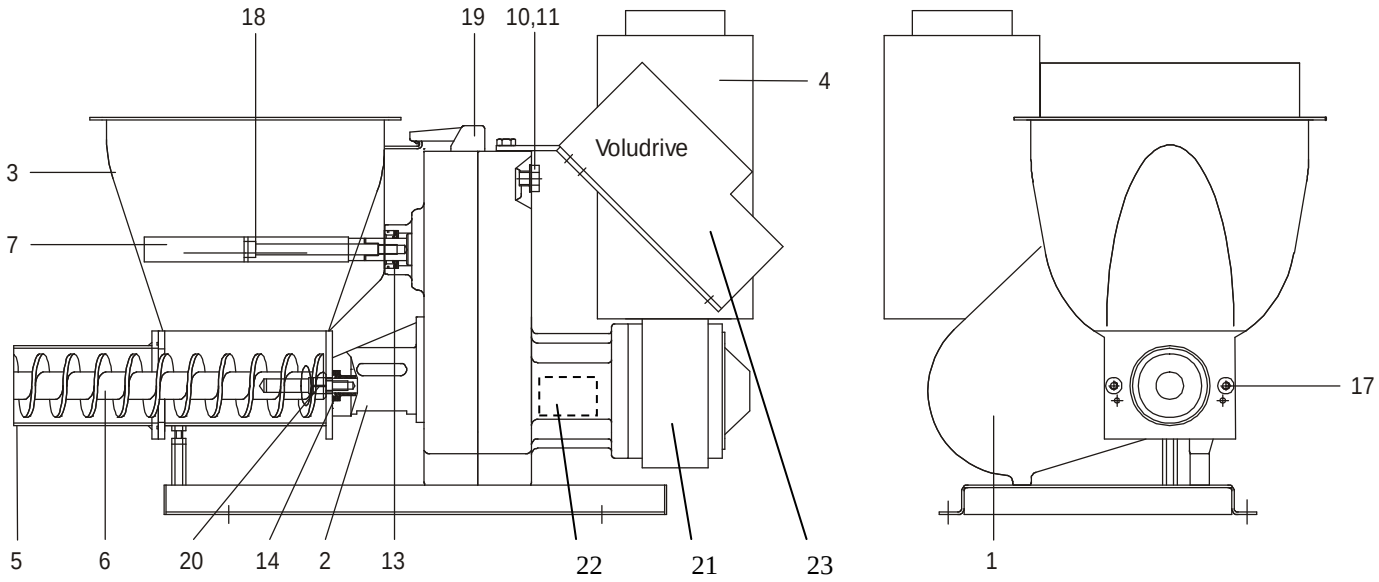
9.5 After 10'000 operating hours, the screw feeder should be completely inspected by an authorized distributor.

10.0 Technical Data

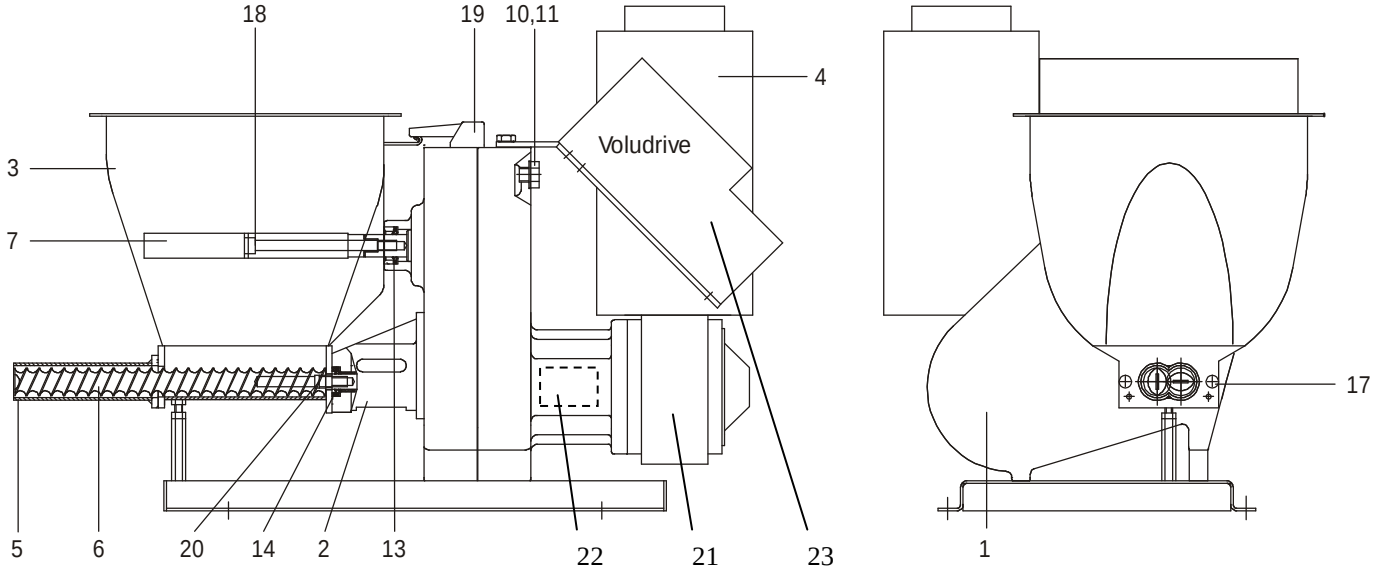
Type		
Order No.		
Serial No.		
Three Phase AC		
Direct Current DC		
Voltage		Volt
Frequency		Hertz
Current		Ampere
Power Rating		Watt
Gear Reduction		
Controller / Frequency transm.		
Accessories		
Others		

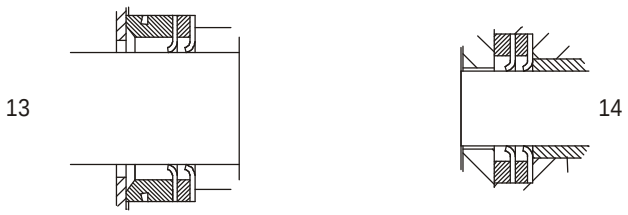
Transmission Grease	Shell Aseol Litea 6-109 (or similar product)
Grease Fill	500 ccm or 17 oz., 1 pint

CS65 Single Screw Feeder



CT22/CT36 Twin Screw Feeders





Spare Part List CT22

1	B-00075	Base unit CT22	1
1	F-00017	Agitator hopper	3
1	H-000134	DC-Motor 0,37 kW	4
1	H-000093	AC-Motor 0,37 kW	4
1		Outlet tube acc to price list	5
1		Screw acc to price list	6
1	F-00016	Agitator	7
1	H-0000069	Ridge ring	13.1
1	H-0000058	Spacer ring	13.2
2	H-0000057	NT lip seal	13.3
1	H-0000066	Press ring	14.1
1	H-0000067	Spacer ring	14.2
2	H-0000068	NT lip seal	14.3
1	H-000139	Gear 7:1 Standard	21
	H-000140	Gear 15:1	21
	H-000158	Gear 28:1	21
1	H-000027	Clutch	22
1	H-000165	Control unit - Control device Voludrive	23
Pcs.	Part-No.	Description	Pos.

Spare Part List CT36

1	B-00076	Base unit CT36	1
1	F-00113	Agitator hopper	3
1	H-000134	DC-Motor 0,37 kW	4
1	H-000093	AC-Motor 0,37 kW	4
1		Outlet tube acc to price list	5
1		Screw acc to price list	6
1	F-00123	Agitator	7
1	H-0000069	Ridge ring	13.1
1	H-0000058	Spacer ring	13.2
2	H-0000057	NT lip seal	13.3
1	H-0000086	Press ring	14.1
1	H-0000085	Spacer ring	14.2
2	H-0000055	NT lip seal	14.3
1	H-000139	Gear 7:1 Standard	21
	H-000140	Gear 15:1	21
	H-000158	Gear 28:1	21
1	H-000027	Clutch	22
1	H-000165	Control unit - Control device Voludrive	23
Pcs.	Part-No.	Description	Pos.

Spare Part List CS65

Pcs.	Part-No.	Description	Pos.
1	B-00077	Base unit CT36	1
1	F-00104	Agitator hopper	3
1	H-000134	DC-Motor 0,37 kW	4
1	H-000093	AC-Motor 0,37 kW	4
1		Outlet tube acc to price list	5
1		Screw acc to price list	6
1	F-00109	Agitator	7
1	H-0000069	Ridge ring	13.1
1	H-0000058	Spacer ring	13.2
2	H-0000057	NT lip seal	13.3
1	H-0000084	Press ring	14.1
1	H-0000083	Spacer ring	14.2
2	H-0000082	NT lip seal	14.3
1	H-000139	Gear 7:1 Standard	21
	H-000140	Gear 15:1	21
	H-000158	Gear 28:1	21
1	H-000027	Clutch	22
1	H-000165	Control unit - Control device Voludrive	23