

BULK BIOMASS CONVEYING SYSTEM TCB



Description

TCB Biomass Conveying system is a complete screw conveyor system which extracts the bulk fraction of the biomass from the mixer/hopper, lifting and charging it into the digester of the Biogas production plant.

The system consists of:

- ❶ BFS Horizontal Screw Feeder
- ❷ BVS Vertical Screw Conveyor
- ❸ BIS Injector Screw

BFS Feeder

It receives the material from the mixer/hopper and transfers it to the BVS Vertical Screw.

The BFS Feeder is a discharging equipment provided with optional inlet spouts pre-engineered to suit the most commonly used mixers on the market.

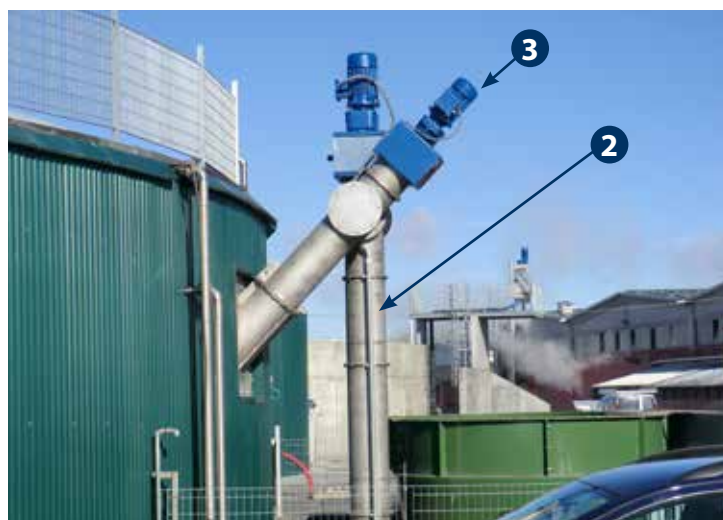
BVS Vertical Screw

It receives the material from the BFS Screw Feeder by a frontal discharge.

BVS Vertical Screw lifts vertically the biomass to the appropriate height for feeding the BIS Injector Screw.

BIS Injector Screw

This equipment collects the bulk material from the BVS Vertical Screw and injects it into the digester under the liquid level.



Technical features and performance

- **Modular versatile system**
- **Facilitates inspection**
- **Vertical Screw Conveyor with load-bearing structure**
- **Extra-thick heavy-duty helicoid flighting manufactured from highly resistant 304 stainless steel**
- **Standard connection for mixers/hoppers**
- **Highly efficient conveying**

Benefits

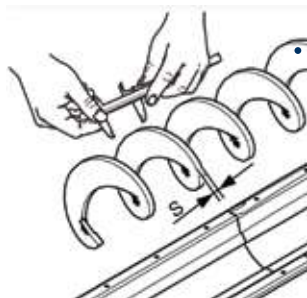
- ✓ **Clean and silent**
- ✓ **Versatile and suitable for conveying various organic materials**
- ✓ **Sturdy fabrication and mechanical components**
- ✓ **Small footprint**
- ✓ **Standard industrial product**

Throughput rate table

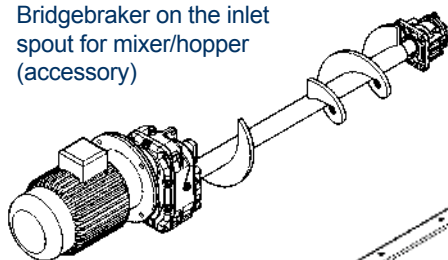
Ø	m³/h
300	20
400	50

Components, options and accessories

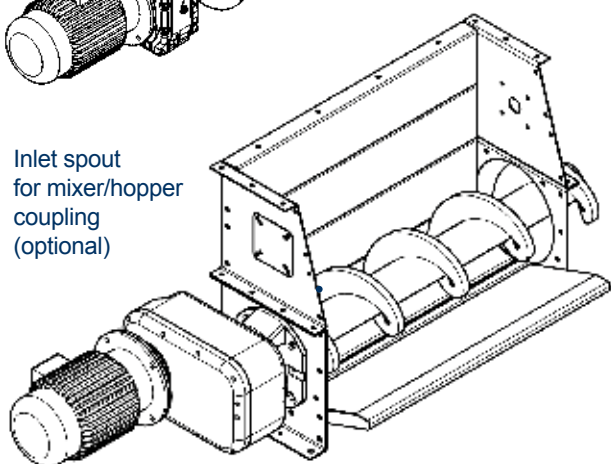
Extra-thick helicoid flighting
heavy-duty manufactured
from highly resistant steel



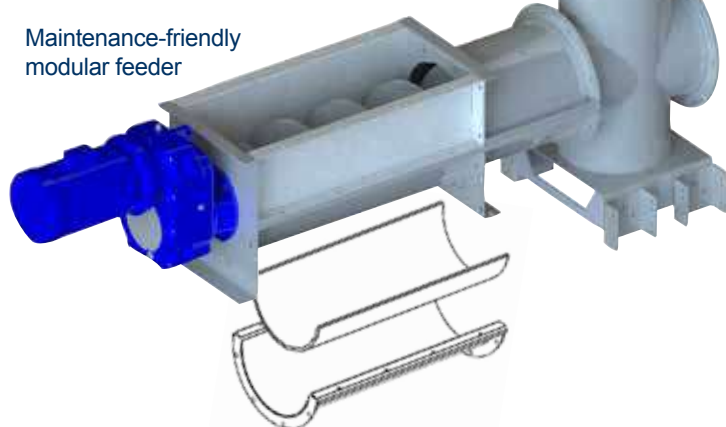
Bridgebraker on the inlet
spout for mixer/hopper
(accessory)



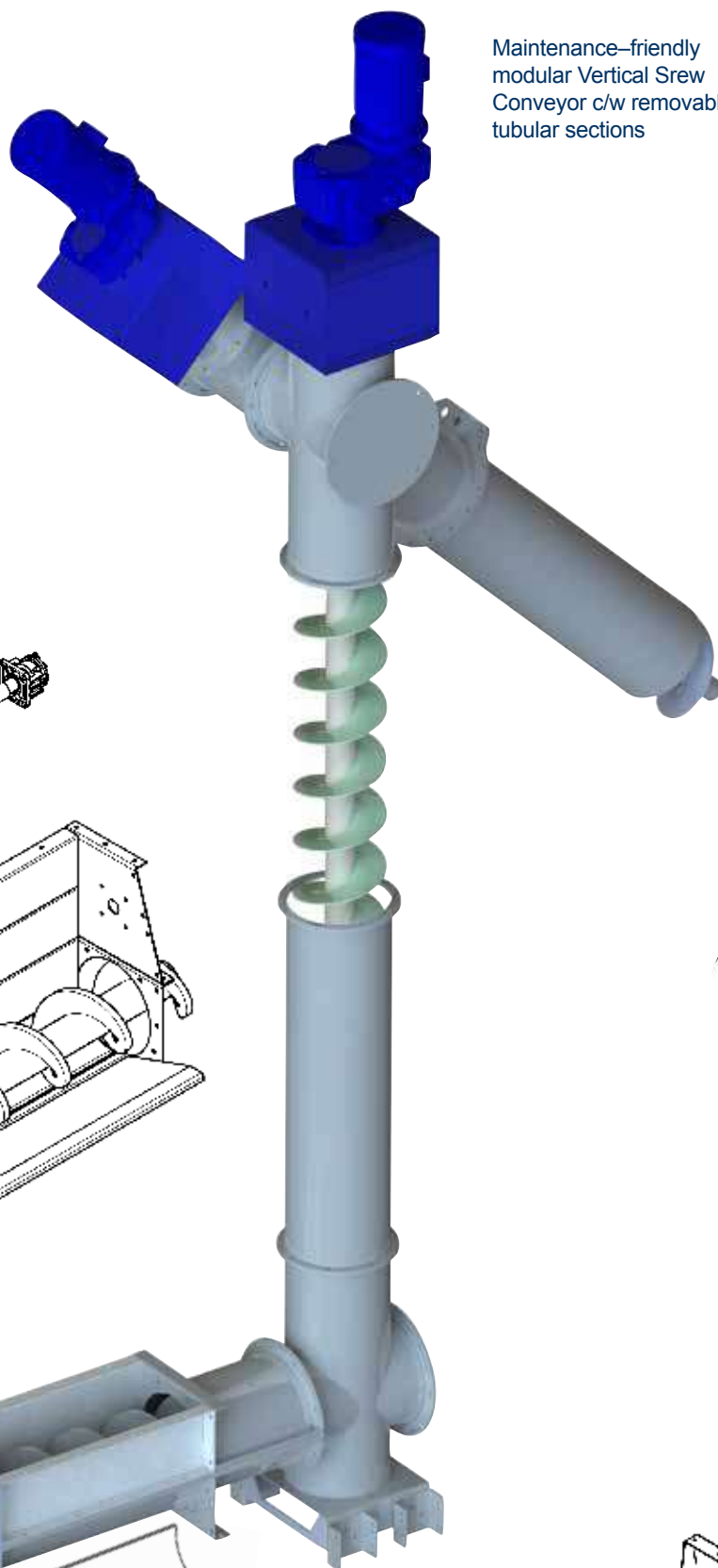
Inlet spout
for mixer/hopper
coupling
(optional)



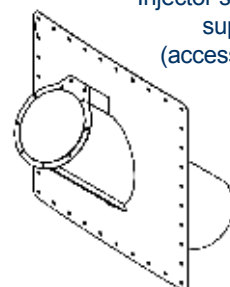
Maintenance-friendly
modular feeder



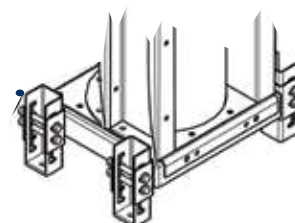
Maintenance-friendly
modular Vertical Srew
Conveyor c/w removable
tubular sections



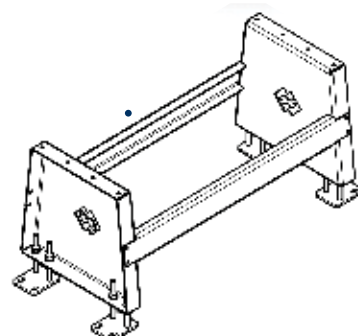
Injector screw
support
(accessory)



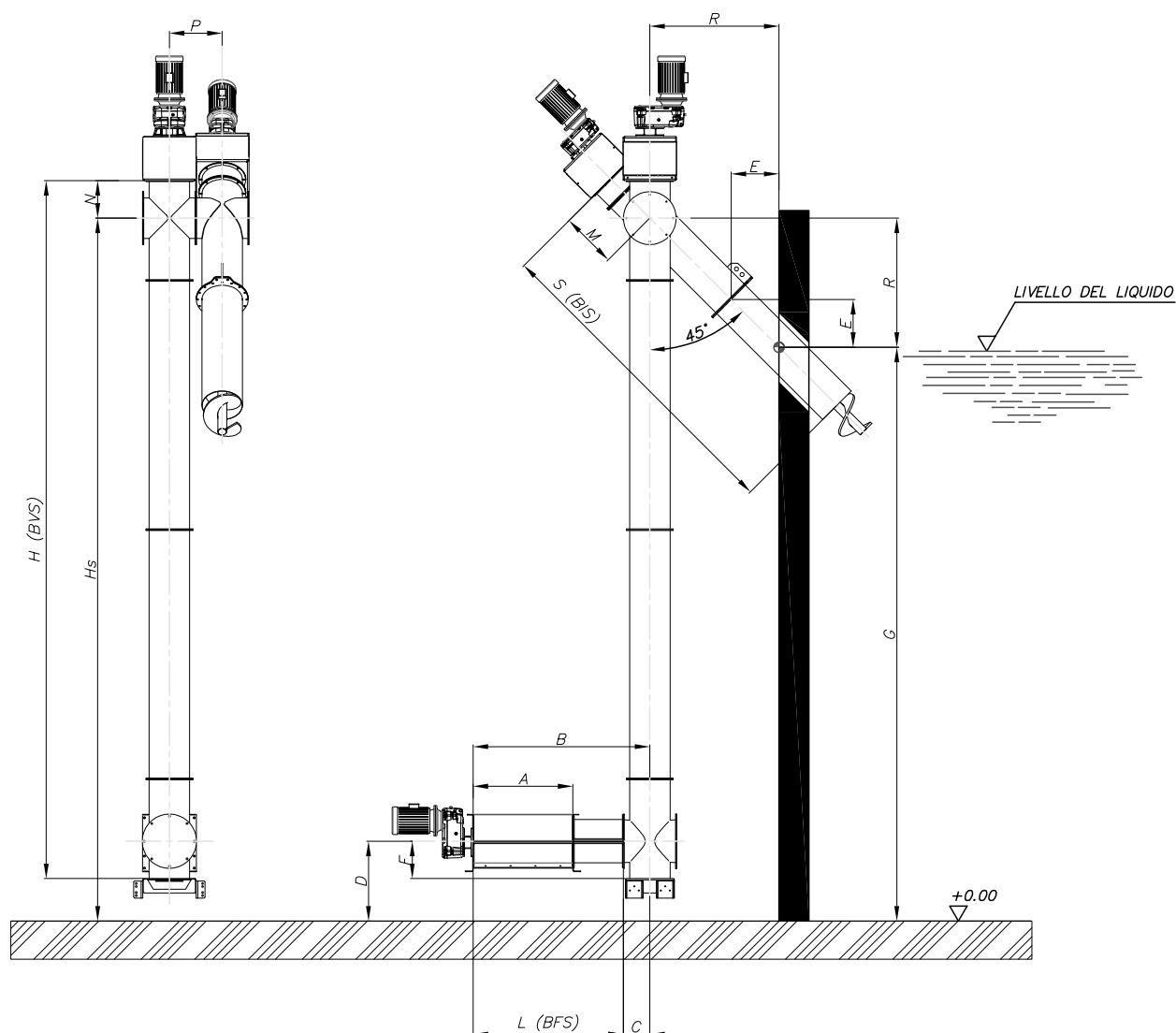
Adjustable feet for BVS
(accessory)



Support for BFS
(accessory)



Dimensions



BFS	A		B		L	
	min	max	min	max	min	max
300	1,000	3,500	1,265	6,265	1,500	6,000
400	1,000	3,500	1,265	6,265	1,500	6,000

D = 800 (standard version foot)

L = B - C : lengthH from flange to flange on BFS (to be used it order code)

BVS	Hs		N	F	C	H		P
	min	max				min	max	
300	3,150	7,150	325	325	265	3,000	7,000	530
400	3,050	7,050	375	375	265	3,000	7,000	530

H = (G + R) - D + F + N : height from flange to flange on BVS (to be used it in order code)

BIS	E	H		S
		max	min	
400	400	1,000	1,260	3,210
		1,185	1,430	3,460

Application



Manure (25 - 30% dry matter)

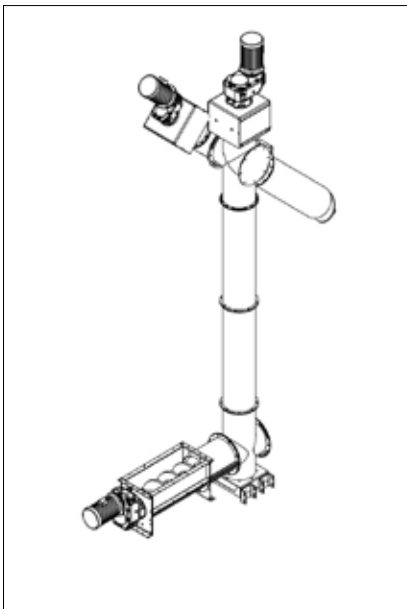


Crops

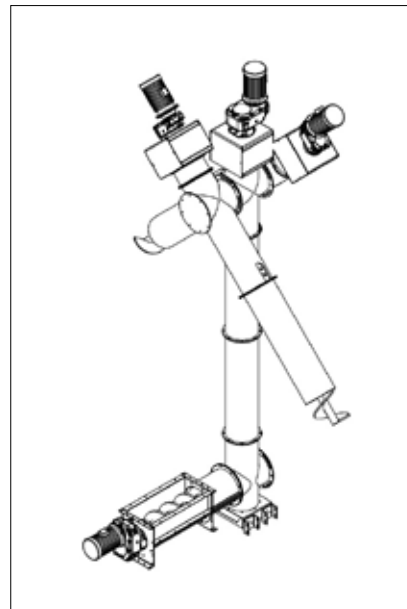


Green Waste

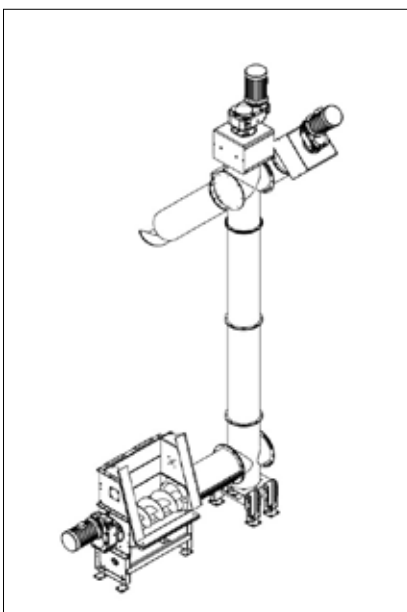
Configuration



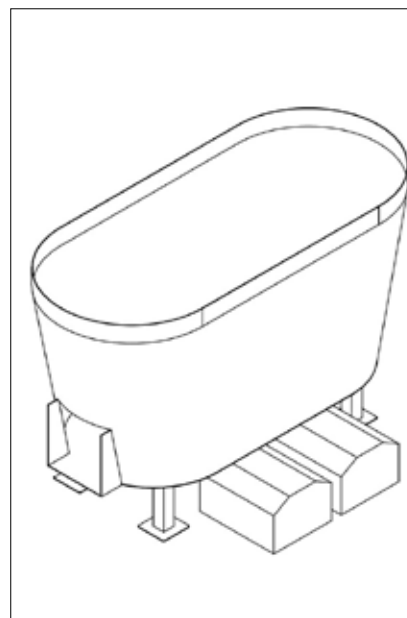
**TCB system with BFS
feeder and standard
loading hopper**



**TCB system with double
injection feeder BIS**



**TCB system with BFS
feeder and loading
hopper ready for
mixing truck**



**Ready for any type of
mixing truck**

