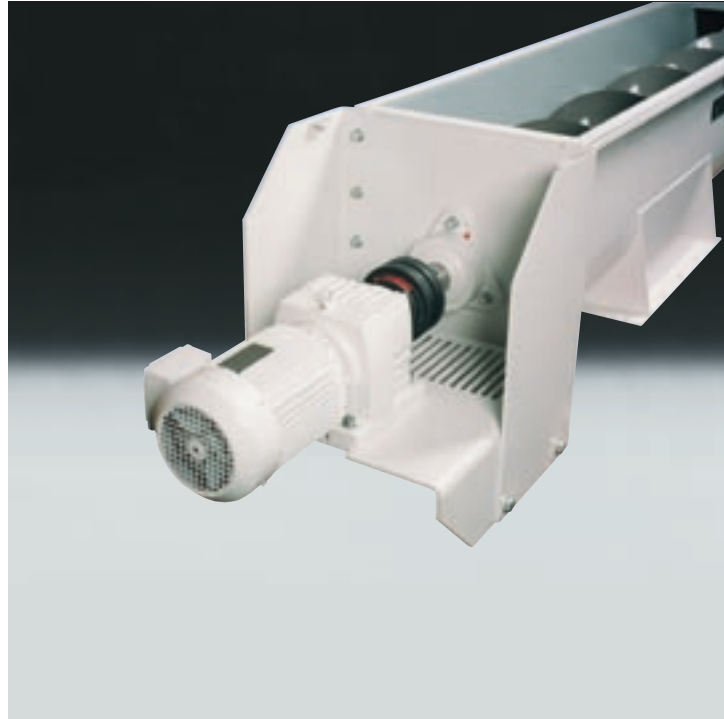




SANAT MECHANIC . CO

# Trough Screw Conveyor

SMQ



# Trough Screw Conveyor SMQ

## Application

Horizontal or inclined material conveying, distribution, collection, mixing and discharge

For floury and mealy, fine- and coarse-grained materials

Application in grain mills and feed manufacturing plants, malthouses, bulk storage systems (for cereal grains, oilseeds and derivatives), food processing facilities, fertilizer factories, and in chemical and related industries



## Design

Straightforward design

Inlets and outlets can be configured as required

Dust-tight housing – high degree of sanitation

Easy maintenance

Low operating energy consumption

All elements of food-grade materials or with special coating (FDA-approved)

Optional:

Stainless steel version

## Safe operation

Personal safety according to EU, UL and CSA safety standards

Optional:

Zero-speed detector

Overflow gate with personal protection switch

Capacitive material backup detector

## Additional elements

Inlet trough with progressive solid-flight screw for uniform storage bin discharge

Bottom gates

Overflow gate

Intermediate outlet with slide gate

Paddle-type screw for mixing

## Surface finish

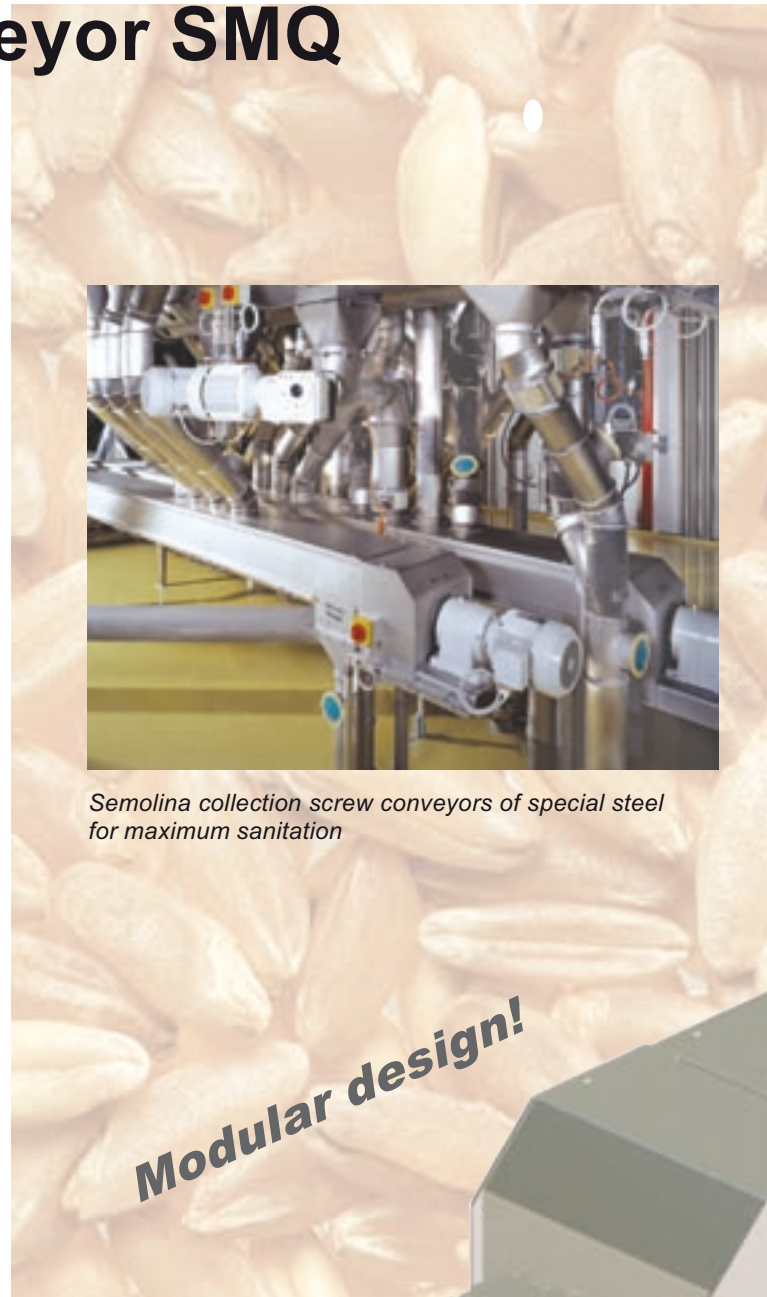
### Standard:

Food-grade coat of paint, white NCS 1000

Multi-layer anti-corrosion coat of paint for outdoor applications

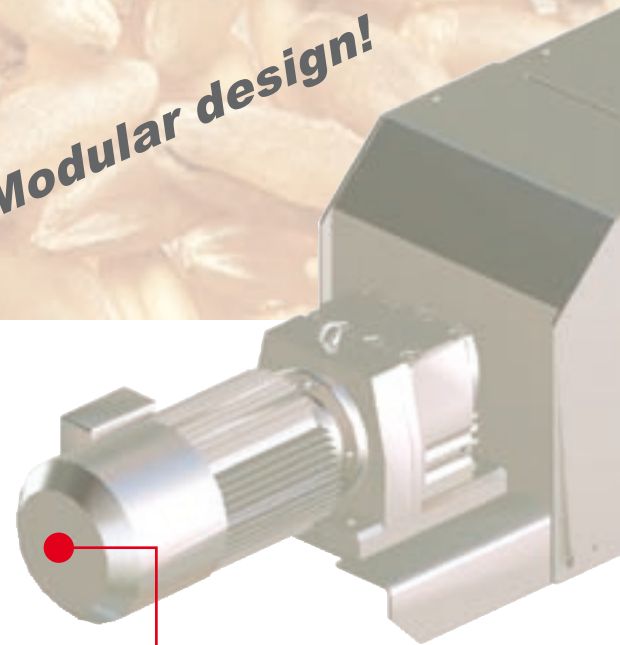
Optional:

Customized coat of paint



*Semolina collection screw conveyors of special steel for maximum sanitation*

**Modular design!**



### Drive

Direct drive

Maintenance-free

Flexible coupling between the drive and the screw shaft

Optional:

Chain drive

(can be varied 360°)



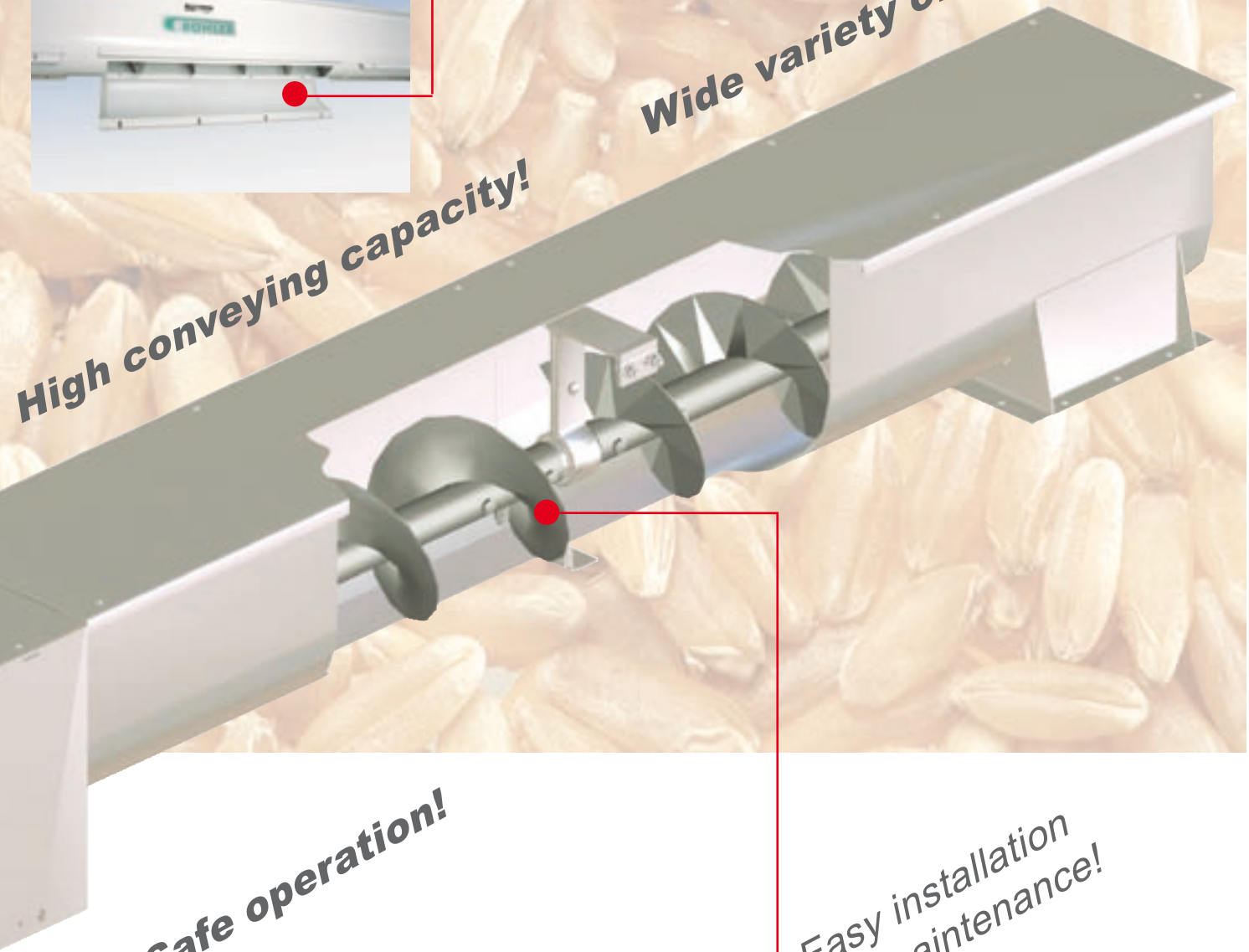
# Material conveying, distribution, collection, mixing or discharge



**Bottom gates (optional)**  
For easy cleaning of the screw and trough

**Wide variety of applications!**

**High conveying capacity!**



**Safe operation!**

**Easy installation and maintenance!**



## **Screw trough**

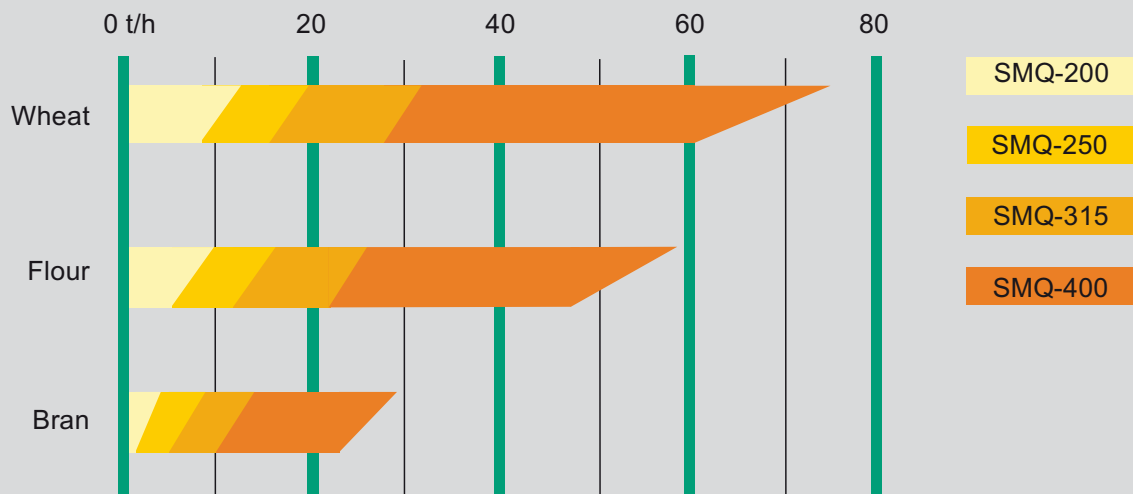
- Solid-flight screw for conveying
- Paddle-type screw for conveying and mixing
- Progressive solid-flight screw for uniform storage bin discharge
- Intermediate bearing with wear-resistant sliding bearing

## Selection of trough screw conveyor

The correct selection and sizing of a trough screw conveyor requires precise knowledge of the material conveyed and of its behavior during conveying. In addition, the required conveying distance must be considered for specifying the trough screw conveyor. The maximum conveying capacity depends on the conveying distance and the material characteristics.

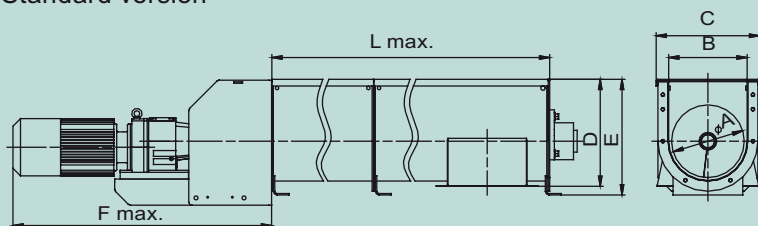
**For the specific selection and determination of all relevant values, please contact our sales and engineering department.**

The following chart shows approximate throughput ranges for materials with different conveying characteristics.

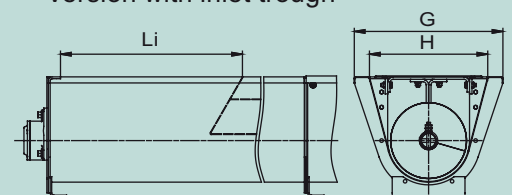


## Dimensions (mm)

Standard version



Version with inlet trough



Model	A ∅	B	C	D	E	F max.	G	H	Li	L max.
SMQ-200	200	220	306	316	351	889	420	320	600-2100	21 m
SMQ-250	250	270	356	369	399	977	490	390	600-2100	21 m
SMQ-315	315	335	425	435	457	1049	570	470	600-2100	21 m
SMQ-400	400	420	530	528	562	1153	700	600	600-2100	21 m