

Dear Sir / mam,
Greetings to you,

Selection of Extruder (we prefer to go for the Single Screw Reciprocating Extruder), the advantages given below.

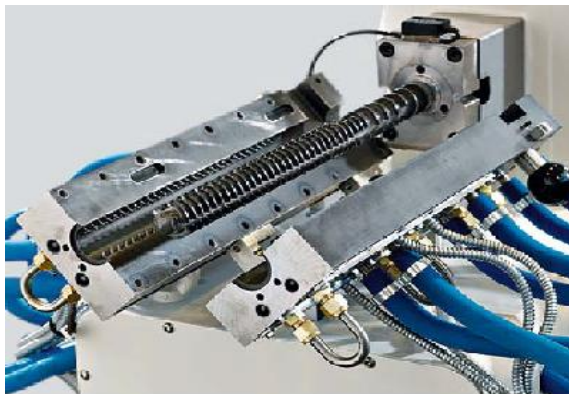
Extruder (single Screw Reciprocating) PCS-46 - with 100-150 kg / Hr. - 20 hp - 1 set -

Advantages of Single screw Reciprocating Extruder

- No need of additional lab extruder for product development, shade / color matching, RM testing
- Easy & fast cleaning due to short length, easy & fast cooling due to water heating system
- Wide range of products can be produced on single screw extruder - like PU, PTFE, low curing, etc.
- Running cost is low as compared with Twin Screw - Low Power, Low heating cost
- Small batches can be easily possible
- Thorough cleaning is possible in small time span.
- Consistence product Quality possible due precise Temp Control, no problem of jamming, no problem of product geletion
- Low maintenance cost as compared with Twin Screw
- Modular design of Screw Elements to felicitate the change in kneading / feeding lengths
- Thru Cooling Shaft - ensures the controlled process temp. / easy cleaning of screw & avoiding geletion in the barrel.
- process length is much less than the Twin Screw extruder, ensures less residence time for product.
- machine is easy to operate
- If power failure occurs - takes less time / less energy for restart
- Due close loop heating cooling system - load on chilling gets reduced drastically

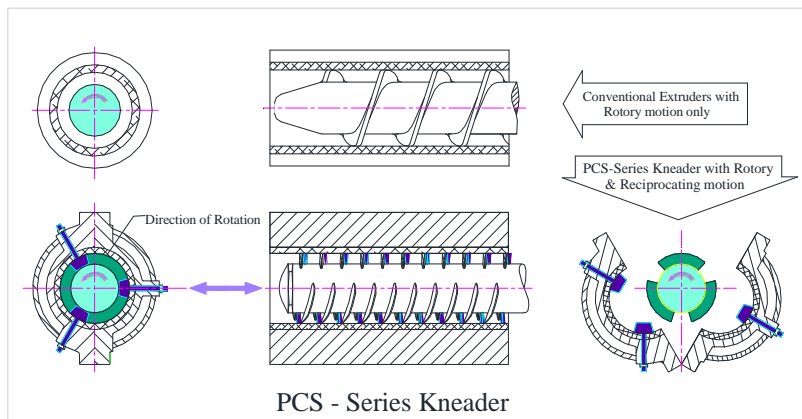
Disadvantages of Single Screw Extruder

- Fine processing is limited to certain extent (in case of rejection processing)
- requires extra care to be taken
- Spares cost is high (but / kg cost is low as compared with twin)
 - Thorough Cleaning is time consuming / you may need to keep spare set of Screw Shaft
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PCS-30 Machine Open Barrel

Unique operating principle of Single Screw Reciprocating Extruders



Selection of Twin Screw (for powder Coatings only) advantages / disadvantages given below

1. - Extruder (Twin Screw) CTSE-30 - with L/D - 20, Do/Di- 1.65, Power main motor - 25 hp, speed - 500-800 rpm, Volumetric feeder with 100-150 kg / Hr. - 1 set -

Advantages

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- User friendly (commonly used machines)
- Low Investment (capital)
- Fine Processing is possible due to free feeding system
- the finish of Glossy products are better than Single Screw extruder
- Economical Formulation is possible
- Removing of screw shaft is easy due to easy access to coupling

Disadvantages of Twin screw & vice a verse

- Lab Extruder is must (cost around rs. 6 lacs)
- It has limitations to produce the products like PU, PTFE, low curing, etc.
- Running Cost is higher than Single screw Screw extruder
- For consistence Quality,Needs to take extra care to Control parameters
- Higher cost for wear parts changing compared with single screw
- Due Higher length of barrel - the residence time of product is more, & direct Heating of barrel, it may creates the gel particles in machines
- If power Failure / sudden stoppage of machine happens - It take longer time / more energy to restart.
- Due Direct heating cooling system - load on chilling gets increased & needs to go for higher capacity OR the running time of chilling plant increases.



I hope I have answered all your concerns. Please reply to us after having a look on all points.