



सीएसआईआर-केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान
CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE

मैसूरु / MYSURU-570 020, भारत / INDIA

(Constituent Laboratory of CSIR, New Delhi (Ministry of Science & Technology)
An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory

Corrigendum: Tender for Monolayer Twin Screw Extruder with Film Blowing Machine

Corrigendum Title: Revised Technical Specification based on PBC

Tender Ref: A3/74230/2021 Date: 19-01- 2022

Tender ID: 2022_CSIR_102388_1

The revised final specification based on the discussion in online Pre Bid Conference held on 01-02-2022 @ 11.00A.M to provide equal opportunity to all OEMs has been incorporated and given below as revised specification to the original tender specification. All bidders are requested to take cognizance of the revised specification and submit their bids accordingly on or before 02.00 p.m. on 15/February/2022.

All other tender terms and conditions of tender remain unaltered.

**Section Officer (S&P)
CSIR-CFTRI, Mysore
Dt. 03-02-2022**

Revised Technical Specification based on PBC

Monolayer Twin Screw Extruder with Film Blowing Machine

Extruder type	Co-rotating intermeshing
Material to be processed	HDPE/LDPE/LLDPE/PP etc
Screws elements	Tool alloy steel AISI d2/a1 (high wear resistance)
Barrel with liners	Tool alloy steel AISI m2 (high-speed steel, high wear resistance)
Treatments on screw liners	Vacuum hardening
Core & surface hardness	Core up to 60 \pm 5 HRC & surface up to 65 \pm 5 HRC
Main screw diameter	20-40mm
Screw inner diameter	20-30mm
Channel depth	3-8mm
Screw length	800-1500mm
Screw shaft	Involutes spline
Screw lobe	Bi lobe
L/d ratio	According to material
Screw construction	Segmental
Barrel design	Segmental with internal closed-loop circuit cooling

Solenoid valve	Direct-acting 2/2
No. Of barrel segments	8-10
Length of barrel segment	60×4=240mm
Charging method & drive	Volumetric feeder (VFD) variable-frequency drive(1.5kw/2hp)
Gearbox unit	All helical gears equipped with tandem thrust pack
Gearbox cooling	Through heat exchanger
Gear class	Ground finish
Vacuum pump (de-gasing)	Water ring cap: 700mm of hg., 0.75 kw make: kirloskar
Max torque	350-600nm
Specific torque	80-100 nm cm ³
Thrust pack cap	300-500 nm
Temp controllers pid	Pid 48×90 interface controller or temp plc module
Heating system	High-density cottirage heater
Heating zones	9+2=11
Main motor drive	Ac variable drive constant torque
Control panel	Standard control panel with pid+plc+lcd/hmi controllers interlocking of heaters and other motors with the main motor
Post processing equipment	<ol style="list-style-type: none"> 1. Volumetric feeder:2nos 2. Vacuum section 1nos 3. Barrel cooling section with heat exchanger: 1nos 4. Side feeder: 1nos

Single-layer extrusion blown film unit with corona treater	Extruder output 1-12kg/hr Material to be processed: HDPE/LDPE/LLDPE/PP etc Film thickness adjustment should be there
Cooling process unit	Cooling for HDPE/LDPE/LLDPE/PP etc.
Accessories	Compressor of required capacity, winding unit must be provided