

Technical News Bulletin

Steinhausen, August 2015



IS 5" Plunger Mechanism Family

- The cylinder units are of a rugged mono-block construction.
- Quick process changes triple to double, etc. with guide ring/base plate.
- Lubrication to upper bearing and cylinder with Teflon Piston Rings ensures smooth low air pressure operation.

Introduction

A new Family of plunger mechanisms for the IS 5" Machine has been developed to enable Plunger Process Control (PPC) for the whole family. The previous units required the removal of the 5" Double Gob Base plate and installation of the 85mm TG base plate, which was a major contribution to long process changes. This new family has now a common base plate for Single Gob Double Gob 5" and Triple Gob 85mm.



Specifications / Application

	85mm Triple Gob	5" Double Gob	Single Gob Press Blow / Blow Blow
Base Plate Assembly	62-12003-01	62-12003-01	62-12003-01
PPC Sensor Plate	59-27463	59-27463	59-27463
Height Adjust Assembly	62-3002-15	62-3002-15	62-3002-15
Guide Plate Assembly	62-12002-01	62-12002-01	62-12002-01
Cylinder Complete With Sensor	62-12001-01	62-12000-01	62-12016-01
Cylinder Complete Without Sensor	62-12001-02	62-12000-02	62-12016-02
QC Cartridge	62-12006-01 ☐	62-3036-12	62-3036-11
Positioner NNPB	62-11047-03 ☐	62-404-15 ◆	☐
Optional Split Ring Adapter for Above	☐	● 62-404-12	☐
Positioner Wide Mouth 55	62-11047-03	☐	☐
Positioner Wide Mouth 70 Fin	☐	62-407-6	62-3069-4
Positioner Wide Mouth 83 Fin	☐	62-412-3 ◆	☐
Positioner Wide Mouth 90 Fin	☐	62-3052-9 ◆	62-3069-3
Positioner Wide Mouth 120 Fin	☐	☐	62-3038-2 / 3
Plunger Mech. Piping in Frame	200-1673-6	200-1673-6	200-1673-6
Plunger Mech. Lube Piping	200-1672-8	200-1672-8	200-1672-8
● Standard Equipment ○ Optional Equipment ☐ Not Applicable ☐ Mold Design Different to Previous Version ◆ Revision Changes Required see Modification Drawings This TNB			

Installation Requirements

The mechanism can be installed on all sections delivered after year 2000 and will be the considered the standard system for installation on new IS 5" machines delivered from Jan 2015. Owing to customer demand the piston and rod of the TG 85mm version of the mechanism now uses a more traditional external threaded

piston and rod, All finish equipment with the exception of cooling tubes is compatible with 85 TG standards. Recommendations for the cooling tubes can be found on Page 5

To ensure the full invert range when using PPC on 5" DG there are minor changes required to the plunger positioners these are shown on page 4 of this document. This change does not affect backward compatibility of finish equipment or the use in existing plunger mechanisms. All equipment supplied after January 2015 will comply with this revision.

Features / Benefits

The cylinder units are of a rugged mono-block construction incorporating both upper and lower cylinder units, the upper cylinder being a single cavity. This has the advantage that straight plunger exhaust channels are used to ensure blockages with cullet occur less frequently. If blockage to the exhaust path does occur the cleaning is a much simpler operation.

The guide ring, base plate and the PPC sensor plate are common components to all cylinder units and height adjust. This ensures that conversions are a straight forward operation.

The cylinder bushing and the lower cylinder have direct connection to the lubrication system. The direct lubrication along with the use of Teflon piston rings ensures the motion of the cylinders is smooth at the low pressures required for NNPB.

Features / Benefits

Features	Benefits
Mono-Block cylinder construction	Exhaust
Mono-Block cylinder construction	Ensures true alignment
Base Plate Design	PPC common Sensor plate
Guide Ring /Base plate	Quick process changes Triple to Double etc.
Lubrication to upper bearing and cylinder with Teflon Piston Rings	Ensures smooth low air pressure operation

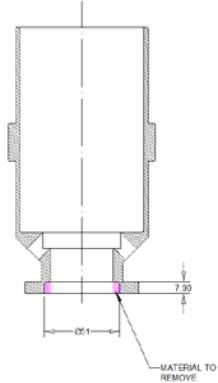
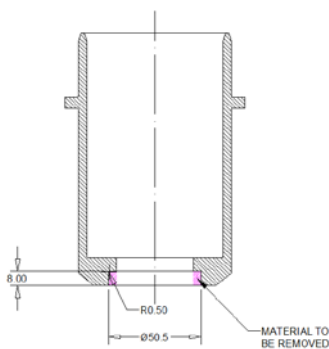
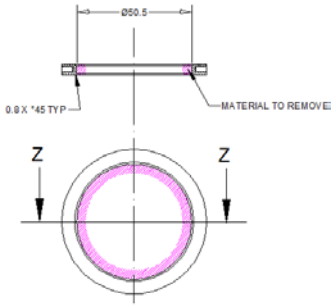
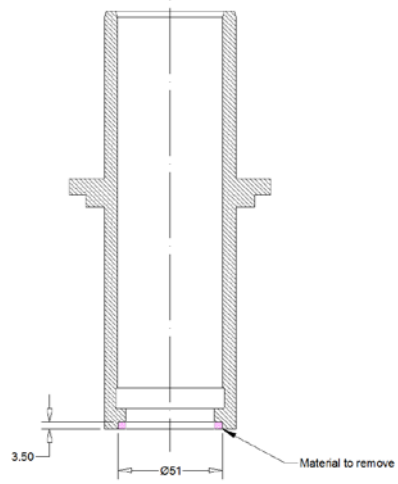
PLEASE NOTE

Customers with the Prototypes of this mechanism series (mechanisms delivered prior to January 2015 should contact Emhart Glass to ensure correct spares are supplied for the mechanisms in use or to seek parts to upgrade to the latest standard.

Modifications for 5" DG Positioners

The following information is for modification of components to ensure positioners are to the latest standards to operate with the new mechanism.

Please Note :- Modifications do not affect backward compatability.

Modification to Positioner Sleeve 62- 6139 for Positioner 62-3052. Modification Drawing 62-7497	Modification to positioner Sleeve 62-2828 for Positioner 62-412 Modification Drawing 62-7496
	
Modification to Protection Washer 62-2985 used on Positioner 62-404 Modification Drawing 62-7495	Mod to Centering Bushing 62-7252 used on NNPB Positioner 62-407 Modification Drawing 62-7494
	

Triple Gob Positioner information

The piston and Rod have been changed from an internally threaded rod end to an external thread. The only changes concerning finish equipment are the plunger cooling tubes. The following shows suggestions for NNPB and wide mouth all other equipment conforms to Mold design sheets IS-425-20-501 sheets 1 and 2.

