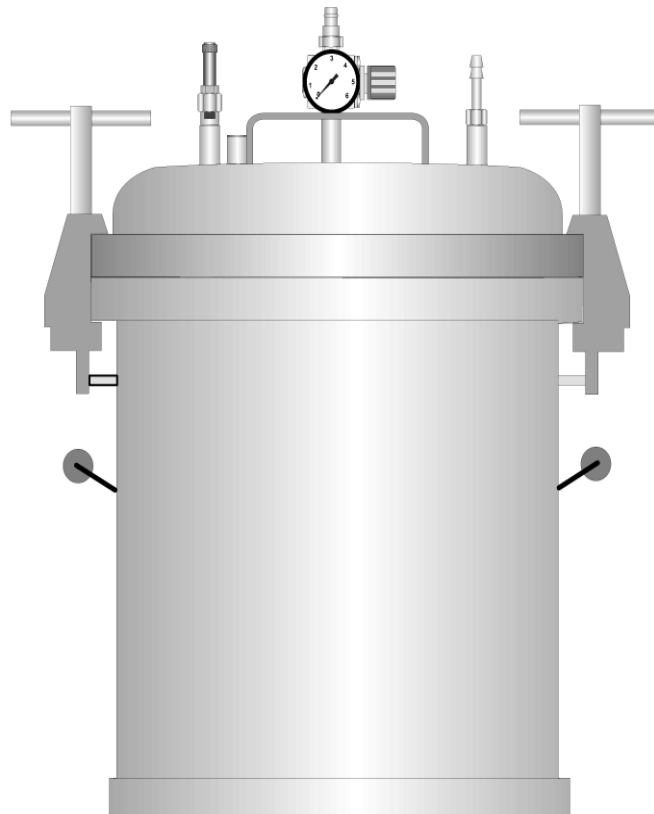


Cold Glue Pressure Vessel

Technical Documentation, Rev.9.25
English - Translation of the original instructions (German)



DY 2020: 20 liters



DY 2040: 40 liters

Information about this manual



Read all instructions before operating this equipment!

It is the customer's responsibility to have all operators and service personnel read and understand this information. Contact your ITW Dynatec customer service representative for additional copies.



NOTE: Please be sure to include the serial number of your application system each time you order replacement parts and/or supplies. This will enable us to send you the correct items that you need.

NOTE: Most common screws, nuts and washers called out in the manual are not for sale and they can be obtained locally at your hardware Store. Specialty fasteners are available by contacting ITW Dynatec's Customer Service.

ITW Dynatec Service Parts and Technical Service:

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Chapter 1

Safety Instructions

1.1 General Considerations



- All operators and service personnel must read and understand this manual before operating or servicing equipment.
- All maintenance and service on this equipment must be performed by trained technicians.



Read and pay attention to the manual!

1. Read and follow these instructions.
Failure to do this could result in severe personal injury or death.
2. Keep the binding rules for accident prevention valid for your country and the place of installation. Also keep the approved qualified technical rules for safety-conscious and professional work.
3. Additional safety instructions and/or symbols are located throughout this manual. They serve to warn maintenance personnel and operators about potentially hazardous situations.
4. Inspect the machine for unsafe conditions daily and replace all worn or defective parts.
5. Keep work area uncluttered and well lit. Remove all material or things not needed for the production from the workspace of the equipment!
6. All covers and guards must be in place before operating this equipment.
7. Subject to technical modifications without notice!
8. To ensure proper operation of the equipment, use specified electrical and/ or air supply sources.
9. Do not attempt to alter the design of the equipment unless written approval is received from ITW Dynatec.
10. Keep the manual readily accessible at all times and refer to it often for the best performance from your equipment.

1.2 Warning Labels

1. Read and obey all of the warning labels, signs and caution statements on the equipment.
2. Do not remove or deface any of the warning labels, signs and caution statements on the equipment.
3. Replace any warning labels, signs and caution statements which have been removed or defaced. Replacements are available from ITW Dynatec.

1.3 Safety Symbols in this Manual

Mandatory signs

	General mandatory sign		Wear foot guard!
	Read and pay attention to the documentation!		Wear protective gloves!
	Switch the unit voltage-free before working! Main switch OFF!		Wear protective clothing!
	Wear headgear, protective goggles and ear protection!		

Warning signs

NOTE: The dangers and risks exist if the corresponding instructions are not heeded and the precautionary measures are not taken!

	Caution, danger spot! This sign points to possible dangers for life and physical condition or to possible risks for machine and material or to possible risks for environment. The word “DANGER” in addition with this points to possible dangers of life The words “WARNING” and “CAUTION” in addition with this sign point to possible risks of injury. The word “ADVICE” in addition with this sign points to possible risks for machine, material or environment.		Danger, high voltage! This sign points to possible dangers for life and physical condition caused by electricity. Risk of injury, mortal danger!
			Caution, high pressure! This sign points to possible risks of injury caused by high pressure. Risk of injury!
			Caution, rotating rolls! This sign points to possible risks of injury caused by inrunning nip (at rolls). Risk of injury!

Prohibition signs

	Fire danger! Smoking prohibited!		Fire danger! Fire and open flames prohibited!
---	--	--	---

1.4 Safe Installation and Operation



Read and pay attention to the manual!

1. Read this manual before applying electrical power to the equipment. Equipment may be damaged by incorrect electrical connections.
2. To avoid possible hose failure, ensure that all hoses are routed in such a way that kinks, tight bend radii and abrasive contacts are excluded.
3. Do not use adhesive that is dirty or chemically contaminated. Otherwise, this may cause the system to bond or become clogged, resulting in component damage.
4. When adhesive hand-held applicators or other movable applicators are used, never point them at yourself or at any other person. Never leave a hand-held applicator's trigger unlocked when not actually in use.
5. Use the unit only as it is intended to.
6. Never let the unit run unattended.
7. Operate the unit only in a faultless and fully functional condition. Check and make sure that all safety devices work in proper form!



Smoking, fire and open flames prohibited! Fire danger!

Make absolutely sure that there is no smoking and no fire being lit in the work area!

1.5 Explosion/ Fire Hazard

1. Never operate this unit in an explosive environment.
2. Use cleaning compounds recommended by ITW Dynatec or your adhesive supplier only.

1.6 Choice of Adhesive



DANGER! HARMFUL FUMES!

The materials processed (i.e., pumped, applied) by the ITW system are at the discretion of the user and beyond the control of ITW Dynatec. It is the user's responsibility to identify and minimize any health effects or other safety issues that may arise from processing these specific materials (e.g., hazardous fumes).

1.7 Eye Protection & Protective Clothing



WARNING
EYE PROTECTION & PROTECTIVE CLOTHING REQUIRED

1. It is very important that you PROTECT YOUR EYES when working around hot melt adhesive equipment!
2. Wear a face shield conforming to ANSI Z87.1 or safety glasses with side shields which conform to ANSI Z87.1 or EN166.
3. Failure to wear a face shield or safety glasses could result in severe eye injury.

4. Wear heat-resistant protective gloves and long sleeved, protective clothing to prevent burns that could result from contact with hot material or hot components.
5. Always wear steel reinforced safety shoes.

1.8 Electrical



DANGER: HIGH VOLTAGE!

1. An electrically operated application head and level sensor require electrical power, which poses a hazardous condition. If these components are present, the container must be electrically grounded to ensure safe operation. Risk of severe electric shock! Risk of injury, even death!
2. To avoid personal injury, do not touch exposed connections and components while input power is on.
3. Disconnect and lock the external power supply and turn it off before connecting any plugs or removing any protective covers.
4. An electrical disconnect switch with lockout capability must be provided in the line ahead of the unit. Wiring installations for the device's power supply must be performed by a qualified electrician.
5. Notify the maintenance personnel immediately if cables are damaged. Ensure that faulty components are replaced promptly.

1.9 Lockout/ Tagout



Switch the unit voltage-free before working!

1. Follow OSHA 1910.147 (Lockout/ Tagout Regulation) for equipment's lockout procedures and other important lockout/tagout guidelines.
2. Be familiar with all lockout sources on the equipment.

1.10 High Pressures



WARNING: HIGH PRESSURE PRESENT!

1. To avoid personal injury, only operate the device when the cover is properly installed and the safety valve is functioning properly.
2. Before opening any fitting or connection in the hydraulic system, relieve the hydraulic pressure in the system. To avoid serious injury from pressurized adhesive during maintenance of the unit or when opening the lid to refill the material, turn the air pressure regulator to 0 bar, open the safety valve, and activate the application heads to relieve the hydraulic pressure in the system.
3. **IMPORTANT NOTE:** Even if a system's pressure gauge reads "0" bar, residual pressure and air pockets may still be present in the system, which could cause adhesive to suddenly escape under pressure when a hose or hydraulic connection is loosened or removed. Therefore, always wear eye protection and protective clothing.
4. Keep the given operating pressure.
5. Immediately notify maintenance personnel if hoses or components are damaged. Ensure that faulty components are replaced promptly.

1.11 Servicing, Maintenance

1. The operation and maintenance of this device is only permitted to be carried out by trained and qualified personnel.
2. Never service or clean the unit while it is in operation. Disconnect the unit from the power supply and lock out all power at the source before attempting any maintenance.
3. Disconnect the compressed air connection and relieve the hydraulic pressure in the system by opening the safety valve and activating the application head!
4. Follow the maintenance and service instructions in this manual.
5. Observe the maintenance intervals specified in this documentation!
6. Any device defects that impair safe operation must be repaired immediately.
7. Check that screws that came loose during repair or maintenance have been retightened.
8. Replace the air hoses regularly as part of preventative maintenance, even if no damage is visible! Follow the manufacturer's instructions!
9. Never clean electrical parts with a water jet!
10. When using hazardous substances (cleaning agents, etc.), refer to the manufacturer's current safety data sheet!

1.12 Secure Transport

1. Check immediately upon receipt whether the entire device has been delivered in perfect condition.

Transport inspection:

- Immediately check the delivery for completeness and transport damage upon receipt.
 - If any external transport damage is visible, do not accept the delivery or accept it only with reservations. Note the extent of the damage on the transport documents/delivery note from the carrier. Initiate a claim.
 - Report any hidden defects immediately upon discovery, as claims for damages can only be asserted within the applicable claim period.
 - Have the carrier certify any transport damage and report it immediately to ITW Dynatec.
2. Always transport and store the pressure vessel with the utmost care in an upright and horizontal position:
 - Do not throw or drop.
 - Do not place any other objects on the pressure vessel or packaging.
 - Protect the pressure vessel from dirt, moisture, heat, and cold.
 - Do not use force when unpacking. Do not damage plastic parts.
 - When storing the pressure vessel, leave it in its packaging until ready to install.

1.13 Packaging

Only environmentally friendly materials were used for the packaging.
Therefore, please observe the following rules:

- Separate different packaging materials according to their type in an environmentally friendly manner.
- Dispose of recyclable materials.
- Reuse usable packaging components.

1.14 Storage

The following regulations apply to the storage of the pressure vessel:

- Store in a dry place. Relative humidity: max. 60%.
- Do not store outdoors or in aggressive atmospheres.
- Protect from direct sunlight. Storage temperature: 15 to 25°C.
- Store in a dust-free area. Avoid mechanical shocks and damage.
- Do not place it under other objects or load it with other parts.

1.15 Measures in case of fire

	Smoking, fire and open flames prohibited! Fire danger! Make absolutely sure that there is no smoking and no fire being lit in the work area!
---	--

Measures in case of fire:

Wear safety shoes, heat-resistant protective gloves, safety goggles and protective clothes that cover all vulnerable parts of the body.

Firefighting - burning glue:

Please keep attention to the safety data sheet given by the glue manufacturer.

	EXTINGUISH FIRE <i>Appropriate extinguishing agents:</i> Foam extinguisher, Dry powder, Spray, Carbon dioxide (CO₂), Dry sand. <i>For safety reasons not appropriate extinguishing agents: None.</i>
---	---

Firefighting - burning electrical equipment:

Appropriate extinguishing agents:
Carbon dioxide (CO₂), Dry powder.

1.16 Disposal

Clean the pressure vessel if necessary to ensure that no hazardous substance residues remain in the pressure vessel.

All metallic parts of the pressure vessel can be recycled after disassembly.

All non-metallic components must be disposed of in accordance with the material requirements.

All parts, auxiliary materials, and operating materials of the product:

- Separate by type.
- Dispose of in accordance with local regulations and guidelines.

	WARNING Pay particular attention to the instructions provided by the adhesive and cleaning agent manufacturers. Carelessly disposed of materials endanger human health and the environment.
---	--

	1. When working on or with the device, comply with legal requirements for waste prevention and proper recycling/disposal. 2. Keep attention, that during installations, repairs or maintenance matters hazardous to water, like adhesive / adhesive scrap, lubricating grease or oil, hydraulic oil, coolant and cleaner containing solvent do not pollute the ground or get into the canalization! These matters have to be caught, kept, transported and disposed in appropriate reservoirs! Dispose these matters according to the international, national and regional regulations.
---	---

Chapter 2

Description and Technical Specifications

2.1 Applicable Safety Regulations

2.1.1 Intended Conditions of Use

The pressure vessel is intended for conveying liquid media, such as adhesives, to an application head.

The maximum permissible operating pressure must not be exceeded (see the value on the nameplate and in Chapter 2.2.2 Technical Data).

Ensure that the material compatibility between the contents, the vessel, and the sealing material is guaranteed to prevent damage caused by chemical or thermal reactions with the contents (e.g., corrosion).

To assess suitability for specific fluids, the operator must consider the relevant regulations for their application, particularly those governing commercial, traffic, or water regulations.



If the unit is not used in accordance with this regulation, a safe operation cannot be guaranteed.

The operator - and not ITW Dynatec - is liable for all personal injury or property damages resulting from unintended use!



Intended use includes, that you

- read this documentation,
- heed all given warnings and safety instructions, and
- do all maintenance within the given maintenance rates.

Any other use is considered to be unintended.

2.1.2 Unintended Use, Examples

The unit may not be used under the following conditions:

- In defective condition.
- In a potentially explosive atmosphere.
- With unsuitable operating/processing media.
- When the values stated in Ch.2.2.2 Technical Specifications are not complied with.

The unit may not be used to process the following materials:

- Toxic, explosive and highly flammable media such as acids, alkalis and cleaning agents.
- Erosive and corrosive media.
- Gases.
- Food products.

2.1.3 Residual Risks

In the design of the unit, every measure was taken to protect personnel from potential danger. However, some residual risks cannot be avoided.

Personnel should be aware of the following risks:



- Risk of injury from fluids escaping under high pressure. Wear personal protective equipment when working on the pressure vessel.
- Risk of injury from mechanical and pneumatic energy. If individual components are damaged, fluids can escape under high pressure and cause injury and property damage.

2.1.4 Technical changes

Any kind of technical changes having impact to the security or the operational liability of the system should only be done by written agreement of ITW Dynatec. Suchlike changes made without given a corresponding written agreement will lead to immediate exclusion of liability granted by ITW Dynatec for all direct and indirect subsequent damages.

2.1.5 Using foreign components

ITW Dynatec takes no responsibility for consequential damages caused by using foreign components or controllers that have not been provided or installed by ITW Dynatec.

ITW Dynatec does not guarantee that foreign components or controllers used by the operating company are compatible to the ITW Dynatec-system.

2.1.6 Setting-up operation

We recommend asking for an ITW Dynatec-service technician for the setting-up operation, to ensure a functioning system. Let yourself and the people working with or working on the system be introduced to the system on this occasion.
ITW Dynatec takes no responsibility for damages or faults caused by any untrained personnel.

2.2 Description Cold Glue Pressure Vessel

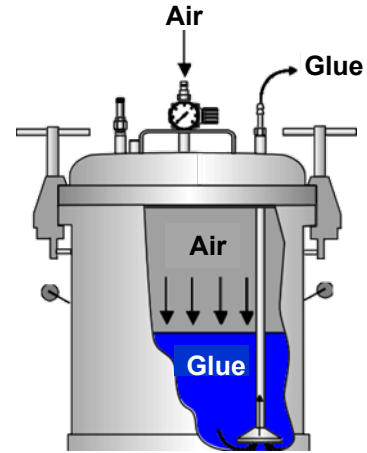
2.2.1 Description

The DY 2020 and DY 2040 cold glue pressure vessels, in conjunction with application heads, are suitable for applying cold glue or liquid media. They feature a simple and robust design, making them easy to maintain and service.

The DY 2020 pressure vessel has a nominal capacity of 20 l. The DY 2040 pressure vessel has a nominal capacity of 40 l and can optionally be equipped with a level sensor (level control).

The pressure vessel is equipped with compressed air connection, pressure regulator and pressure gauge, suction pipe(s) for glue outlet and safety valve in the lid.

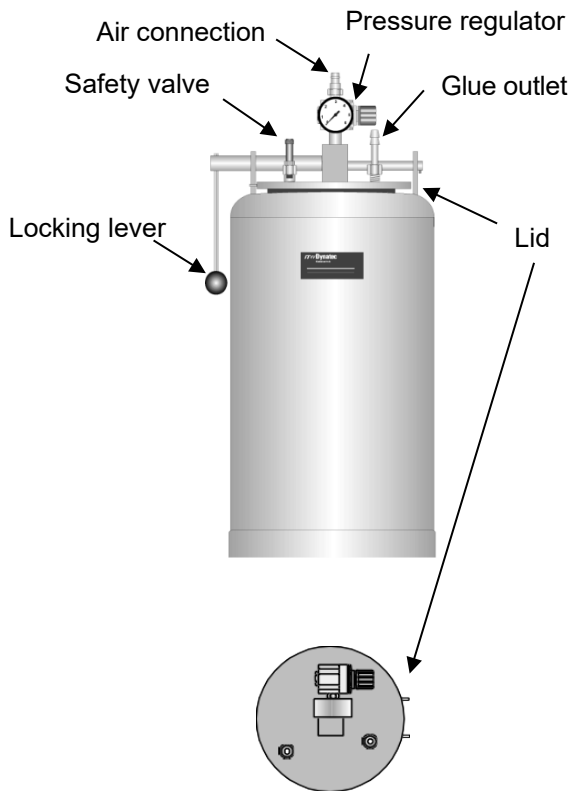
The pressure vessel has a removable lid and is filled manually after the lid has been removed.



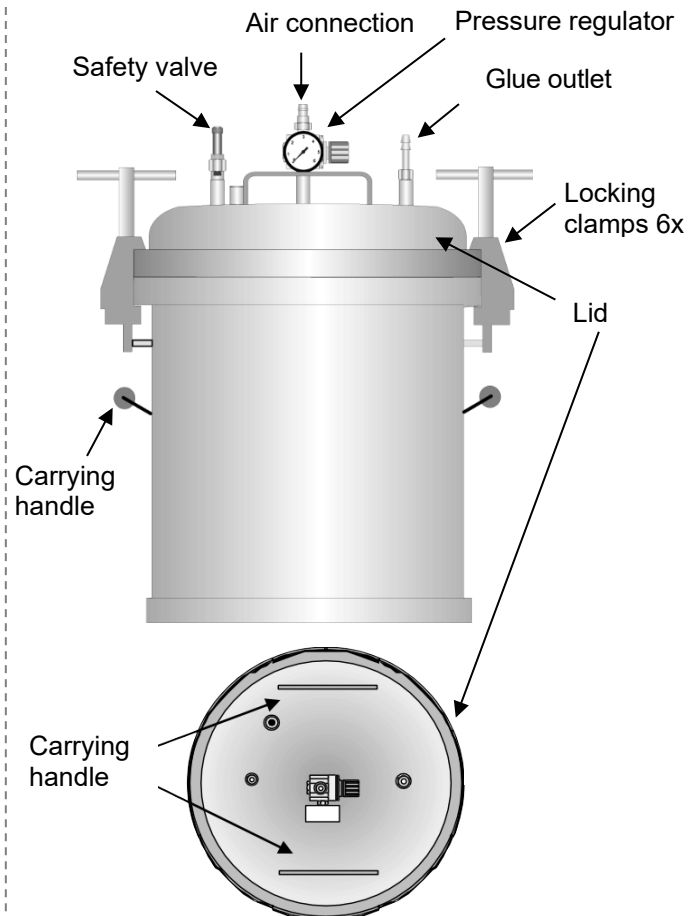
Function

Remove the pressure vessel lid and manually fill the pressure vessel with glue. Close the lid airtight. Turn on the compressed air supply at the air connection and turn open the pressure regulator. The pressure inside the vessel will be built up and it will push and forward the glue through one (or two) suction pipe(s) and the material hose to the application head. You can adjust the glue pressure with the pressure regulator.

Connection and control elements:



DY 2020



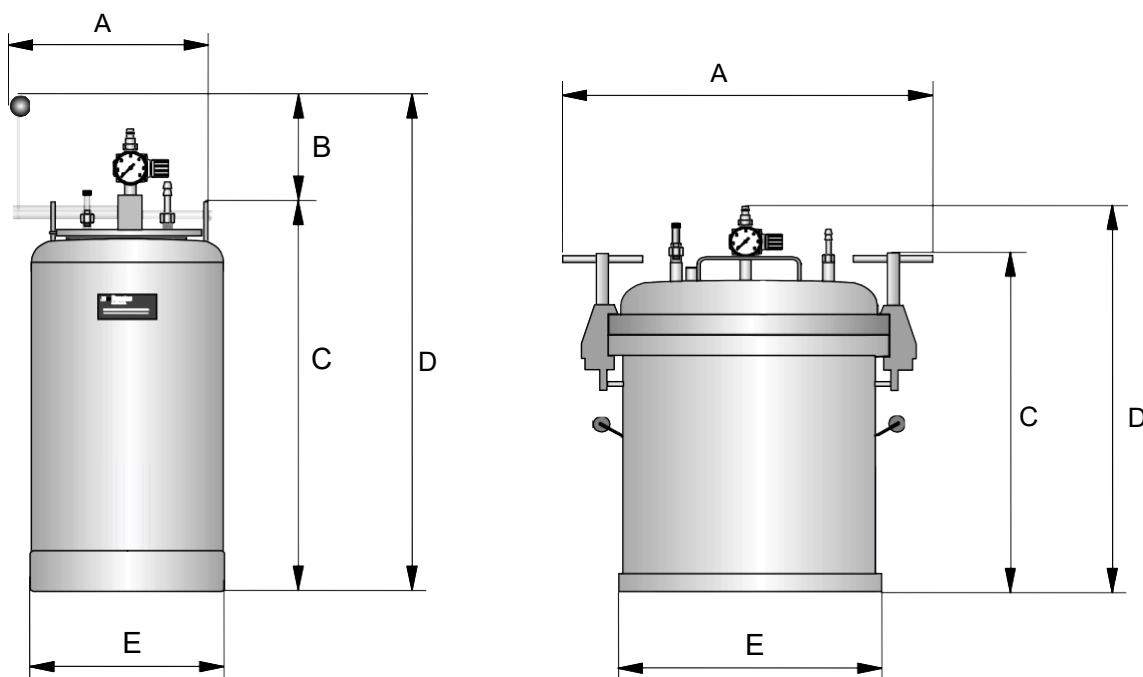
DY 2040

2.2.2 Technical Specifications

	DY 2020	DY 2040
Maximum inlet air pressure	4 bar *	4 bar *
Maximum glue pressure	limited by safety valve to 3.8 bar ($\pm 0,2$ bar) *	limited by safety valve to 3.8 bar ($\pm 0,2$ bar) *
Nominal capacity	20 l	40 l
Usable capacity (filling quantity)	15 l *	35 l *
Operating temperature	10°C to 50 °C *	10°C to 50 °C *

* **NOTE:** The specified values must be strictly adhered to.

2.2.3 Dimensions



	A	B	C	D	E
DY 2020	250	270	590	760	250
DY 2040	510	-	530	630	360

NOTE: All dimensions are in mm.

Chapter 3

Installation and Strat-Up

3.1 Safety instructions

	➤ Only allow trained personnel to carry out the installation work and operate the pressure vessel! ➤ During all work on the system, wear safety shoes, protective gloves, safety goggles and protective clothing that covers all parts of the body at risk. Otherwise, there is a risk of injury!
	➤ Only open the pressure vessel when it is depressurized. The installation of the pressure vessel may only be carried out when it is depressurized. Otherwise, there is a risk of injury from pressurized fluids.
	➤ Pay attention to all safety advices mentioned in Chapter 1. ➤ Pay attention to the intended use. ➤ Pay attention to the limit values specified in Chapter 2.2.2 Technical Specifications.
	➤ Pay attention to all relevant regulations for accident prevention. ➤ Incorrect operation can cause the safety valve to suddenly deflate, resulting in injury. ➤ Keep all ignition sources away. ➤ The fittings on the lid (regulator, gauge, safety valve, etc.) may not come into contact with the contents of the vessel (e.g., through pivoting, tilting or toppling over of the vessel), because they lose their function. ➤ Ensure an adequate accessibility and stability of the vessel. ➤ The compressed air must be absolutely clean and dry! See Ch. 3.1.1 Quality of compressed Air. ➤ The hoses must be installed without twisting when connecting to the application heads! ➤ Check the pressure vessel for leaks during commissioning. ➤ The pressure vessel must not be structurally modified. ➤ Use only original ITW Dynatec spare parts.

3.1.1 Quality of compressed Air



CAUTION

- In any case, the air has to be clean and dry!
- The min. requirement for compressed air supply to solenoids to control automatic Applicators is ISO 8573-1:2010 class 2:4:3.
- The min. requirement for compressed air supply to solenoids to control the pressure vessels is ISO 8573-1:2010 class 7:4:3.

Compressed air quality classes according to ISO 8573-1:2010 class 7:4:3:

ISO 8573-1: 2010	Solid particles				Water		Oil
Class	Maximum number of particles per m ³			Mass concentration	Vapor pressure dew point °C	Liquid g/m ³	Total oil content (liquid, aerosol and mist) mg/m ³
	0.1-0.5 µm	0.5-1 µm	1-5 µm	mg/m ³			
0	As stipulated by the equipment user, stricter requirements than class 1.						
1	≤ 20,000	≤ 400	≤ 10	-	≤ -70	-	0.01
2	≤ 400,000	≤ 6,000	≤ 100	-	≤ -40	-	0.1
3	-	≤ 90,000	≤ 1,000	-	≤ -20	-	1
4	-	-	≤ 10,000	-	≤ +3	-	5
5	-	-	≤ 100,000	-	≤ +7	-	-
6	-	-	-	≤ 5	≤ +10	-	-
7	-	-	-	5-10	-	≤ 0.5	-
8	-	-	-	-	-	0.5 - 5	-
9	-	-	-	-	-	5 - 10	-
X	-	-	-	> 10	-	> 10	> 10

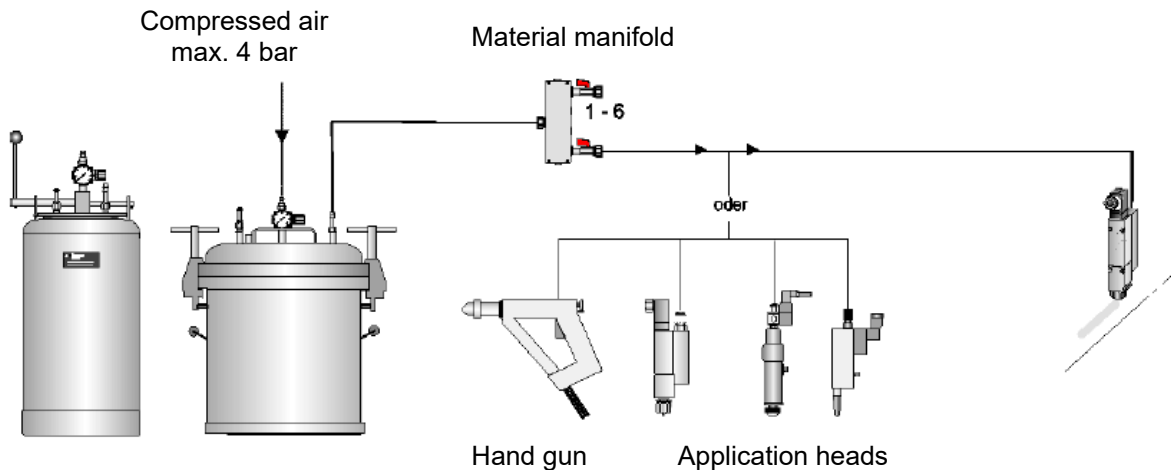
3.2 Installation



ATTENTION

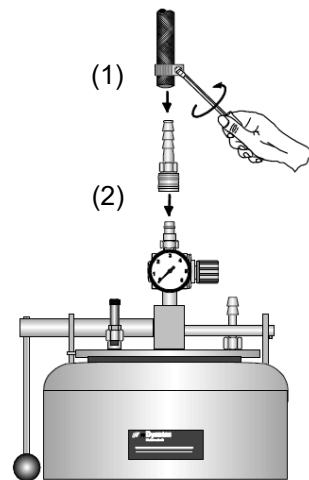
- Pay attention to all safety instructions in Chapter 3.1.
- Only install the cold glue pressure vessel vertically and never in the danger zone of other machines.
- Pay attention to the technical specifications in Chapter 2.2.2.

Installation example:



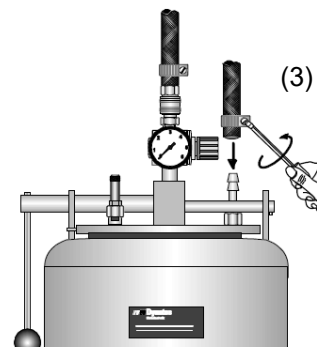
Connecting the air hose:

1. Before installing the air hose, turn off the compressed air and set the pressure regulator to "0" (zero) bar.
2. Slide a hose clamp over the air hose and connect the air hose to the connector of the plug nipple. Tighten the hose clamp screw (1).
3. Press the coupling onto the plug nipple (2) until it clicks into place.



Connecting the material hose:

4. Slide a hose clamp over the material hose and plug the material hose onto the plug nipple of the glue outlet.
5. Tighten the screw (3) of the hose clamp and check the tightness.



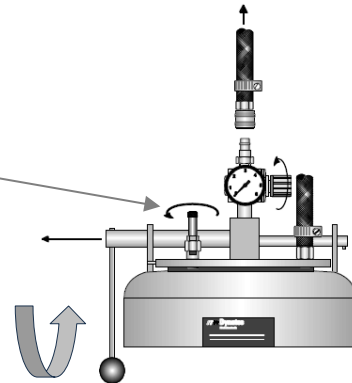
3.3 Start-Up

**ATTENTION**

- Pay attention to all safety instructions in Chapter 3.1.
- Pay attention to the technical specifications in Chapter 2.2.2.

Opening, filling with glue and closing the DY 2020 pressure vessel:

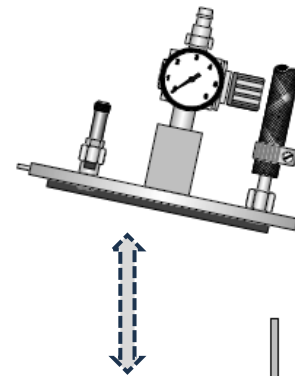
1. Turn off the compressed air supply, disconnect the air hose, and turn the pressure regulator to "0" (zero) bar. Turn on the vent screw on the safety valve to release any pressure in the vessel.
2. Turn the locking lever upward and pull it out of the guides.
3. Remove the lid.
4. Fill with glue. The maximum filling volume is 15 liters.



5. Place the lid over the opening.

NOTE: Ensure the seal is properly positioned!

6. Insert the locking lever into the guide and turn the locking lever down.

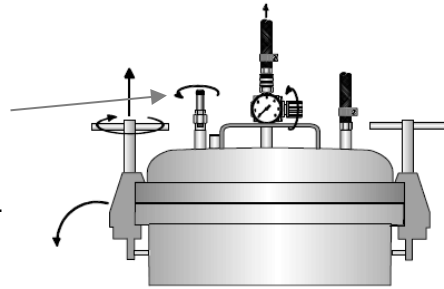
**CAUTION**

Turn the locking lever until you feel a noticeable resistance. Only then is the pressure vessel properly closed.



Opening, filling with glue and closing the DY 2040 pressure vessel:

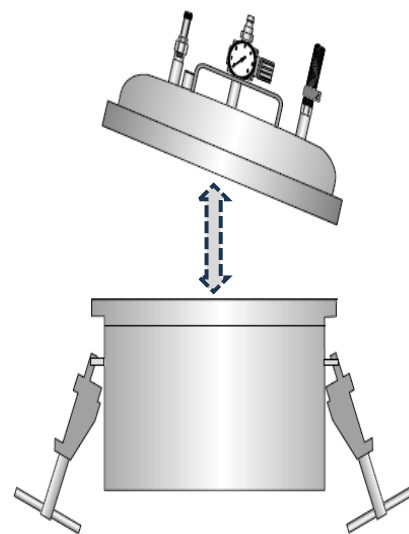
1. Turn off the compressed air supply, disconnect the air hose, and turn the pressure regulator to "0" (zero) bar. Turn on the vent screw on the safety valve to release any pressure in the vessel.
2. Unscrew the six locking clamps and fold them downwards.
3. Remove the lid.
4. Fill with glue. The maximum filling volume is 35 liters.



5. Place the lid over the opening.

NOTE: Ensure the seal is properly positioned!

6. Fold up the six locking clamps and screw them tight.



Starting glue application:**NOTE:**

- Before starting to apply glue, ensure that the pressure vessel is closed and that the remaining components, such as the material hose, application head, etc., are connected and ready for use.
- Before starting up, check all compressed air and material connections for tightness.

1. Make sure that the pressure vessel is filled with glue and the entire system is ready for operation.
2. Set the desired pressure on the pressure regulator/gauge. The vessel is now pressurized.

NOTE: A maximum pressure of 3.8 bar can be set. At 3.8 bar, the safety valve opens and prevents excessive pressure from building up.

If the maximum permissible operating pressure of the pressure vessel is exceeded, the safety valve opens and releases air! In this case, turn the pressure regulator counterclockwise until the safety valve closes again and the pressure gauge returns to a value below the maximum permissible operating pressure.

3. Activate the application head.

NOTE:

- The glue will initially exit the application head with air bubbles. Only after a few minutes, when the air is expelled from the hoses, will the glue flow and the application pattern become even.
- You can optimize the glue pressure and application pattern by adjusting the pressure on the pressure regulator.
- Check the vessel for leaks after each start-up.

**NOTE:**

Release the pressure in the pressure vessel only by unscrewing the vent screw on the safety valve.
Do not release the pressure by loosening the lid.

**NOTE:**

Check the lid seal regularly (e.g., weekly) for wear and proper fit.

3.3.1 Exchanging the glue

Always clean or purge the system (pressure vessel, hose, application head) when you switch from one glue to another - even within the same product group or from the same manufacturer. This will prevent possible reactions between the glues.

3.4 Switching off

1. Deactivate or close the application head.
2. Turn the pressure regulator to "0" bar.
3. Unscrew the vent screw of the safety valve to release any pressure in the vessel. Wait until the compressed air has escaped. The pressure gauge must read "0" bar. Do not release the pressure by loosening the lid.
4. If the unit is not in operation for an extended period, clean the parts and surfaces of the container that come into contact with the material with a suitable cleaning agent or water.
See cleaning instructions in Chapter 4.

3.5 Shutdown

3.5.1 Temporary Shutdown

1. Purge the system with water to remove all glue residue.
2. Depressurize the pressure vessel and release any residual pressure.
3. Remove all air and glue hoses.
4. Fit screw plugs or cover caps to all open connection fittings.
5. Package the pressure vessel.
6. Store the pressure vessel in a manner that protects it from damage.

3.5.2 Permanent Shutdown and Disposal

1. Purge the pressure vessel with water to remove all glue residue.
2. Depressurize the pressure vessel and release any residual pressure.
3. Remove all air and glue hoses.
4. Disassemble the device.
5. Dispose of the components in an environmentally friendly manner.

Chapter 4

Maintenance, Repair and Troubleshooting

4.1 Safety Instructions

	➤ Only allow trained personnel to carry out maintenance and repair work on the pressure vessel! ➤ During all work on the system, wear safety shoes, protective gloves, safety goggles and protective clothing that covers all parts of the body at risk. Otherwise, there is a risk of injury!
	➤ Only open the pressure vessel when it is depressurized. The installation of the pressure vessel may only be carried out when it is depressurized. Otherwise, there is a risk of injury from pressurized fluids.
	➤ Pay attention to all safety advices mentioned in Chapter 1. ➤ Pay attention to the intended use. ➤ Pay attention to the limit values specified in Chapter 2.2.2 Technical Specifications.
	➤ Pay attention to all relevant regulations for accident prevention. ➤ Incorrect operation can cause the safety valve to suddenly deflate, resulting in injury.
	➤ Keep all ignition sources away. ➤ Ensure that the material compatibility between the contents, the container and the sealing material is guaranteed so that damage caused by chemical or thermal reactions with the contents (e.g., corrosion) can be excluded. ➤ The fittings on the lid (regulator, gauge, safety valve, etc.) may not come into contact with the contents of the vessel (e.g., through pivoting, tilting or toppling over of the vessel), because they lose their function. ➤ Check the container for leaks after each assembly or maintenance work. ➤ The pressure vessel must not be structurally modified. ➤ Use only original ITW Dynatec spare parts.

4.2 Cleaning Pressure Vessels and Systems



NOTE

- Observe all Safety Instructions in Chapters 1 and 4.1.
- See Chapter 4.4 Maintenance Plan.



WARNING

Before opening the lid, always make sure that the pressure vessel is depressurized!

1. Deactivate or close the application head.
2. Turn the pressure regulator to "0" (zero) bar.
3. Disconnect the air hose coupling.
Turn on the vent screw on the safety valve to release any pressure in the vessel.
Wait until the compressed air has escaped. The pressure gauge must read "0" bar.
Do not release the pressure by loosening the lid.
4. Open the pressure vessel as described in Chapter 3.3 Start-Up.
5. Fill the pressure vessel with a suitable cleaner or with a solution of warm water and household detergent.
6. Place a collecting container under the application head.
7. Put the pressure vessel into operation as described in the Chapter 3.3 Start-Up and purge the entire system.
8. Clean the parts and surfaces of the vessel that come into contact with the material using a suitable cleaning agent or water and lint-free cloths.

Ensure a clean surface between the lid seal and the container rim!

Do not allow cleaning agents to enter the lid fittings!

NOTE: Do not use aggressive or highly alkaline substances for cleaning.

4.3 Clean or replace the screen (sieve)

1. Deactivate or close the application head.
2. Turn the pressure regulator to "0" (zero) bar.
3. Disconnect the air hose coupling.
Turn on the vent screw on the safety valve to release any pressure in the vessel.
Wait until the compressed air has escaped. The pressure gauge must read "0" bar.
Do not release the pressure by loosening the lid.
4. Open the pressure vessel as described in Chapter 3.3 Start-Up.
5. Use pliers to squeeze the retaining ring (1) in the suction pipe and remove it.



6. Use a narrow-slotted screwdriver to pry the screen (2) out of the suction pipe.
7. Clean the screen with a suitable cleaner or with a solution of water and household detergent or replace the screen if it is too dirty.

4.4 Maintenance Plan Pressure Vessel



CAUTION

- All maintenance and cleaning work must be carried out by qualified and trained technical personnel.
- Pay attention to all safety instructions in chapters 1 and 4.1.
- All maintenance and cleaning work may only be carried out when the pressure vessel is depressurized.
- Use only original parts from ITW Dynatec, otherwise ITW Dynatec's warranty is void!
- Use only the indicated lubricants and keep the prescribed maintenance intervals. Consider in addition the enclosed regulations of manufacturers.
- Punctual and conscientious maintenance of the unit secures not only a trouble-free function, but prevents also for expensive repair costs.
- Remove all materials and tools used during the repair or maintenance from the workspace of the unit.
- Place a catchment tank/underlay under the components. Glue may come out.
- Use only lint-free cleaning cloth and suitable cleaner for cleaning! Do not damage surfaces! Do not scratch above them with sharp-edged tools, otherwise the components will get leaky and inoperable!
- **NOTE:** It is not possible to make a specific statement about when signs of wear will occur, as this depends on the material being processed and the operating conditions of the pressure vessel
- **NOTE:** Seals fatigue and are subject to natural wear. Defective seals can be identified by the leakage of air or material from fittings and connections.

Maintenance plan:

Operating time/ frequency	Inspection point / maintenance notes
Continuous	• Remove any leaked and old adhesive, find the cause of the leak and eliminate the cause.
Once a day	• Check the pressure vessel for contamination and clean it if necessary. • Immediately remove surface corrosion spots by polishing. The causes of corrosion must be eliminated immediately.
Once a week	• Check the lid seal for wear and proper fit. Check all other seals. When replacing seals, check their compatibility with the material used. • Check the air supply connections for leaks; if loose, tighten or replace them. • Check the solenoid valves for proper function and replace it if necessary.
Once a month	• Check the pressure vessel for leaks, corrosion, and mechanical damage, and if necessary, eliminate these or the cause. • Clean the air and material hoses and replace them if necessary. • Threads (threaded connections) may be loose. Check all threaded parts and screw connections for tightness and tighten if necessary. • Lightly grease the moving parts of the clamp fasteners if necessary.
Every two years	• Carry out a complete maintenance.

4.5 Troubleshooting

NOTE: This chapter describes possible malfunctions, causes, and troubleshooting for cold glue pressure vessels. Obvious defects, such as damaged pneumatic hoses, are not covered. These faults should be identified and corrected during regular system inspections.

Fault	Possible Cause	Solution
1. Material or air leakage between the lid and the vessel.	Lid seal defective or worn.	Check the lid seal and replace it if necessary.
2. Air leakage at the air connections.	Seals and connections are loose or defective.	Tighten seals or connections and replace if necessary.
3. Material pressure cannot be adjusted.	Defective pressure regulator or gauge.	Check and replace it if necessary.
4. Material does not come out or no glue application.	Pressure vessel empty.	Refill the pressure vessel.
	Material dried out.	Clean the pressure vessel and suction pipe.
	No air pressure. Pressure gauge shows less than 0.5 bar.	Check the compressed air supply line. Set the inlet pressure to max. 3.8 bar.
	Screen (sieve) clogged.	Clean or replace the screen.
	Material hose clogged.	Clean or replace the material hose.
5. The safety valve is constantly releasing air or does not open when the maximum operating pressure is reached.	Defective safety valve.	Check and replace it if necessary.

Chapter 5

Drawings and Bill of Materials



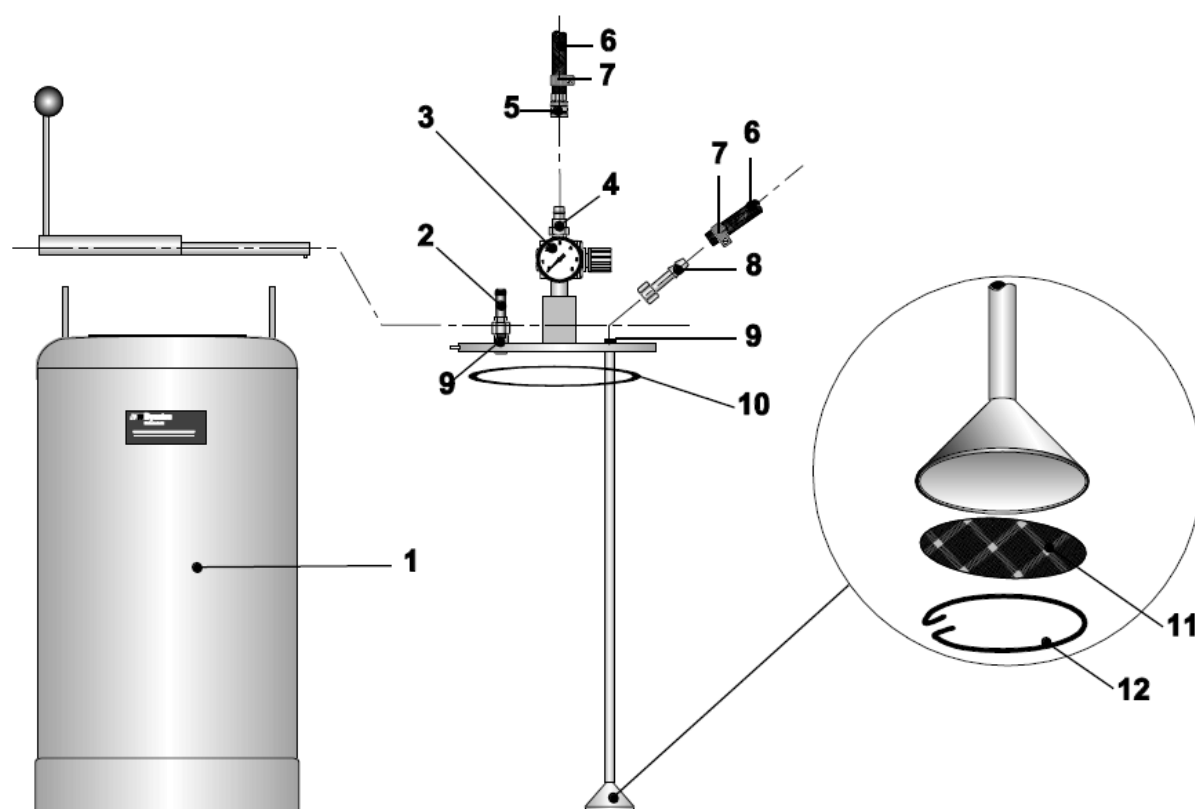
WARNING

All parts must be periodically inspected and replaced if worn or broken. Failure to do this can affect equipment's operation and can result in personal injury.

This chapter contains the component illustrations (exploded-view drawings) for each assembly of the unit. These drawings are useful for finding part numbers as well as for use when maintaining or repairing the equipment.

Note: Most common screws, nuts and washers called out in the manual are not for sale and they can be obtained locally at your hardware Store. Specialty fasteners are available by contacting ITW Dynatec's Customer Service.

5.1 Cold Glue Pressure Vessel DY 2020, 20l, PN 30.20000.702

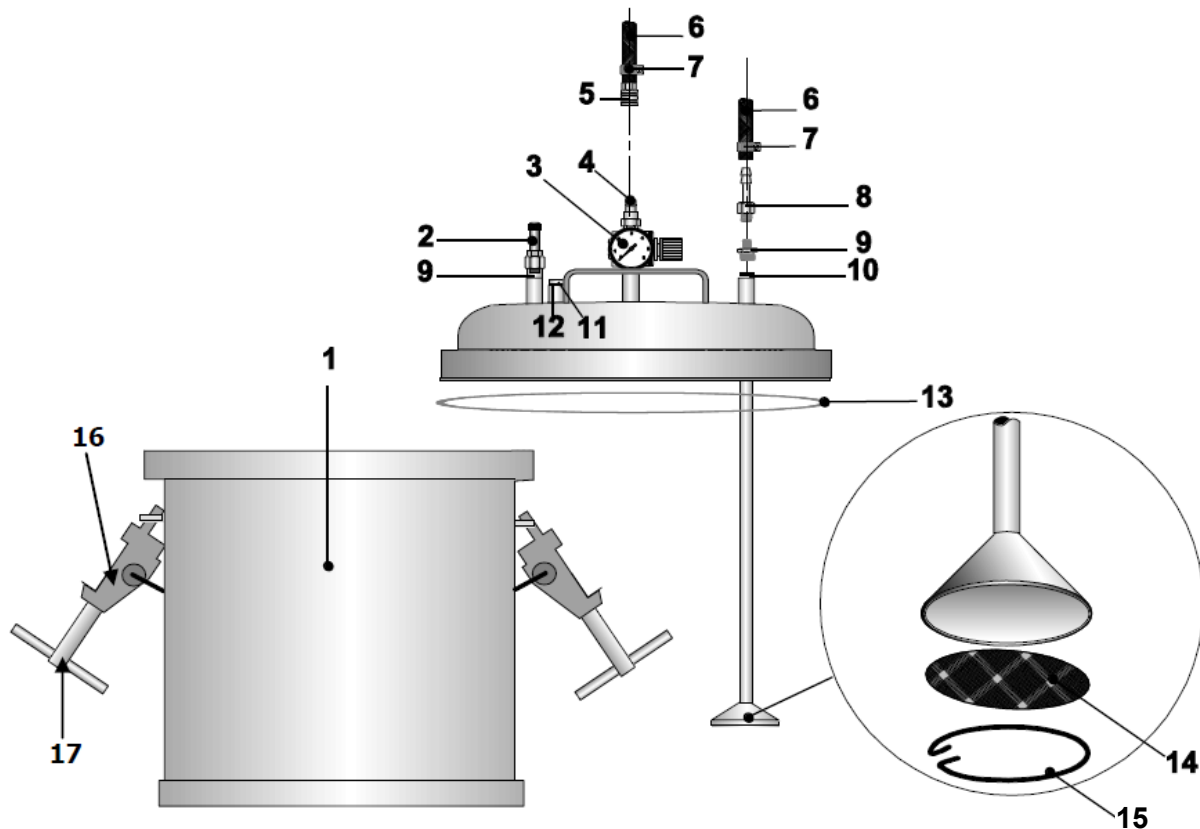


Item	Part no.	Description	Qty
	30.20000.702	Pressure Vessel DY 2020, 20l, assembly	
1	30.20000.701	Pressure vessel 20l, incl. locking lever and lid, without accessories, (contains items 10, 11 and 12)	1
2	30.20000.108 #	Safety valve set to 3,8 bar, G1/4	1
3	07.81006.001 old # 07.81006.002 new #	Regulator-pressure gauge combination, 0 - 6 bar	1
4	07.41014.401 #	Plug nipple DN7, G1/4 male thread	1
5	07.40900.401 #	Quick release coupling P9, Schlauch DN 7,2	1
6	08.11509.101 #	PVC-pressure hose with fabric reinforcement, D = 15,0 mm / D = 9,0 mm	1
7	08.91500.101 #	Hose clamp SB, 10 - 16 mm, INOX	2
8	07.41320.004 #	Material connection, plug nipple G1/4 with union nut	1
9	02.11350.433 # *	Sealing ring Cu for G1/4	2
10	30.20000.103 *	Sealing ring for lid DY 2020, D=148/129 x 6 mm	1
11	30.20000.106 *	Screen (sieve) for pressure vessel	1
12	30.20000.107 *	Internal retaining ring d = 1,5 mm	1

* The parts marked with * are wearing parts. To avoid extended downtime, we recommend keeping a stock of these spare parts.

These parts are included in the 20l+40l accessory assembly, item no. 30.20000.705.

5.2 Cold Glue Pressure Vessel DY 2040, 40l, PN 30.40000.702



Item	Part no.	Description	Qty
	30.40000.702	Pressure vessel DY 2040, 40l, assembly	
1	30.40000.701	Pressure vessel 40l, incl. lid, without accessories (contains items 9, 11, 13, 14, 15, 16 and 17)	1
2	30.20000.108 #	Safety valve set to 3,8 bar, G1/4	1
3	07.81006.001 old # 07.81006.002 new #	Regulator-pressure gauge combination, 0 - 6 bar	1
4	07.41014.401 #	Plug nipple DN7, G1/4 male thread	1
5	07.40900.401 #	Quick release coupling P9, hose DN 7.2	1
6	08.11509.101 #	PVC-pressure hose with fabric reinforcement, D = 15,0 mm / D = 9,0 mm	2
7	08.91500.101 #	Hose clamp SB, 10 - 16 mm, INOX	2
8	07.41320.004 #	Material connection, plug nipple G1/4 with union nut	1
9	07.01438.101	Double nipple G1/4 - G3/8 stainless steel (reducing nipple)	2
10	02.11720.433	Sealing ring Cu 22/17,2x1,5 for G3/8	1
11	00.61320.908	Locking screw G1/4 (for level control connection)	1
12	02.11350.433 # *	Sealing ring Cu for G1/4	2
13	30.40000.103 *	Sealing ring for lid DY 2040, medium D = 380 mm, 8x8 GU 50 8x8 mm	1
14	30.20000.106 *	Screen (sieve) for pressure vessel	2
15	30.20000.107 *	Internal retaining ring d = 1,5 mm	2
16	30.40000.104	Closure, segment clamp screw	6
17	30.40000.105	Locking screw, toggle nut M12	6

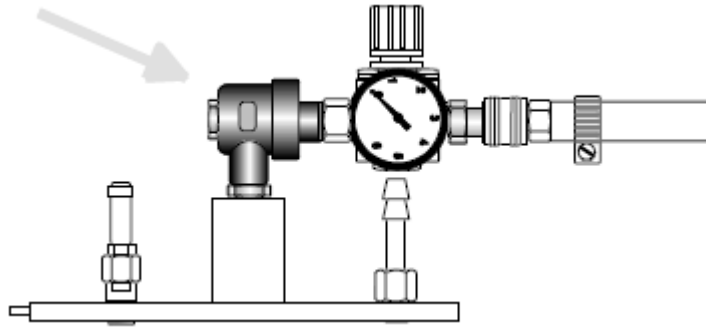
* The parts marked with * are wearing parts. To avoid extended downtime, we recommend keeping a stock of these spare parts.

These parts are included in the 20l+40l accessory assembly, item no. 30.20000.705.

5.3 Accessories

5.3.1 Quick exhaust valve 1/4", PN 07.93225.101

If the control air fails, this valve opens automatically and depressurizes the pressure vessel. The pressure vessel can then be opened safely.



5.3.2 Level sensor 4x550mm for DY 2040, with accessories, PN 30.40000.703

The DY 2040 pressure vessel can be retrofitted with a level sensor. The level sensor detects the lowest glue level and sends a signal to the pneumatic control cabinet.



Manual Revisions

Revision	Page/Chapter	Update Description
Rev.9.25	Ch.6.1 and 6.2	Bill of materials updated.

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