



Preparation for Incorporation

3 Preparation for Incorporation

⚠ WARNING

	<p>Heavy Weight Hazard</p> <p>Transport and lifting equipment should be operated only by trained personnel. Operate lifting and transport equipment slowly and carefully to avoid uncontrolled swinging of the manifold.</p> <p>Lifting and transport equipment for lifting Hot Runner Systems shall be approved and properly rated taking into account the weight and size of the manifold.</p> <p>When unpacking the Hot Runner System, there is a risk of injury due to falling parts and sharp edges. Maintain a minimum distance of 1 m from the Hot Runner System. Use personal protective equipment, such as head gear, safety shoes and work gloves.</p> <p>For first aid contact your medical / safety representing.</p>	
 <p>Pneumatic</p>	<p>Hazard of Pressurized Air</p> <p>When working with pressurized air, there is a risk of flying metal chips and other foreign bodies getting into the eyes.</p> <p>Hearing impairment could arise.</p> <p>Use work gloves, protective goggles or face protection and hearing protection (PPE).</p>	



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3.1 Unpacking the Hot Runner System

- 1) Verify that the transport crate is not damaged.

NOTICE

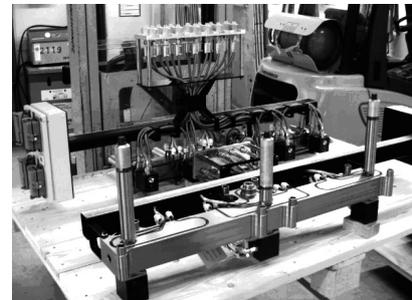
If damage is noted, contact Synventive and the shipping carrier immediately to report a claim.

Synventive cannot be held liable for damage occurred during shipping.

Failure to report shipping damage may void any future warranty claims.

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- 2) Open the transport crate
 - Loosen the crate's side walls and cover.
 - Dismantle the whole crate.

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- 3) To prevent occupational injuries, allow for a sufficient access to the transport crate and a sufficient area around it.
- 4) Verify the crate's contents against the supplied Bill of Materials and that the supplied parts match the customer drawing. Verify that the Hot Runner System has not been damaged during transport.
- 5) Check if all major dimensions, such as the mold cavity, gauge and length of cables and hoses connected to the Hot Runner System, match the customer drawing.
- 6) Unscrew the screws that affixed the Hot Runner System during transport.

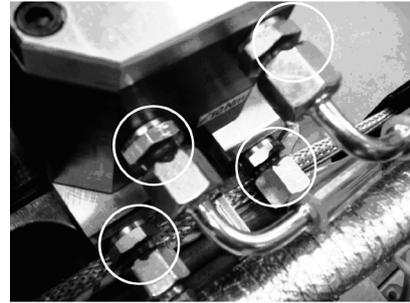


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- 7) Check if the paint applied during assembly for sealing reasons is not damaged on the hose connections of the hydraulic system.

NOTICE

If the paint has been damaged or otherwise shows signs of tampering, contact Synventive immediately.

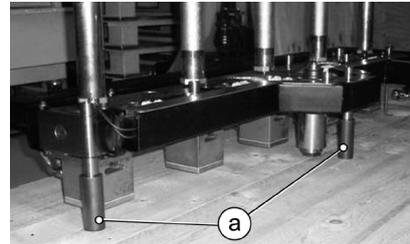
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- 8) Before the HR-System will be assembled into the hot-half, remove the assembly pillars (a), provided with the HR-system.

NOTICE

Keep the assembly pillars (a) for storage and transport of the hot runner system.

This hot runner system has been shipped with assembly pillars installed to prevent damage to the actuators and valve pin bushings while being assembled or in transit. These assembly pillars must be removed prior to installing the top clamp plate.

*Doc003233.png***⚠ WARNING**

Do not use the assembly pillars as lifting device.

NOTICE

Synventive does not accept returns on transport packages and any other packaging. This does not apply to euro-pallets, which are to be returned to Synventive (please note regional distinctions).



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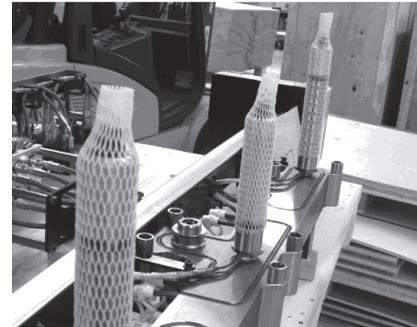
3.2 Cleaning Hot Runners and Cutout

 WARNING		
 Pneumatic	<p>Hazard of Pressurized Air</p> <p>When working with pressurized air, there is a risk of flying metal chips and other foreign bodies getting into the eyes. Hearing impairment could arise.</p> <p>Use protective goggles or protective goggles and hearing protection (PPE).</p>	  

NOTICE

Before the hot runner is installed, the whole surface of the plate and the cutouts shall be carefully and completely cleaned.

- 1) Remove the protective cases from the nozzles.



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- 2) Remove any residual anti-corrosion agent used by Synventive for preservation of the individual system parts using a dry cloth.
- 3) Clean the cavity plate using a dry cloth.
- 4) If the cutouts are not easily accessible, blow them out with pressurized air and wipe with a clean cloth.
- 5) For larger and difficult to access areas, a small quantity of solvent or chemical cleaner can be used.

WARNING
Hazard of Pressurized Air



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3.3 List of necessary Tools

Table 1: List of necessary tools

Tools	Purpose of use	Size / Design
Allen screw key	Hexagonal socket screws	Depends on system and parts (See section 13).
Micrometer depth gauge	Depth measurement	-
Slide gauge	Depth and thickness measurement	-
Torque wrench	For the uniform tightening of nozzles, screws and nozzle tips using the defined force	4-400 Nm / 3-295 ft-lbs. Depends on system and parts (See section 13).
Spotting paste (Engineer's blue)	Blueing of all contact points where the manifold contacts the mold	Common type
High-temperature assembly paste	Applied to make sure all threaded connections are easily disassembled at a later date	Resistant to temperature Solid lubricant paste (e.g. Molykote@1000)
Carpenter's hammer or hammer and chisel	Opening the transport crate	Common type
Box end wrench	For unscrewing nozzle tips from nozzle bodies	HEX 7, 10, 14, 17, 21, 24, 27, 36, 46, 55 (depends on nozzle size)
Anti-corrosion agent	Protection of parts	We recommend the multipurpose spray CC 80 by Metaflux.
Engineer's wrench	Nozzle tip	HEX 7
Braces for vice jaws	Tightening of nozzles, actuators etc. for dismantling	Common type (aluminum)
Soft face hammer	For assistance during work, if needed	Common type
Pliers	General use	-
Round-nosed pliers	Bend the cold length of heater	
Spiral wire brush	Cleaning of the nozzle flow channels	Common type, matching the flowbore diameter
Tools by Synventive		
Tools for assembling and disassembling the actuator	Mounting and dismantling of actuators of various design series	Upon request from Synventive (See also 8)
Pulling hammer	For releasing nozzles	Upon request from Synventive