

## Technical News Bulletin

August, 2018

### **New 210-2046-00 Blankside VertiFlow Accessories for AIS Individual Mold Cooling Cavity control**

A new family of Blank side inserts, insert holders, and VertiFlow plenum chamber has been introduced with the release of our latest Blank mold holder equipment 210-2046-00 on the AIS machine, for both DG and TG applications. These new Blank side VertiFlow accessories replace the previous accessories standard 210-473, and are the default Blank side VertiFlow equipment reference for all new AIS and AIS 2 machines.



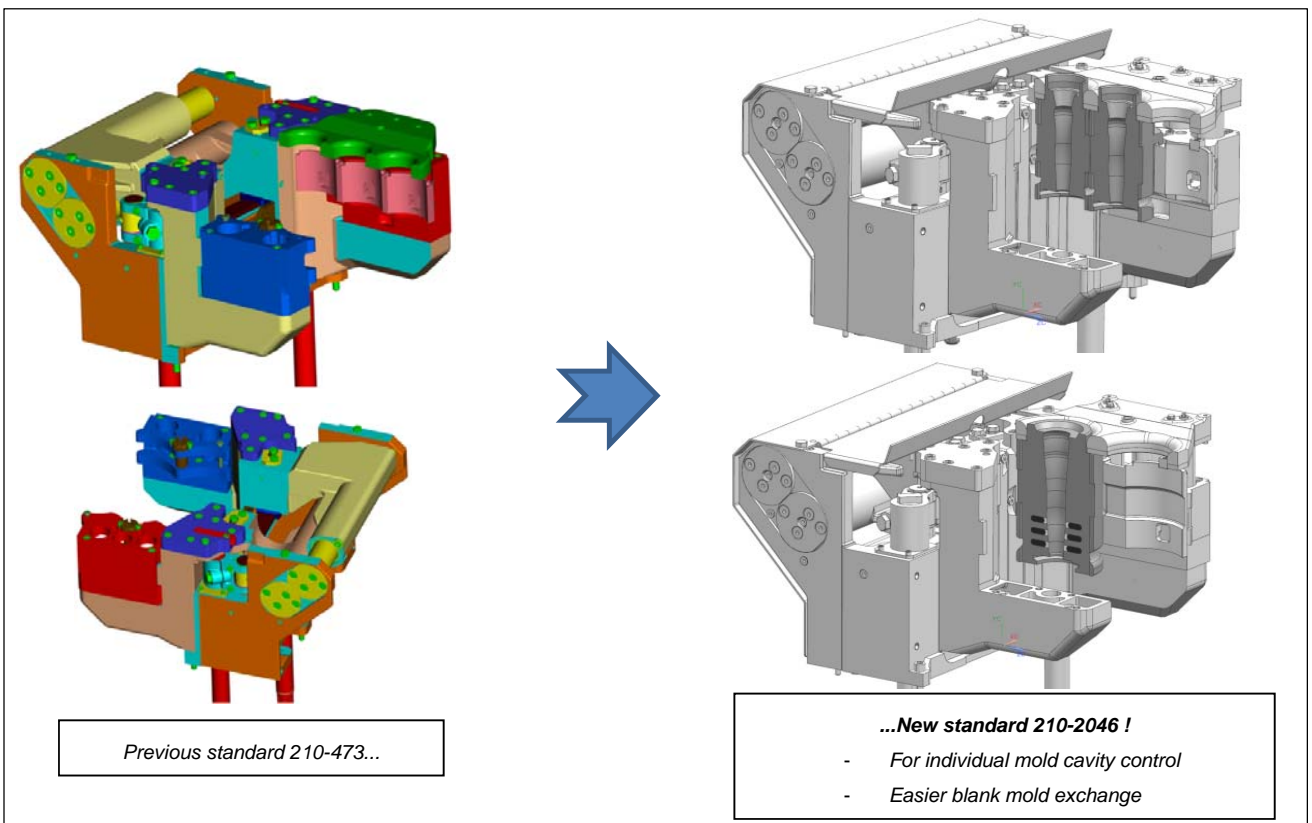
Improved height adjustment of the plenum chamber



New plenum chamber design allowing individual mold cooling cavity control

Just as 210-473, the 210-2046-00 Blank side VertiFlow equipment is mounted on our standard AIS Blank mold supporting mechanism 210-2110-00 (210-2110-00 is a revision of the 210-470 Blank mold supporting mechanism).

With 210-2046-00, the insert holder and plenum chamber designs enable individual mold cavity cooling for both DG and TG applications, and the plenum chamber attachment design enables faster job changes, since no pin maintains the plenum chamber onto the Blank mold, allowing an easier Blank mold exchange.



## Specification

The Blank side VertiFlow accessories for AIS are now defined in 210-2046-00.

For both DG and TG applications, it includes insert holder references (one for DG, one for TG), insert references that are mold-design setup related, as well as plenum chambers allowing individual mold cavity cooling, which is a real asset when used in conjunction with a Blank mold temperature control system.

### New AIS 6 ¼" DG and AIS 4 ¼" TG machines, including AIS 2 machines:

- The standard Blank side VertiFlow accessories 210-2046-00 is specified and supplied for new machines.
- The previous 210-473 Blank side VertiFlow accessories can still be supplied as a Customer Special with a new AIS machine (not AIS 2).

### Upgrades for existing AIS 6 ¼" DG and 4 ¼" TG machines:

- The standard Blank side VertiFlow accessories 210-2046-00 can be used on existing AIS machines, provided that the installed Blank mold supporting mechanism is the 210-470 (the one introduced in 2007, allowing both Blank side VertiFlow and InVertiFlow cooling).
- **IMPORTANT: there is no equipment compatibility between the type 210-2046-00 and the previous type 210-473. For instance, "new" type inserts cannot be mounted on the "old" type insert holder: same remark applies for the plenum chambers.**
- There is 100% mold interchangeability between the new type of Blank side VertiFlow accessories and the previous type. No modification is required on the existing VertiFlow Blank molds, so that they can be reused one to one (same mold band diameters, same "H" dimensions, same "S" dimensions, same cooling holes PCDs).

### Remark:

Previous type insert holders, inserts and plenum chamber (type 210-473) are still supplied as normal spare parts for existing running AIS machines.

The references for the Blank side VertiFlow accessories 210-2046-00 are listed on the two next pages, together with the correspondence to the previous type of Blank side VertiFlow accessories, for both AIS 6 ¼" DG and AIS 4 ¼" TG applications.

**1) AIS 6 1/4" DG:**

<b>AIS 6 1/4" DG Blankside VertiFlow</b>			
Blank mold supporting mechanism	210-294	210-470 / 210-2110	<b>210-470 / 210-2110</b>
Blank cooling capabilities	VertiFlow only	VertiFlow / InVertiFlow	<b>VertiFlow / InVertiFlow</b>
Insert Holder	210-284-1	210-474-1	<b>210-2042-1</b>
Insert	210-287-xx	210-287-xx	<b>210-2037-xx</b>
Plenum chamber	191-9152-xx	191-9152-xx	<b>210-2041-xx</b>
Reference drawing	210-227	210-473	<b>210-2046-00</b>
Individual mold cavity control	NO	NO	<b>YES</b>

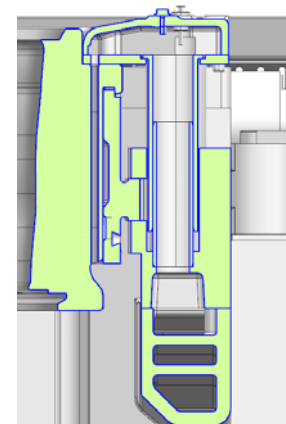
Latest standard for AIS DG Blank VertiFlow

Note: 100% mold setup compatibility

<b>AIS 6 1/4" DG - Mounting Assemblies and corresponding Insert types</b>						
Mounting Assembly	"H" dim	"S" dim	"W" dim	Band diameter	"old" type Insert reference	"new" type Insert reference
<b>VF 01 DG</b>	28.6	---	68.3	5 3/8" - 136.3mm	210-287-3	<b>210-2037-01</b>
				6" - 152.2mm	210-287-8	<b>210-2037-04</b>
<b>VF 11 DG</b>	69.9	77.5	109.7	5 3/8" - 136.3mm	210-287-5	<b>210-2037-02</b>
				6" - 152.2mm	210-287-9	<b>210-2037-05</b>
				6 5/8" - 168.1mm	210-287-15	<b>210-2037-08</b>
<b>VF 12 DG</b>	69.9	131.4	146.1	5 3/8" - 136.3mm	210-287-4	<b>210-2037-03</b>
				6" - 152.2mm	210-287-10	<b>210-2037-09</b>
<b>VF 21 DG</b>	117.5	121.9	157.3	6" - 152.2mm	210-287-11	<b>210-2037-06</b>
<b>VF 22 DG</b>	117.5	179	193	6" - 152.2mm	210-287-12	<b>210-2037-07</b>

<b>AIS 6 1/4" DG - Plenum chambers correspondence</b>			
Cooling holes PCD	For band diameter blank mold	"old" type Plenum Chamber reference	"new" type Plenum Chamber reference (*)
<b>115.9</b>	5 3/8" - 136.3mm	191-9152-36	<b>210-2041-10</b>
<b>138.1</b>	6" - 152.2mm	191-9152-35	<b>210-2041-14</b>
	6 5/8" - 168.1mm		

(\*) plenum chamber mounting parts to be used are 210-2041-11/12/13 : the right group to be selected depends on the mounting assembly used, refer to the mold design books.



**2) AIS 4 1/4" TG:**

AIS 4 1/4" TG Blankside VertiFlow			
Blank mold supporting	210-294	210-470 / 210-2110	<b>210-470 / 210-2110</b>
Blank cooling capabilities	VertiFlow only	VertiFlow / InVertiFlow	<b>VertiFlow / InVertiFlow</b>
Insert Holder	210-284-3	210-474-2	<b>210-2040-1</b>
Insert	210-289-xx	210-289-xx	<b>210-2038-xx</b>
Plenum chamber	191-9152-37	191-9152-37	<b>210-2039-05</b>
Reference drawing	210-228	210-473	<b>210-2046-00</b>
Individual mold cavity	NO	NO	<b>YES</b>

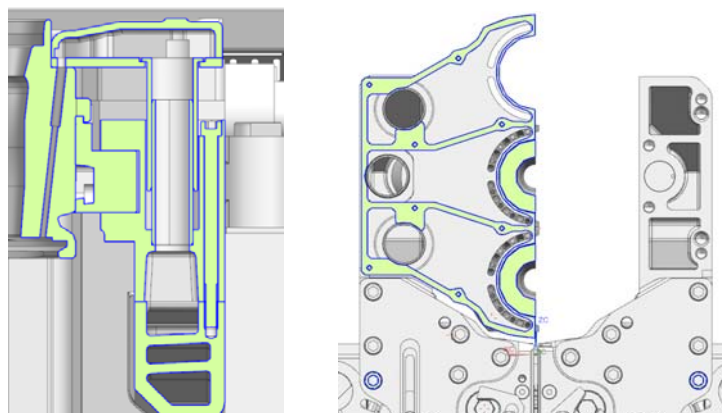
Latest standard for AIS TG Blank VertiFlow

Note: 100% mold setup compatibility

AIS 4 1/4" TG - Mounting Assemblies and corresponding Insert types						
Mounting Assembly	"H" dim	"S" dim	"W" dim	Band diameter	"old" type Insert reference	"new" type Insert reference
<b>VF 01 TG</b>	41.3	---	48	4 5/8" - 117.2mm	210-289-6	<b>210-2038-01</b>
<b>VF 02 TG</b>	41.3	70.2	80.8	4 5/8" - 117.2mm	210-289-8	<b>210-2038-02</b>
<b>VF 11 TG</b>	92.1	121	131.6	4 5/8" - 117.2mm	210-289-9	<b>210-2038-03</b>

AIS 4 1/4" TG - Plenum chamber correspondence			
Cooling holes PCD	For band diameter blank mold	"old" type Plenum Chamber reference	"new" type Plenum Chamber reference (*)
94	4 5/8" - 117.2mm	191-9152-37	<b>210-2039-05</b>

(\*) plenum chamber mounting parts to be used are 210-2039-06/07/08 : the right group to be selected depends on the mounting assembly used, refer to the mold design books.



## Reference / Documents

Document ID	Document description	Type
210-2046-00	Blank VertiFlow Holder (for both AIS DG and TG)	Assembly Drawing
H35200CEN	Mold design manual – AIS 6 ¼" DG	Manual
H35201CEN	Mold design manual – AIS 4 ¼" TG	Manual

## Features / Benefits

Features	Benefits
100% VertiFlow Blank mold compatibility	Low transition cost Full mold interchangeability
Independent mold cooling cavity control	Improved temperature distribution between mold cavities, allowing increased container quality => a MUST when used with a Blank mold temperature control system!
Easier and faster plenum chamber attachment	Increased safety Faster job changes