

Mouldflo

Guide de l'interface utilisateur graphique MouldFlo

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Introduction

Le présent guide a été conçu pour servir de référence à l'opérateur d'un système de nourrices de distribution MouldFlo. Les pages suivantes décrivent chaque écran, bouton et fonction de l'application d'interface utilisateur graphique MouldFlo pour nourrices de distribution.

Move Innovations MouldFlo GUI
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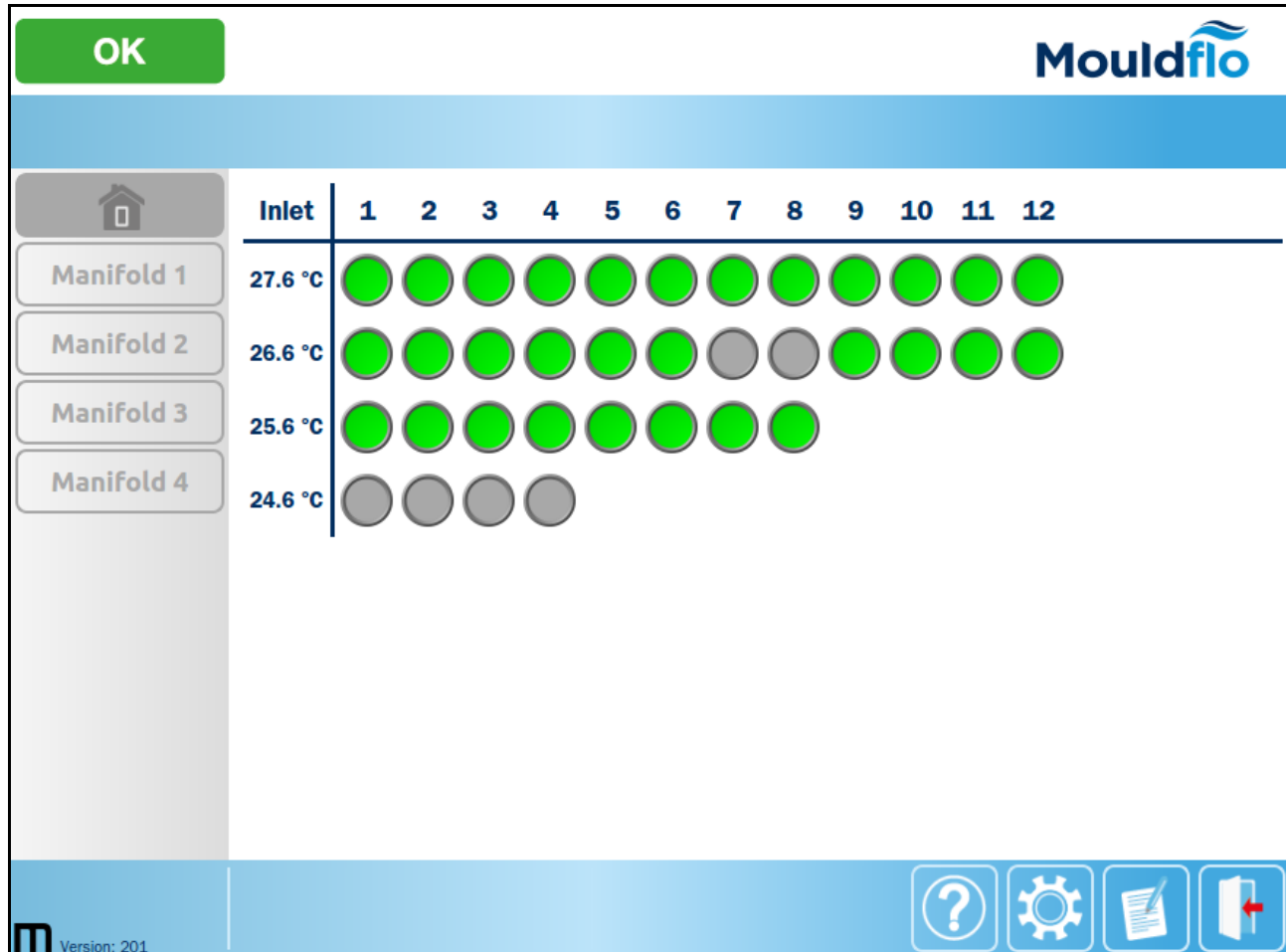
Move Innovations MouldFlo GUI is based in part on the work of the Qt project (<http://qt-project.org>).

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Ecran principal/d'accueil





L'écran représenté ci-dessous est un exemple d'écran d'accueil ou d'écran principal de synthèse. Cet écran montre un tableau comportant une rangée pour chaque nourrice de distribution connectée. Chaque rond coloré représente un capteur et changera de couleur en fonction de l'état actuel du capteur considéré (alarme, avertissement ou OK). Consulter le chapitre Ecran Paramètres pour plus de détails sur les seuils de réglage pour chaque canal d'une nourrice de distribution.



Les boutons situés à gauche de l'interface utilisateur sont décrits ci-dessous :

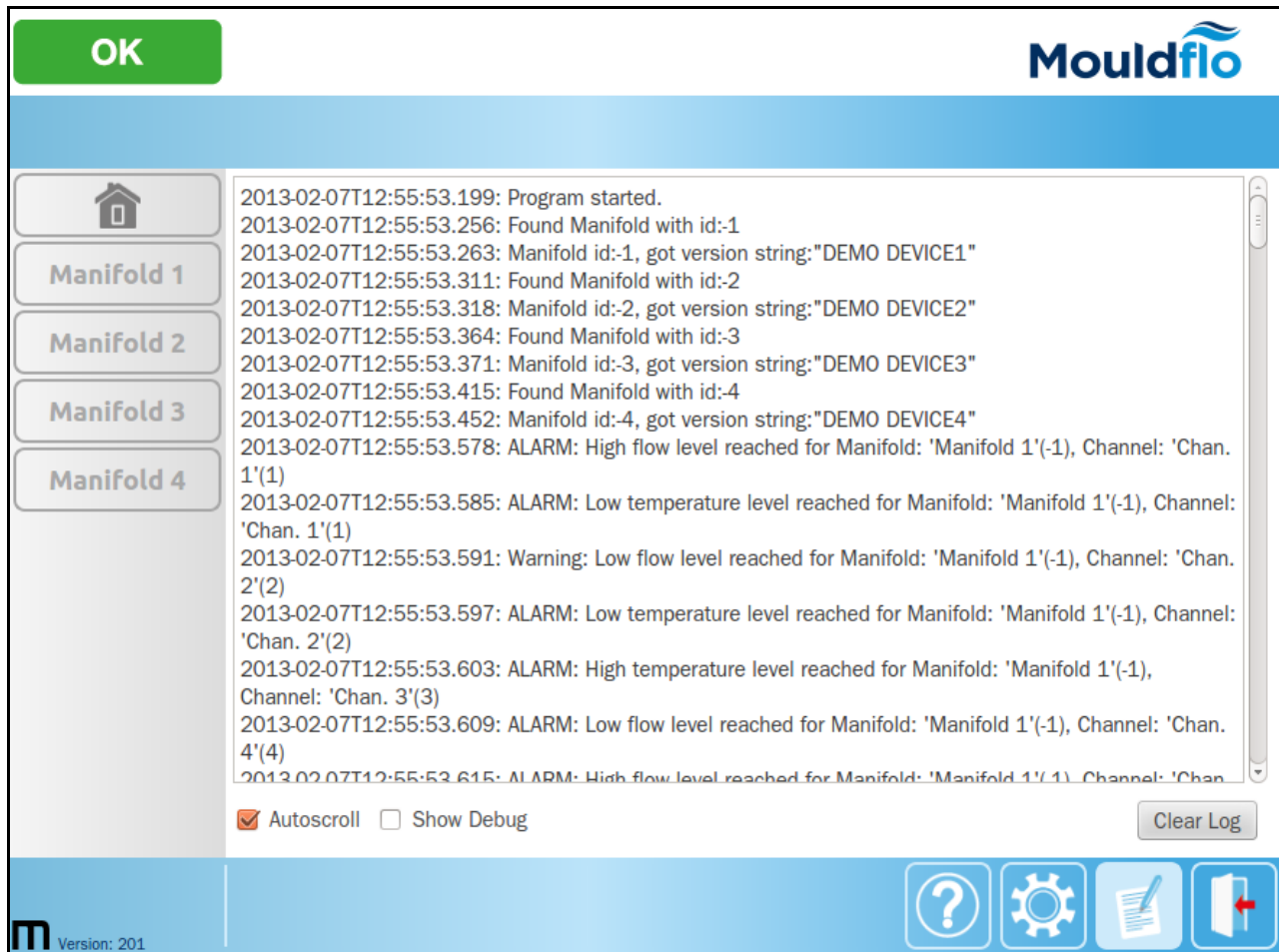
	Ce bouton principal ou d'accueil permet de retourner à l'écran principal de synthèse, comme représenté ci-dessus.
	Il y aura un de ces boutons pour chaque nourrice de distribution connectée au système. Ce bouton permet de sélectionner la nourrice de distribution correspondante ainsi que ses caractéristiques. Consulter le chapitre Ecran Nourrice de distribution plus de détails.
	Bouton de réinitialisation de l'alarme. Ce bouton s'affiche en cas de déclenchement d'un état d'alarme du système. Ce bouton permet de réinitialiser cet état.

Les boutons affichés en bas à droite de l'interface utilisateur n'apparaissent que dans l'écran d'accueil. D'autres boutons s'afficheront en fonction du bouton sélectionné dans la colonne de gauche.

	Bouton d'aide. Ce bouton affiche une boîte de dialogue "A propos" du programme. Cette boîte comporte un lien vers le présent manuel.
	Bouton des paramètres principaux. Ce bouton affiche les paramètres spécifiques de l'ensemble du système. Consulter le chapitre Paramètres principaux.
	Ce bouton permet de visualiser l'écran Journal. Sélectionner le bouton Accueil de la colonne de gauche pour revenir à l'écran de synthèse des nourrices de distribution. Consulter le chapitre Ecran Journal pour plus de détails.
	Bouton Quitter. Ce bouton ferme le programme.

Ecran Journal

L'écran reproduit ci-dessous donne un exemple d'écran Journal. Cet écran montre une liste d'événements qui se sont produits dans le programme ou dans le système. Il est possible de réinitialiser le journal à l'aide du bouton « Clear Log » situé au-dessus du bouton Quitter.



The screenshot displays the Mouldflo Journal interface. At the top left is a green 'OK' button. The top right features the Mouldflo logo. On the left side, there is a sidebar with a home icon and four buttons labeled 'Manifold 1', 'Manifold 2', 'Manifold 3', and 'Manifold 4'. The main area contains a scrollable list of log entries with timestamps and descriptions of events. At the bottom of the log area, there are checkboxes for 'Autoscroll' (checked) and 'Show Debug' (unchecked), and a 'Clear Log' button. The bottom right corner has four icons: a question mark, a gear, a document with a pencil, and a door with a red arrow. The bottom left corner shows the Mouldflo logo and 'Version: 201'.

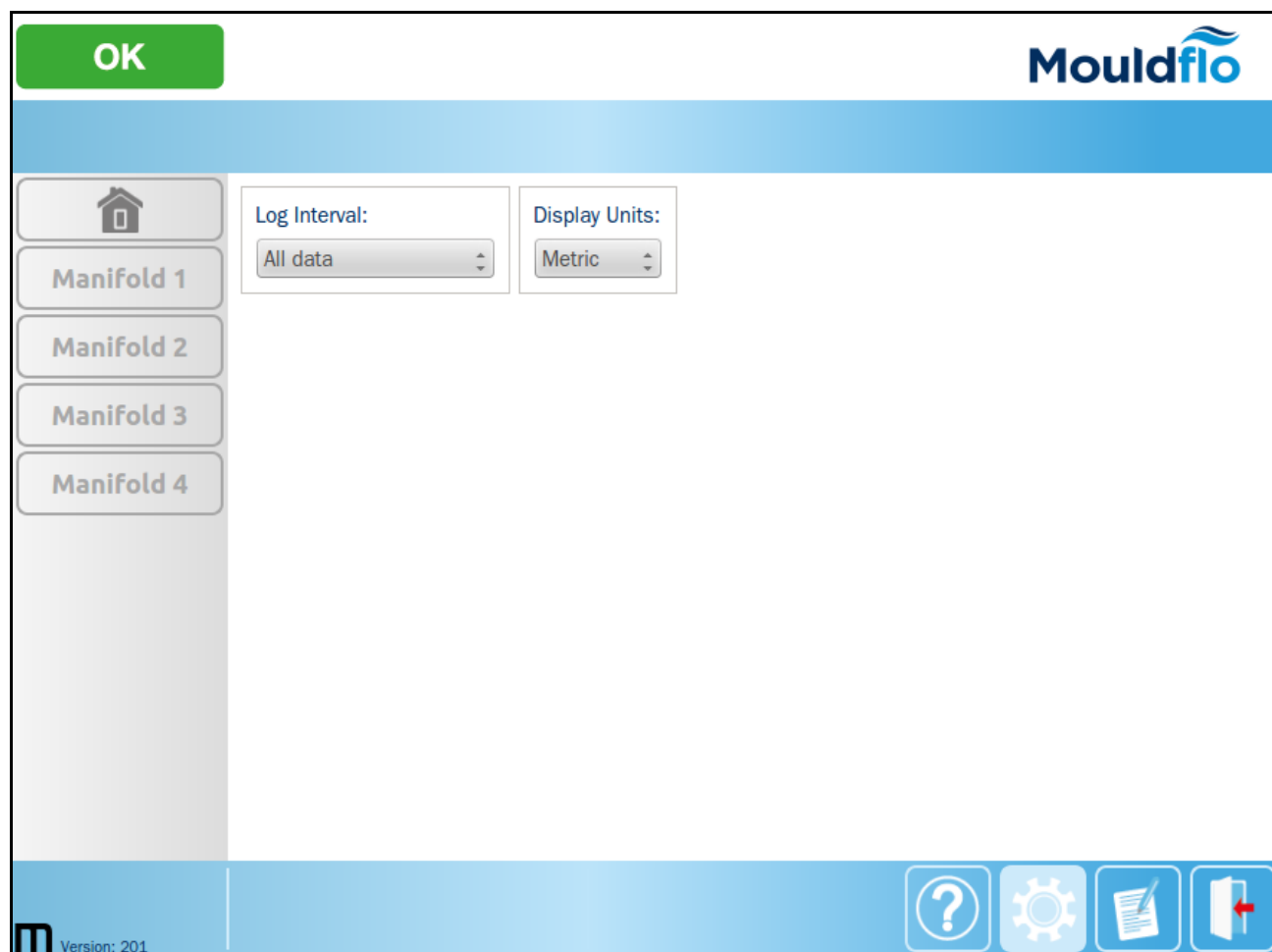
2013-02-07T12:55:53.199: Program started.
2013-02-07T12:55:53.256: Found Manifold with id:-1
2013-02-07T12:55:53.263: Manifold id:-1, got version string:"DEMO DEVICE1"
2013-02-07T12:55:53.311: Found Manifold with id:-2
2013-02-07T12:55:53.318: Manifold id:-2, got version string:"DEMO DEVICE2"
2013-02-07T12:55:53.364: Found Manifold with id:-3
2013-02-07T12:55:53.371: Manifold id:-3, got version string:"DEMO DEVICE3"
2013-02-07T12:55:53.415: Found Manifold with id:-4
2013-02-07T12:55:53.452: Manifold id:-4, got version string:"DEMO DEVICE4"
2013-02-07T12:55:53.578: ALARM: High flow level reached for Manifold: 'Manifold 1'(-1), Channel: 'Chan. 1'(1)
2013-02-07T12:55:53.585: ALARM: Low temperature level reached for Manifold: 'Manifold 1'(-1), Channel: 'Chan. 1'(1)
2013-02-07T12:55:53.591: Warning: Low flow level reached for Manifold: 'Manifold 1'(-1), Channel: 'Chan. 2'(2)
2013-02-07T12:55:53.597: ALARM: Low temperature level reached for Manifold: 'Manifold 1'(-1), Channel: 'Chan. 2'(2)
2013-02-07T12:55:53.603: ALARM: High temperature level reached for Manifold: 'Manifold 1'(-1), Channel: 'Chan. 3'(3)
2013-02-07T12:55:53.609: ALARM: Low flow level reached for Manifold: 'Manifold 1'(-1), Channel: 'Chan. 4'(4)
2013-02-07T12:55:53.615: ALARM: High flow level reached for Manifold: 'Manifold 1'(-1), Channel: 'Chan. 4'(4)

Autoscroll Show Debug Clear Log

m Version: 201

Paramètres principaux

Cet écran contient les paramètres spécifiques du système.



Log Interval (intervalle d'enregistrement) :

L'intervalle de temps entre les échantillons est enregistré dans le fichier Journal au format CSV (valeurs séparées par une virgule). « All data » signifie toutes les données échantillonnées par les nourrices de distribution, environ 3 fois par seconde.

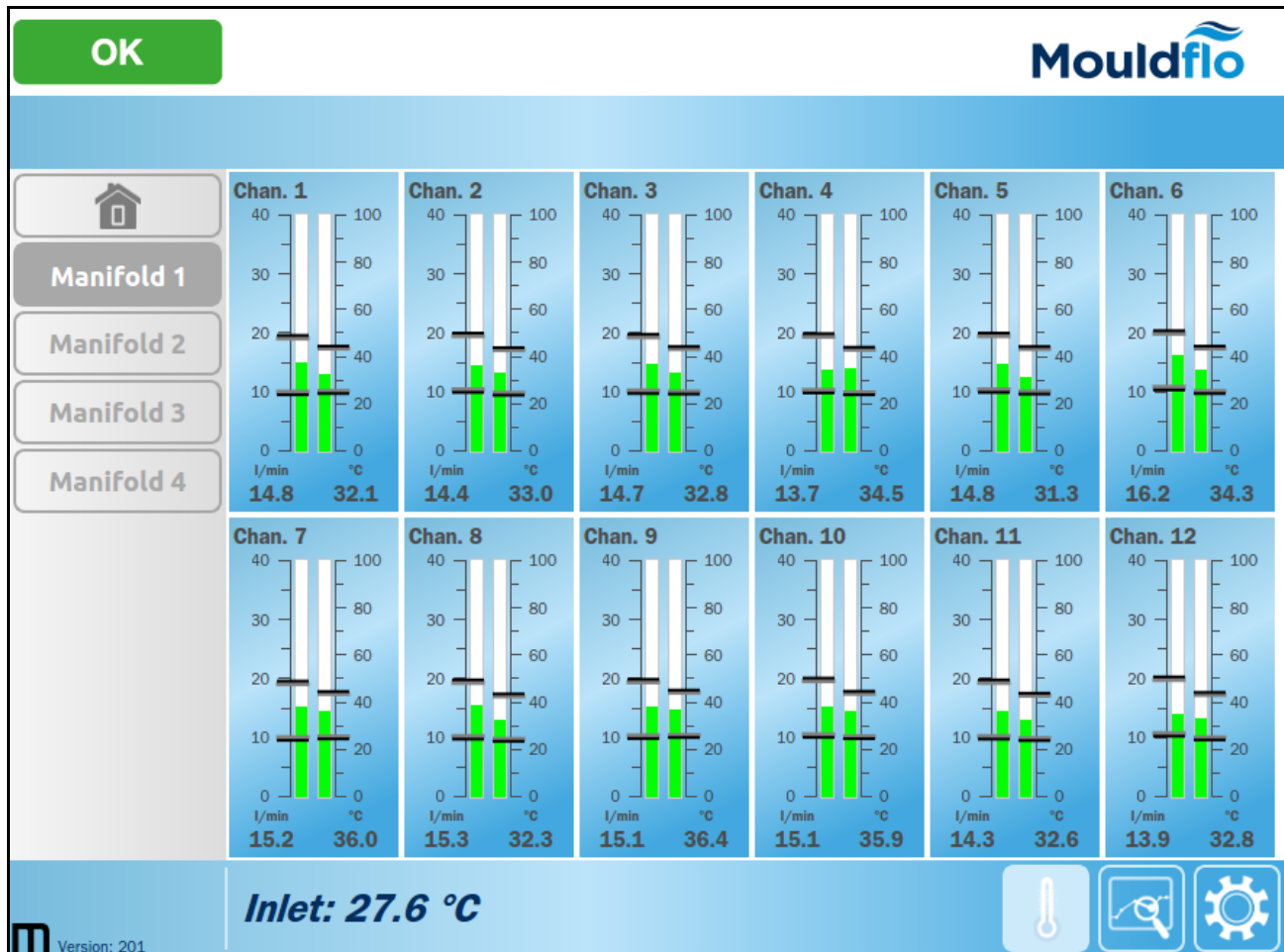
Display Units (unités d'affichage) :

Le programme propose actuellement les unités métriques (l/min et °C) et les unités impériales (gal/min et Fahrenheit).

Ecran Nourrice de distribution




Pour accéder à l'écran Nourrice de distribution, sélectionner l'un des boutons correspondant aux nourrices de distribution connectées. Ces boutons se trouvent dans la colonne de gauche, sous le bouton Accueil.

Il y a trois écrans différents pour chaque nourrice de distribution connectée. Le premier d'entre eux est représenté ci-dessous:



Les diagrammes à barres de cet écran représentent le débit et la température de chaque capteur relié à la nourrice de distribution sélectionnée. Si des seuils ont été fixés pour le capteur, ils sont représentés par des traits horizontaux sur le diagramme à barres. Le capteur de température d'admission sélectionné est également affiché au bas de l'écran (Inlet).

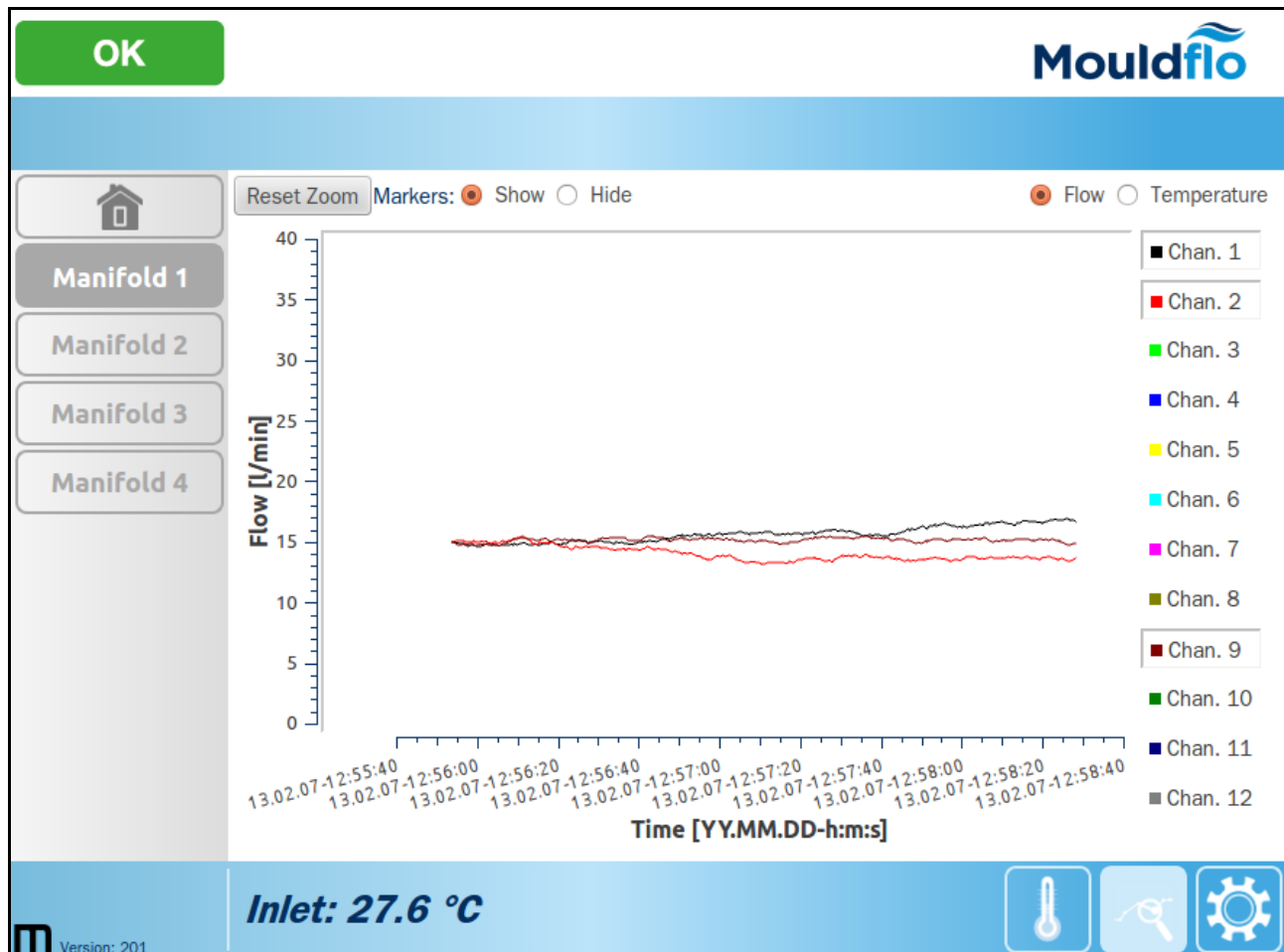
Les trois boutons situés en bas à droite de l'écran permettent de sélectionner les trois écrans correspondant à la nourrice de distribution considérée.

	Ce bouton sélectionne le premier écran, présenté précédemment.
	Ce bouton sélectionne l'écran Diagramme de tendance. La description de cet écran se trouve au chapitre suivant.
	Ce bouton sélectionne l'écran Paramètres de la nourrice considérée. Une description plus détaillée de cet écran se trouve au chapitre Ecran Paramètres.

Ecran Diagramme de tendance

Cet écran montre le diagramme de tendance de chaque canal/capteur sélectionné pour la nourrice de distribution choisie. La colonne à droite du diagramme permet de sélectionner les canaux à visualiser. Les cases d'option situées au-dessus de la liste des canaux permettent de choisir la tendance de la température ou la tendance du débit.

Il est possible d'agrandir une zone, en faisant glisser un rectangle d'agrandissement autour de cette zone. Le bouton « Reset Zoom » situé en haut à gauche de la zone du diagramme permet de revenir au niveau d'agrandissement normal.



Ecran Paramètres

Le dernier des écrans disponibles pour une nourrice de distribution donnée est l'écran Paramètres. Cet écran permet de donner un nom à la nourrice considérée (Manifold Name :) ainsi qu'un nom approprié pour chaque canal de la dite nourrice de distribution.

La description des autres paramètres se trouve ci-dessous.

The screenshot shows the 'Set Limits/Names' configuration screen for Mouldflo. It features a sidebar on the left with buttons for 'Manifold 1', 'Manifold 2', 'Manifold 3', and 'Manifold 4'. The main area is titled 'Set Limits/Names:' and includes a radio button selection for 'Flow' (selected) and 'Temperature'. Below this is a table with 12 channels, each with fields for Name, Low, Cur., High, and En. (Enabled). The 'Manifold Name' is set to 'Manifold 1' and the 'Id' is '-1'. There are also fields for 'Select Inlet Channel' (Temp 1: 27.6, Temp 2: 22.2) and 'Flow Sensor Range' (2.0-40.0 l/min). A 'Limit's' field is set to 'AUTO: ± 5.0 l/min (± 10.0°C)'. At the bottom right, there are 'Settings' buttons for 'Load' and 'Save'. The bottom of the screen has a blue bar with icons for temperature, search, and settings, and a version number 'Version: 201'.

Name:	Low	Cur.	High	En.	Name:	Low	Cur.	High	En.
1: Chan. 1	9.6	16.5	19.6	<input checked="" type="checkbox"/>	7: Chan. 7	9.6	14.3	19.6	<input checked="" type="checkbox"/>
3: Chan. 2	10.0	14.2	20.0	<input checked="" type="checkbox"/>	8: Chan. 8	9.8	14.0	19.8	<input checked="" type="checkbox"/>
2: Chan. 3	9.8	17.2	19.8	<input checked="" type="checkbox"/>	9: Chan. 9	9.9	14.7	19.9	<input checked="" type="checkbox"/>
4: Chan. 4	9.9	14.7	19.9	<input checked="" type="checkbox"/>	10: Chan. 10	10.1	13.9	20.1	<input checked="" type="checkbox"/>
5: Chan. 5	10.0	16.1	20.0	<input checked="" type="checkbox"/>	11: Chan. 11	9.8	15.5	19.8	<input checked="" type="checkbox"/>
6: Chan. 6	10.4	16.4	20.4	<input checked="" type="checkbox"/>	12: Chan. 12	10.3	15.7	20.3	<input checked="" type="checkbox"/>

Plages de débit possibles (Flow Sensor Range) :

Cette liste permet de sélectionner la plage de débit pour les capteurs connectés. Elle devrait être indiquée sur la nourrice de distribution. (Actuellement, le programme propose 1 à 15 litres par minute et 2 à 40 litres par minute.)

Seuils pour chaque canal de la nourrice de distribution :

Pour lancer un « auto.set.par » des seuils d'alarme alors que le système fonctionne, sélectionner un des jeux de seuils prédéfinis dans le menu déroulant (Limit's:). Actuellement, le système propose trois jeux de seuils prédéfinis : +/- 1 l/min +/- 2 °C, +/-2 l/min +/-5 °C et +/-5 l/min +/-10 °C.

L'option « off » permet de désactiver tous les canaux et de faire correspondre les seuils avec leurs limites extrêmes.

Une autre méthode consiste à définir séparément le seuil inférieur et le seuil supérieur pour chaque canal, à la fois pour le débit et pour la température.

Le seuil d'avertissement est préréglé à - 10 % du seuil supérieur d'alarme et à + 10 % du seuil inférieur d'alarme.

Canal du capteur d'admission :

La fonction « Select Inlet Channel » permet de sélectionner l'un des deux canaux de capteur de température d'admission ; celui-ci apparaîtra sur les autres écrans pour cette nourrice de distribution. Cette fonction n'est utile que si deux capteurs sont connectés à la nourrice de distribution, ce qui est rarement le cas.

Sauvegarder et recharger les paramètres :

Les deux boutons situés à droite, sous les canaux, permettent de sauvegarder (« Save ») et de recharger (« Load ») des paramètres prédéfinis pour une nourrice de distribution.

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