



FX2 With NovaNet™ Equipment Networking System

New Novatec expandable system provides central conveying control and access to other Novatec equipment.

The powerful FlexXpand FX2 control system uses a single, wall-mounted, color touch screen and PLC to provide a wide range of control possibilities. Simple connection with Ethernet cable to compatible Novatec auxiliary equipment controls allows access via the FX2 touch screen, or remotely via web browser or networked Smart Devices.

FX2 Convey Control of Up To:

- 160 Receiver Station
- 20 Pumps + 1 back-up
- 73 Material Sources
- Selector station ID proofing
- Blowback & proportioning options

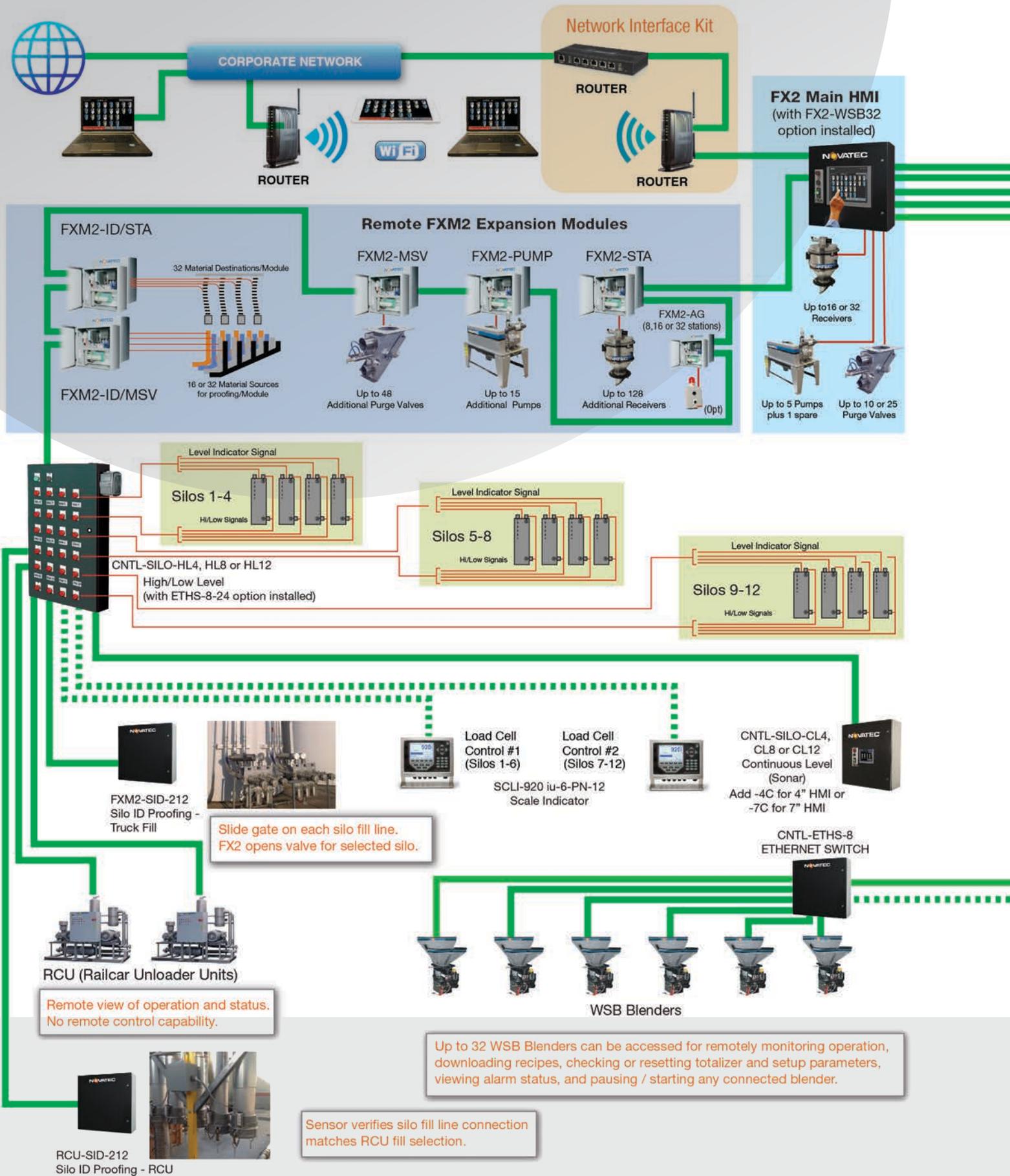
Remote access to controls for up to:

- 4 Central dryers & 48 central drying hoppers
- 12 Silos – Hi/Lo signals
- 12 Silos – Load cell or continuous sonar level
- 2 Railcar unloading systems
- Silo ID proofing (railcar, truck fill)
- 32 WSB blenders
- 36 additional Novatec equipment controls

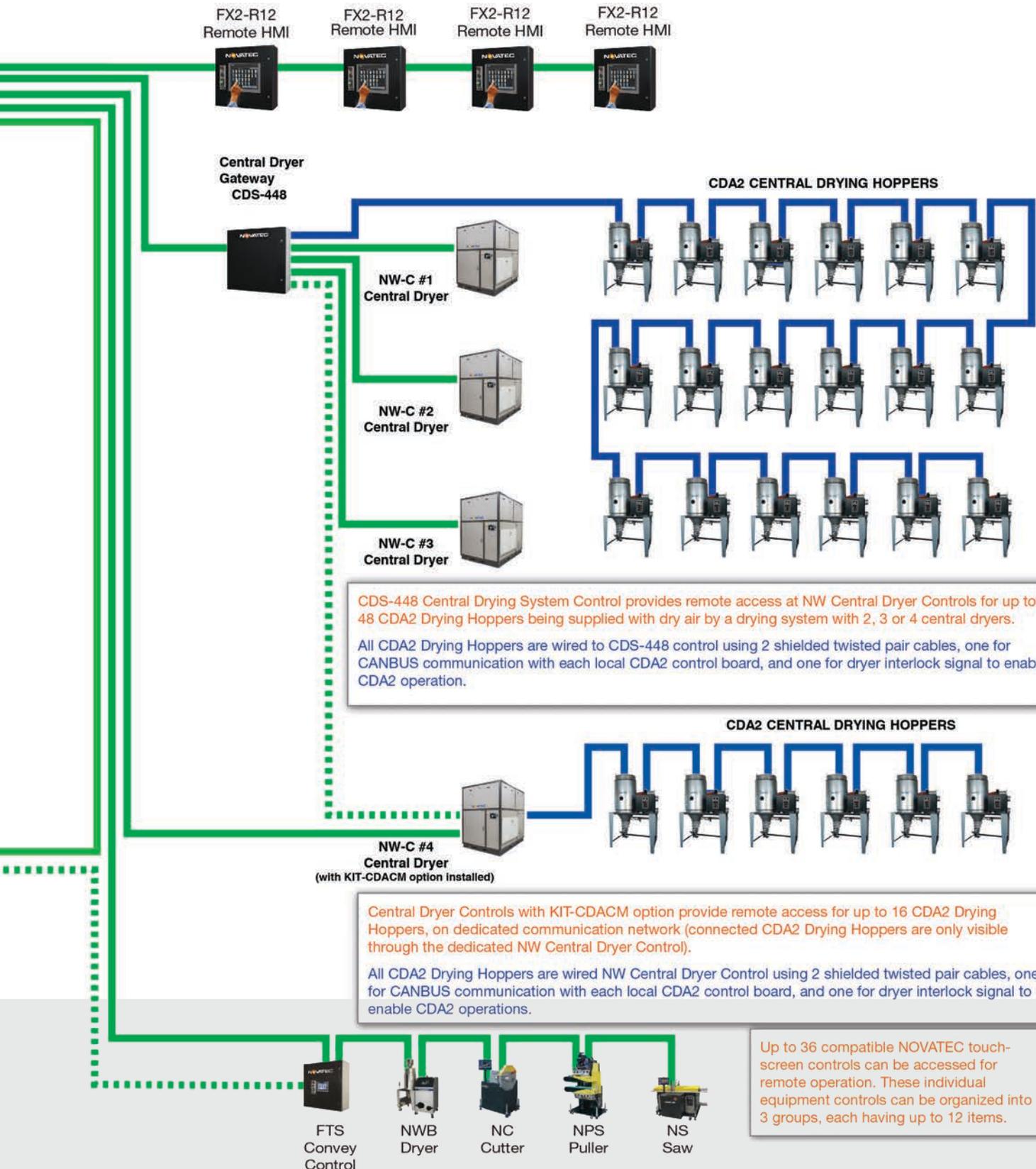
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YEAR
warranty



FX2 With NovaNet™ Equipment Networking System



A whole new world of Auxiliary Control



FX2-R12
Remote HMI

FX2-R12
Remote HMI

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FX2-R12
Remote HMI

Central Dryer
Gateway
CDS-448

NW-C #1
Central Dryer

NW-C #2
Central Dryer

NW-C #3
Central Dryer

NW-C #4
Central Dryer
(with KIT-CDACM option installed)

CDA2 CENTRAL DRYING HOPPERS

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CDS-448 Central Drying System Control provides remote access at NW Central Dryer Controls for up to 48 CDA2 Drying Hoppers being supplied with dry air by a drying system with 2, 3 or 4 central dryers.

All CDA2 Drying Hoppers are wired to CDS-448 control using 2 shielded twisted pair cables, one for CANBUS communication with each local CDA2 control board, and one for dryer interlock signal to enable CDA2 operation.

Central Dryer Controls with KIT-CDACM option provide remote access for up to 16 CDA2 Drying Hoppers, on dedicated communication network (connected CDA2 Drying Hoppers are only visible through the dedicated NW Central Dryer Control).

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Up to 36 compatible NOVATEC touch-screen controls can be accessed for remote operation. These individual equipment controls can be organized into 3 groups, each having up to 12 items.

FTS
Convey
Control

NWB
Dryer

NC
Cutter

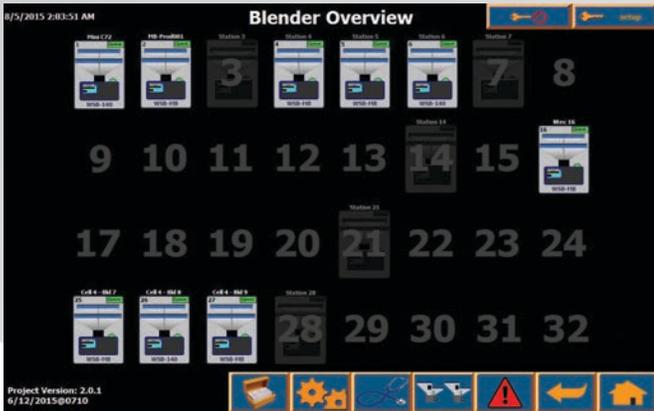
NPS
Puller

NS
Saw



Remote Access to WSB Blenders

Connect with up to 32 WSB blender controls located anywhere in your facility via Ethernet cable. Access directly through the FX2 touch screen, or remotely via web browser or VNC app by networked Smart devices and computers.



View status of up to 32 blenders at once

Confirm each blender's communication and alarm status at a glance. Assign a unique screen name to each blender for quick and easy identification.



View blender operating details

Access any blender individually to view current recipe, totalizer values, alarms, component operating details and remotely START/STOP blenders.



Blender recipe management

Recipe library allows stored recipes to be loaded to a blender or to be pulled from a blender, or an active recipe to be pulled from a blender and store centrally for later use.



Blender alarm summary

Remotely view alarms for a specific blender, or all blenders, in a single convenient location. Memory stores over 1000 alarm entries across all devices.

Multiple blender screens including: blender diagnostics

Identify stored model, software type, and units. Verify communication "heartbeat", and view data exchange details as well as blender I/O status.

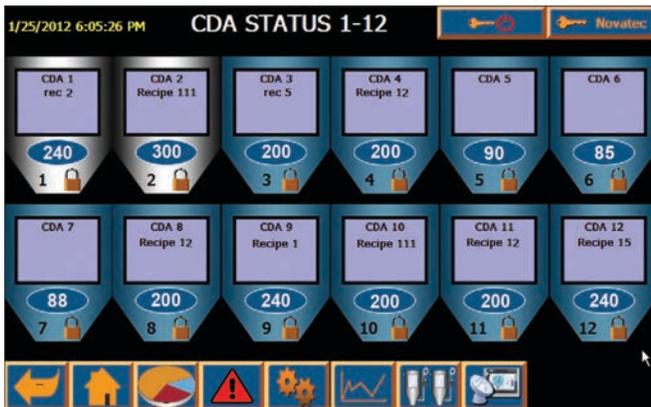
Blender parameters

View and edit parameter settings, which are displayed in a convenient matrix for quick review and comparison during initial setup or when trouble shooting.



Remote Access to Central Drying

Connect with up to 4 NovaWheel central dryers and up to 48 central drying hoppers located anywhere in your facility via Ethernet cable. Access directly through the FX2 touch screen, or remotely via web browser or VNC app by networked smart devices and computers.



CDA drying hopper status

Local summary view of drying hopper status. Confirm if enabled or disabled, and view hopper name, recipe, pre-dry lock status and actual inlet air temperature.



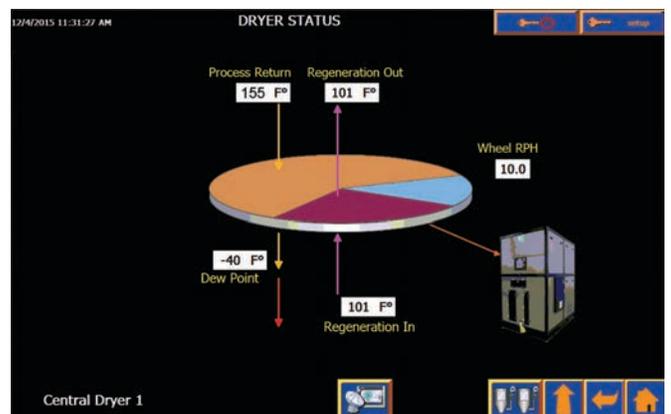
Auto start CDA drying hoppers

Access dryer control screen to designate central dryer requirements for CDA drying hopper operation and which CDAs will automatically start when the central dryer(s) restart after a shutdown.



CDA drying hopper setup

Access dryer control screen to remotely adjust CDA drying hopper temperature and alarm set points, monitor status, and enable/disable operation.



Dryer operating status

Local summary view of key dryer operating parameters including drying and regeneration air temperature, drying air dew point temperature and wheel RPM.

Multiple central drying screens including:

CDA drying hopper trending screen

Access dryer control screen to view CDA drying hopper temperature trends, including inlet and outlet temperature values, optional drying air dew point and set points..

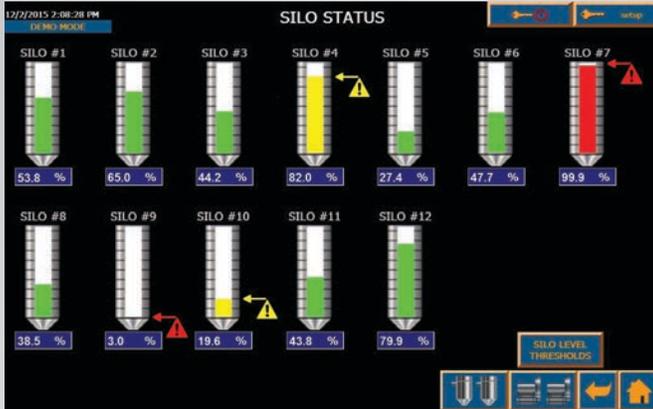
Central dryer home screen

Access wheel dryer home screen for full access to central dryer and CDA drying hopper operating and setup details.



Silo material level sensing

Fit silos with sonar level sensors or load cells for the most accurate picture of material levels. The level status of each silo is graphically shown on a color touch screen and alarms can be set to indicate approaching high or low level conditions.



CNTL-SILO-CL – Silo continuous level status screen



Load Cells
Non-contact, continuous weight measurement



Sonar
Non-contact, continuous length measurement



Railcar/truck unloading and proofing systems

Railcar unloader monitoring



RCU Status (Silo fill ID Proofing control available with RCU).



ID proofing switch for truck/railcar.

Silo fill ID proofing

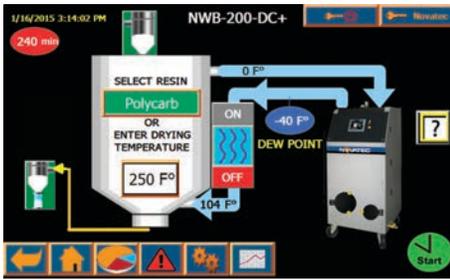


Truck unload ID proofing through FX2 control.



ID proofing gate valves for truck unloading.

Communicate with all compatible Novatec equipment



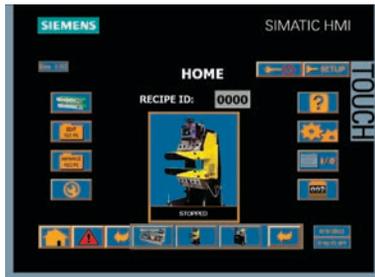
NovaWheel™ Dryers



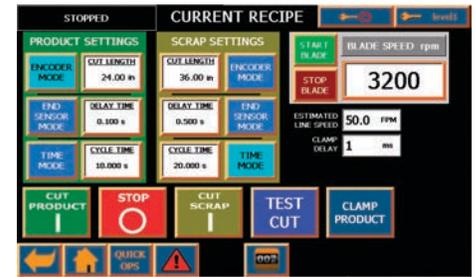
FTS Controls



Extrusion Pullers



Extrusion Cutters



Traveling Up Cut Saw

FX2 main control

Component	Panel Input Voltage	Description	Pumps	Receivers	Material Source (Purge) Valves
FX2-516-10-7C	115/230 VAC	7" Diag. Color Touch Screen PLC	5	16	10
FX2-516-10-12C	115/230 VAC	12" Diag. Color Touch Screen PLC	5	16	10
FX2-532-25-7C	115/230 VAC	7" Diag. Color Touch Screen PLC	5	32	25
FX2-532-25-12C	115/230 VAC	12" Diag. Color Touch Screen Control PLC	5	32	25

Ethernet connects your FlexXpand to the world

Every FlexXpand control can be accessed via web browser by any networked computer, or via VCN App by a networked smartphone or tablet. Actual FlexXpand screens are displayed remotely, and changes can be made easily with a simple click.

Multiple security levels are pre-programmed with selectable passwords to prevent unauthorized viewing or changes.

View alarm logs, program material changes, monitor pump run life... all remotely, and with the help of intuitive graphics and self-explanatory icons.



Specifications:

Component	Dimensions W x H x D		Amps Required	
	in	mm	115V	230V
FX2-516 & FX2-532	30 x 24 x 8	762 x 610 x 203	6	3
FXM2-STA	18 x 18 x 8	457 x 457 x 203	3	1.5
FXM2-AG16, 24, 32	18 x 18 x 8	457 x 457 x 203	3	1.5
FXM2-PUMP	18 x 18 x 8	457 x 457 x 203	3	1.5
FXM2-MSV	18 x 18 x 8	457 x 457 x 203	3	1.5
FXM2-ID/STA	18 x 18 x 8	457 x 457 x 203	3	1.5
FXM2-ID/MSV	18 x 18 x 8	457 x 457 x 203	3	1.5
CNTL-SILO-HL 4, 8 or 12	18 x 18 x 8 or 30 x 20 x 8	457 x 457 x 203 or 762 x 508 x 203	3	1.5
CNTL-SILO-CL 4, 8 or 12	18 x 18 x 8	457 x 457 x 203	3	1.5
SCLI-920iu-(x)-PN-12 (x=2, 4 or 6)	11 x 11 x 5.25	279 x 279 x 133	3	1.5
FXM2-SID-212 and RCU-SID-212	16 x 16 x 6	406 x 406 x 152	3	1.5
CNTL-ETHS-5 or -8	10 x 10 x 6	254 x 254 x 152	3	1.5
CDS-448	18 x 18 x 8	457 x 457 x 203	6	3

Note: add -12 to FX2 models and FXM2 modules for 115 VAC inputs/outputs (Where available)

FX2 Options:

Blowback and/or Proportioning Outputs for Stations:

Add either or both for stations 1 to 16 and 17 to 32

Ethernet Switch, 5-port: Adds networking ports to main panel and RHI'S

FX2-WSB: Communications gateway to access up to 32 WSB blenders 115 V I/O for existing systems

30 V Panel Input Power: All models, 24 VDC I/O only.

Alarm strobe: (must match panel I/O voltage) for 24 VDC or 115 VAC.

Accessories:

Station (Receiver) Xpand Module: Up to 8 may be added, each controlling up to 16 stations. (Blowback/proportioning optional).

Alarm Group Module: Up to 3 may added each controlling up to 16, 24 or 32 alarms.

Pump Xpand Module: Up to 3 may be added, each controlling up to 5 pumps. (automatic backup optional).

Purge Valve Xpand Module: Up to 3 may be added, each controlling up to 16 material source (purge) valves.

Auto ID: (source) Xpand Module: Up to 4 may be added, each with Auto ID Proofing for material sources.

Auto ID: (destination) Xpand Module: Up to 5 may be added, each with Auto ID proofing for stations.

Silo Level Monitoring with Profinet communications:

High/Low level control panel for up to 4, 8 or 12 silos. Continuous level touch screen control for up to 4, 8 or 12 silos. Load cell control for 1- 6 and 7 - 12 silos.

Silo ID Proofing (Truck, Railcar)

Ethernet Communication Cable and Tool-free Connectors

Ethernet Repeater Switch: 5-port or 8-port – Stand alone installation 115 VAC input power required. (Required to extend a single network cable segment greater than 300 feet).

Cables For Receivers: 18/6 or 16/6 with drain wire and PVC jacket.

Remote Touch-Screen HMI: (12" color) Includes 2 Ethernet ports. (Ethernet switch optional).

Router Packages: Enables communication from isolated equipment control network to corporate network.