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**Excelon® Plus** is the latest generation of IMI Norgren Air Preparation equipment developed to meet the needs of today's customer. It offers exceptional performance, is compact and light-weight with no compromise on robustness, and is suitable for all automation applications. IMI NORGREI

**Excelon® Plus** has been designed with safety in mind, offering built in tamper proof features and a unique double lock mechanism on the bowls. Maintenance of the unit is simplified with the new system where the element assembly is removed together with the bowl.

The innovative family of **IMI Norgren Excelon® Plus** products can be used where both stand alone units or modular assemblies are required thanks to the slim line Quikclamp system. The one piece Quikclamp assembly with integrated brackets allows installation and removal of the units without breaking a pipe connection.

### **General Specifications**

- Port sizes 1/4", 3/8", 1/2" or 3/4"
- Thread type PTF
- Fluid:Compressed air
- Maximum inlet pressure:
  - Polycarbonate bowl 150 psi (10 bar)
  - Metal bowl 300 psi (20 bar)
- Maximum temperature:
  - Polycarbonate bowl 140°F (60°C)
  - Metal bowl 150°F (65°C)
- All internal and external surfaces are protected with an Electrophoretic paint coating providing excellent corrosion and chip resistant protection

 A Flexible modular system

IMI NORGRE

- Built with safety in mind
- Best in class
   Water Extraction
- Reduced weight and size
- Available in 1/4", 3/8", 1/2" & 3/4", NPT ports

# 314-427-0600

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# John Henry Foster

# Norgren Excelon® Plus Series 82 and Series 84

#### **Modular Flexibility**

- All bodies have standard Quikclamp flanges for fast modular installation
- All bodies are threaded 1/4", 3/8", 1/2" or 3/4" PTF
- Keyhole mounting slots in the Quikclamp brackets to easily mount and dismount units

#### **High Performance**

- Can operate at 100<sup>s</sup> air flow through a 1/2" (12.7mm) diameter pipe to minimize pressure drop in system.
- High performance makes 3/4" porting possible. Depending on flow requirements, 3/4" porting makes these products a low cost alternative to larger 3/4" basic systems, resulting in:
- Space savings
- Purchase cost savings
- All major components are of die cast metal
- Gives exceptional strength & long life in most applications
- Quikclamps & inline combos can withstand high torque or bending moments

#### **Easy to Mount**

- Easy to mount choices
- Pipe mounted
- Universal bracket for single installations
- Panel mounted (for pressure regulators, fiter-regulators)
- Quikclamp (with or without wall bracket) for rapid modular assembly
- Integrated gauge, manual drain or auto-drain with PIF, is ready to fit 'out of the box'
- Products are only 70mm port to port





#### **General Purpose Filter**

- 5 or 40µm ratings
- A grade to suit any application
- Particulate removal to ISO 8573-1 Class 6 (5 Micron) and Class 7 (40 Micron)
- Elements have large surface area
- High efficiency particle removal
- Provides high flow
- Allows extended service intervals

### **Coalescing Filter**

- Bowl choices as the general purpose filter
- Must always be fitted downstream of a general purpose filter
- Oil removal to ISO 8573-1 Class1

   Max remaining aerosol of 0.01mg/m³ (53 scfm, 1/2" port size, and 90 psig operating pressure).
- Oil free, instrument grade air provides dependable, reliable air quality for trouble free 'high technology' applications
  - Ex: spray painting where poor air quality can effect paint finish

- High efficiency housing and louver
  More than 98<sup>s</sup> condensate
- separation at 100<sup>%</sup> flowWater extraction is to
- ISO 8573-1 Class 8 (>95<sup>\*</sup>) • Low pressure loss
- Choice of quick release bowl stylesGuarded polycarbonate
- Metal with prismatic sight glass for more durability
- Standard pressure drop indicator advises when element needs to be changed
- Pleated element construction
- Superior dirt holding capacity
   Low pressure drop 50<sup>%</sup> reduction compared to existing range
- Increased flow capacity
- Low energy consumption
- Polyester sleeve sock
   Superior mechanical strength & chemical resistance
- Maximum operating temperature 150°F (65°C) with metal bowl

### Oil Vapor Removal Filter

Oil vapor removal filters feature activated carbon element that adsorbs oil vapors. Oil vapor removal to ISO 8573-1 Class 0 -Max remaining aerosol of 0.003 mg/m<sup>3</sup> (53 scfm, 1/2" port size, 90 psig operating pressure). Should be used as part of a three stage filtration system with F84G general duty filter and F84C coalescing filter. Such combos provide air quality to ISO8573-1 Class 0 for particulates.

- Filter & element design optimises air velocity and contact time to reduce oil content of air leaving the filter to 0,003ppm @ 70°F (21°C)\*
- Long life carbon cartridge element\*
- Closed metal quick release 'bayonet' bowl is standard (Polycarbonate bowl available)

\*Oil vapor removal filters must be protected upstream by a coalescing filter.

### **Filter Drains**

Two drain options are available.

- Durable quarter turn manual drain
- Fully automatic drain removes condensate only when it is needed
- Ideal for 'hard to service' locations
- Eliminates risk of condensate carry-over
- Minimal air loss when exhausting water





# **Pressure Regulators**

- Large diaphragm area & good syphoning action for high flow with minimal pressure droop
- Balanced main valve
- Stops effects of compressor swing & reductions in main line pressure
- A double convolute diaphragm ensures minimum hysteresis
- Symmetrical Quikclamp flange (inlet & outlet Excelon ears)
- Provides 90° modular mounting Threaded bonnet
- Can use panel nut to panel mount

#### **Optional Features**

- All major components are of die cast metal
- Offers better environment resilience to a plastic regulator

#### **Combined Filter-Regulators**

- Combines features, options & performance of Filters and Regulators • Saves install time, space and cost!
- Integrated gauge and Push-in-Fitting on Auto-drain offers more simplicity and is ready for use out of the box

• Push to lock adjusting knob

pressure setting stable

downstream pressure

• Choice of 60, 150 or 250 psi

& pipe to a remote gauge.

pressure version.

T-handle adjuster with locknut

• Allows for quick adjustment under 'no flow' conditions

(4, 10, or 17 bar) regulating range

• An integrated gauge is standard. A

'no gauge' option means a gauge

adapter kit is fitted with a 1/8" port

Allows lower torque adjustment

Create a custom 'Maximum set'

for external gauge or threaded fitting

Relieving diaphragm

Bleeds off excess

For easy adjustment. Lock keeps

#### Excelon<sup>®</sup> Plus Lubrication Systems

- Two design choices in 1/2" family "C" Oil-fog for single tool or
- actuator applications • "M" Micro-fog for complex piping systems and circuits
- Body has many standard features • Threaded oil fill plug – easy to remove hexagonal shape and screwdriver slot • 360° sight dome for
  - adjustment visibility
- Color coded for identification: green = oil-fog; red = micro-fog
- Choice of two quick release 'bayonet' bowls - guarded polycarbonate or metal with red prismatic sight glass Standard 0,2l bowl
- Both micro-fog and oil-fog types can be filled under pressure using a quick fill connector. Oil-fog units with standard bowls can be filled under pressure (Not on rapid cycle units), without a quick fill connector.
- Elastomeric flow sensor Provides constant oil density output throughout the flow range

Shut-Off Valves This is a 'Ball' type rotating Safety Shut-off Valve

- Valve is lockable in closed position Using additional padlock with or without a padlock lockout device
- Easy to operate full flow device
- Easy to isolate system with
- no reduction in performance
- Valve function is 3/2
- Threaded Exhaust port so exhaust air can be piped away or silencer fitted
- Easy to combine due to ergonomic Quikclamp system - Ready to use

# Norgren Excelon<sup>®</sup> Plus Series 82 and Series 84

#### Service & Maintenance Made Easy

- Easy to service
  - Units can be repaired in-line
- Quikclamps allow for rapid 'removal and replacement' (removal from service without breaking pipework)
- High visibility sight glass shows liquid condensate level in bowl
- Quick release 'bayonet' bowls with double safety lock
- Patented 'Q' drain removes condensate with a quick, no mess 1/4 turn
- Pressure drop indicator (standard on coalescing fi filters) shows when element replacement is required
- Filters & Filter/Regulators have a unique maintenance system: Low clearance, no tools, one piece filter element removal

#### **Can Help Create Safe Pneumatic Systems**

- Tamper Proof options on both shut-off valve & regulator knob available using padlock accessory features
- Double safety lock on bowl
- Bowl clip with audible click plus safety detent when pressurised
- Combined with either 18D or 51D adjustable pressure switches the system can detect when air pressure reaches an unacceptable high or low level.
- Can be combined with IMI Norgren soft start/dump valves for safe reapplication of air or system exhausting (rapid or emergency dumping of air supply)







# ၂ြို) John Henry Foster

Part numbers listed are in Stock Now at John Henry Foster!

### Norgren Excelon® Plus Series 82 and Series 84

# Lubricators, Metal with Level Indicator



Series	Flow Series scfm		Part Number		
Oil Fog					
82	51	1/4	L82C-2AP-EDN		
02	51	3/8	L82C-3AP-EDN		
	193*	3/8	L84C-3AP-EDN		
84		1/2	L84C-4AP-EDN		
		3/4	L84C-6AP-EDN		
Micro F	og				
82	45	1/4	L82M-2AP-EDN		
02	40	3/8	L82M-3AP-EDN		
		3/8	L84M-3AP-EDN		
84	155*	1/2	L84M-4AP-EDN		
		3/4	L84M-6AP-EDN		

Maximum supply pressure: 290 psi

# Coalescing Filters, Metal with Level Indicator



finetal men zerei maleator						
Flow Series scfm		Port Size NPT	Part Number			
Manual	Drain					
82	32	1/4	F82C-2AD-QD0			
02	52	3/8	F82C-3AD-QD0			
		3/8	F84C-3AD-QD0			
84	53*	1/2	F84C-4AD-QD0			
		3/4	F84C-6AD-QD0			
Auto Dr	ain					
82	48	1/4	F82C-2AD-AD0			
02	58	3/8	F82C-3AD-AD0			
		3/8	F84C-3AD-AD0			
84	165*	1/2	F84C-4AD-AD0			
		3/4	F84C-6AD-AD0			
Based or	n 1/2" por	t size				

Maximum supply pressure: 290 psi 0.01 micron partical removal

#### Oil Vapor Filters, Metal bowl - no sight glass



Series	Flow scfm	Port Size NPT	Part Number				
Closed	Bowl						
82	32	1/4	F82V-2AN-EDA				
02		3/8	F82V-3AN-EDA				
	53*	3/8	F84V-3AN-EMA				
84		1/2	F84V-4AN-EMA				
		3/4	F84V-6AN-EMA				

\* Based on 1/2" port size

Maximum supply pressure (metal bowl with Level Indicator): 290 psi

Remaining oil content: 0.003 mg/m3 max

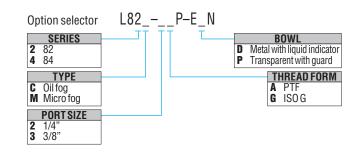
### 3/2 Shut-Off Valves

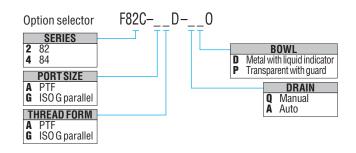


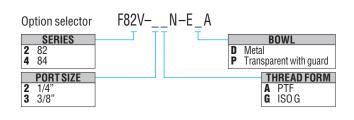
Maximum supply pressure: 290 psi Valve function: 3/2 way Exhaust port: 1/4 NPT Lockable in closed position

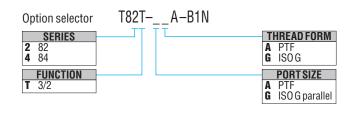
Series	Flow scfm	Port Size NPT	Part Number			
Closed	Bowl					
82	86	1/4	T82T-2AA-B1N			
δZ		3/8	T82T-3AA-B1N			
		3/8	T84T-3AA-B1N			
84	343*	1/2	T84T-4AA-B1N			
		3/4	T84T-6AA-B1N			
Describer 4/0" result size						

\* Based on 1/2" port size









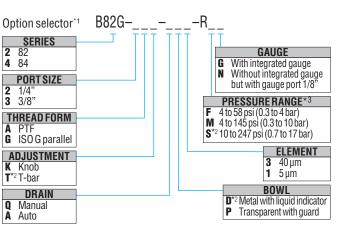
# Part numbers listed are **in Stock Now** at John Henry Foster!

#### Filter/Regulators, Metal with Level Indicator



Maximum supply pressure: 290 psi Outlet pressure range: 4 to 145 psi - Standard Integrated pressure Gauge: Standard

	Flow	Port Size	Part		
Series	scfm	NPT	Number		
Auto Dr	ain				
82	79	1/4	B82G-2AK-AD3-RMG		
02	19	3/8	B82G-3AK-AD3-RMG		
		3/8	B84G-3AK-AD3-RMG		
84	212*	1/2	B84G-4AK-AD3-RMG		
		3/4	B84G-6AK-AD3-RMG		
Manual	Drain				
82	79	1/4	B82G-2AK-QD3-RMG		
02		3/8	B82G-3AK-QD3-RMG		
		3/8	B84G-3AK-QD3-RMG		
84	212*	1/2	B84G-4AK-QD3-RMG		
		3/4	B84G-6AK-QD3-RMG		
* Based or	n 1/2" por	t size	1		



\*1 All models shown are for flow direction left to right. With flow direction right to left use the imi-precision.com online configurator or contact IMI Norgren

\*2 Units with 246 psi (17 bar) outlet pressure range available only with T-bar adjustment and metal bowl; therefore substitute T at 7th position, D at 9th position, and S at 12th position. T-bar handle only available with 17 bar option. \*3 Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of specified ranges.

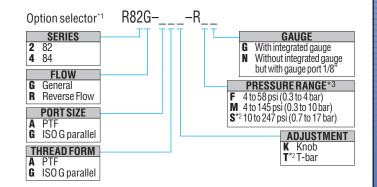
# Pressure Regulators

Å

Maximum supply pressure: 290 psi Outlet pressure range: 4 to 145 psi - Standard

Integrated pressure Gauge: Standard

	Series	scfm	Port Size NPT	Part Number					
	Knob A	djustm	ent						
	82	66	1/4	R82G-2AK-RMG					
	02	00	3/8	R82G-3AK-RMG					
			3/8	R84G-3AK-RMG					
	84	265*	1/2	R84G-4AK-RMG					
Ĺ			3/4	R84G-6AK-RMG					
	T-handle Adjustment								
	82	66	1/4	R82G-2AT-RMG					
	02	00	3/8	R82G-3AT-RMG					
			3/8	R84G-3AT-RSG					
	84	265*	1/2	R84G-4AT-RSG					
			3/4	R84G-6AT-RSG					
	* Deced on 1/0" part size								



\* Based on 1/2" port size

\*1 All models shown are for flow direction left to right. With flow direction right to left use the imi-precision.com online configurator or contact IMI Norgren

\*2 Units with 246 psi (17 bar) outlet pressure range available only with T-bar adjustment and metal bowl; therefore substitute T at 7th position and S at 9th position. T-bar handle only available with 247 psi option.

\*3 Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of specified ranges.

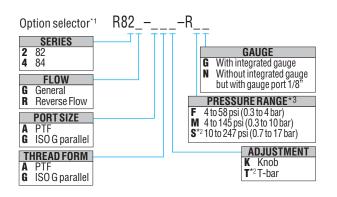
### General Purpose Filters, Metal with Level Indicator



Maximum supply pressure:

290 psi

<b>FILEIS</b> , Metal With Level Indicato						
Series	Flow scfm	Port Size NPT	Part Number			
Manual	Drain					
82	48	1/4	F82G-2AN-QD3			
02	58	3/8	F82G-3AN-QD3			
		3/8	F84G-3AN-QD3			
84	165*	1/2	F84G-4AN-QD3			
		3/4	F84G-6AN-QD3			
Auto Dr	ain					
82	48	1/4	F82G-2AN-AD3			
02	58	3/8	F82G-3AN-AD3			
		3/8	F84G-3AN-AD3			
84	165*	1/2	F84G-4AN-AD3			
		3/4	F84G-6AN-AD3			
Deceder	1/0" por	t oine				



40 micron element: Standard

\*1 All models shown are for flow direction left to right. With flow direction right to left use the imi-precision.com online configurator or contact IMI Norgren

\*2 Units with 247 psi outlet pressure range available only with T-bar adjustment; therefore substitute T at 7th position and S at 9th position. T-bar handle only available with 247 psi option.

\*3 Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of specified ranges.

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<sup>\*</sup> Based on 1/2" port size

John I	oster		Part numbers listed are in Stock Now at John Henry Foster!					
				John Henry	Foster			
Series 82	7							
Norgren Excel		cessories						
0	Quickclamp	5	Auto Drain Kit with Metal Nut - Inch	Contraction of the second seco	R82 / B82 Elastomer kit		Porous Plastic Silencer 1/4" PTF	
Part Number	820014-51KIT	Part Number	6000-61KIT	Part Number	FRLB82-Kit	Part Number	C/S2	
9	Quickclamp - Bracket Assembled		Pressure Sensing Block 1/4 PFT		Padlock Lock Out Device	- And	Sintered Bronze Silencer 1/4 PTF	
Part Number	820014-52KIT	Part Number	820016-50KIT	Part Number	820055-02KIT	Part Number	MS002A	
-0	Neck Mount Bracket And Panel Nut		Pressure Sensing Block 1/4 NPT		Padlock		Filter Cartridge 5 micron	
Part Number	820068-51KIT	Part Number	820028-50KIT	Part Number	820055-01KIT	Part Number	820038-50KIT	
T	Filter Unit Mounting Bracket	Ş	Port Adaptors 1/4 PTF		Digital pressure switch 51D (-14 to 145 psi)		Filter Cartridge 40 micron	
Part Number	820024-50KIT	Part Number	820028-50KIT	Part Number 086	0810000000000	Part Number	820038-51KIT	
0	Panel Mounting Nut	Ş	Port Adaptors 3/8 PTF	C	Pneumatic pressure switch 18D (7 to 120 psi)		Vapor Removal Carbon Filter Element	
Part Number	820048-89KIT	Part Number	820015-03KIT	Part Number 088	1300000000000	Part Number	820041-50KIT	
	Integrated 10 Bar Gauge		Integrated 20 Bar Gauge	0	Pressure Switch Interface Block (18D)		Coalescing Filter Element	
Part Number	820073-01KIT	Part Number	820073-02KIT	Part Number 052	23109000000000	Part Number	820044-50KIT	
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				Part nur	mbers listed	J	82 and Series	
				- ro in S	tock NOW du	Series		, 04
				John He	enry Foster!			
Series 84								
Norgren Excelo	on® Plus Ac	cessories						
			Auto Drain		R84 / B84		Porous	
	Quickclamp		Kit with Metal Nut		Elastomer		Plastic Silencer	
			- Inch		kit		1/4" PTF	
Part Number	840014-51KIT	Part Number	6000-61KIT	Part Numbe	er FRLB84-Kit	Part Number	C/S2	
			Pressure	$\cap$			Sintered	
10	Quickclamp - Bracket		Sensing		Padlock		Bronze	
	Assembled		Block		Lock Out Device		Silencer	
C Dord Number	840014-52KIT	Part Number	1/4 PFT	Deut Number			1/4 PTF	
Part Number	840014-52KIT	Part Number	840016-50KIT	Part Numbe	er 840055-02k	IT Part Number	MS002A	
• •	Neck Mount		Port				Filter	
	Bracket And		Adaptors		Padlock		Cartridge	
	Panel Nut		3/8 PTF				5 micron	
Part Number	840068-51KIT	Part Number	840015-02KIT	Part Numbe	er 840055-01k	IT Part Number	840038-50KIT	
	<b>F</b> 11		Port	17	Digital	1 Million	Filter	
	Filter Unit Mounting		Adaptors	1	pressure		Filter Cartridge	
	Bracket		1/2 PTF	'C	switch 51	The second se	40 micron	
Part Number	840024-50KIT	Part Number	840015-03KIT	Part Number	(-14 to 145 p 08608100000000		840038-51KIT	
T urt Number	0 1002 T 001411			T ut thumbor				
	Panel		Port		Pneumatic pressure		Vapor Removal	
	Mounting Nut		Adaptors 3/4 PTF		switch 18	1000000000	Carbon Filter	
				C Da-	(7 to 120 ps		Element	
Part Number	840048-89KIT	Part Number	840015-04KIT	Part Number	08813000000000	0 Part Number	840041-50KIT	
1 miles	Integrated		Integrated	No.	Pressure	1 Mile	Coalescing	
	10 Bar 140 psi		20 Bar 300 psi	11.00	Switch Interface		Filter	
	Gauge		Gauge		Block (18		Element	
Part Number	840073-01KIT	Part Number	840073-02KIT	Part Number	03377170000000	00 Part Number	840044-50KIT	
	Full Flow		Full Flow					
	Porting		Porting					
1	Block 3/4 PTF		Block 3/8 PTF					
Part Number	840028-68KIT	Part Number	840028-50KIT	-				
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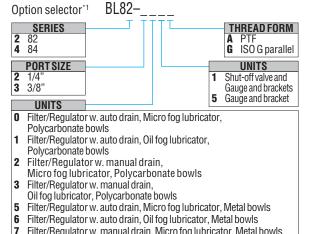
Part numbers listed are **in Stock Now** at John Henry Foster!

# Norgren Excelon® Plus Series 82 and Series 84

# Excelon<sup>®</sup> Plus Modular System

Filter/regulator - Lubricator Combination Units





- Filter/Regulator w. manual drain, Micro fog lubricator, Metal bowls
- 8 Filter/Regulator w. manual drain, Oil fog lubricator, Metal bowls

#### F/R-L Combination Units - Metal Bowls with Level Indicator, Micro Fog Lubricators

		Port		Assembly Includes						
Series	Flow scfm	Size NPT	Part Number	Shut off	Clamp with bracket	Filter/regulator	Clamp with bracket	Lubricator		
Manual	Drain									
82	51*	1/4	BL82-271A	T82T-2AA-B1N	820014-52KIT	B82G-2AK-QD3-RMG	820014-52KIT	L82M-2AP-EDN		
02	51	3/8	BL82-371A	T82T-3AA-B1N	820014-52KIT	B82G-3AK-QD3-RMG	820014-52KIT	L82M-3AP-EDN		
	155^	3/8	BL84-371A	T84T-3AA-B1N	840014-52KIT	B84G-3AK-QD3-RMG	840014-52KIT	L84M-3AP-EDN		
84		1/2	BL84-471A	T84T-4AA-B1N	840014-52KIT	B84G-4AK-QD3-RMG	840014-52KIT	L84M-4AP-EDN		
		3/4	BL84-671A	T84T-6AA-B1N	840014-52KIT	B84G-6AK-QD3-RMG	840014-52KIT	L84M-6AP-EDN		
Auto Dr	ain									
82	F4*	1/4	BL82-251A	T82T-2AA-B1N	820014-52KIT	B82G-3AK-AD3-RMG	820014-52KIT	L82M-2AP-EDN		
82	51*	3/8	BL82-351A	T82T-3AA-B1N	820014-52KIT	B82G-4AK-AD3-RMG	820014-52KIT	L82M-3AP-EDN		
		3/8	BL84-351A	T84T-3AA-B1N	840014-52KIT	B84G-3AK-AD3-RMG	840014-52KIT	L84M-3AP-EDN		
84	155^	1/2	BL84-451A	T84T-4AA-B1N	840014-52KIT	B84G-4AK-AD3-RMG	840014-52KIT	L84M-4AP-EDN		
		3/4	BL84-671A	T84T-6AA-B1N	840014-52KIT	B84G-6AK-AD3-RMG	840014-52KIT	L84M-6AP-EDN		

\* Based on lubricator flow

^ Based on 1/2" port size lubricator

\*1 All models shown are for flow direction left to right. With flow direction right to left use the imi-precision.com online configurator or contact IMI Norgren

## About John Henry Foster

John Henry Foster Company is a full-line fluid power distributor with territories covering parts of Missouri and Illinois and is the Midwest leader in fluid power sales. We have been serving our customers in Missouri and Illinois for over 75 years! Please visit www.jhf.com to learn more about us.



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