

Dump Bailer Cement Systems



Cefas Approved NeoSuperSlurry Cement Kits & Related Products

100% of the cement used in NeoProducts Cement Kits is Class H (HSR) and is certified to meet all requirements of API Specification 10A. NeoProducts Cement Kits meet all BSEE cement requirements for dumping bailing and building cement plugs in casing.

Shipments of Cefas Approved NeoProducts Cement Kits are composed of gray pails containing a dry cement blend and blue pails containing the potable water. The part number for the individual NeoSuperSlurry Water Pail is 0105-000-000.

P/N E0101-350-017-Cefas • NeoSuperSlurry – NeoFlex System • (70° - 350° F Service Temp Range)

The dry blend pail in this kit is easily identified by its Yellow Lid.

This NeoFlex SuperSlurry System is available in single pail and two pail forms. The single-pail kit contains a blend of High Sulfate Resistant (HSR) API cement and proprietary admixes. The two-pail kit includes the dry blend pail plus a pail containing a premeasured amount of mix water. Both kit forms yield a 5 gallon batch of 17 ppg Expanding Flexible cement. The slurry contains proprietary expansion and suspension agents, shear bond enhancing admixes, plus numerous constituents needed to assure high ΔP flexible cement plugs. NeoFlex plugs have unique physical properties that enhance cement elasticity and cement bonding to casing and formations, therein substantially reducing the occurrence of micro-cracking, gas migration, and the occurrence of sustained casing pressure. View [NeoFlex Product Bulletin](#) for more information.

P/N E0101-450-017-Cefas • Cefas Approved HPHT NeoSuperSlurry System • (300° - 450° F Service Temp Range)

The dry blend pail in this kit is easily identified by its Red Lid.

This HPHT System is available in single pail and two pail forms. The single-pail kit contains a blend of High Sulfate Resistant (HSR) API cement and proprietary admixes. The two-pail kit includes the dry blend pail plus a pail containing a premeasured amount of mix water. Both kit forms yield a 5 gallon batch of 17 ppg Expanding High Shear Bond slurry. The slurry contains a proprietary HPHT suspension agent, an expansion admix, shear bond enhancing admixes, plus numerous constituents needed to assure high ΔP plugs. NeoSuperSlurry plugs provide hydraulic seals that are anchored in place for the life of the well. Each kit contains a report listing the cmt grind number, production date, the API compressive strength for the neat cement, and the 24 hr compressive strength and shear bond strength for the NeoSuperSlurry blend in the kit.

P/N E0101-300-020-Cefas • Cefas Approved 20 ppg NeoSuperSlurry System • (70° - 325° F Service Temp Range)

The dry blend pail in this kit is easily identified by its Black Lid.

This 20 ppg slurry system is available in single pail and two pail forms. The single-pail kit contains a blend of High Sulfate Resistant (HSR) API cement and proprietary admixes. The two-pail kit includes the dry blend pail plus a pail containing a premeasured amount of mix water. Both kit forms yield a 5 gallon batch of 20 ppg Expanding High Shear Bond slurry. This 20 ppg slurry is ideal for dumping in 16 – 18 ppg wellbore fluids. This slurry yields hydraulic seals that anchor in place for the life of the well.

See next page for info on:

NeoSuperSlurry Modifier Packs



NeoSuperSlurry Modifier Packs

Weight-up to 18 ppg

- P/N • E0105-350-018-Cefas – 18ppg Weight-up Pack (70°-350° F Service Temp Range) for use with 17 ppg NeoSuperSlurry Kit P/N E0101-350- 017-Cefas.

Use of one pack per cmt kit will allow the user to increase the density of the slurry from 17 ppg to 18 ppg.

Shorten Setting Times

- P/N • E0101-225-017-Cefas – Accelerator Pack (70° - 225° F Service Temp Range) for use with 17 ppg NeoSuperSlurry Kit P/N E0101-350- 017-Cefas.

One Pack is added to one kit. Addition of one pack to a cmt kit will shorten the setting time of the cement slurry, i.e., set time = 6 - 8 hrs and cause the plug to achieve its normal 24-hr strength in 17 – 19 hrs.

Increase Bond Str to Csg @ Low Temps

- P/N • E0102-225-017-Cefas – Low Temp Expansion Pack (70° - 225° F Service Temp Range) for use with 17 ppg NeoSuperSlurry Kit P/N E0101-350-017-Cefas.

The degree of solid state expansion and bond strength to the casing at temperatures below 225° F can be significantly improved by using this accessory pack. Use one pack per cement kit.

Add 1 - 2 hrs To Run Times

- P/N • E0103-225-017-Cefas – Low Temp Extended Run Time Pack (70° - 225° F Service Temp Range) for use with NeoSuperSlurry Kit P/N E0101-350-017-Cefas.

Use of one pack per cmt kit will extend the allowable time from mixing to dumping by an additional 1 - 2 hrs.

- P/N • E0103-350-017-Cefas – Intermediate Extended Run Time Pack (225° - 350° F Service Temp Range) for use with NeoSuperSlurry Kit P/N E0101-350-017-Cefas.

Use of one pack per cmt kit will extend the allowable time from mixing to dumping by an additional 1 - 2 hrs.

- P/N • E0103-400-017-Cefas – HPHT Extended Run Time Pack (300° - 400° F Service Temp Range) for use with HPHT NeoSuperSlurry Kit P/N E0101-450-017-Cefas.

Use of one pack per cmt kit will extend the allowable time from mixing to dumping by an additional 1 - 2 hrs.

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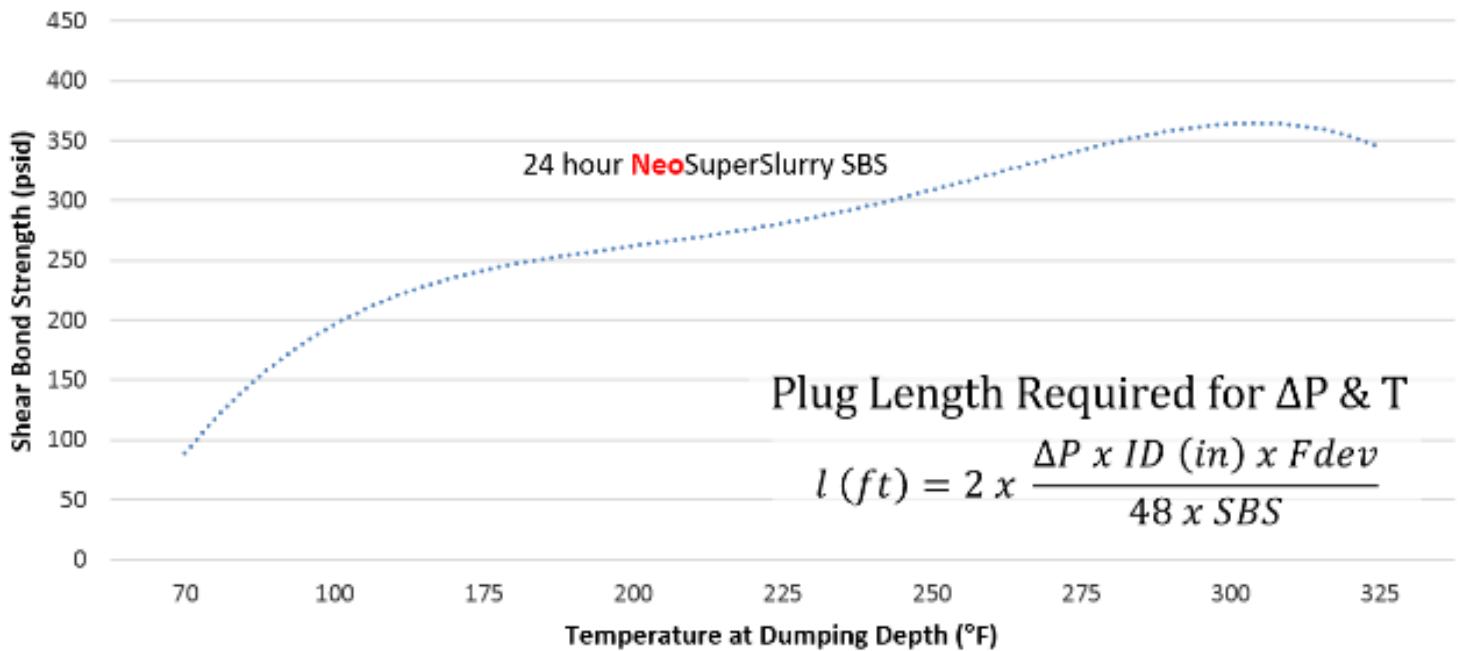
Whenever dumping cement slurry, always locate the bottom of the bailer system 1-2 ft above the bridge plug or 1-2 ft above the top of previously dumped cement.

A minimum plug length of 10 ft is ALWAYS recommended for all plug-back operations.

A 24-hr Wait on Cement Time after the last bailer run is ALWAYS recommended before pressure testing.

Recommended plug lengths based on ΔP, csg ID and Shear Bond Strength can be determined from the information below.

24 Hour Shear Bond Strength at Dumping Depth vs Temperature



Plug Length Required for ΔP & T

$$l (ft) = 2 \times \frac{\Delta P \times ID (in) \times Fdev}{48 \times SBS}$$

I = minimum plug length (ft)		SBS = plug-to-csg shear bond @ 24 hr	
ΔP = differential pressure (psid)		Fdev = deviation factor	
ID = casing ID (inches)			
@ 0° DEV, Fdev = 1	@ 30° DEV, Fdev = 1.2	@ 60° DEV, Fdev = 1.6	@ 70° DEV, Fdev = 2.0