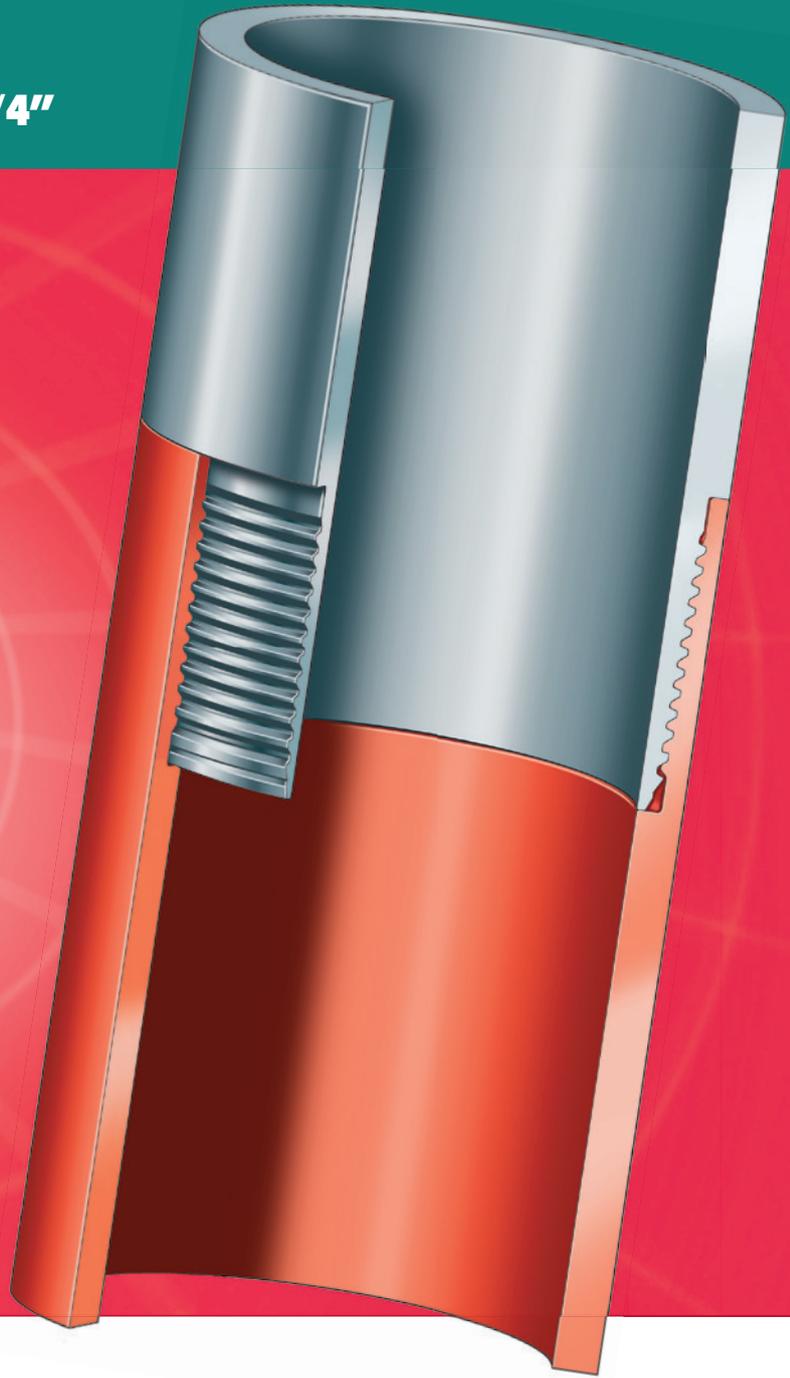


FLUSHMAX

SERIES

FLUSHMAX	2-3/8" to 4"
FLUSHMAX - II	4-1/2" to 7"
FLUSHMAX - III	7-5/8" to 11-3/4"



Low Cost & High Performance Flush Connection

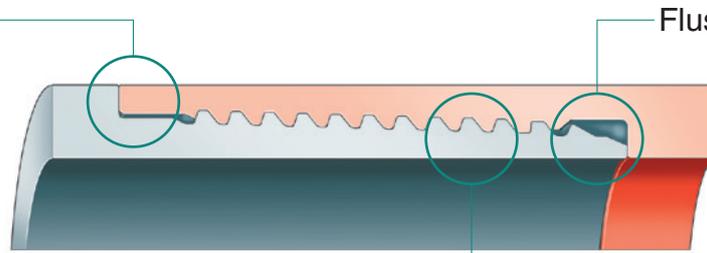
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Metal One

FLUSHMAX Feature of Design

- 1 Externally & internally 100% flush connection
- 2 Thread seal connection
- 3 High over-torque resistance due to double shoulders
- 4 High galling resistance for multiple make and break

Flush OD & External Shoulder

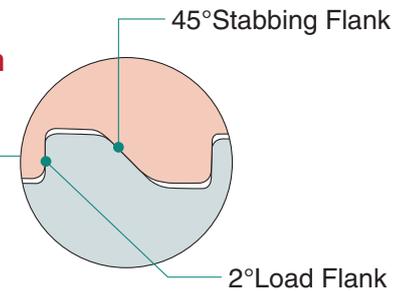


Flush ID & Internal Shoulder

Thread Profile

	TPI	Height	Taper
FLUSHMAX	8	0.040	1/24
FLUSHMAX-II	8	0.047	1/16
FLUSHMAX-III	5	0.061	1/16

Thread Form



FLUSHMAX Performance Summary

1 Tensile Strength (Pipe Body Yield Load)

FLUSHMAX : 45-50%
FLUSHMAX-II, FLUSHMAX-III : 60%

4 Collapse Value

Equal to API Collapse pressure

2 Compression Strength

60% of pipe body yield

5 Torque Resistance

Very High Torque Resistance

3 Internal Pressure

80% of pipe body internal yield pressure

6 Bending Resistance

20 deg./ 100ft for 5-1/2"

Recommended Torque & Yield Torque

unit : ft-lbs

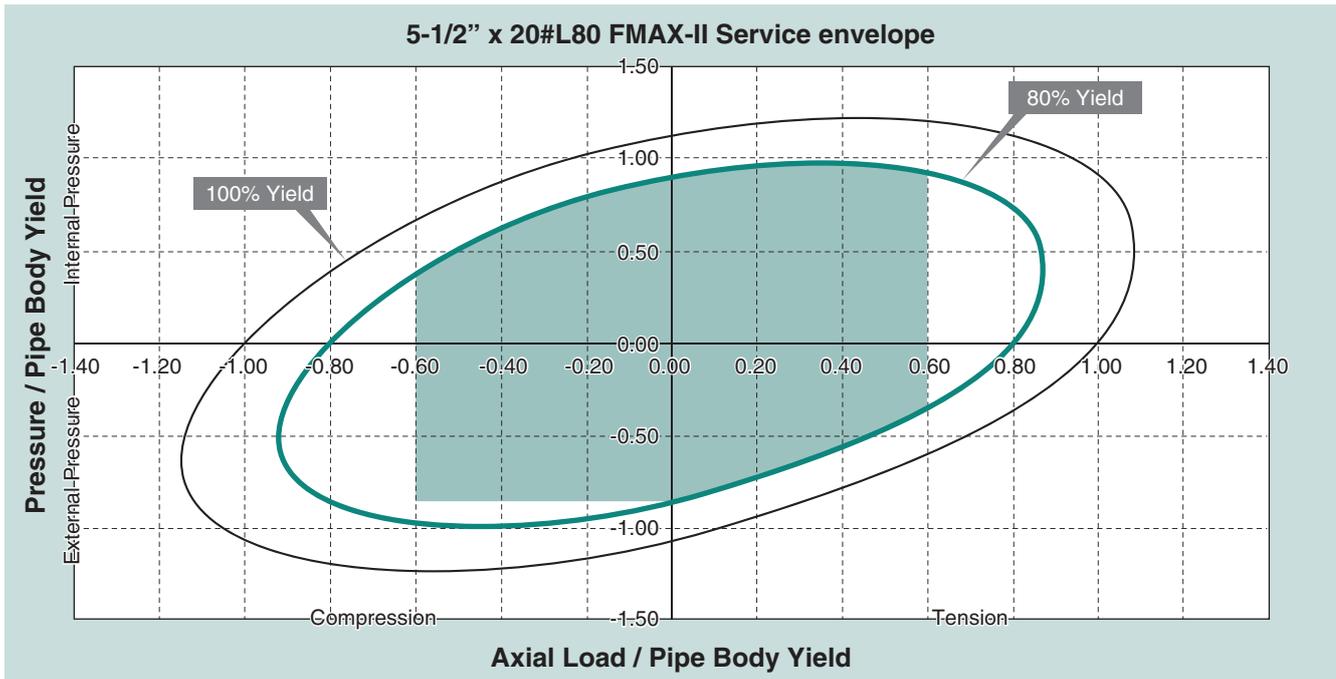
		5" x18# P110	5-1/2" x17# N80	7" x26# L80
Recommended Torque	Min.	3,900	3,800	5,400
	Max.	4,900	4,800	6,600
Actual yield torque		18,000	18,200	>25,000

FLUSHMAX Technical Data

Service Envelope

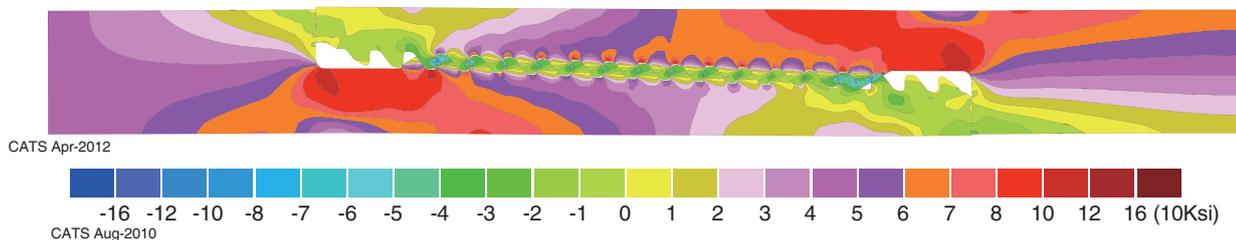
Shoulders work as metal seal :

FLUSHMAX series have "SUPERMAX" thread which provides high leak resistance. Also, as FLUSHMAX series can be used up to the limited tensile load (60% of pipe body tension) especially used for liner, shoulders do not open and work as metal to metal seal.



Finite Element Analysis

Axial stress on 5-1/2" x 20# L80 FMAX-II under 60% body yield load



Tension to Failure Test Results

5-1/2" x 20# L80

Yielding load = 284.3 kips (61% of SMYS)

Failure stress = 330.9 kips (71% of SMYS)

* SMYS : Min. Specified Yield Strength of pipe body

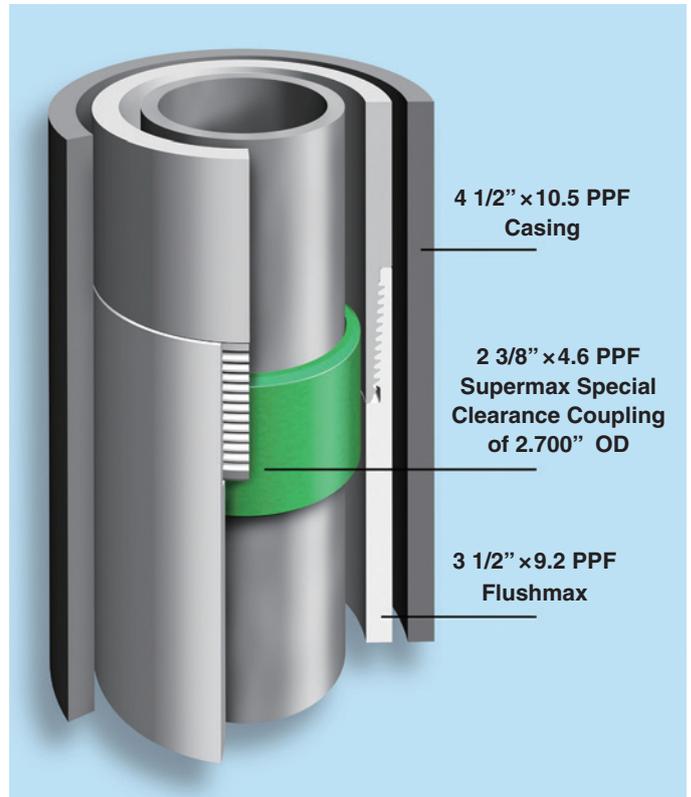


FLUSHMAX Examples of Application

CASING APPLICATIONS

- Liner
- Screen pipe
- Side tracking
- Casing Repair

Example of Casing Repair Application In West Texas, USA



TUBING APPLICATIONS

- Tail pipe
- Wash pipe

INTEGMAX : 2-3/8" - 4-1/2"

- 1 Slim OD and high bending resistance (up to **50 degrees / 100 ft**)
- 2 High joint strength = 80% of pipe body on tension
- 3 Threaded on standard API EUE upset.
- 4 Market : Side tracking, work tubing
- 5 Suitable for Internal plastic coating or GRE liner

