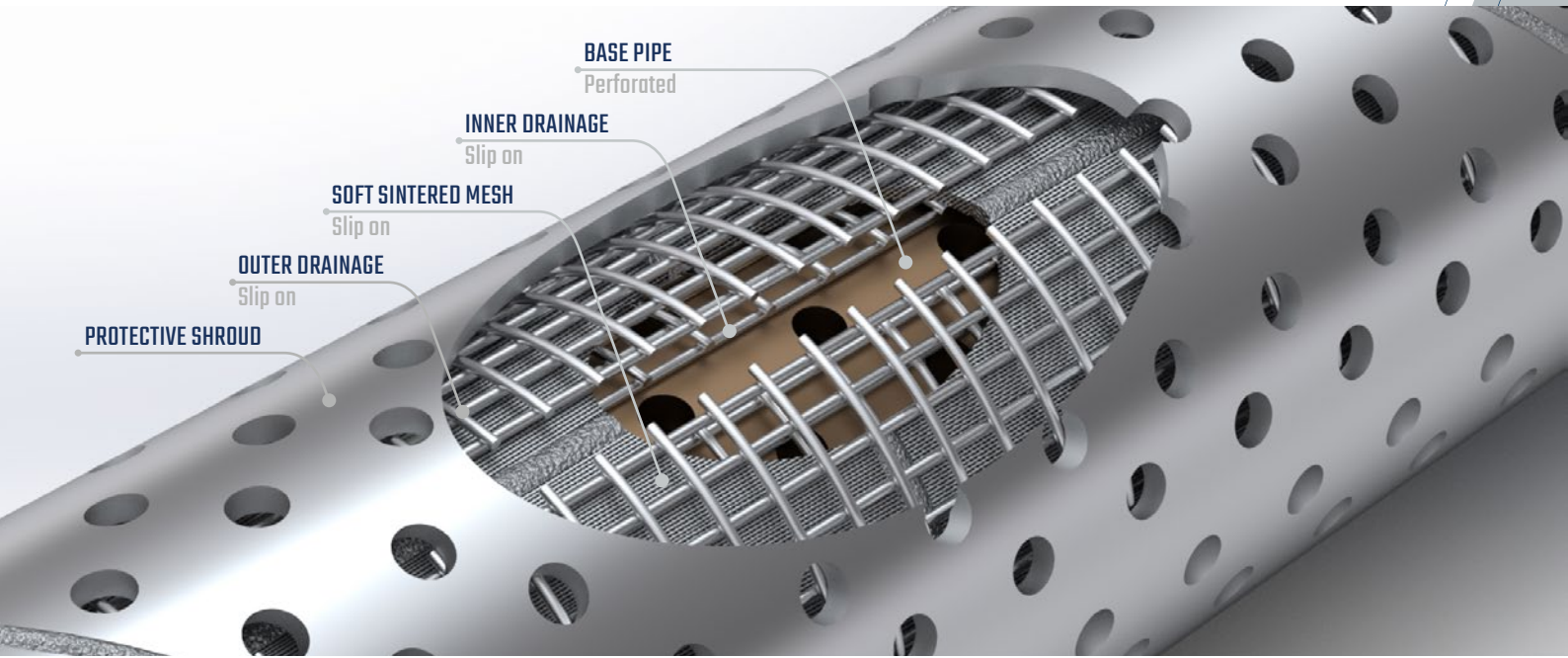


ENDURE

PREMIUM SCREEN

PRODUCT TECHNICAL DATA



Endure screen, made of *multi-layer sintered woven mesh*, is one of the long serving sand control Premium mesh product with long track record: launched in 2003 it has been globally successful used mostly for open hole completions with or without a gravel pack. Known for its higher mechanical properties, reliability and efficiency, Endure lasts longer in extreme conditions.

Multiple layers of *sintered woven-wire mesh* form the screen filter: three or four layer mesh is chosen based on requirements or to enhance the strength of the mesh, as also a *dutch weave* or a *square weave* filter layer is chosen to accommodate the desired pore size. The higher thickness of the *filter media* helps ensure weld integrity at terminations of the sintered laminate tubes. Sintering the mesh layers increases mechanical stability, which ensures that the filter's pore openings do not change during installation or production and injection.

The *inner drainage layer*, acting as standoff, shall ensure uniform flow of oil across the perforated *base pipe*, while a perforated *outer shroud* with higher open area ensures protection and high-flow across the outer surface.

MAIN APPLICATIONS

- ❑ Deepwater, High CAPEX wells
- ❑ Wellbores with high pressure requirements
- ❑ Openhole stand alone screen completions
- ❑ Openhole & cased hole gravel pack completions

STRENGTHS

- ❑ Long lifespan
- ❑ Durable excellent sand retention
- ❑ Easy handling and fast installation

CHARACTERISTICS

- ❑ Multi-layer sintered mesh laminate filtration media
- ❑ Screens nominal pore size comes in Fine, Medium, Coarse but other customizable sizes are available
- ❑ Meshes normally woven with 316L or Alloy 20
- ❑ Optimized base pipe perforations
- ❑ Robust design and construction appropriate for severe conditions
- ❑ Sand retention and reverse permeability tested
- ❑ Higher flow across basepipe surface due to its high stand-off with the filter media



MANUFACTURING & QUALITY

Being the sintered mesh the main element in Endure, it is checked both with our experienced mesh specialised technicians as well as third party test house.

Due to its importance in the filtration system, a special patented end ring is used to isolate the sintered mesh from heat during heat treatment of the base pipe welds.

This isolation prevents any heat-induced physical damage as well as the weakening of mechanical properties.

API , ISO standards are the integral part of the quality standards which Endure screens inherits.

Comprehensive mechanical tests (e.g. Burst Collapse, Tensile, Bend, Crush, Shroud Pulloff) and sand retention and reverse permeability tests have been performed on Endure.

PRODUCT TECHNICAL DATA



DATA

BASE PIPE SIZE	BASE PIPE WEIGHT	PRODUCT OD	HOLE SIZE	NUMBER OF HOLES
(Inch)	(Lbs/Ft)	(Inch)	(Inch)	(per Ft)
2 3/8	4,6	3,16	3/8	72
2 7/8	6,4	3,66	3/8	84
3 1/2	9,2	4,29	3/8	108
4	11	4,79	1/2	72
4 1/2	11,6	5,29	1/2	72
5	15	5,79	1/2	84
5 1/2	17	6,29	1/2	96
6 5/8	24	7,41	1/2	108
7	26	7,79	1/2	120

*For more details on collapse, burst, tensile and other ratings please contact sales@completionproducts.com.

JEWELRY

Endure sand control screen product is customizable and shall be integrated with other flow control equipment's.

ICD/AICD

In flow control devices (ICD) or autonomos inflow control device (AICD), which improves oil recovery, can be integrated with Endure to improve process efficiency of the well production.

SSD FLOW CONTROL DEVICES

Endure can incorporate a sliding sleeve door (SSD) to provide a system that allows selective shut-off in different sections of the pay zone. A shifting tool is used to close the sliding sleeve, successfully isolating the reservoir from the tubing ID.