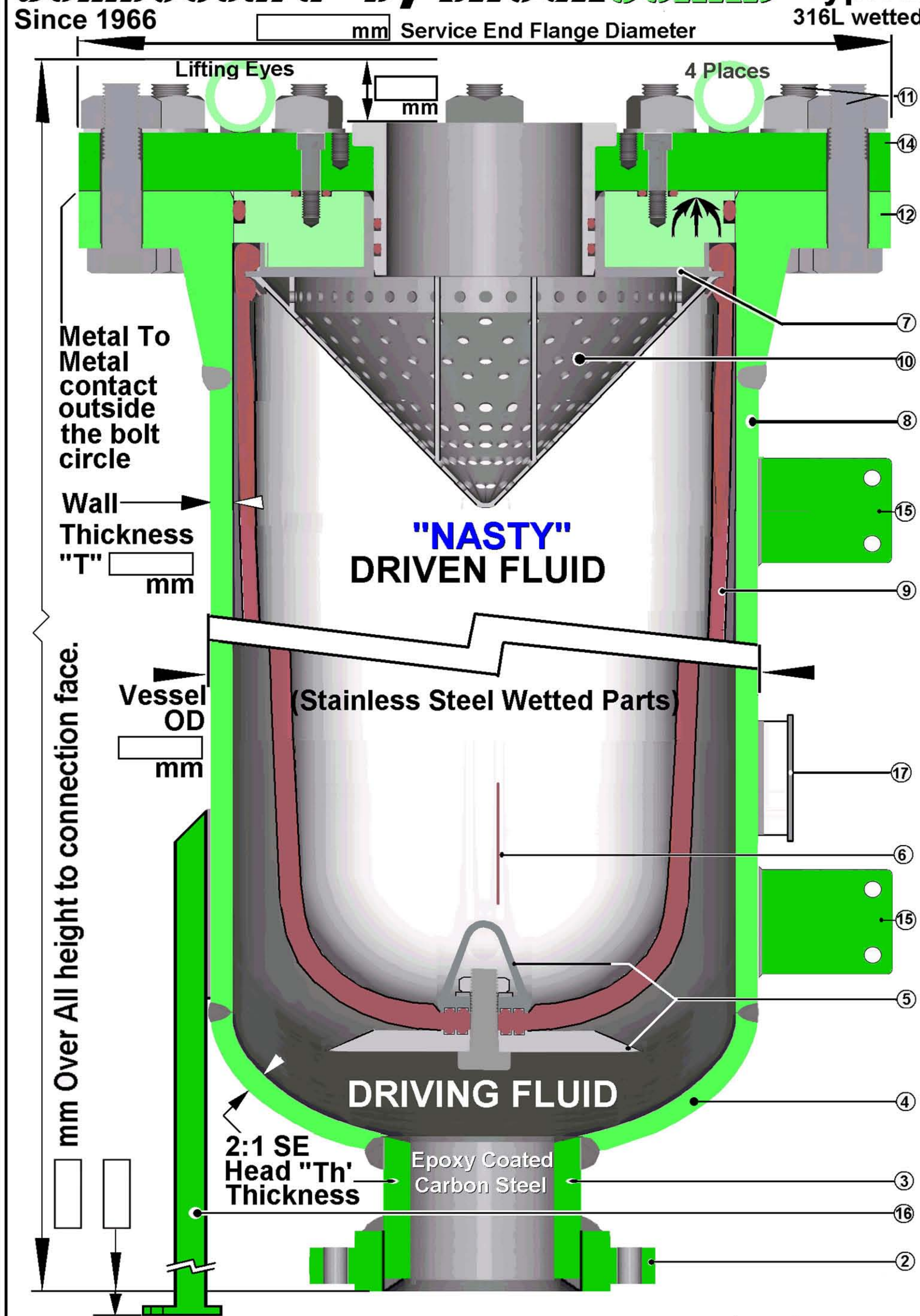


"JumboGuard" by SHOCKGUARD Typical "Jug" Series "Transfer Barrier" between 2 fluids. Typical-Jug.bmp



316L wetted, carbon steel housing + EP, NBR, Hypalon, Fluorel Transfer Barrier Bag.
Enables a "nasty fluid" to be pumped by an easily pumpable fluid,

We are able to warrant safety when following our own 30 year proven methods :-
 We can not accept end user statement that design pressure is working pressure

Where Allowable Working Stress = S
 Design Pressure P = MAWP + 10% + 15%
 Joint Efficiency = E

RV is for relief safety valve set pressure
 RVacc for relief valve accumulation pressure

E is 1.0 No Welds, or radiographed.
 E is 0.7 Welded but not radiographed.

$$T = \frac{\text{Design Pressure} \times \text{Radius Internal}}{S(\text{From Pt. II D 1992}) \times E - (0.6P)}$$

As the ASME have increased allowable working stress, enabling cheaper less safe vessels, so "U" certification business can be expanded competitively, and hence ASME income; and concurrently the European PED has no Safety Coefficients in its ESRs approved for cyclic duty snubber dampers, whilst allowing ductility as low as 14%, no one is able to give a guarantee of suitability for purpose on "Coded" transfer barriers.

17	Stainless Steel Data Plate	IDENTIFICATION / TRACEABILITY
16	3 or 4 Legs & foot bolt holes, Opional	
15	Mounting Lugs Opional	
14	Closure / manway , Transfer Barrier bag loading	
12	Vessel open end flange	
11	Closure bolting	
10	Anti-Extrusion Cone for barrier bag.	
9	Transfer Barrier bag	
8	Vessel shell cylinder	
7	Stainless Plate Cladding, end plug.	
6	Anti extrusion plate weight suspension	
5	Anti-Extrusion Plate with tension strap connection hoop (Large units only)	
4	2:1 S.E. Head	
3	Driving Fluid Connection nozzle Max D 0.3 x Vessel Diameter (Sch XXH smls)	
2	Driving Fluid Connection	
1	Driven Fluid Connection	

Item Nbr	Description / function	Internal "Heat/Cast No" PURCHASE No
BILL OF MATERIALS		

Scale : Please do not print without "MAINTAIN ASPECT RATIO" on, Use A3 paper on A3 paper. Landscape 420mm wide

Part Nbr. / Drawing Ref : _____ Date _____ th 200- Rev Nbr 1

Jug /cs-ss/ _____ Lt./ _____ bar/ _____ v / SA 106 / _____ (eg. EX: DN300 PN 16 or 12" 150#)

SHOCKGUARD <http://www.shockguard.co.uk>
<http://www.shock-guard.com>

SHOCKGUARD Waermeausdehnung-Kompensator www.waermeausdehnung.com
SHOCKGUARD Druckschlagverhinderer www.schockabsorber.com
SHOCKGUARD Rohrleitungsschockabsorber

SHOCKGUARD suppressors & arrestors www.ShockGuard.us
SHOCKGUARD line shock alleviators Shock-alleviators.co.uk
SHOCKGUARD for pump start-up surge, Surge-alleviators.com
SHOCKGUARD noise caused by rapid valve closure www.water-hammer.com

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