



International Drilling Fluids & Engineering Services (IDEC) Ltd.

# Screen Product Data Sheet

## Shale Shaker Screens

IDEC understands that shakers are the first line of defense against solids and the performance of a shaker can greatly affect the operational cost per foot while drilling a well.

IDEC is committed to developing and supplying shaker screens that not only comply with the industry's highest quality and manufacturing standards; but also, offers the same, and in many cases, better performance than the original OEM screen.

Screen performance plays a vital role in how well the shale shakers perform overall. Therefore, IDEC provides a high-quality screen at a reasonable cost. Trials were conducted during Real-time operations, and thus IDEC have concluded that overall IDEC screens gained the best operational cost per foot compared to other well know screen manufactures in the market. Thanks to our superior longevity and high performance.

IDEC can produce a stiff screen that provides good throughput and conveyance with intellectual property at a reliable cost while still complying with API RP13C. IDEC supplies replacement Shaker Screens to fit all majority of the industry's leading shale shaker manufacturers. The screen size range – From API 20 – API 325, covering all major applications.

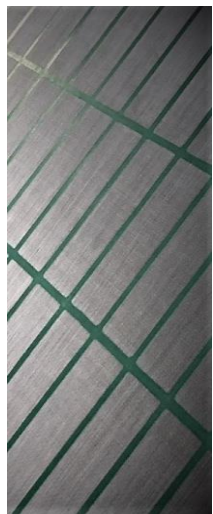
IDEC uses high quality pyramid screens for the tension screens and composite, frame for the pretension product lines. Giving customers better service life quality and higher separation. Experience low-cost savings and high performance by using IDEC screens designed to maximize on solids removal; therefore, reducing cost associated.

## Composite Flat Screen Range

Extra-fine square mesh provides the best balance between defined cut point, conductivity, conveyance, and anti-blinding ability. IDEC screens are repairable up to a recommended 15% surface area; extending service life and maintaining screen integrity. High material quality, manufacturing technology and attention to product excellence ensures IDEC screens are equipped to offer longevity and performance under the most demanding drilling environments.

## Metal Pyramid Screen Range

The Pyramid screen consists of a standard sandwich construction having two fine mesh cloths layered with a coarse backing cloth. These three layers are bonded together, corrugated, and then bonded to a perforated plate. The resulting corrugations are 0.8 inches high on the PMD screen increasing total screening area and maximizing fluid dispersion. Pyramid screens can make separations as fine as 43 microns. The Pyramid screen uses gravity to immediately force the oncoming solids off the peaked areas and down into the trough sections of the panel, not to the outside edges of the discard screen. This preferential solid distribution keeps the peaked areas clear of solids and allows for continuously higher fluid throughput than is possible with any standard flat panel screen.



## IDEC Design Features

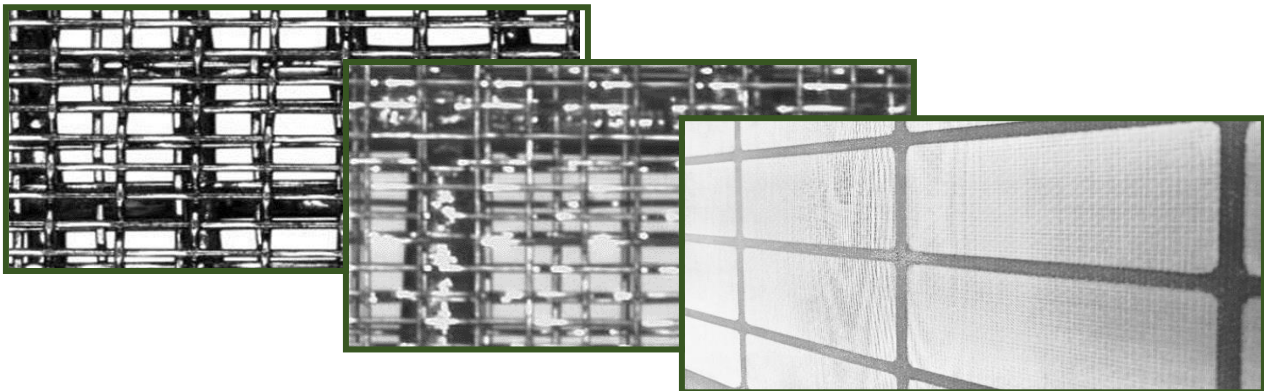
Polypropylene lightweight frame supported by internal steel cage provides best in class platform for even "G" force transfer to the screen surface.

### The frame design permits

- High percentage of non-blanked area for fluid – solid separation.
- Lighter weight than steel framed screens.
- Handle Temperatures up to 165°C (329°F).
- Consistent manufacturing process whereby each mesh layer is tensioned individually.
- Bonding of mesh to frame allows stability of cloth openings to offer consistent particle separation. Multi-layer construction offers better de-blinding characteristics for consistent flow rates.
- Improved reliability due to the lack of a metal perforated plate that always has an opportunity to come off the frame.
- Corrosion resistance.
- High levels of heat resistance, resulting in better performance in OBM and SBM systems.

### Screening Features – Combination of Rectangular and Square Mesh Screens

- Computer software designed multi-layer mesh combinations and field testing provides optimized separation potential, conductance, resistance to blinding and screen longevity.
- Incorporates all the latest design, engineering, manufacturing and performance features developed through ongoing R&D and customer feedback.
- Square Mesh to API 50; Rectangular Mesh from API 60 to API 325.
- Proven Combination of Screen Life and Reliability.



### The IDEC Benefits

- Screen types to fit ALL Shaker models
- Frame design provides maximum stability for the screen surface
- Screen frame is manufactured using high yield strength structural steel & high-quality Polypropylene
- API RP 13C (ISO 13501) compliant
- Resistant to near size particle blinding
- Light Weight, Easy to handle, No sharp edges
- Technical Support for all Shaker and Screen needs
- Rigid support reduces flexing, increases screen life and maximizes the G-force at the screen surface
- Guaranteed D100 cut point
- Increased volume handling capacity

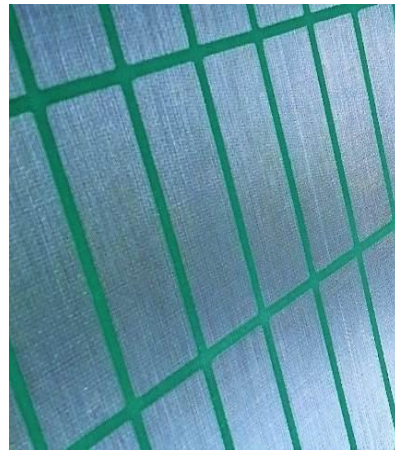
## API Certification

IDEC shaker screens are API certified and verified during trials. The trials were conducted by utilizing SS304 and SS316 multi-layered screen cloth and carbon steel frame that are compliant with API RP13C. A screen must be labelled following the guidelines specified in the API RP13C document. The guidelines in the document require that wherever the part number is on the box or screen, it must be in an acceptable format and must contain the following information as a minimum.

API Standard	
API	D100 Cut Point
35	462.5 to 550.0
40	390.0 to 462.5
50	275.0 to 327.5
60	231.0 to 275.0
70	196.0 to 231.0
80	165.0 to 196.0
100	137.5 to 165.0
120	116.5 to 137.5
140	98.0 to 116.5
170	82.5 to 98.0
200	69.0 to 82.5
230	58.0 to 69.0
270	49.0 to 58.0
325	41.5 to 49.0

### D100 and Conductance

The D100 value is the finest particle diameter at which the screen no longer sends 100% of the particles to the discard stream. API RP13C is a very specific value determined from carefully controlled laboratory procedures so that any laboratory should measure the same value from any given screen cloth.



### Non-blanked area

The total non-blanked area is the unblocked area that will permit fluid to pass through the screen. IDEC's Manufacturing facilities perform these calculations in-house. These calculations are done typically with a digital caliper and a calculator.

### API Number

The API range requires no measurements or calculations and is determined by directly comparing the D100 with the API Standard Table provided in the API RP 13C.

### Statement of compliance

A label following the API RP13C should contain a statement that it conforms to API RP13C.

At IDEC manufacturing facilities, we believe that the D100 number determined by testing in accordance with API RP13C is a useful tool and are currently following the recommended practice in both the literal text and its intent.

IDEC Screen API Test Results			
Mesh	API	IDEC Cut Point	Conductance Kd/mm
GLA35H	35	538.61	9.69
GLA35H	40	438.52	8.64
GLA50H	50	284.57	5.17
GLA60H	60	268.12	4.10
GLA70H	70	202.63	3.33
GLA80H	80	193.15	2.76
GLA100H	100	164.81	2.66
GLA120H	120	134.35	1.89
GLA140H	140	101.20	1.34
GLA170H	170	82.80	1.18
GLA200H	200	73.49	1.32
GLA230H	230	68.89	0.71
GLA270H	270	57.70	0.67
GLA325H	325	44.25	0.39

## Screen Designation

IDEC has a complete selection of hook style screens, pretension panels and specialty screens for most shaker models. With the ability to custom design screen panels for just about any application.

### MISwaco Mongoose/Meerkat Replacement

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
MISwaco	Mongoose/Meerkat	585 x 1165mm	12 kg	Pretension
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECMON-020CF		20	809.12	10.88
IDECMON-035CF		35	538.61	9.69
IDECMON-040CF		40	438.52	8.64
IDECMON-050CF		50	284.57	5.17
IDECMON-060CF		60	268.12	4.10
IDECMON-070CF		70	202.63	3.33
IDECMON-080CF		80	193.15	2.76
IDECMON-100CF		100	164.81	2.66
IDECMON-120CF		120	134.35	1.89
IDECMON-140CF		140	101.20	1.34
IDECMON-170CF		170	82.80	1.18
IDECMON-200CF		200	73.49	1.32
IDECMON-230CF		230	68.89	0.71
IDECMON-270CF		270	57.70	0.67
IDECMON-325CF		325	44.25	0.39

**MISwaco MD Series Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
MISwaco	MD Series	610 x 660mm	7 kg	Pretension
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECMD-010CF		10	1957	40.92
IDECMD-020CF		20	809.12	10.88
IDECMD-035CF		35	538.61	9.69
IDECMD-040CF		40	438.52	8.64
IDECMD-050CF		50	284.57	5.17
IDECMD-060CF		60	268.12	4.10
IDECMD-070CF		70	202.63	3.33
IDECMD-080CF		80	193.15	2.76
IDECMD-100CF		100	164.81	2.66
IDECMD-120CF		120	134.35	1.89
IDECMD-140CF		140	101.20	1.34
IDECMD-170CF		170	82.80	1.18
IDECMD-200CF		200	73.49	1.32
IDECMD-230CF		230	68.89	0.71
IDECMD-270CF		270	57.70	0.67
IDECMD-325CF		325	44.25	0.39

**MISwaco ALS Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
MISwaco	ALS	1212 x 1141mm	7 kg	Hook Strip
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Metal	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECALS-020MF		20	809.12	10.88
IDECALS-035MF		35	538.61	9.69
IDECALS-040MF		40	438.52	8.64
IDECALS-050MF		50	284.57	5.17
IDECALS-060MF		60	268.12	4.10
IDECALS-070MF		70	202.63	3.33
IDECALS-080MF		80	193.15	2.76
IDECALS-100MF		100	164.81	2.66
IDECALS-120MF		120	134.35	1.89
IDECALS-140MF		140	101.20	1.34
IDECALS-170MF		170	82.80	1.18
IDECALS-200MF		200	73.49	1.32
IDECALS-230MF		230	68.89	0.71
IDECALS-270MF		270	57.70	0.67
IDECALS-325MF		325	44.25	0.39

**Derrick FLC 2000 Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Derrick	FLC2000	1053 x697mm	5.5 kg	Hook Strip
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Metal	SS304 / SS316 stainless steel		Triple Layer	Pyramid
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECFLC2-020MP		20	809.12	10.88
IDECFLC2-035MP		35	538.61	9.69
IDECFLC2-040MP		40	438.52	8.64
IDECFLC2-050MP		50	284.57	5.17
IDECFLC2-060MP		60	268.12	4.10
IDECFLC2-070MP		70	202.63	3.33
IDECFLC2-080MP		80	193.15	2.76
IDECFLC2-100MP		100	164.81	2.66
IDECFLC2-120MP		120	134.35	1.89
IDECFLC2-140MP		140	101.20	1.34
IDECFLC2-170MP		170	82.80	1.18
IDECFLC2-200MP		200	73.49	1.32
IDECFLC2-230MP		230	68.89	0.71
IDECFLC2-270MP		270	57.70	0.67
IDECFLC2-325MP		325	44.25	0.39

**Derrick FLC 2000 Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Derrick	FLC2000	1053 x697mm	5.5 kg	Hook Strip
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECFLC2-020CF		20	809.12	10.88
IDECFLC2-035CF		35	538.61	9.69
IDECFLC2-040CF		40	438.52	8.64
IDECFLC2-050CF		50	284.57	5.17
IDECFLC2-060CF		60	268.12	4.10
IDECFLC2-070CF		70	202.63	3.33
IDECFLC2-080CF		80	193.15	2.76
IDECFLC2-100CF		100	164.81	2.66
IDECFLC2-120CF		120	134.35	1.89
IDECFLC2-140CF		140	101.20	1.34
IDECFLC2-170CF		170	82.80	1.18
IDECFLC2-200CF		200	73.49	1.32
IDECFLC2-230CF		230	68.89	0.71
IDECFLC2-270CF		270	57.70	0.67
IDECFLC2-325CF		325	44.25	0.39

**Derrick FLC500 Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Derrick	FLC500	1050x695mm	7.5 kg	Hook Strip
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Metal	SS304 / SS316 stainless steel		Triple Layer	Pyramid
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECFLC5-020MP		20	809.12	10.88
IDECFLC5-035MP		35	500	9.97
IDECFLC5-040MP		40	445	8.5
IDECFLC5-050MP		50	300	5.6
IDECFLC5-060MP		60	250	4.11
IDECFLC5-070MP		70	214	3.06
IDECFLC5-080MP		80	187.5	2.54
IDECFLC5-100MP		100	150	2.17
IDECFLC5-120MP		120	125	1.64
IDECFLC5-140MP		140	108	1.49
IDECFLC5-170MP		170	94	1.18
IDECFLC5-200MP		200	82	1.13
IDECFLC5-230MP		230	68	0.55
IDECFLC5-270MP		270	58	0.44
IDECFLC5-325MP		325	44.25	0.39

**Derrick FLC500 Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Derrick	FLC500	1050x695mm	7.5 kg	Hook Strip
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECFLC5-020CF		20	809.12	10.88
IDECFLC5-035CF		35	500	9.97
IDECFLC5-040CF		40	445	8.5
IDECFLC5-050CF		50	300	5.6
IDECFLC5-060CF		60	250	4.11
IDECFLC5-070CF		70	214	3.06
IDECFLC5-080CF		80	187.5	2.54
IDECFLC5-100CF		100	150	2.17
IDECFLC5-120CF		120	125	1.64
IDECFLC5-140CF		140	108	1.49
IDECFLC5-170CF		170	94	1.18
IDECFLC5-200CF		200	82	1.13
IDECFLC5-230CF		230	68	0.55
IDECFLC5-270CF		270	58	0.44
IDECFLC5-325CF		325	44.25	0.39



**Derrick D600 Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Derrick	D600	570x1070mm	11 kg	Hook Strip
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Metal	SS304 / SS316 stainless steel		Triple Layer	Pyramid
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECD600-020MP		20	809.12	10.88
IDECD600-035MP		35	538.61	9.69
IDECD600-040MP		40	438.52	8.64
IDECD600-050MP		45	284.57	5.17
IDECD600-060MP		50	268.12	4.10
IDECD600-070MP		60	202.63	3.33
IDECD600-080MP		70	193.15	2.76
IDECD600-100MP		80	164.81	2.66
IDECD600-120MP		100	134.35	1.89
IDECD600-140MP		120	101.20	1.34
IDECD600-170MP		140	82.80	1.18
IDECD600-200MP		170	73.49	1.32
IDECD600-230MP		200	68.89	0.71
IDECD600-270MP		230	57.70	0.67
IDECD600-325MP		325	44.25	0.39

**Derrick Hyperpool Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Derrick	Hyperpool	570x1070mm	11 kg	Hook Strip
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Metal	SS304 / SS316 stainless steel		Triple Layer	Pyramid
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECHYP-020MP		20	809.12	10.88
IDECHYP-035MP		35	538.61	9.69
IDECHYP-040MP		40	438.52	8.64
IDECHYP-050MP		45	284.57	5.17
IDECHYP-060MP		50	268.12	4.10
IDECHYP-070MP		60	202.63	3.33
IDECHYP-080MP		70	193.15	2.76
IDECHYP-100MP		80	164.81	2.66
IDECHYP-120MP		100	134.35	1.89
IDECHYP-140MP		120	101.20	1.34
IDECHYP-170MP		140	82.80	1.18
IDECHYP-200MP		170	73.49	1.32
IDECHYP-230MP		200	68.89	0.71
IDECHYP-270MP		230	57.70	0.67
IDECHYP-325MP		270	44.25	0.39

**Fluid System 29x42 Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Fluid System	29x42	737x1067mm	14 kg	Pretension
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECF2942-020CF		20	809.12	10.88
IDECF2942-035CF		35	538.61	9.69
IDECF2942-040CF		40	438.52	8.64
IDECF2942-050CF		50	284.57	5.17
IDECF2942-060CF		60	268.12	4.10
IDECF2942-070CF		70	202.63	3.33
IDECF2942-080CF		80	193.15	2.76
IDECF2942-100CF		100	164.81	2.66
IDECF2942120CF		120	134.35	1.89
IDECF2942-140CF		140	101.20	1.34
IDECF2942-170CF		170	82.80	1.18
IDECF2942-200CF		200	73.49	1.32
IDECF2942-230CF		230	68.89	0.71
IDECF2942-270CF		270	57.70	0.67
IDECF2942-325CF		325	44.25	0.39

**Brandt VSM300 Scalping Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Brandt	VSM300 Scalping	940 x685mm	15 kg	Pretension
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECVSMMS-010CF		10	1957	40.92
IDECVSMMS-020CF		20	809.12	10.88
IDECVSMMS-035CF		35	538.61	9.69
IDECVSMMS-040CF		40	438.52	8.64
IDECVSMMS-050CF		50	284.57	5.17
IDECVSMMS-060CF		60	268.12	4.10
IDECVSMMS-070CF		70	202.63	3.33
IDECVSMMS-080CF		80	193.15	2.76
IDECVSMMS-100CF		100	164.81	2.66

**Brandt VSM300 Primary Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Brandt	VSM300 Primary	890 x 685mm	12 kg	Pretension
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECVSM-020CF		20	809.12	10.88
IDECVSM-035CF		35	538.61	9.69
IDECVSM-040CF		40	438.52	8.64
IDECVSM-050CF		50	284.57	5.17
IDECVSM-060CF		60	268.12	4.10
IDECVSM-070CF		70	202.63	3.33
IDECVSM-080CF		80	193.15	2.76
IDECVSM-100CF		100	164.81	2.66
IDECVSM-120CF		120	134.35	1.89
IDECVSM-140CF		140	101.20	1.34
IDECVSM-170CF		170	82.80	1.18
IDECVSM-200CF		200	73.49	1.32
IDECVSM-230CF		230	68.89	0.71
IDECVSM-270CF		270	57.70	0.67
IDECVSM-325CF		325	44.25	0.39

**Brandt Cobra/LCM Replacement**

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Brandt	Cobra/LCM	635 x1250mm	15 kg	Pretension
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECCOB-020CF		20	809.12	10.88
IDECCOB-035CF		35	538.61	9.69
IDECCOB-040CF		40	438.52	8.64
IDECCOB-050CF		50	284.57	5.17
IDECCOB-060CF		60	268.12	4.10
IDECCOB-070CF		70	202.63	3.33
IDECCOB-080CF		80	193.15	2.76
IDECCOB-100CF		100	164.81	2.66
IDECCOB-120CF		120	134.35	1.89
IDECCOB-140CF		140	101.20	1.34
IDECCOB-170CF		170	82.80	1.18
IDECCOB-200CF		200	73.49	1.32
IDECCOB-230CF		230	68.89	0.71
IDECCOB-270CF		270	57.70	0.67
IDECCOB-325CF		325	44.25	0.39

### Brandt D380/D285 Replacement

<i>Manufacture</i>	<i>Description</i>	<i>Dimensions</i>	<i>Weight</i>	<i>Type</i>
Brandt	D380/D285	712x1180mm	14 kg	Pretension
<i>Frame Type</i>	<i>Mesh Type</i>		<i>Layer Count</i>	<i>Screen Type</i>
Composite	SS304 / SS316 stainless steel		Triple Layer	Flat
<i>Ref Number</i>		<i>API Number</i>	<i>D100 (Cut Point)</i>	<i>Conductance (kD/mm)</i>
IDECD380-020CF		20	809.12	10.88
IDECD380-035CF		35	538.61	9.69
IDECD380-040CF		40	438.52	8.64
IDECD380-050CF		50	284.57	5.17
IDECD380-060CF		60	268.12	4.10
IDECD380-070CF		70	202.63	3.33
IDECD380-080CF		80	193.15	2.76
IDECD380-100CF		100	164.81	2.66
IDECD380-120CF		120	134.35	1.89
IDECD380-140CF		140	101.20	1.34
IDECD380-170CF		170	82.80	1.18
IDECD380-200CF		200	73.49	1.32
IDECD380-230CF		230	68.89	0.71
IDECD380-270CF		270	57.70	0.67
IDECD380-325CF		325	44.25	0.39