



**HFL DEPLOYMENT
FRAME**



**STFL WITH BEND
RESTRICTOR**



**HFL/STFL WITH
BEND STIFFENER**

Hydraulic Flying Lead (HFL) and Steel Tube Flying Lead (STFL's)

FULL PRODUCT SPECIFICATION

HFL/STFL assemblies are used to interconnect subsea equipment. HFL's provide the transmission of hydraulic fluid, chemical, and service line connections between subsea equipment.

Each end of the HFL is terminated to a ROV Free 'Fly to Place' stabplate which house self-sealing female hydraulic couplings, connecting each of the lines contained within the HFL bundle. Replaceable seals are contained within the female couplings of the stabplates for easy retrieval.

HFL's are installed from deployment frames with ROV assistance, but they are also capable of being installed through the clump weight method.

HFL's are sufficiently flexible to allow handling by ROV and are negatively buoyant when the lines are filled with their normal operating fluids. The overall construction is sufficiently robust which allows the components to withstand the exerted forces during manufacture, transportation, installation and service life.

All materials used in the HFL's and ancillary equipment are compatible with each other, and with most fluids, suitable for subsea use under normal service conditions for the life of field.

DESIGN FEATURES

- Strain wire (up to 3T load capacity)
- Transportation frame
- Multi Lifting points designed and tested in accordance with DNV 2.7-3
- Variable minimum installation height to suit client requirements
- Bend restrictor / limiter
- Bend stiffener
- HFL on bottom stability analysis using DNV RPF109
- Butt welded hose fittings
- Anti-rotation hose fittings
- Hoses in accordance with ISO 13628 part 5
- Fully qualified
- Fully project list available on request

Vertical / Lateral	±75mm
Orientation	Z Axis ± 10°
Azimuth / Elevation	Y Axis ± 10°
Bearing	X Axis ± 10°

GENERAL

Coupling Population	Up to 26
Coupling Size	Various
Design Depth	3000m
Maximum Separation Force	218 kN
Design Life	30 Years
Applicable Standards	ISO3628-6 / 7 / 8

MATERIALS

Male & Female Stabplates	UNS S31803
Locking Down Interaction — Drive Screw	Hiduron 130
Locking Down Interaction — Receptacle	UNS S31803 / UNS S32760
ROV Buckets	ST. STL 316L

WEIGHTS & DIMENSIONS

OD of Stabplate	Ø300 / Ø350
Length	Up to 250m

