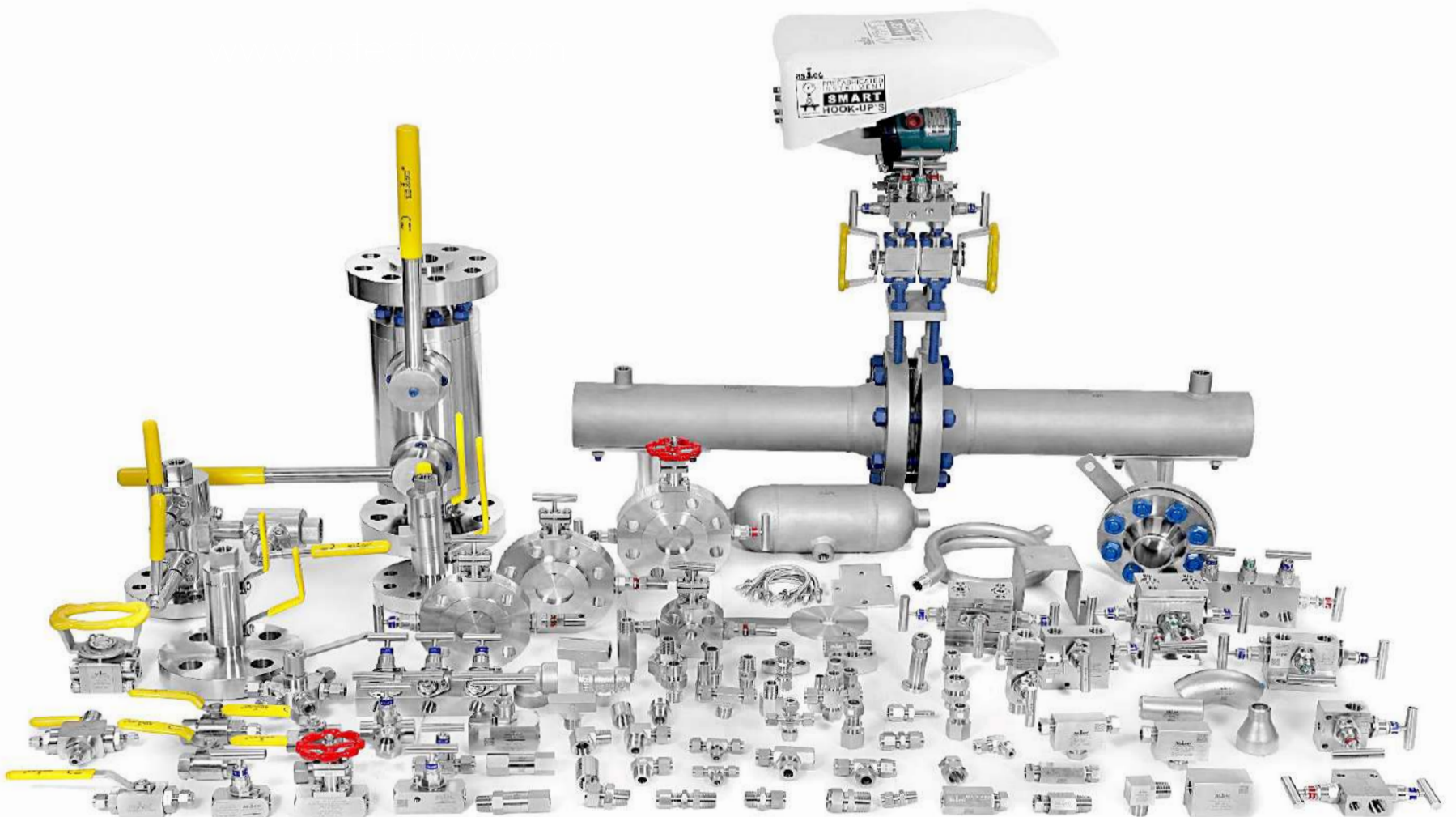


ecofriendly**flowlines**



# PRODUCT SELECTOR CATALOGUE

[www.astecflow.com](http://www.astecflow.com)





**aslec®**

Celebrating  
**50** Years

**ECOFRIENDLY  
SOLUTIONS**

**AT YOUR SERVICE SINCE 1965**



- ◆ OVER 500 PROJECTS COMPLETED FOR EPC, OEMS, others.
- ◆ 90% PLUS OIL & GAS EXPERIENCE FOR HIGH PRESSURE
- ◆ 70% PLUS EXPORTS TO GLOBAL OIL & GAS COMPANIES
- ◆ OVER A MILLION INSTALLATIONS IN OIL & GAS SERVICES
- ◆ FINEST FLEET OF YAMAZAKI MAZAK CNC & VMCs in USE
- ◆ AWARD WINNING FLUID HANDLING SOLUTIONS



## MODERN HIGH QUALITY PLANT & SYSTEMS



- ◆ "ASTEC" (Safe Energy group companies) is a 150+ experienced team focussed on manufacturing high pressure flow connections, valves and integrated assemblies. We have been closely working with end users to develop innovative AWARD WINNING TECHNOLOGIES for LOW CARBON EMISSION SOLUTIONS for the process instrumentation industry.
- ◆ We have two manufacturing plants near Mumbai, India that hosts one of the finest fleet of CNC & VMC Machines & Test facilities backed by an INNOVATION, R&D & PROJECT MANAGEMENT CENTRE.
- ◆ We are a company DEDICATED to developing technologies for CLEAN ENERGY TRANSITION with key focus on HYDROGEN products and solutions.

since 1965

# CONSISTENCY

**FINEST FLEET of CNC MACHINES** for  
HIGH PRECISION  
PARTS

[www.astecflow.com](http://www.astecflow.com)





# QUALITY

ISO9001

ISO14001

ISO45001





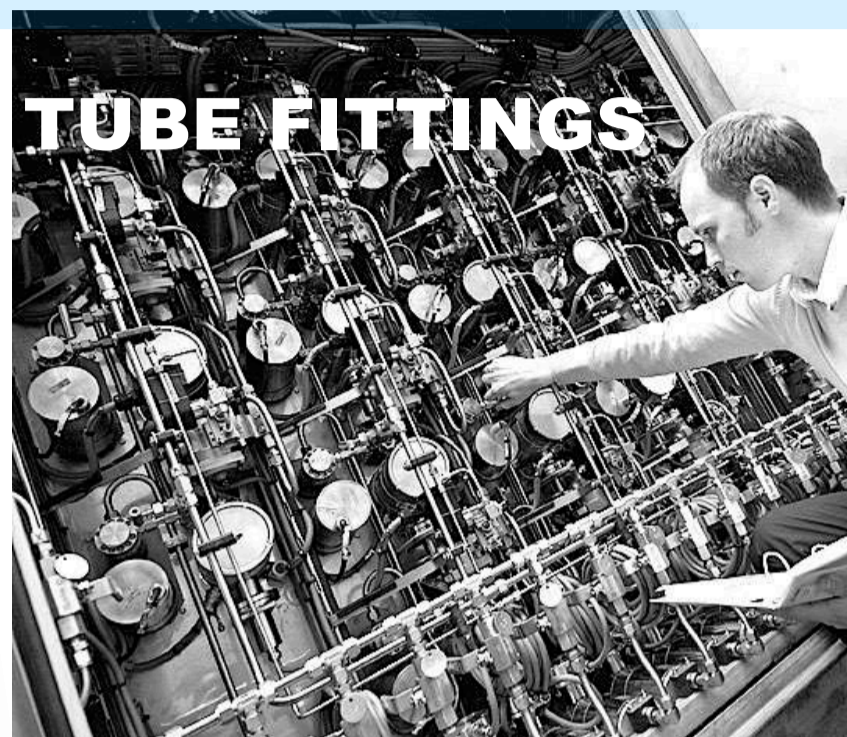
# DOUBLE COMPRESSION TUBE FITTINGS



LEGACY  
DCF series

Surpasses recommended PRESSURE/ TEMPERATURE requirements of TUBE standards

ADVANCE DESIGNS



Tested & Certified

CSA/ANSI NGV 3.1.20

ISO 15500-2-2016

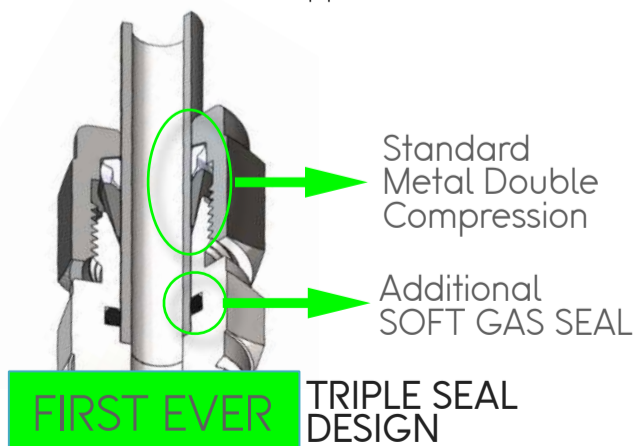
ISO 15500-19-2020

ECE R110

H2.CNG.LNG.GAS

ADCF series

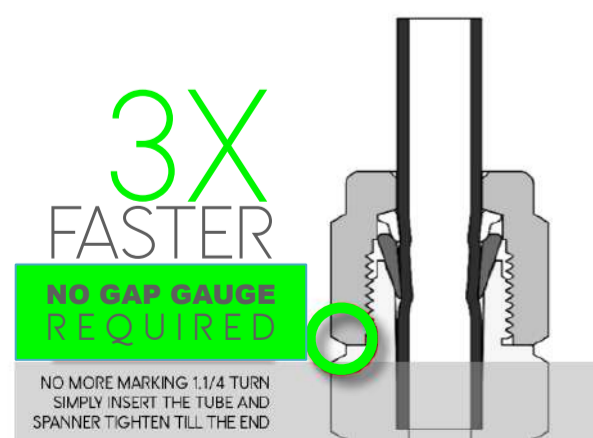
'TRILOK' Advance Triple Seal Design  
added to DCF series for extra safety in  
Low Molecular Gas Applications



FAST INSTALLATION

NGG series

Also available with 'TRILOK' Advance  
Triple Seal Design for Gas applications  
NO GAP GAUGE REQUIRED



The Astec logo features the word "astec" in a bold, sans-serif font, with a stylized graphic of a tube fitting integrated into the letter "t".

ADF70 series

**DOUBLE  
COMPRESSION  
TUBE FITTINGS**

20K psi/1360 Bar

**H2**

friendly  
700BAR



2022 **NEW  
TECHNOLOGIES**

## SOLUTION TO CONE & THREAD FITTING DESIGN

The ADF70 series is similar to DCF series design with metal DOUBLE COMPRESSION ferrules. This innovative design tube fitting are capable to withstand high pressures up to 20K/1360 bar @ ambient temperature. They are optionally available with SAFETY LOCK NUT & THIRD GAS SEAL for high pressure and are good for low molecular gas applications. Compared to the widely used Cone & Thread Fittings that require special equipment, this design requires simply standard wrench and vice making installation lot easier, other than time and cost effective.

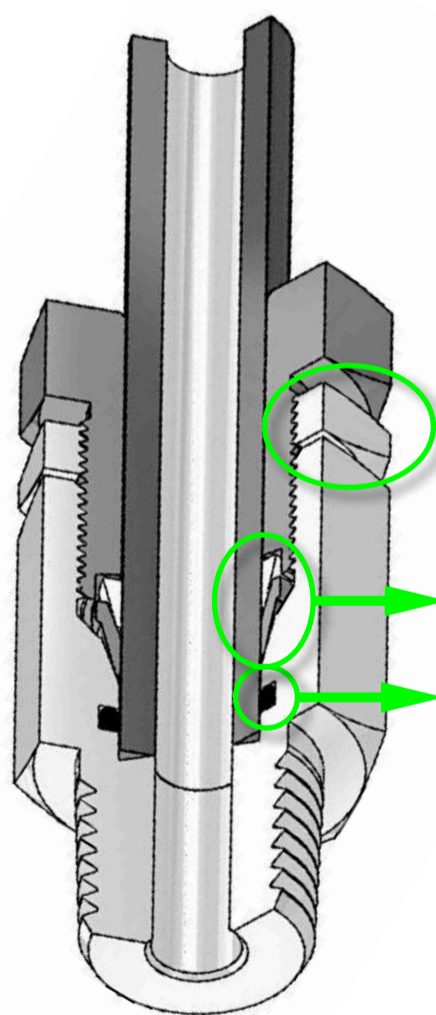
## Tested & Certified

CSA/ANSI NGV 3.1.20

ISO 15500-2-2016

ISO 15500-19-2020

ECE R110



**FIRST EVER**

**SAFETY LOCK NUT**  
For accidental opening  
Under high pressure

Robust & Proven  
Metal Double  
Compression  
ferrules

Additional  
SOFT GAS SEAL  
TRIPLE SEAL  
DESIGN

[www.astecflow.com](http://www.astecflow.com)

# TUBING

## INSTRUMENTATION & HYDRAULIC

### STRAIGHT LENGTH & COILED

(PVC Jacketed and/or Insulated available)

#### SEAMLESS BRIGHT ANNEALED TUBING



Metric, Fractional & Imperial sizes

Available Materials: SS316L, SS304, SS321,  
Alloy20, Alloy 400/R405, Alloy825, Alloy625,  
Alloy C-276, Duplex 2205 & 2507

Over 400 kilometres of installation base in Middle East,  
Oil & Gas along with ASTEC Tube Fittings



# FITTINGS



FLANGE CONNECTORS



DI-ELECTRIC  
TUBE FITTINGS



VCO O-RING  
FACE SEAL FITTINGS



AN FITTINGS  
(JIC 37 deg Flare to SAE J514)

# FITTINGS

## CONE & THREAD FITTINGS MWP 20K PSI



PIPE FITTINGS  
INSTRUMENT/ B16.11  
(MWP 3K TO 20K PSI)



WELD FITTINGS  
(Regular & Ultra Clean)



TEFLON/PEEK  
TUBE FITTINGS



FUSIBLE PLUG  
FITTINGS

Eutectic Alloy in SS Plug  
Max Pressure 500 psi  
Max Temp 160F to 281C  
(71C to 138C)



VACCUUM TUBE FITTINGS

# VALVES



## HIGH PRESSURE SMALL BORE VALVES

# MWP 1K to 10K PSI



**Series: BV1**  
Barstock BV  
1000 psi



**Series: BV3**  
Barstock BV  
3000 psi



**Series: BV4**  
Barstock BV  
10,000 psi



## MULTIPORT Ball Valves



[www.astecflow.com](http://www.astecflow.com)

Available Materials: SS316L, SS304, SS321, Alloy20, Alloy 400/R405, Alloy825, Alloy625, Alloy C-276, Duplex 2205 & 2507

# VALVES



## SCREWED BONNET NEEDLE VALVES

# MWP 20K PSI



Series: SNV  
Screwed Bonnet Needle Valves



[www.astecflow.com](http://www.astecflow.com)

Available Materials: SS316L, SS304, SS321, Alloy20, Alloy 400/R405, Alloy825, Alloy625, Alloy C-276, Duplex 2205 & 2507

# VALVES



## HIGH PRESSURE SMALL BORE VALVES

# MWP 20K PSI



Check  
Valves



## Manifolds with built in TUBE FITTINGS

[www.astecflow.com](http://www.astecflow.com)

Available Materials: SS316L, SS304, SS321, Alloy20, Alloy 400/R405, Alloy825, Alloy625, Alloy C-276, Duplex 2205 & 2507

# VALVES

## DOUBLE BLOCK & BLEED VALVES

### MESC TAT CERTIFIED

EEMUA 182

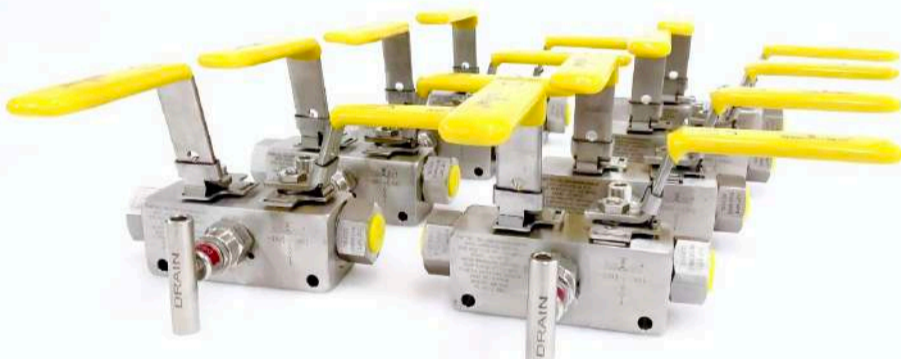
API6D,

API607

BS6755PT2,

API 10K

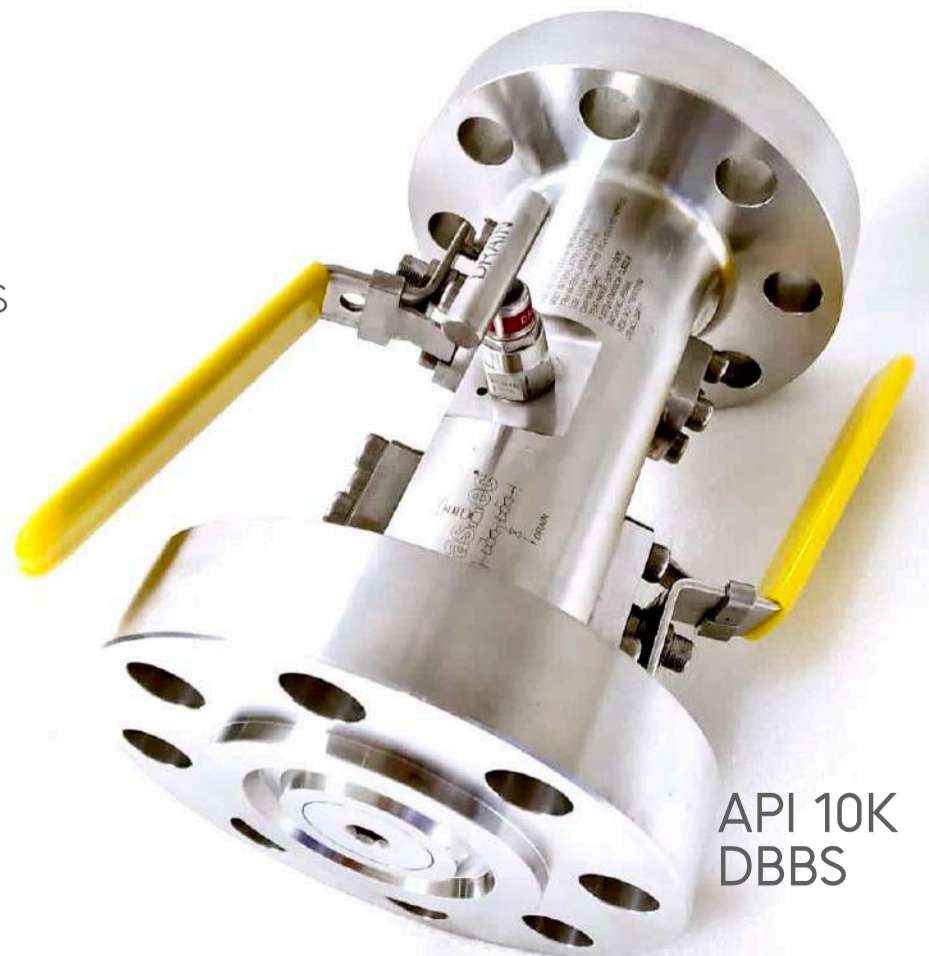
**Series: IDBB**  
INSTRUMENT DOUBLE BLOCK & BLEED VALVES  
Flange x Flange  
Flange x Thread



**Series: IDBBS**  
INSTRUMENT DOUBLE BLOCK & BLEED VALVES  
Thread to Thread



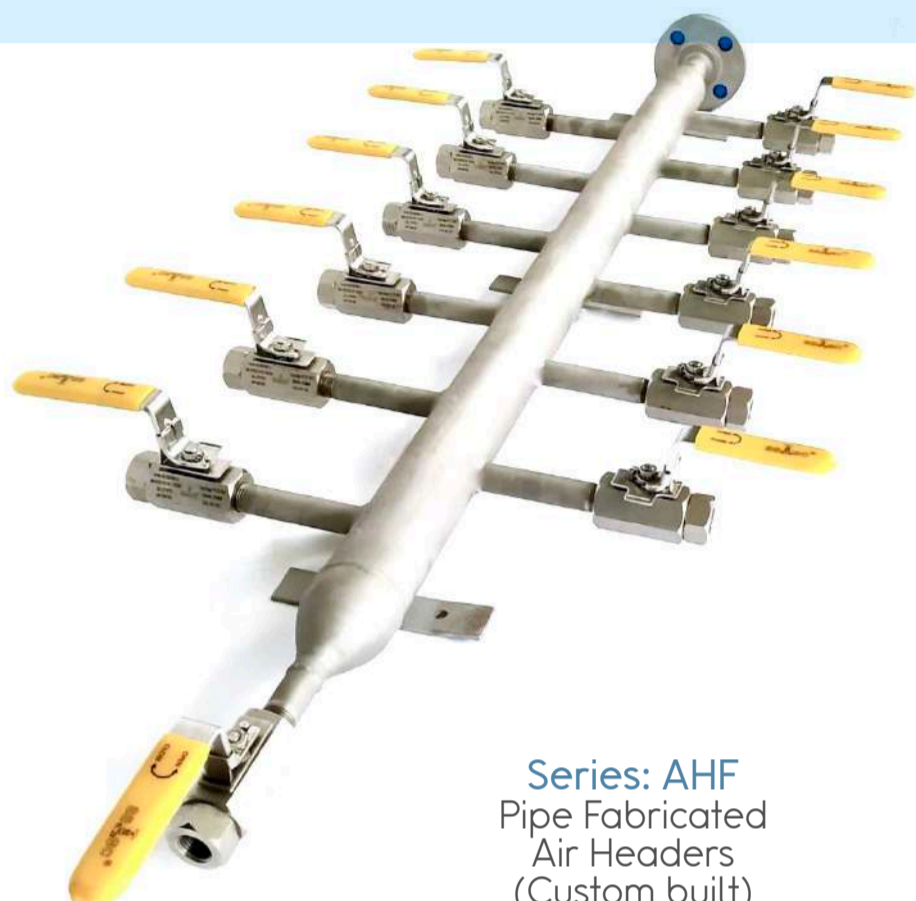
Sampling &  
Injection probe DBBs



API 10K  
DBBS

# INSTRUMENT

## ERECTION MATERIAL



**Series: AHF**  
Pipe Fabricated  
Air Headers  
(Custom built)

## AIR HEADERS



**Series: BHF**  
Barstock Compact  
Air Headers  
(Specify outlet ports)



**Series: FR- BV**  
Flush Ring with Ball valves



**Series: SPS/SPR**  
Custom Built

Instrument Stand Mounting Plate,  
Sun Shade / Enclosure / Clamps



Syphons



Condensate Pot



# LNG

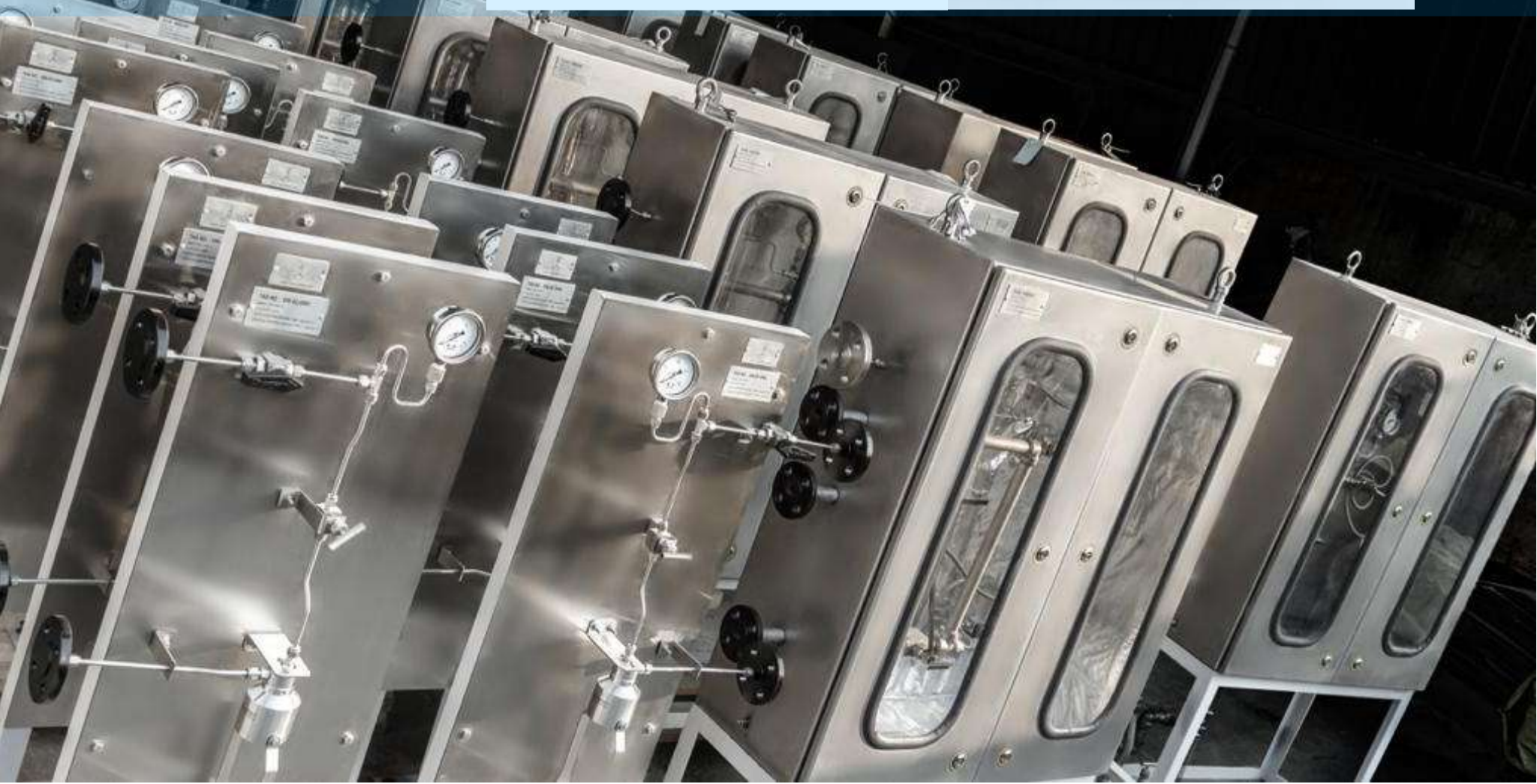
CRYOGENIC  
PRODUCTS  
& SOLUTIONS

Globe,  
Ball &  
DBB Valves



# INTEGRATION SERVICES

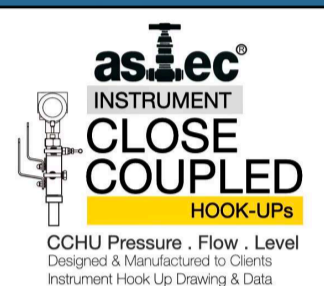
# DISPENSERS & SAMPLING SYSTEMS



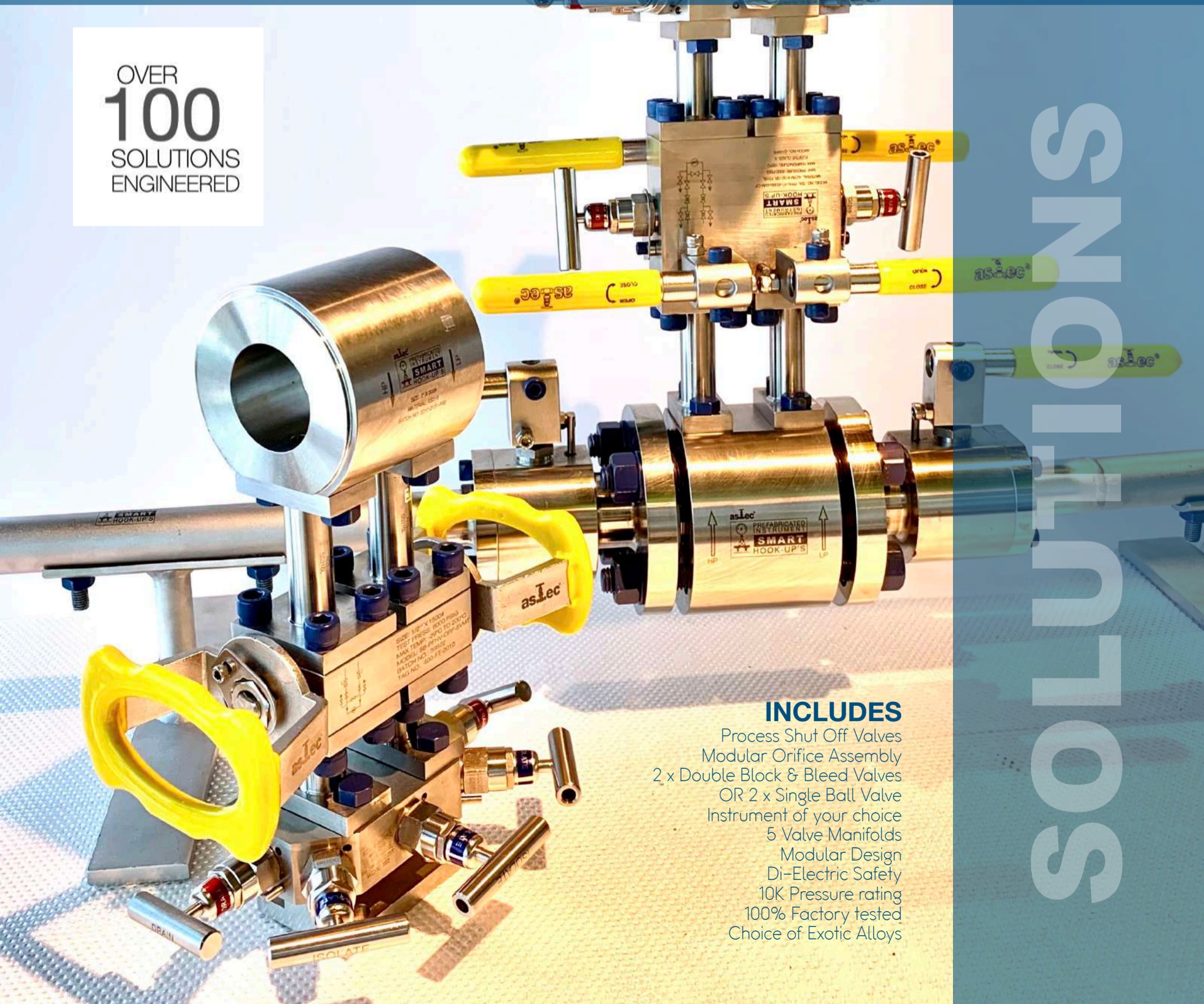
# Flow Instrument CLOSE COUPLED HOOK-UPS WINNER OF MULTIPLE AWARDS

## ADVANTAGES:

CUTS 50% WEIGHT  
CUTS 90% INSTALLATION TIME  
CUTS 25% JOINTS / EMISSIONS  
HIGH SAFETY - DI ELECTRIC DESIGN  
CUSTOMISED TO USERS DRAWINGS UPTO 10K PRESSURES  
HIGH SAFETY PROCESS SHUT OFF VALVES FOR ORIFICE SERVICE



OVER  
**100**  
SOLUTIONS  
ENGINEERED



## INCLUDES

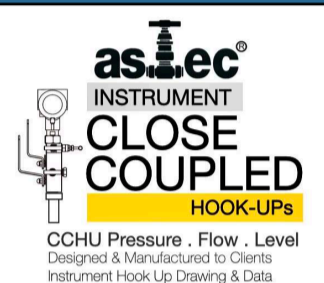
Process Shut Off Valves  
Modular Orifice Assembly  
2 x Double Block & Bleed Valves  
OR 2 x Single Ball Valve  
Instrument of your choice  
5 Valve Manifolds  
Modular Design  
Di-Electric Safety  
10K Pressure rating  
100% Factory tested  
Choice of Exotic Alloys

SOLUTIONS

# Pressure Instrument CLOSE COUPLED HOOK-UPS WINNER OF MULTIPLE AWARDS

## ADVANTAGES:

CUTS 70% WEIGHT  
CUTS 90% INSTALLATION TIME  
CUTS 75% JOINTS / EMISSIONS  
HIGH SAFETY – DI ELECTRIC DESIGN  
AVAILABLE IN PRESSURE & FLOW DESIGN  
AVAILABLE TO USERS SCHEMATIC DRAWINGS



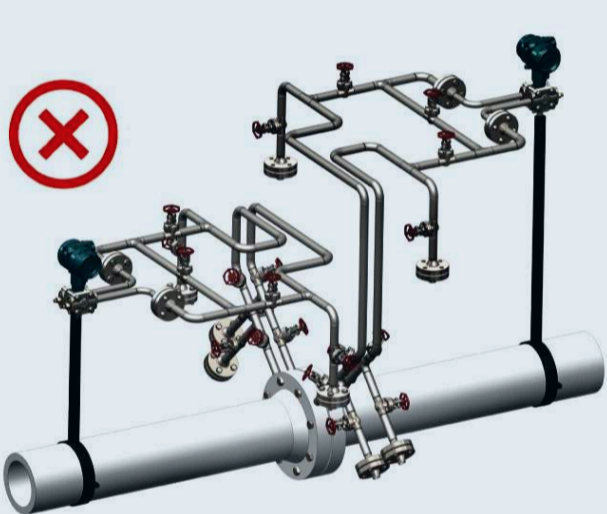
OVER  
**100**  
SOLUTIONS  
ENGINEERED

## INCLUDES

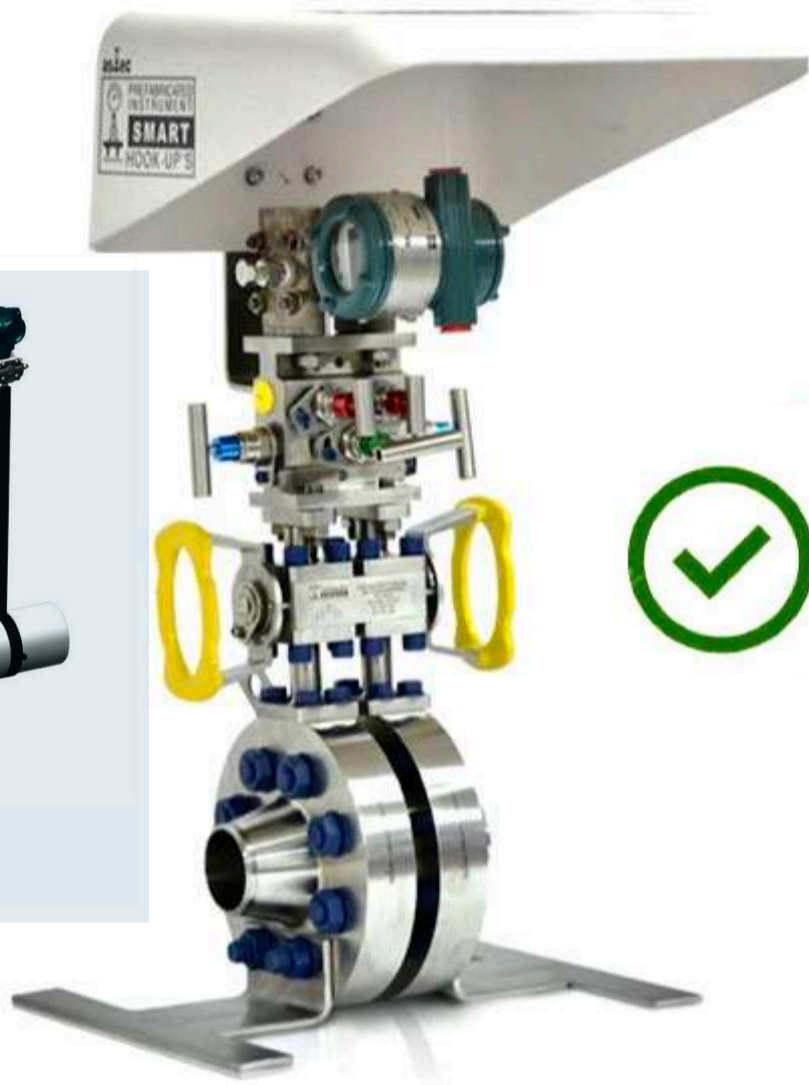
Process connections  
Double Block & Bleed Valves  
Instrument of your choice  
2 Valve Manifolds  
Swivel Connector  
Di-Electric Safety  
10K Pressure rating  
100% Factory tested  
Choice of Exotic Alloys

SOLUTIONS

# HELPING YOU WORK SMARTER



Conventional Site Installed CCHUs

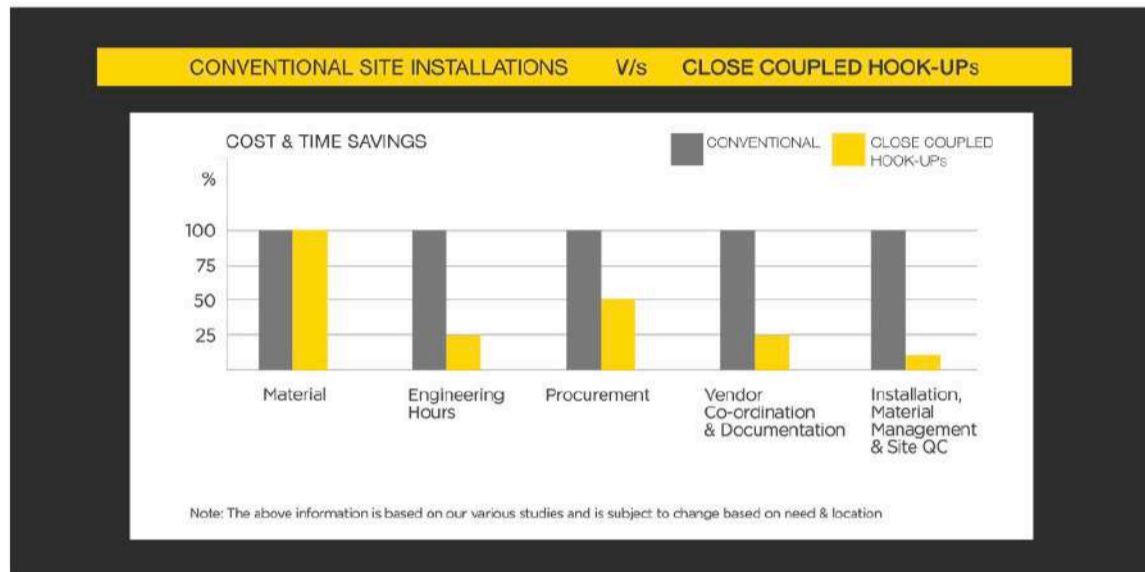


## ADVANTAGE to INSTRUMENT TEAMS

- Reduces Measurement Errors caused by long Impulse line tubing
- Reduces WEIGHT, JOINT and mainly CUTS CARBON FOOTPRINT
- Reduces EPC TIME & COST drastically
- Modular Design with DI ELECTRIC DESIGN & SAFETY
- Designed, manufactured & tested to your P&ID, Instrument Hook Up drawings, TUV NEL, UK recommendations, MESG standards, Client specs.
- Completely prefabricated & tested using Astec DBBs, Manifolds Valves and Orifice Assemblies along with Client Approved Instruments and Sunshades.
- Available for max pressure class API 10K / 2500# & max temperature 550C
- Available in most Exotic Alloys i.e. CS/LF2, Inconel, DSS, SS
- Over **15,000** CCHU Installations on Oil & Gas Applications

SOLUTIONS

# COST & TIME SAVINGS



**SAVE 50%**  
COST . TIME . JOINTS

360° ROTATION PRIOR TO WELDING

ABOVE SMART HOOK UP MODEL SUITABLE FOR 150°C. FOR HIGH TEMPERATURE DIFFERENT SOLUTION WILL BE PROVIDE.

MAXIMUM 4 JOINTS

WELD HERE

MAXIMUM 32 JOINTS

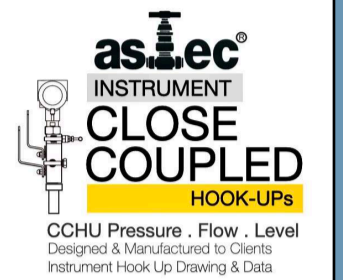
HOOK UP DRAWING AS PROVIDED BY CLIENT

- PRETESTED, READY TO USE ASSEMBLY WITH COMPLETE ORIFICE ASSEMBLY.
- 'SMART HOOK UPS' PROVIDES STANDARD & CUSTOMIZED SOLUTIONS BASED ON APPLICATIONS.
- 'SMART HOOK UPS' ARE DESIGNED & PREFABRICATED TO CLIENTS HOOK UP DRAWINGS.
- WE SPECIALIZE IN VALUE ADDED DESIGN/ENGINEERING BY CUTTING JOINTS or FUGITIVE EMISSIONS BY NEAR HALF.
- WE USE CLOSE COUPLED TECHNOLOGY THAT ELIMINATES CONDENSATION & CLOGGING OF LONG IMPULSE TUBING LINES IMPROVING SYSTEM RELIABILITY.
- 'SMART HOOK UPS' CUTS ENGINEERING, PROCUREMENT, INSTALLATION COST & TIME BY APPROX 70%.
- ALSO GOOD FOR REVAMP PROJECTS AS IT MINIMIZES SHUT DOWN TIME.

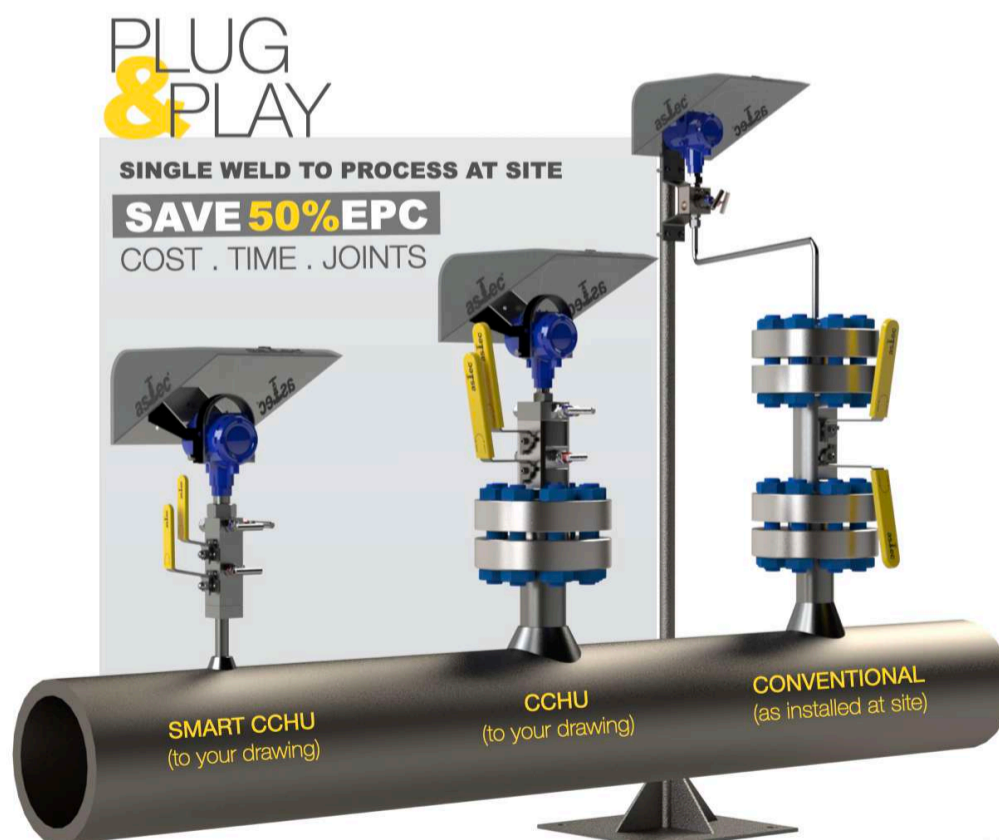
TITLE :- CLOSE COUPLE FLOW HOOK UP UP TO 2500#		<p><b>VALVES &amp; FITTINGS</b> Vasai (E), Mumbai-401208 Tel:-0250-2450035 Web :- www.asleclubhook.com e mail :- aslecdesign@asleclubhook.com</p>
MODEL NO : SCFH-LT-FT	REV. NO 0	
MATL : CS / SS316	SCALE NTS Drawn:KDP Date:23.10.13	
Checked: _____ Date: _____ Approved: _____ Date: _____		

SOLUTIONS

# ENGINEERED TO OPTIMISE MEASUREMENT



## “PRESSURE SMART CCHU” with DBB piping valves

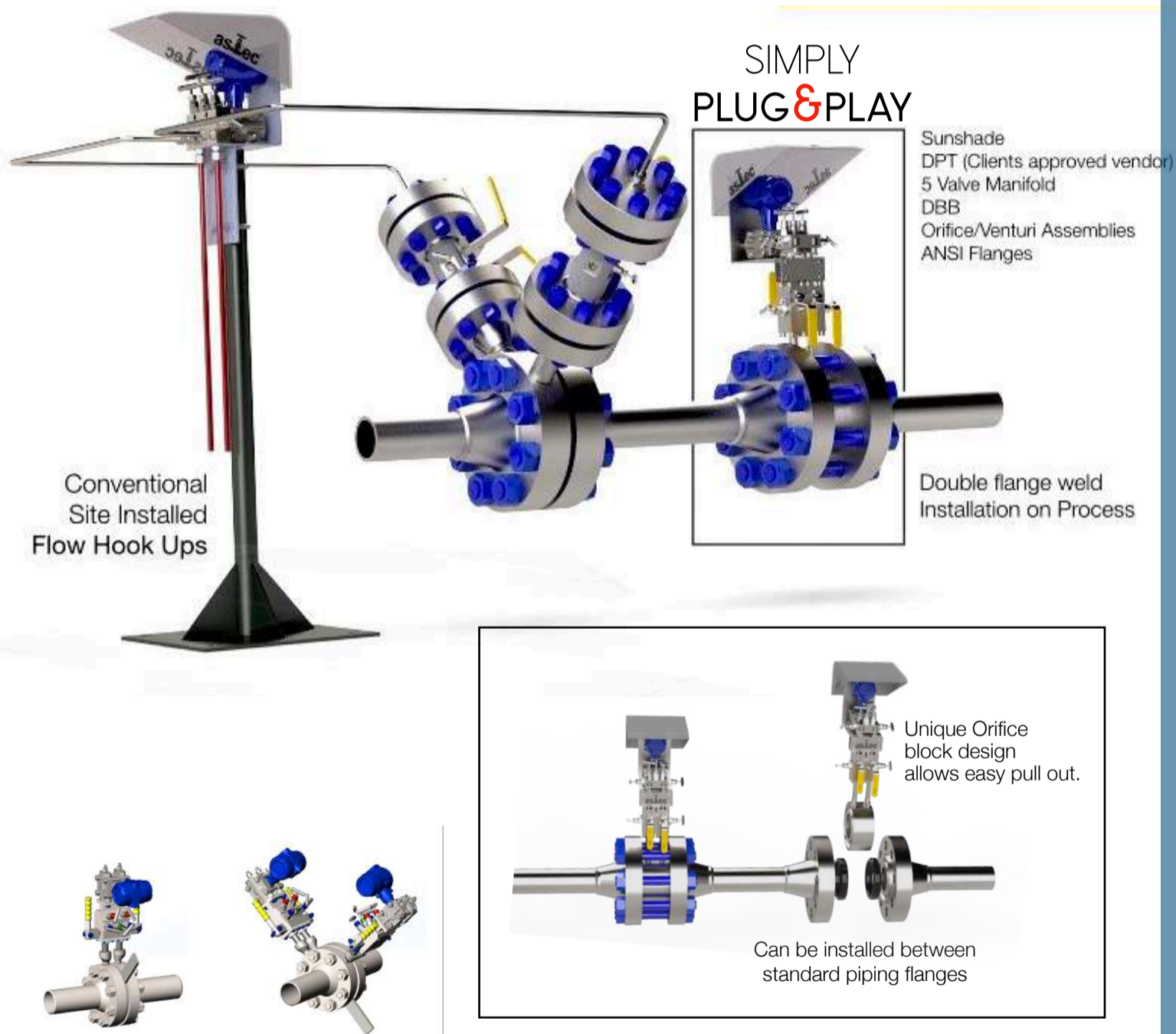
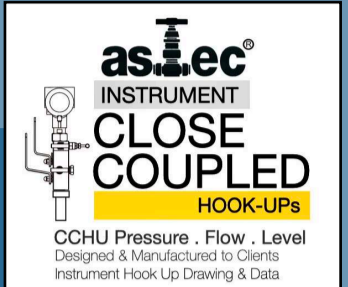


SOLUTIONS

# DESIGNING OUT THE CLUTTER

## “FLOW SMART CCHU”

with DBB piping valves

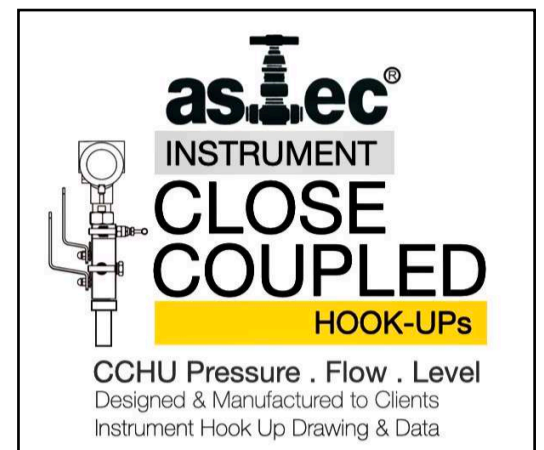


Quick installation between standard piping flanges  
Modular design ensures quick parts change over  
Better Measurement due to avoidance of long tubing assemblies  
Complies to TUV NEL recommendations for Close Coupled Hook Ups  
75% LESSER JOINTS or FUGITIVE EMISSIONS

SNOITNOS

## OVER 10,000 Instrument Hook-UP assemblies in USE

**INCLUDES**  
Instrument of your choice  
2 or 3 Valve Manifolds  
Swivel Connector  
Di-Electric Safety (optional)  
100% Factory tested  
Choice of Exotic Alloys



# API, ISO & PERFORMANCE NOTES

## CERTIFICATIONS

### API-6D & API-609



### ISO 45001 . ISO 9001 . ISO 14001



### PERFORMANCE LETTERS

**ESSAR OIL (now Nayara Energy)**  
is the **WORLD'S 2nd LARGEST GRASSROOT**  
**REFINERY** and has over 5,00,000 nos ASTEC  
valves & Fittings in use since over 15 years.

Essar Oil Limited  
Refinery Division

Date: 20th Sept 2006

To,  
Astec Valves & Fittings Pvt Ltd,  
103, Ravi Industrial estate,  
off Mahakali Caves road,  
Andheri East,  
Mumbai 400093.

**ESSAR**  
P.O. Box No. 24,  
Heed P. O. Khamphalia,  
Dist. Jamnagar - 361 309  
Phone: (+91-2833) 241444  
Fax: (+91-2833) 241414

Sub: Service support of Astec Fittings & Valves.

Dear Sir,

On your request for a feedback requested of the Service provided by your company  
for our Refinery project we will like to inform you as under.

For our Refinery most of the fittings are from ASTEC Instrumentation Fittings & Valves.  
We are in the process of installing nearly 100000 nos of Astec products.

Their service support is satisfactory. They are also helpful in delivering our urgent  
requirements with in short span of time. They have also earmarked a dedicated person for  
our project.

We are yet to ascertain the performance of the fittings.

Regards,

*S. Lakshminarayana*  
S. Lakshminarayana  
GM/Instrumentation  
ESSAR Oil Limited

**BRITISH GAS & ONGC Offshore**  
consortium after our services after few  
years and several thousand units in  
operation on their OFFSHORE PLATFORMS

**BG India**

Ref: BGEPII/ AG/Reco,01/July 03

Date: 14<sup>th</sup> July 2003

**TO WHOMEVER IT MAY CONCERN**

We are pleased to inform you that M/s. Astec Instruments Pvt.  
Ltd., Mumbai has been our **PREFERRED VENDOR** for the  
supply of Instrument Tube Fittings & Instrumentation Valves  
for use at BG Exploration and Production India Limited  
Offshore Platforms

We have been satisfied with their performance with regard to product quality  
and timely service provided during the past three years.

For BG Exploration and Production India Limited

*Amar Gupta*  
Amar Gupta  
Asst. Manager - Purchase

# TUBE FITTINGS/VALVES

## DCF Series ASTM F 1387

## DCF Series Interchangeability ASTEC, SWAGELOK, PARKER



## DBB Valves ISO 15848-1 FUGITIVE EMISSION TESTING



Extension of Value Qualification Range (According para 8 of ISO 15848-1)		
Description	Tested Value	Extension
Let from Seal Material	PTFE	PTFE
Let from Seal Material	PTFE	PTFE
Seal Diameter (DSE)	2500	2500 Class and lower
Valve Class	2"	2" and lower
Seal Material	Quarter turn	Quarter turn
Body Material	PTFE	PTFE
Pressure Class	Class 2500	Class 2500 and below
Endurance Class	EN1	EN1
Temperature Class	API 6A	API 6A
Tightness Class	API 6A	API 6A



## Inst Valves & Manifolds Burst Testing



# ADF70 Series 20K psi Tube Fittings

Advance Double Compression Tube Fittings (ADF70 Series)  
Meets : CSA/ANSI NGV 3.1:20



Double Compression Tube Fittings (DCF Series)  
Meets - FCF R110

[illegible]



Celebrating  
**50**Years

**ECOFRIENDLY  
SOLUTIONS**

[www.astecflow.com](http://www.astecflow.com)



#### INTERNATIONAL SALES AND MARKETING

##### SAFE ENERGY GT LLC

2307 – 2308,  
Burlington Tower,  
Business Bay,  
Dubai, U.A.E

T: +971 4 551 8180 /  
+971 50 222 3710

Email: [mena@astecflow.com](mailto:mena@astecflow.com)

##### SAFE ENERGY QFZ LLC

53/54, Business Innovation Park,  
Ras Bufontas Free Zone,  
Qatar

T: +974 33685807

Email: [mena@astecflow.com](mailto:mena@astecflow.com)

#### HEAD OFFICE & MANUFACTURING

##### Astec Valves & Fittings Pvt Ltd (PLANT 1)

10/11, Geeta Industrial Estate No. 7,  
Gorai Pada, Near K.T. Industrial Park,  
Vasai (E), Palghar – 401 208,  
Mumbai, INDIA.

##### Astec Valves & Fittings Pvt Ltd (PLANT 2)

Plot No. 40, Survey No. 66,  
Valiv Heavy Industrial Area, Valiv,  
Vasai (E), Palghar – 401 208  
Mumbai, INDIA.

T: +91 96646 91000

Email: [bdm2@astecflow.com](mailto:bdm2@astecflow.com)