

**Behsazan  
Jonoob**

شرکت بهسازان جنوب (دانش بنیان)

*Innovation  
Experience  
Reliability  
Quality*



تولید کننده شیرآلات،  
وله‌د، کریسمس تری  
و اکچویاتور



**Valves, Wellheads & Actuators**  
**Engineering & Manufacturer**



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

شرکت دانش بنیان بهسازان جنوب در سال ۱۳۷۳ با هدف تولید تجهیزات صنعت نفت در جنوب کشور و در قلب پایتخت نفت ایران، شهر اهواز تأسیس گردید. این شرکت از اعضاء انجمن های معتبر سازندگان نفت و گاز کشور بوده و با بهره گیری از مجوزهای تحقیق و توسعه و طراحی و مهندسی از وزارت نفت و وزارت صنعت، معدن و تجارت (صمت) با ایجاد مرکز فن آوری، تحقیق و توسعه و با تلاش مؤسسين، متخصصین و تکنسین های مجرب و همچنین امکانات سخت افزاری و نرم افزاری خود، در مدت زمان کوتاهی توانست جایگاه ویژه ای را در این صنعت به خود اختصاص دهد.

شرکت بهسازان جنوب واقع در شهرک صنعتی شماره ۳ اهواز، در محدوده ای به وسعت بیش از سی هزار متر مربع بنا شده است. این شرکت با استفاده از استانداردهای جهانی و نرم افزارهای پیشرفته در واحدهای تحقیق و توسعه و مهندسی خود توانسته است کلیه شیرآلات دستی و دارای محرکه، پالایشگاهی، سرچاهی و همچنین تجهیزات سرچاهی شامل ولهد و کریسمس تری و انواع محرکه بصورت هیدرولیکی و نیوماتیکی و الکتروهایدرولیک را تحت استاندارد های مربوطه مثل API 6A, API 6D و NACE MR0175 و سیستم مدیریت کیفیت (ISO 9001) با کیفیت بالا و تکنولوژی روز دنیا به تولید انبوه برساند.

این شرکت هم اکنون از برندهای معتبر در صنعت نفت و گاز بوده و در وندر لیست بسیاری از شرکت های معتبر از جمله مناطق نفتخیز جنوب، نفت مناطق مرکزی، ملی حفاری ایران، ملی گاز ایران، مهندسی و توسعه نفت (متن)، شرکت POGC، توسعه صنعت نفت و گاز پرشیا، نفت و گاز اروندان، شرکت های ODCC, OIEC, OEID و بهره برداری نفت و گاز شرق و غرب، زاگرس جنوبی، شرکت فلات قاره، خط لوله مخابرات و شرکت پخش و پالایش و همچنین در وندر لیست شرکت های خارجی انی ایتالیا، سینوپک چین، توتال فرانسه نیز قرار دارد. شرکت بهسازان جنوب تاکنون شیرآلات خط لوله و پالایشگاهی و شیرآلات و تجهیزات سرچاهی پروژه های مختلفی را در سطح کشور تولید نموده که برای سال های متمادی درحال استفاده در مناطق مختلفی از جمله مناطق اهواز، کارون، مارون، گچساران، آغاچاری، منصوری، اروندان، خانگیران، آغار، دالان، سراجه قم، دهلران، چشمه خوش، کنگان، شانول، تابناک، سرخون، تنگ بیجار، یاران شمالی و جنوبی و آزادگان، دارخوین، گوره-جاسک می باشد.

باتوجه به کیفیت بالای محصولات شرکت بهسازان جنوب و منطبق بودن آنها با استانداردهای جهانی و استقبال شرکت های خارجی، صادرات این محصولات بزودی به کشورهای مختلف آغاز خواهد شد.

کادر متخصص، مجرب و آموزش دیده این شرکت در بخش کنترل و تضمین کیفیت، با اجرای QC Plan پیشرفته، کلیه محصولات را در تمامی مراحل از زمان تولید مواد اولیه تا مرحله خروج کالا زیر نظر داشته و کیفیت آنرا تضمین می نمایند. کلیه محصولات شرکت بهسازان جنوب دارای ده سال خدمات پس از فروش می باشد و با توجه به نیاز مشتری، از یک تا پانزده سال عملکرد آنها تضمین میگردد.

## تولیدات شرکت بهسازان جنوب (Our Products)

### شیرآلات و اکچویاتور (Valve & Actuator)

- API 6A/ANSI Ball Valve
- API 6A/ANSI Gate Valve
- API 6A/ANSI Check Valve
- API 6A/ANSI Globe Valve
- API 6A/ANSI Choke Valve
- ESD, LBV, MOV
- High Integrity Pressure Protection System (HIPPS) Including Valves, Actuators, Logic Solver and Transmitters
- SBB & DBB Valve
- Relief & Safety Valve
- Surface Safety Valve (SSV)
- Butterfly Valve
- Plug Valve
- Needle Valve
- Pinch Valve

### تجهیزات سرچاهی (Wellhead)

- Wellhead including:
  - Casing Head Housing and Hanger
  - Casing Head Spool and Hanger
  - Tubing Head Spool and Hanger
  - Packoff Flanges
- Christmas tree including:
  - Solid Block, BOP, Master Valve
  - X-Cap, Spool, Cross, Tee
- Stone Trap, Grit Trap
- Anchor Flange
- Barred Tee
- Flanges & Fittings
- Venturi
- Strainer
- Wellhead Control Panel
- Hydraulic Power Unit



# Valves, Wellheads & Actuators Engineering & Manufacturer

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## Company Profile

Behsazan Jonoob (knowledge base company) is a leading manufacturer of Valves and Wellhead for the oil and gas industry. Formed in 1994, Behsazan Jonoob is privately held and has grown to a medium size company with sales, services and manufacturing facilities. Our continuous investment in the Research and Development of new technology has resulted in the growth and ongoing success of our company. Behsazan Jonoob line of production includes some of the most sophisticated products. Some of our clients include: NIOC, ICOFC, NIGC, ENI Italy, Sinopec, Total. We offer a complete line of API 6A & 6D Valves and Wellhead equipment. Our products can be shipped anywhere in the world, helping our customers with ongoing needs, as well as in-time delivery requirements, is what makes us such a valued strategic partner. With over 30 years of wealthy experience, BJ established a strong base of satisfied customers due to timely delivery of products and committed focus on quality. Producing innovative, quality and application engineered product for oil and gas sector is our main focus. BJ has built a reputation of maintaining commitment and fast responses.



**Fire Safe Test**



**PR2 Test**



**laser spectrometer**



**UT & Hardness Test**

## Quality Commitment

At Behsazan Jonoob, we maintain an ISO 9001 quality management system with strong emphasis on the continual improvement of quality, engineering, manufacturing, and business related processes. The scope of this quality management system covers all processes directly and indirectly related to the design, material, manufacture, assembly, test of all our products and tractability

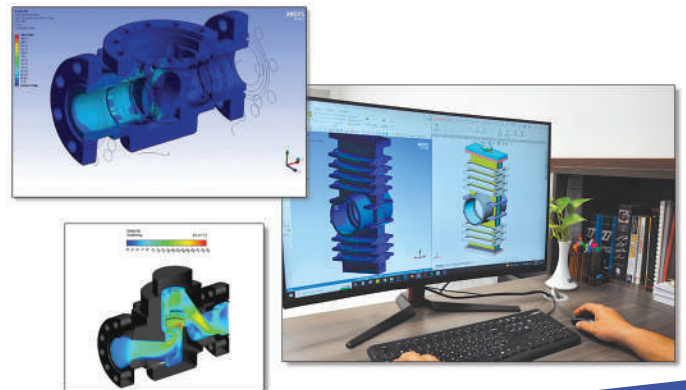
The quality management system also makes provision for the control of purchased component products, which requires that these suppliers also maintain an ISO 9001 based quality system and the .subsequent certification

Behsazan Jonoob quality policy is as follows, "We, the Behsazan Jonoob employees, are committed to meeting our customers' expectations in the manufacture of quality Valves and Wellhead and associated services. We will work as a team in providing error free products and services on time. Our commitment is to continual improvement." That quality policy statement promotes the close relationships between the company, supply chains, and customer expectations of BJ products and services



## Engineering, Research and Development

Behsazan Jonoob is committed to continually develop and manufacture new and better products which will meet the increasingly stringent demands of the energy and process industries. The Company's commitment to Research and Development not only ensures that the most up-to-date technology is used, but also that our clients can count on a reduction of their long term operational costs, due to the long and trouble-free life of our products. We have an unrivalled in-house' design capability for safe, reliable and state-of-the-art products





# Ball Valve

Behsazan Jonoob designs and manufactures Ball Valve for a broad range of applications in the Oil and Gas, Petrochemical industry. We are attempting to satisfy the needs of our customers by achieving high quality and design.

**Specification:** API 6A, API 6D, API 608, BS5351, ISO 17292 and Non-Standard Design

**Nominal Sizes (API 6A):** 1 13/16", 2 1/16", 3 1/8", 4 1/16", 7 1/16", 9", 11"

**Rating:** 3000, 5000, 10000, 15000

**Nominal Sizes (API 6D):** Up to 56"

**ANSI Class:** #150, #300, #600, #800, #900, #1500, #2500, #4500

**Valve type:** Trunnion Mounted, Floating

**Features:** Side Entry, Top Entry & Fully Welded, Soft Seat, Metal Seat, PMSS Seat, Anti Static Device, Anti Blowout Stem, Double Block and Bleed, Double Isolation and Bleed, Extended Stem, Fire Safe Design, Partial Cladding, Fire Proof Jacket

**Fire Safe Design Standard:** API 6FA, BS 6755, API 607

**Operation:** Lever, Gearbox, Pneumatic/Hydraulic/Electro-Hydraulic/Electrical Actuator, Gas Over Oil/Gas Direct Actuator

**Service:** General, Sour Service, Severe Sour Service, Cryogenic and High Temp. Service

**M/C(API 6A):** AA, BB, CC, DD, EE, FF, HH

**T/R(API 6A):** K, L, N, P, S, T, U, V

**PSL(API 6A):** 1, 2, 3

**PR(API 6A):** 1, 2

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel, Nickel Alloy, Duplex/Super Duplex, NACE MR0175/ISO 15156 compliance



**Side Entry**



**Fully Welded**



**Top Entry**

# Single & Double Block and Bleed Valve



**Specification:** API 6A, API 6D, ASME B16.34, ISO 17292

**Type:** Ball, Gate, Needle

**Nominal Sizes(API 6A):** 1 13/16" ~ 7 1/16"

**Rating:** 3000, 5000, 10000

**Nominal Sizes(API 6D):** 1/4" ~ 8"

**ASME Class:** #150, #300, #600, #900, #1500, #2500

**M/C(API 6A):** AA, BB, CC, DD, EE, FF, HH

**T/R(API 6A):** K, L, N, P, S, T, U, V

**PSL(API 6A):** 1, 2, 3 - **PR(API 6A):** 1, 2

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel, Nickel Alloy, Super Duplex

**Service:** General, Sour Service, Severe Sour Service, Cryogenic and High Temp. Service

**NACE MR0175/ISO 15156 compliance**

# Gate Valve

## API 6A

**Specifications:** API 6A

**Nominal Sizes:** 1 13/16", 2 1/16", 3 1/8",  
4 1/16", 7 1/16", 9", 11"

**Rating:** 3000, 5000, 10000, 15000

**Type:** Slab, Through Conduit

**M/C:** AA, BB, CC, DD, EE, FF, HH

**T/R:** K, L, N, P, S, T, U, V - **PSL:** 1, 2, 3 - **PR:** 1, 2

**Operation:** Handwheel, Gearbox, Linear Actuators

**Media:** Oil, Gas

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel, Nickel Alloy, Super Duplex

**Service:** General, Sour Service, Severe Sour Service

**NACE MR0175/ISO 15156 compliance**



## ANSI

**Specification:** API 6D, API 600, API 602, BS 5352, ISO 15761

**Nominal Sizes:** Up to 56"

**ANSI Class:** #150, #300, #600, #900, #1500, #2500

**Type:** Fabricated & Cast, Slab, Expanding, Wedge, Parallel

**Features:** Through Conduit, Rising Stem, Outside Screw and Yoke, Extended Stem, Double Block and Bleed

**Operation:** Handwheel, Power Handwheel, Gearbox, Linear Actuators

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel, Nickel Alloy, Bronze Alloy

**Service:** General, Sour Service, Severe Sour Service

**NACE MR0175/ISO 15156 compliance**



# Check Valve

## API 6A

**Specification:** API 6A

**Type:** Piston and Swing

**Nominal Sizes:** 1 13/16", 2 1/16", 3 1/8",  
4 1/16", 7 1/16", 9", 11"

**Rating:** 3000, 5000, 10000, 15000

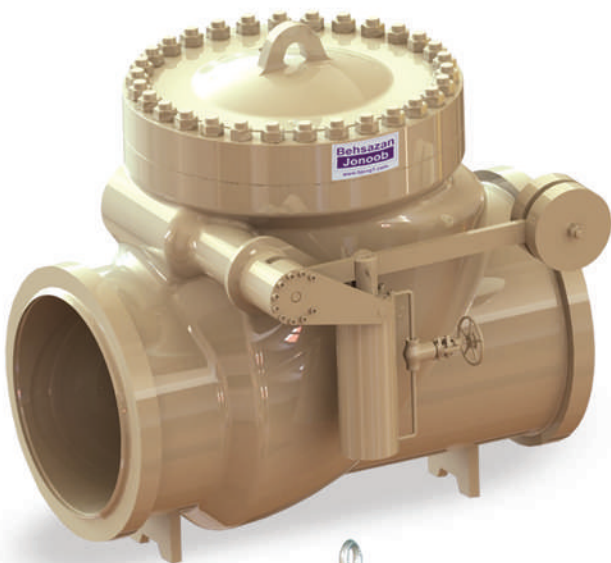
**M/C:** AA, BB, CC, DD, EE, FF, HH

**T/R:** K, L, N, P, S, T, U, V - **PSL:** 1, 2, 3 - **PR:** 1, 2

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel,  
Nickel Alloy, Bronze Alloy

**Service:** General, Sour Service, Severe Sour Service

**NACE MR0175/ISO 15156 compliance**



## ANSI

**Specification:** API 6D, API 594, BS 1868, API 602

**Type:** Swing, Piston, Dual Plate, Single Plate

**Nominal Sizes:** Up to 56"

**ANSI Class:** #150, #300, #600, #900, #1500, #2500

**Features:** Non-Slam, Full/Reduced Opening

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel,  
Nickel Alloy, Super Duplex

**Service:** General, Sour Service, Severe Sour Service,  
Cryogenic and High Temp. Service

**NACE MR0175/ISO 15156 compliance**



# Globe Valve

## API 6A

**Specification:** API 6A

**Nominal Sizes:** 1 13/16" , 2 1/16" , 3 1/8" , 4 1/16" ,  
7 1/16" , 9" , 11"

**Rating:** 3000, 5000, 10000

**Valve characteristic:** Throttling, Quick Opening

**M/C:** AA, BB, CC, DD, EE, FF, HH

**T/R:** K, L, N, P, S, T, U, V - **PSL:** 1, 2, 3 - **PR:** 1, 2

**Operation:** Handwheel, Gearbox, Linear Actuators

**Service:** General, Sour Service, Severe Sour Service

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel,  
Nickel Alloy, Super Duplex

**NACE MR0175/ISO 15156 compliance**



## ANSI

**Specification:** API 623, BS 1873, ISO 15761

**Nominal Sizes:** Up to 24"

**ANSI Class:** #150, #300, #600, #800, #900, #1500, #2500

**Valve characteristic:** Throttling , Quick Opening

**Operation:** Handwheel, Gearbox, Linear Actuators

**Service:** General, Sour Service, Severe Sour Service,  
Cryogenic and High Temp. Service

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel,  
Nickel Alloy, Super Duplex

**NACE MR0175/ISO 15156 compliance**



# Choke Valve

## Positive Choke Valve

**Specification:** API 6A & API 6D

**Nominal Sizes(API 6A):** 1 13/16", 2 1/16", 3 1/8", 4 1/16", 7 1/16", 9"

**Rating(API 6A):** 3000, 5000, 10000, 15000

**Nominal Sizes(API 6D):** Up to 10"

**Rating(API 6D):** Up to 2500

**M/C:** AA, BB, CC, DD, EE, FF, HH

**T/R:** K, L, N, P, S, T, U, V - **PSL:** 1, 2, 3 - **PR:** 1, 2

**Features:** Fully Forged One Piece Body, Convertable to Adjust Type Choke Valve

**Max Bean Size:** 4"

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel, Nickel Alloy, Super Duplex

**Service:** General, Sour Service, Severe Sour Service

**NACE MR0175/ISO 15156 compliance**



## Adjustable Choke Valve

**Specification:** API 6A & API 6D

**Type:** External Sleeve, Plug & Cage, Needle

**Nominal Sizes(API 6A):** 1 13/16", 2 1/16", 3 1/8", 4 1/16", 7 1/16", 9"

**Rating(API 6A):** 3000, 5000, 10000, 15000

**Nominal Sizes(API 6D):** Up to 10"

**Rating(API 6D):** Up to 2500

**Material Class:** AA, BB, CC, DD, EE, FF, HH

**T/R:** K, L, N, P, S, T, U, V - **PSL:** 1, 2, 3 - **PR:** 1, 2

**Features:** Fully Forged One Piece Body, Convertable to Positive Type Choke Valve

**Operation:** Handwheel, Gearbox, Electrical Motor

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel, Nickel Alloy, Super Duplex

**Service:** General, Sour Service, Severe Sour Service

**NACE MR0175/ISO 15156 compliance**



# Butterfly Valve



**Specification:** API 609, MSS SP-67, MSS SP-68, EN1092, ASME B16.1, ASME B16.5

**Type:** Double Flanged, Lug & Wafer

**Nominal Sizes:** Up to 72"

**Rating:** #125, #150, #300, #600

**Rated Pressure(EN1092):** PN6, PN10, PN16, PN25, PN40, PN63, PN100

**Material:** Cast/Ductile Iron, Carbon Steel, Stainless Steel, Bronze Alloy

**Flow Characteristic:** On/Off, Throttling

**Media:** Oil, Water

**Operation:** Lever, Gearbox, Pneumatic/Hydraulic/Electrical Actuator

**Service:** General, Sour Service, Severe Sour Service

**NACE MR0175/ISO 15156 compliance**

# Needle Valve

**Specification:** MSS SP-99, ASME B16.34

**Nominal Sizes:** 1/8"~ 1"

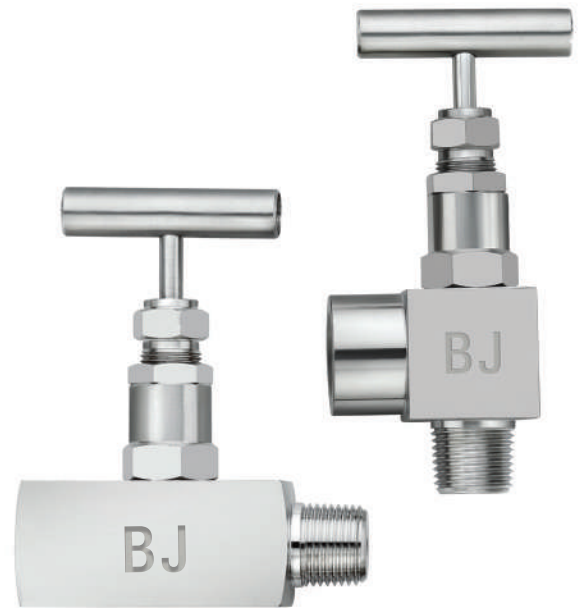
**Rating:** 3000, 6000, 10000

**Type:** Straight or Angle Pattern

**Material:** Carbon Steel, Stainless Steel, Brass

**End Connection:** Screwed (BSP/BSPT/NPT Thread),  
Socket Weld, Double Ferrule Tube Fitting

**NACE MR0175/ISO 15156 compliance**



# Pinch Valve

**Specification:** EN1092, ASME B16.5

**Function:** On/Off, Throttling

**Nominal Sizes:** Up to 24"

**Rating**(ASME B16.5): #150, #300

**Pressure Class**(EN1092): PN6, PN10, PN16, PN25, PN40, PN63, PN100

**Construction:** Open Body, Enclosed body, Enclosed/Sealed body

**Media:** Liquid, Solid and Slurry

**Operation:** Handwheel, Gearbox, Pneumatic/Hydraulic and  
Electrical Actuated

**Material:** Carbon Steel (Cast/Plate), Aluminum, Stainless Steel

**Sleeve Material:** SBRT, EPDM, NR, NBR, HNBR, PU

**NACE MR0175/ISO 15156 compliance**



# Relief & Safety Valve

**Specification:** API 520, API 526, API 527, API 2000, ISO 4126, ASME Section VIII

**Function:** Pressure Relief/Safety, Thermal Relief/Safety, Pressure/Vacuum Relief, Breather

**Type:** Pilot Operated, Conventional, Bellows, Weight-Loaded, Spring-Loaded

**Nominal Sizes:** Up to 8"

**Rating:** #150, #300, #600, #900, #1500, #2500

**Nozzle:** Semi, Full

**Orifice Designations:** According to API 526

**Set Pressure:** 20 Psig ~ 6170 Psig

**Material:** Carbon Steel, Chrome Molybdenum Steel, Austenitic Stainless Steel, Nickel/Copper Alloy, Alloy 20

**Temperature Range:** -450 °F ~ 1000 °F

**NACE MR0175/ISO 15156 compliance**



## Plug Valve

**Specification:** API 6A

**Design Nominal Sizes:** 1", 2"

**Rating:** 15000 (105MPa)

**Material Class:** DD, EE, FF, HH

**T/R:** K, L, N, P, S, T, U, V

**PSL:** 1, 2, 3

**PR:** 1, 2

**Service:** Acidizing, Cementing Suitable for H2S Service

**NACE MR0175/ISO 15156 compliance**



## Surface Safety Valve

**Specification:** API 6A, API 6D

**Nominal Sizes(API 6A):** 3 1/8", 4 1/16", 7 1/16"

**Rating:** 3000, 5000, 10000

**Material Class:** DD, EE, FF, HH

**T/R:** K, L, N, P, S, T, U, V

**PSL:** 1, 2, 3

**PR:** 1, 2

**Nominal Sizes(API 6D):** 4", 6", 8", 10"

**ANSI Class:** #300, #600, #900, #1500

**Reverse Acting Gate Valve**

**Low & High Pilot Range:** 15~6000 Psig

**Failure:** Failed to Close

**Media:** Oil, Gas

**Material:** Carbon Steel, Low Alloy Steel, Stainless Steel, Nickel Alloy, Super Duplex

**NACE MR0175/ISO 15156 compliance**



## **B, D, M, L Pilots & Velocity Check Valve (OTIS Type)**

The Behsazan Jonoob velocity check valve is a 2-way, 2 position control valve. It is ideal for line break or process upset detection when using pipeline process pressure to operate an actuated valve. The valve is designed to operate with liquid or gas process fluids with pressures ranging from 100 to 10,000 PSI. The valve incorporates a unique soft seal design to ensure zero leakage while also providing trip indication.

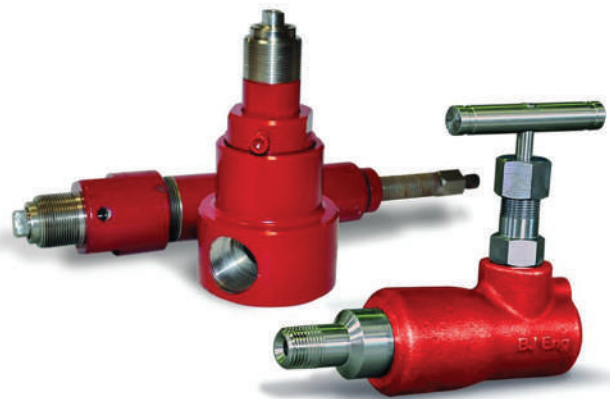
**Specification:** API 6A

**Nominal Size:** 1/2" NPT, 1", 1 3/4" UNC

**Working Pressure:** 10,000 psi

**H2S Service**

**NACE MR0175/ISO 15156 compliance**



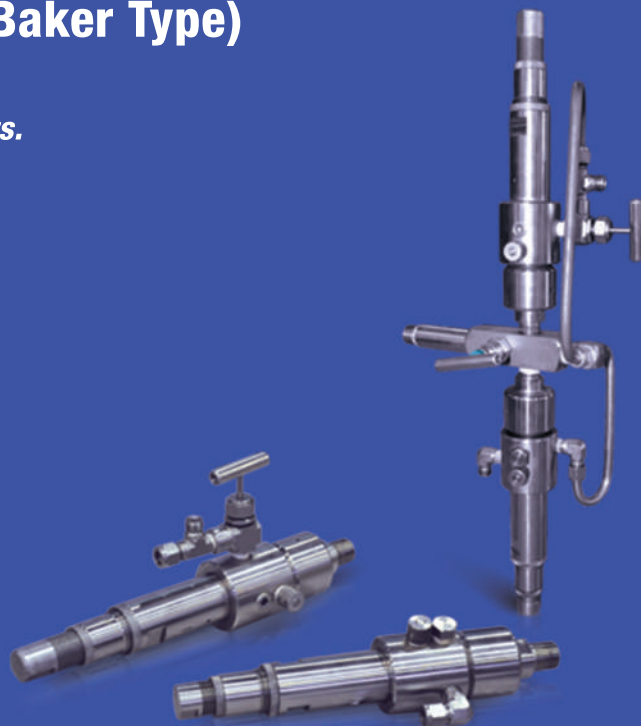
## **Line Pressure Operated (LPO) Actuator Control System (Baker Type)**

**LPO System including HIGH AND LOW Pilots.**

- **High Pilot. Set pressure 15-4500 psig.**
- **Low Pilot, Set pressure 15-4500 psig.**
- **Velocity Check Valve.**
- **Low Pressure ByPass valve**
- **Process Isolating Valve**

**H2S Service**

**NACE MR0175/ISO 15156 compliance**



# Actuated Valves

## Emergency Shut Down Valve

**Specification:** API 6A, API 6D, API 6DX

**Type:** Quarter Turn, Linear

**Valve Type:** Ball Valve, Butterfly Valve, Gate Valve

**Power Supply:** Pneumatic, Hydraulic, Gas Direct

**Nominal Sizes (API 6A):** 1 13/16", 2 1/16", 3 1/8", 4 1/16", 7 1/16", 9", 11"

**Rating:** 3000, 5000, 10000, 15000

**Nominal Sizes (API 6D):** Up to 56"

**ANSI Class:** #150, #300, #600, #900, #1500, #2500

**Actuator Function:** On/Off

**Actuator Output Torque:** Up to 150000 N.m

**NACE MR0175/ISO 15156 compliance**

# ESDV





# Motor Operated Valve

**Specification:** API 6A, API 6D, API 6DX, ISO 22153

**Valve Type:** Ball Valve, Butterfly Valve, Gate Valve, Choke Valve

**Nominal Sizes (API 6A):** 1 13/16", 2 1/16", 3 1/8",  
4 1/16", 7 1/16", 9", 11"

**Rating:** 3000, 5000, 10000, 15000

**Nominal Sizes (API 6D):** Up to 56"

**ANSI Class:** #150, #300, #600, #900, #1500, #2500

**Actuator Function:** On/Off, Modulating

**Motor Manufacturer:** Rotork, Auma

**NACE MR0175/ISO 15156 compliance**



# MOV



## Line Break Valve

**Specification:** API 6D, API 6DX

**Type:** Quarter Turn

**Valve Type:** Ball Valve

**Power Supply:** Pneumatic, Gas Direct, N2 Bottle

**Nominal Sizes (API 6D):** Up to 56"

**ANSI Class:** #150, #300, #600, #900, #1500, #2500

**Actuator Function:** On/Off

**Equipped with mechanical or Electrical Detection System**

**Actuator Output Torque:** Up to 150000 N.m

**NACE MR0175/ISO 15156 compliance**

# LBV

# High-Integrity Pressure Protection System (HIPPS)



**The High Integrity Pressure Protection System (HIPPS) is a mechanical and electrical system designed in order to reduce the risk of over pressurization.**

**Behsazan Jonoob** is a leading in:

- Manufacture of SIL Certified Skid Mounted Valve Actuators with Local Control Panel & Fire Proofing feature
- Integrator of HIMA SIL Certified Logic Solver Panel (HIQUAD X & All Accessories such as modules, Power Supply, Isolator Barrier, Safety Relay, ..)
- Supplier of Rittal Industrial Enclosure & Schneider HMI Display
- Supplier of SIL Certified Pressure Transmitter with Diaphragm Seal & Flashing Ring for Monitoring of Line Pressure

*It is completely manufactured and assembled in Iran.*



## **Initiators (Pressure Transmitter, Interlocking Manifold)**

*The pressure transmitters detect the high pressure in the system and the Safety loop may include a minimum of three transmitters, which operate in a 2oo3 voting logic, to achieve the SIL 3 requirement.*



## **Logic Solver (PLC-Based, Rittal Cabinet)**

*A logic solver is an electric safety system that combines digital and analogue signals to monitor the status of the HIPPS inputs and determine if a safety valve has to be closed.*

*The logic solver normally operates fully autonomously.*



## **Final Elements (Actuated Valve, Solenoid Valve)**

*The final elements are the physical units that are called upon to isolate the exposure, and are typically fail safe valves, open or closed using spring loaded, hydraulic or pneumatic actuators and solenoids.*

# Wellhead Equipment

**Specification:** API 6A

**Nominal Sizes:** all casing program  
up to 21-1/4"

**Rating:** 2000, 3000, 5000, 10000

**Connection Type:** threaded and slip on welding

**M/C:** AA to HH

**T/R:** K, L, N, P, S, T, U, V

**Material:** 45K, 60K, 75K

**PSL:** 1, 2, 3, 3G

**PR:** 1, 2

**Suitable for H2S service**

**NACE MR0175/ISO 15156 compliance**

## X-Mass Tree

**Specificaitons:** API 6A

**Nominal Sizes:** 3 1/16", 4 1/16", 5 1/8", 7 1/16"

**Rating:** 3000, 5000, 10000

**Type:** All Single String Type

**M/C:** AA to HH

**T/R:** K, L, N, P, S, T, U, V

**Material:** 45K, 60K, 75K

**PSL:** 1, 2, 3, 3G

**PR:** 1, 2

**Suitable for H2S service**

**NACE MR0175/ISO 15156 compliance**



# Solid Block

**Main Drift:** 2-1/16", 2-9/16", 3-1/16", 4-1/16", 5-1/8", 6-3/8"

**Working Pressure:** 2000psi~10000psi

**Material Class:** AA, BB, CC, DD, EE, FF, HH

**T/R:** K, L, N, P, S, T, U, V

**PSL:** 1, 2, 3, 3G

**PR:** 1, 2

**NACE MR0175/ISO 15156 compliance**



## BOP (Manual for SRP)

Manual type Ram BOP, body are made of forging or casting, ram chamber adopts ellipse cross section or rectangular section. The ram is driven by gear device or handwheel to realize the switch operation. Body designed automatic sand cleaning, The ram designed automatically center. Ram installed special tooth structure, can clamped pipe, can bear the pipe weight, can be achieved the function with slip and sealing

### Technical Data:

- Opening and closing of the ram driven by manual, do not need BOP control system
- Less parts, compact structure, small size, light weight.
- Side door made of low alloy forging, pressure bearing ability.
- Can be provided with worm device, effectively reduced the labor intensity.
- Low manufacturing cost, easy maintaining.

### Basic Parameters:

- **Bore:** 3 1/8", 4 1/16", 5 1/8", 6 3/8"
- **Working Pressure:** 2000psi~10000psi



## BOP (Automatic for SRP)

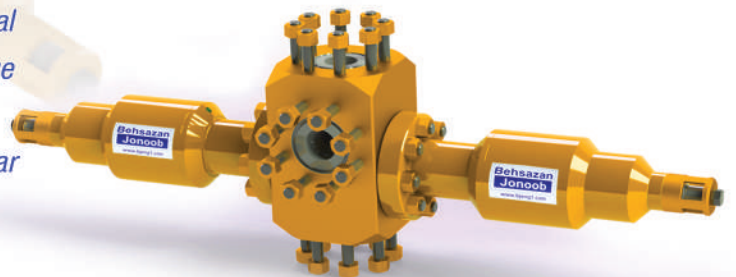
Automatic BOP, body and major parts are made of forging, ram chamber adopts long circular cross section. The Ram is driven by a hydraulic cylinder of piston rod to realize the switch operation. Side door can straight-line switch, it controlled by hydraulic. Body designed automatic sand cleaning. The ram designed automatically center, in the side of body designed two export, used to connect choke manifolds and kill manifolds, can used in mud recirculation, throttle, kill the well, wash the well and any other special operations. The cylinder body designed one discharge port used to vent pressure when the pressure is too high. The intermediate flange designed secondary sealing device, when the observation port was found liquid leakage.

### Technical Data:

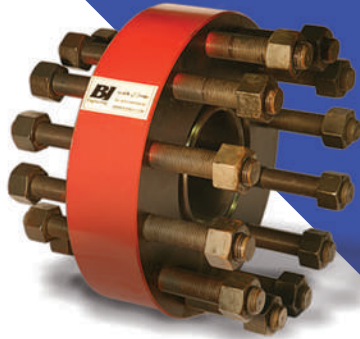
- Shut well quickly, it can shut well within 3~8 seconds.
- Easy to operation, it is hydraulic actuated.
- Ram chamber adopts long circular cross section, strength evenly, good resistance to pressure
- Side door ASSY can straight-Line switch by hydraulic, easy to change the Ram ASSY, easy maintenance
- Side door sealed with floating seal instead of mechanical seal
- RAM shaft sealed with three sealing, reliable seal
- Ram rubber used self-contained seal, has a large amount of rubber reserves
- More extended functions, the installation of shear booster device, hydraulic lock device, etc

### Basic Parameters:

- **Bore:** 3 1/8", 4 1/16", 5 1/8", 6 3/8"
- **Working Pressure:** 2000psi~10000psi



# Adaptor Packoff Flanges



Behsazan Jonoob manufactures different type of Adapter Flanges consist of : DSA, SSA and Flange X Union in all sizes and pressure ratings.

**Specification:** API 6A

**Nominal Sizes:** 3 1/8" ~ 21 1/4"

**Rating:** 2000, 3000, 5000, 10000

**M/C:** AA to HH

**T/R:** K, L, N, P, S, T, U, V

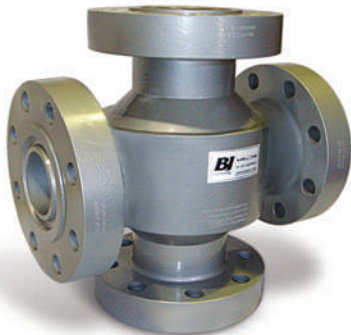
**Material:** 45K, 60K, 75K

**PSL:** 1, 2, 3, 3G - **PR:** 1, 2

**Overlay/Cladding:** Inconel, SS316L

**Suitable for Sour Service,  
NACE MR0175/ISO 15156 compliance**

# Cross and Tee



Behsazan Jonoob design and manufactures Flanged and Studded Cross and Tee according to API Spec 6A with high quality forged material.

**Specification:** API 6A

**Nominal Sizes:** 1 13/16", 2 1/16", 3 1/8", 4 1/16", 7 1/16"

**Rating:** 3000, 5000, 10000

**M/C:** AA to HH

**T/R:** K, L, N, P, S, T, U, V

**Material:** 45K, 60K, 75K

**PSL:** 1, 2, 3, 3G

**Suitable for Sour Service,  
NACE MR0175/ISO 15156 compliance**

# Swept Bend



Behsazan Jonoob manufactures different sizes and working pressures of Swept Bends with Hot Bend process using high quality seamless pipe and Casting.

**Specification:** API 6A

**Nominal Sizes:** 1 13/16", 2 1/16", 3 1/8", 4 1/16", 7 1/16"

**Rating:** 3000, 5000, 10000

**Material:** Forged and Cast

**Suitable for Sour service,  
NACE MR0175/ISO 15156 compliance**

## Stone Trap & Grit Trap

Behsazan Jonoob design and manufactures Stone Trap and Grit Trap with High Quality Material from well known fittings manufacturer according to API 6A -and customize for any requirement

**Specification:** API 6A, ASME B31.3, ASME B31.4

**Nominal Sizes:** 2 1/16" ~ 9"

**Rating:** 2000, 3000, 5000, 10000

**M/C:** AA to HH

**T/R:** K, L, N, P, S, T, U, V

**Material:** 45K, 60K, 75K

**PSL:** 1, 2, 3, 3G - **PR:** 1, 2

**Overlay/Cladding:** Inconel

**Suitable for Sour service,**

**NACE MR0175/ISO 15156 compliance**



## Strainers

**Specification:** IPS-G-PI-230

**Type:** T-Type, Y-Type, Duplex, Compact Duplex

**Nominal Sizes:** 2"~42"

**Rating:** CL150~CL2500

**Material:** Carbon Steel & Stainless Steel

**NACE MR0175/ISO 15156 compliance**



## Special & Items Flanges



## Barred Tee

**Specification:** ASME B16.9, MSS SP 75, IPS-D-PI-149

**Nominal sizes:** 1/2" ~ 56"

**Material:** A860 WPHY, A234 WPB, Bar materials hot rolled mild steel plate compatible with tee body material unless otherwise specified.

**Suitable for Sour Service**

**NACE MR0175/ISO 15156 compliance**



## Spool and Adaptor Spool

**Specification:** API 6A

**Nominal Sizes:** 1 13/16" ~ 21 3/4"

**Rating:** 2000, 3000, 5000, 10000

**M/C:** AA to HH

**T/R:** K, L, N, P, S, T, U, V

**Material:** 45K, 60K, 75K

**PSL:** 1, 2, 3, 3G - **PR:** 1, 2

**Suitable for Sour service,**

**NACE MR0175/ISO 15156 compliance**



## Anchor Flange

Anchor flanges are forged fittings installed on pipelines and embedded in reinforced concrete blocks. They are used to restrain or limit main line thermal expansion or contraction and transfer built-up stresses to external structures or larger foundation.

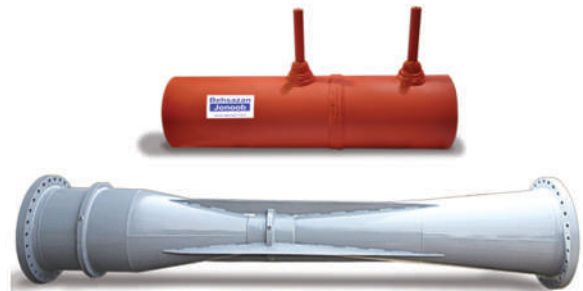
**Specification:** ASME B16.5, ASME B16.25, ASME SECTION VIII

**Size Chart:** Normal Pipe Size 2" to NPS 56"

**Rating:** Class 150 to Class 2500

**Materials:** Carbon Steel & Stainless Steel

**NACE MR0175/ISO 15156 compliance**



## Venturi Flow Element

**Specification:** ISO 5167

**Nominal Sizes:** 2" - 56"

**Rating:** CL150-CL 2500

**Overlay:** Inconel, Stellite

**Suitable for Sour Service,**

**NACE MR0175/ISO 15156 compliance**



# Flanges

**Specification:** API 6A, ASME B16.5 and ASME B16.47

**Type:** Weld Neck, Blind, Threaded, Socket Weld

**Nominal Sizes(API 6A):** 1 13/16"~21 1/4"

**Rating:** 3000, 5000, 10000, 15000

**M/C(API 6A):** AA to HH - **T/R(API 6A):** K, L, N, P, S, T, U, V

**Material:** 45K, 60K, 75K

**PSL:** 1, 2, 3, 3G - **PR:** 1, 2

**Nominal Sizes (ASME B16.5):** 1/2"~24"

**Nominal Sizes (ASME B16.47):** 26"~60"

**ANSI Class:** #150, #300, #600, #900, #1500, #2500

**Overlay/Cladding:** Inconel

**Suitable for Sour Service, NACE MR0175/IOS 15156 compliance**



## Choke Flange

**Specification:** API 6A

**Nominal sizes:** 2 1/16" up to 11"

**Rating (API 6A):** 3000, 5000, 10000, 15000

**Pressure Drop:** According to request

**Material:** 45K, 60K, 75K

**Suitable for Sour Service**

**NACE MR0175/ISO 15156 compliance**



## Spectacle Flange

**Specification:** ASME B16.48, ASME B16.5

**Type:** Figure-8 Blank, Paddle Blank, Paddle Spacer

**Application:** Water Pipeline Industry, Nuclear Power Plant, Natural Gas Industry, Fabrication Industry, Oil And Gas Industry, Chemical Industry

**Rating:** #150, #300, #600, #900, #1500, #2500

**Sizes:** 1/2" ~ 24"

**NACE MR0175/ISO 15156 compliance**



## Orifice Flange

**Specification:** ASME B16.36, ASME B16.5

**Rating:** #300, #600, #900, #1500, #2500

**Sizes:** 1/2" ~ 24"

**Material:** Carbon Steel & Stainless Steel

**NACE MR0175/ISO 15156 compliance**





## Wellhead Control Panel

BJ control panels are available in a wide variety of options and are built with exceptional quality with a proven track record for reliability and ease of maintenance. We specialize in the design and assembly of wellhead surface and sub-surface safety valve & HIPPS control panels for well production facilities. Our panels are adaptable to facilities located both onshore and offshore and are designed and assembled in-house in both standard and custom configurations. Each well has individual manual and automatic control features to allow the well to be shutdown in sequence according to the pneumatic logic control or program logic control (PLC).

To achieve this, the Wellhead Control Panel/Rack consists of various pressure switches, sensors and solenoid valves

### ***Our wellhead control panel products include:***

- *Pneumatic/hydraulic control systems*
- *Electro/hydraulic control systems*
- *Single well control panels*
- *Multi-well control panels*
- *Modular well control panels*

### ***Material Used and Design Cuts:***

- *Up to 20,000 Psi*
- *Hydraulic Pumps (High / Low pressure)*
- *SS316 - Tubing / Fittings*
- *SS316 / Carbon Steel - Accumulator*
- *SS316 - Instrumental Valves*
- *SS316 - Pressure Transmitter / Gauges / Switches*
- *SS316 - Solenoid Valves - ATEX / EEXD, EEXIA*



## Hydraulic Power Unit

*BJ Hydraulic unit or power unit, also called hydraulic power pack, consists of main parts including motor, pump, controllers, tank, accumulator, Pressure Gauge, Pressure Relief Valve, Hand Pump, Solenoid Valve, Pressure Transducer...*

*Hydraulic units are used to supply energy and power to hydraulic systems such as Hydraulic Actuator, Power Handwheel and Surface Safety Valves...*

# 42" GOREH-JASK PIPE LINE



# GOREH-JASK PUMP STATION



**KARANJ**



**MANSOURI**



**SOUTH YARAN**



**NORTH YARAN**



**SOUTH AZADEGAN**



**DARQUAIN PHASE 2**



## HYDRAULIC TEST BENCH



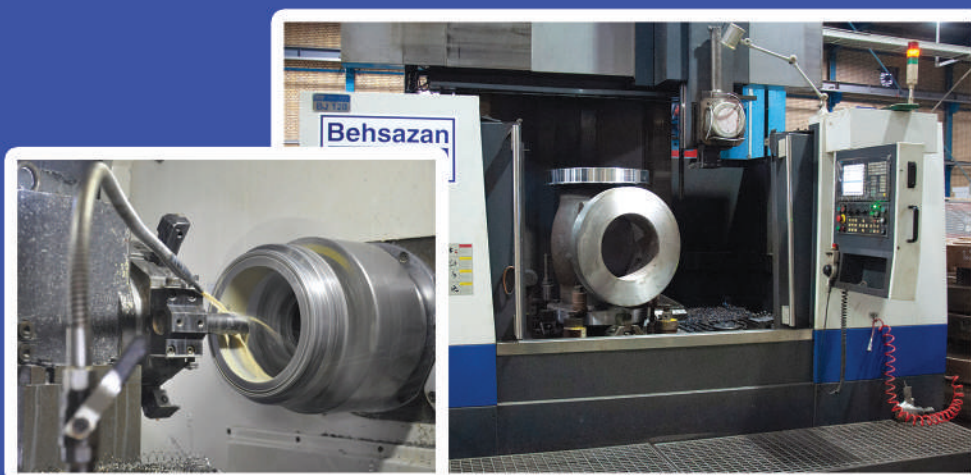
## ACTUATOR TEST BENCH



## GLADDING EQUIPMENT



## MACHINING EQUIPMENT



## GAS TEST





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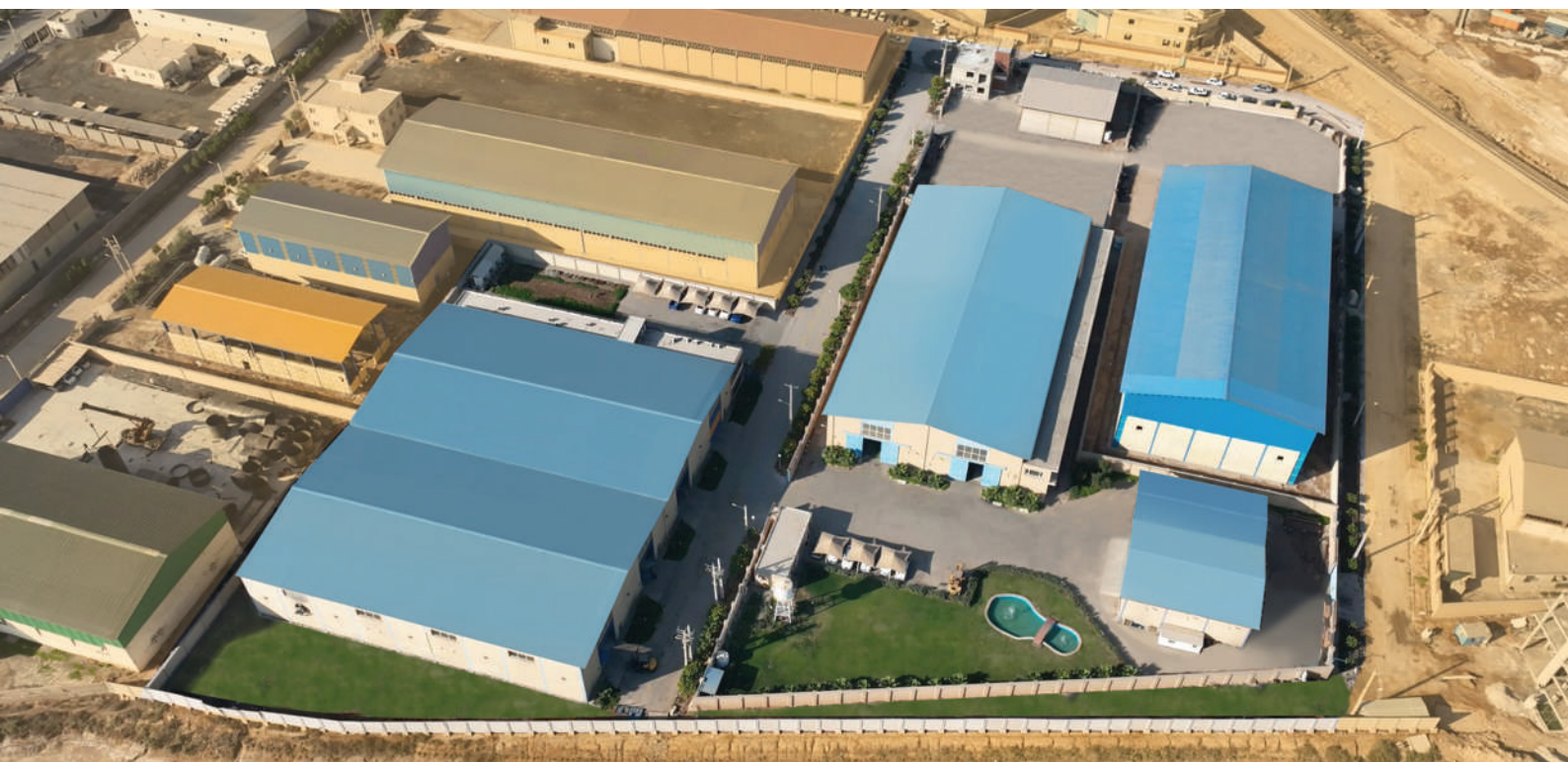
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