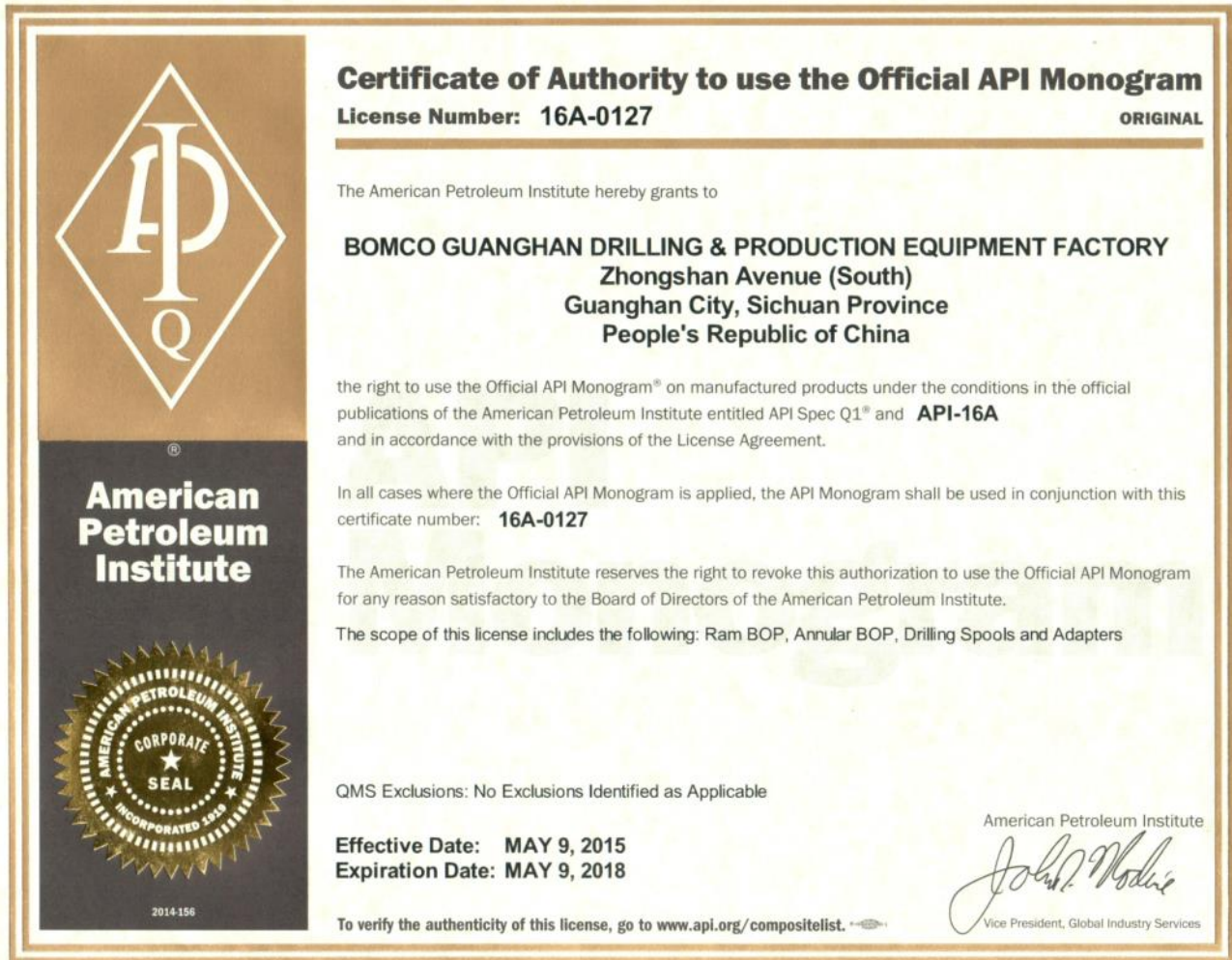


API 16A PRODUCTS

Well Control Equipment

Oilman Group Ltd





BOMCO Guanghan Drilling & Production Equipment Factory is a subsidiary of CNPC and provides the best API 6A & 16A products to esteemed customers all over the world.



BOP SPECIFICATIONS

DN (in)	7-1/16	9	11	13-5/8	16-3/4
	18-3/4	20-3/4	21-1/4	26-3/4	
Working Pressure(psi)	2,000	3,000	5,000	10,000	15,000
Flange	API 6A				
Design and Manufactureing	Meet or exceed API 6A				

Temperature Classifications

Classifications	Operating Range	
	°C	°F
T-75	-59 to 121	-75 to 250
T-20	-29 to 121	-20 to 250
T-0	-18 to 121	0 to 250

Drilling Pipe Sizes Suitable for Blind Ram

BOP	Drilling Piping(min)	Hydraulic Pressure
7-1/16"	3 1/2" 13.3lb/ft E-75	≤3000psi
11"	5" 19.5lb/ft E-75	
13-5/8"	5" 19.5lb/ft G-105	

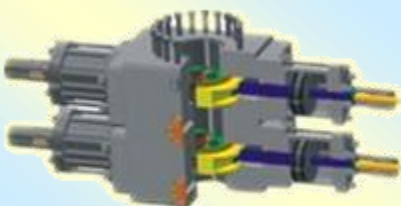
Standard Material Property

Material Designator	0.2% Offset yield strength(min)		Tensile Strength(min)		Elongation in 50mm(2in)	Reduction in area
	Mpa	psi	Mpa	psi	% (min)	% (min)
36k	248	36,000	483	70,000	21	/
45k	310	45,000	483	70,000	19	32
60k	414	60,000	586	85,000	18	35
75k	517	75000	655	95,000	18	35

RAM BOP

Features:

- Main pressurized parts made of casting or forging with excellent comprehensive mechanical properties.
- Large volume feedable rubber and enhanced seal deliver a long and dependable service life.
- Hydraulic control is used for closing and opening cylinder and intermediate flange.
- Large piston area, easing operation at moderate operation pressure.
- Ram replacement easily.



- Pressure energized ram seal
- Ram are interchangeable with Cameron related type.

Parameters of Ram BOP

Parameter Module	Bore Size (inch)	Pressure Rating (Mpa/psi)	Hydraulic Control Pressure (Mpa/psi)	Ram Size (inch)	Side Outlet Flange size(in)
7-1/16"-21	7-1/16	20.7/3,000	8.5-10.5/1230-1520	2-7/8	2-1/16
7-1/16"-35	7-1/16	34.5/5,000	8.5-10.5/1230-1520	2-7/8	2-1/16
7-1/16"-70	7-1/16	69/10,000	8.5-10.5/1230-1520	3-1/2	2-1/16
7-1/16"-105	7-1/16	103.5/15,000	8.5-10.5/1230-1520	3-1/2	2-1/16
9"-21	9	20.7/3,000	8.5-10.5/1230-1520	2-7/8	2-1/16
9"-35	9	34.5/5,000	8.5-10.5/1230-1520	2-7/8	2-1/16
9"-70	9	69/10,000	8.5-10.5/1230-1520	3-1/2 "Pipe	2-1/16
11"-21	11	20.7/3,000	8.5-10.5/1230-1520	5" Pipe Ram	2-1/16
11"-35	11	34.5/5,000	8.5-10.5/1230-1520	5" Pipe Ram	2-1/16
11"-70	11	69/10,000	8.5-10.5/1230-1520	5" Pipe Ram	2-1/16
11"-105	11	103.5/15,000	8.5-10.5/1230-1520	5" Pipe Ram	2-1/16
13-5/8"-21	13-5/8	20.7/3,000	8.5-10.5/1230-1520	5" Pipe Ram	2-1/16
13-5/8"-35	13-5/8	34.5/5,000	8.5-10.5/1230-1520	5" Pipe Ram	2-1/16
13-5/8"-70	13-5/8	69/10,000	8.5-10.5/1230-1520	5" Pipe Ram	2-1/16
13-5/8"-105	13-5/8	103.5/15,000	8.5-10.5/1230-1520	5" Pipe Ram	2-1/16
20-3/4"-21	20-3/4	20.7/3,000	8.5-10.5/1230-1520	5" Pipe Ram	4-1/16
21-1/4"-14	21-1/4	13.8/2,000	8.5-10.5/1230-1520	5" Pipe Ram	4-1/16
26-3/4"-14	26-3/4	13.8/2,000	8.5-10.5/1230-1520	5" Pipe Ram	4-1/16

ANNULAR BOP

Annular BOP fabricated by BOMCO features compact structure, reliable sealing and suitable all shape, all size of kelly drilling pipe, drilling pipe, casing and cables.



Parameters of Annular BOP

Parameter Module	Bore Size (inch)	Pressure Rating (Mpa/psi)	Hydraulic Control Pressure (Mpa/psi)	Control Line Connection (in)
7-1/16"-21	7-1/16	20.7/3,000	8.5-10.5/1230-1520	NPT 1"
7-1/16"-35	7-1/16	34.5/5,000	8.5-10.5/1230-1520	NPT 1"
7-1/16"-70	7-1/16	69/10,000	8.5-10.5/1230-1520	NPT 1"
9"-21	9	20.7/3,000	8.5-10.5/1230-1520	NPT 1"
9"-35	9	34.5/5,000	8.5-10.5/1230-1520	NPT 1"
9"-70	9	69/10,000	8.5-10.5/1230-1520	NPT 1"
11"-21	11	20.7/3,000	8.5-10.5/1230-1520	NPT 1"
11"-35	11	34.5/5,000	8.5-10.5/1230-1520	NPT 1"
11"-70	11	69/10,000	8.5-10.5/1230-1520	NPT 1"
13-5/8"-21	13-5/8	20.7/3,000	8.5-10.5/1230-1520	NPT 1"
13-5/8"-35	13-5/8	34.5/5,000	8.5-10.5/1230-1520	NPT 1"
13-5/8"-70	13-5/8	69/10,000	8.5-10.5/1230-1520	NPT 1"
13-5/8"-105	13-5/8	103.5/15,000	8.5-10.5/1230-1520	NPT 1"
20-3/4"-21	20-3/4	20.7/3,000	8.5-10.5/1230-1520	NPT 1"
21-1/4"-14	21-1/4	13.8/2,000	8.5-10.5/1230-1520	NPT 1"

Integral Blowout Preventer Stack

The integral BOP stack integrates Ram Blowout Preventer, Annular Blowout Preventer and Drilling Spool. It is a safe, fast and efficient latest model Blowout Preventer Stack, which is mainly applied to mechanical Drilling Rig and Work over rig with limited installation space.

Features:

- Improve well control safety: The Integral Blowout Preventer Stack is forged as a whole piece without combined connection and reduce leakage points.
- Promote drilling speed: The Integral Blowout Preventer Stack only install once, save installation time by simplifying operation procedure.
- Reduce drilling costs: BOP stack installation and operation as one piece, easily move, which greatly saves operating time and labor intensity.



Main performance Data:

Working Pressure	Mpa	14	21	35
	psi	2000	3000	5000
Main Diameter	mm	φ179.4	φ279.4	φ346.1
	inch	7-1/16	11	13-5/8
Material Code		75K		
Temperature Class		T-20		

VARIABLE BORE RAM

Variable bore ram can be used to seal on a range of pipe from 3-1/2" to 5-1/2" , and can replace rams: 3-1/2" , 4" , 4-1/2" , 5" and 5-1/2"



Drilling Spool

Oilman Group supplies drilling spool designed and manufactured according to API 16A product specification. Products are designed to allow smooth circulation of mud during the drilling environment. Drilling spools are used for BOP hookup and usually have the same nominal top and bottom end connections. Side outlet may differ from each other. Top, bottom and side end connections can be hub end or flanged.

SPECIFICATIONS

Working pressure:	2,000psi – 20,000psi
Working medium:	Oil, Natural Gas, Mud
Working temperature:	-29 -121°C (82°F -250°F)
Material class:	CC, DD, EE, FF
Specification class:	PSL1, PSL2, PSL3, PSL4
Performance class:	PR1, PR2

