ATTACHMENT 1.2A - PRICING FORMAT

Cameron Quotation #445415

NOTE: Your bid must be submitted in the following format. If clarifications are required they should become an attachment. All line items must include a realistic delivery date. Forward to:

RBF Exploration Co.
Fax No: (281) 597-7510
Attn: Marisol Gonzalez

Project: RBS8D Semi-Submersible
Inquiry No: 087-00015
Package Name: BOP STACK

Item	Price Each	Delivery	Comments
1	N/A	N/A	SPECIFICATION, GENERAL
2	N/C	N/A	DOCUMENTATION
3	$54,788	✓ 9-MONTHS	ADAPTER MANDREL
4	$38,829	✓ 9-MONTHS	GASKET SPECIFICATION
5	$13,365	✓ 9-MONTHS	HUB, BLIND CLAMP, 3-1/8" 15,000 PSI
6	$136,555	✓ 9-MONTHS	ASSEMBLY, CLAMP
7	$102,432	✓ 9-MONTHS	CHOKE AND KILL SYSTEM
8	$564,020	✓ 9-MONTHS	STACK RECEIVER PLATE ASSEMBLY
9	PRICE INCLUDED IN ITEM 8	9-MONTHS	FRAME, LOWER BOP STACK
10	PRICE INCLUDED IN ITEM 8	9-MONTHS	FRAME, GUIDE
11	$226,665	✓ 9-MONTHS	ASSEMBLY, LOWER STACK F.A.T.
12	$376,013	✓ 9-MONTHS	STAB PLATE
13	PRICE INCLUDED IN ITEM 12	9-MONTHS	ACCUMULATOR BOTTLES AND RACK
14	$250,000	✓ 9-MONTHS	HOSES, PIPING, HYDRAULIC
15	$128,325	✓ 9-MONTHS	HOSE
16	$116,665	✓ 9-MONTHS	LMRP ASSEMBLE
17 *	145352 N/A	N/A	HARDWARE, MOUNTING
18	$49,018	✓ 9-MONTHS	SYSTEM, EMERGENCY, RECOVERY

* price on revised quote?

4276
Exhibit No. _____
Worldwide Court Reporters, Inc.

Reading & Bates Drilling Co.
Attachment 1.2a - Pricing Format
INQ # 087-00015

19	PRICE INCLUDED IN ITEM 18		9-MONTHS	ACCESSORIES, EMERGENCY RECOVERY SYSTEM
20	$70,910	✓	9-MONTHS	SKIDS, SHIPPING
21	deleted $245,454		9-MONTHS	CONNECTOR, WELLHEAD
22	69 089 $73,892		9-MONTHS	STUMP, STACK TEST
23	$221,679	✓	9-MONTHS	CONNECTOR, RISER
~~24~~ *	59222 $59,838	✓	9-MONTHS	STUMP, LMRP TEST
25	$139,140	✓	9-MONTHS	CONNECTORS, UPPER HALF OF CHOKE AND KILL
26	$10,396	✓	9-MONTHS	CONNECTORS, LOWER HALF OF CHOKE AND KILL
27	$2,876	✓	9-MONTHS	STUMP, UPPER CONNECTOR HALF TEST PLUG
28	$10,396	✓	9-MONTHS	STUMP, LOWER CONNECTOR HALF TEST PLUG
29	$182,436	✓	9-MONTHS	VALVE, DOUBLE BLOCK
30	$273,654	✓	9-MONTHS	VALVE, DOUBLE BLOCK
31	$99,854	✓	9-MONTHS	VALVE, STRAIGHT THROUGH FAILSAFE SUBSEA
32	$420,037	✓	9-MONTHS	JOINT, FLEX
33	PRICE INCLUDED IN RECEIVER & STAB PLATE		9-MONTHS	SPECIFICATIONS, COATING
34	PRICE INCLUDED IN RECEIVER & STAB PLATE		9-MONTHS	SYSTEM, CATHODIC PROTECTION
35	$604,980	✓	9-MONTHS	PREVENTERS, ANNULAR
36	$1,836,167	✓	9-MONTHS	PREVENTERS, RAM
37	$128,768	✓	9-MONTHS	ASSEMBLY, ADJUSTABLE BORE RAM
38	$35,600	✓	9-MONTHS	RAM, PIPE, 5-1/2" OD

* [illegible]

Reading & Bates Drilling Co.
Attachment 1.2a - Pricing Format
INQ # 087-00015

39	$35,600	9-MONTHS	RAM, PIPE, 6-5/8" OD
40	$30,600	9-MONTHS	RAM, LOWER SHEARING BLIND
41	$32,128	9-MONTHS	RAM, UPPER SHEARING BLIND
42	$34,043	9-MONTHS	RAM, CASING SHEAR
43	$32,200	9-MONTHS	RAM, LOWER CASING SHEAR BLIND
44	N/A	N/A	EQUIPMENT, OPTIONAL RAM BONNET OPENING
45	N/C	9-MONTHS	SPECIFICATION, DRAWINGS
46	N/A	N/A	NOISE SPECTRUM DATA
47	N/A	N/A	TEMPERATURE RANGE
48	N/C	N/A	SPECIFICATION, PRESERVATION
49	N/A	N/A	SPARES, COMMISSION
50	$160,949	4-5 MONTHS	QUOTE TWO YEAR SPARES (QUOTE 445415-01
51	N/C	9-MONTHS	SPECIFICATION, SHIPPING WEIGHT
52	N/C	9-MONTHS	CERTIFICATION, ABS
53	THIS CHARGE WILL BE BILLED AT ACTUAL COAT.	9-MONTHS	SPECIFICATION, EQUIPMENT, CERTIFICATION
54	N/C	N/A	REPORTING MONTHLY
55	$1,200 PER DAY	N/A	SPECIFICATION, SERVICE

Reading & Bates Drilling Co.
Attachment 1.2a - Pricing Format
INQ # 087-00015

56. Payment Terms:

Progress Payments:

On receipt of order/letter of intent 15% of authorised purchase/spend value
6 Months after order placement 20% of authorised purchase/spend value
9 Months after order placement 15% of authorised purchase/spend value
Upon completion of order 45% of authorised purchase/spend value
At delivery of complete Documentation/Certification 5% of authorised purchase/spend value

Ship Set Discount:

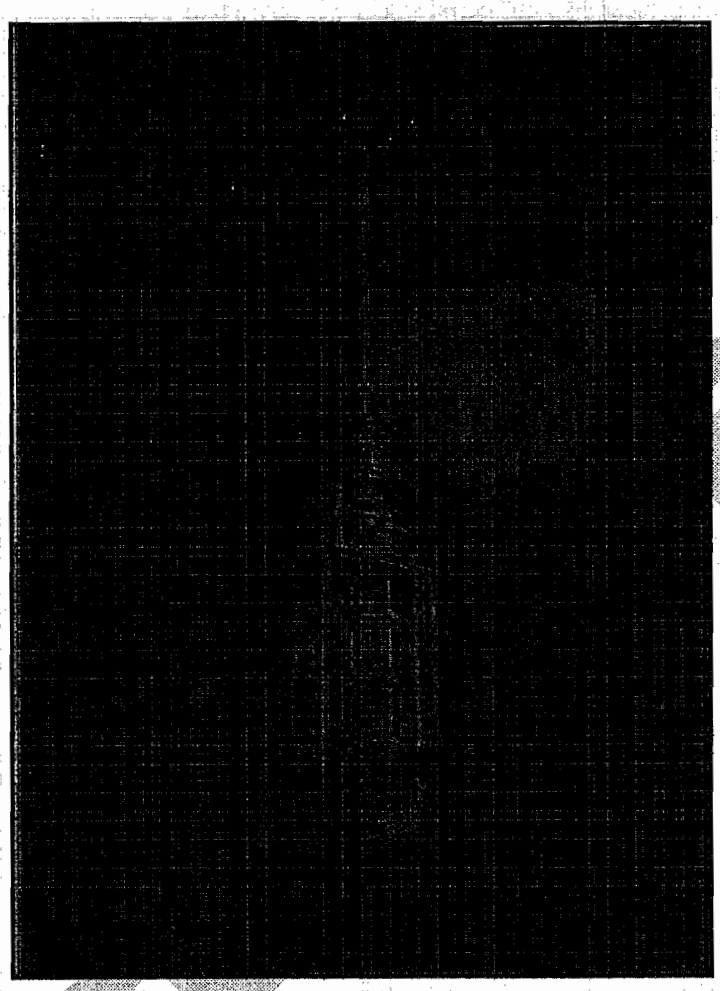
First ship set: As shown

Second ship set: As shown

Cameron — MARCH 1, 1999
VENDOR — DATE
Russell Henske
BY:
Technical Service Rep.
TITLE

R & B Falcon

RBS8D



CONFIDENTIAL

ORIGINAL

CAMERON

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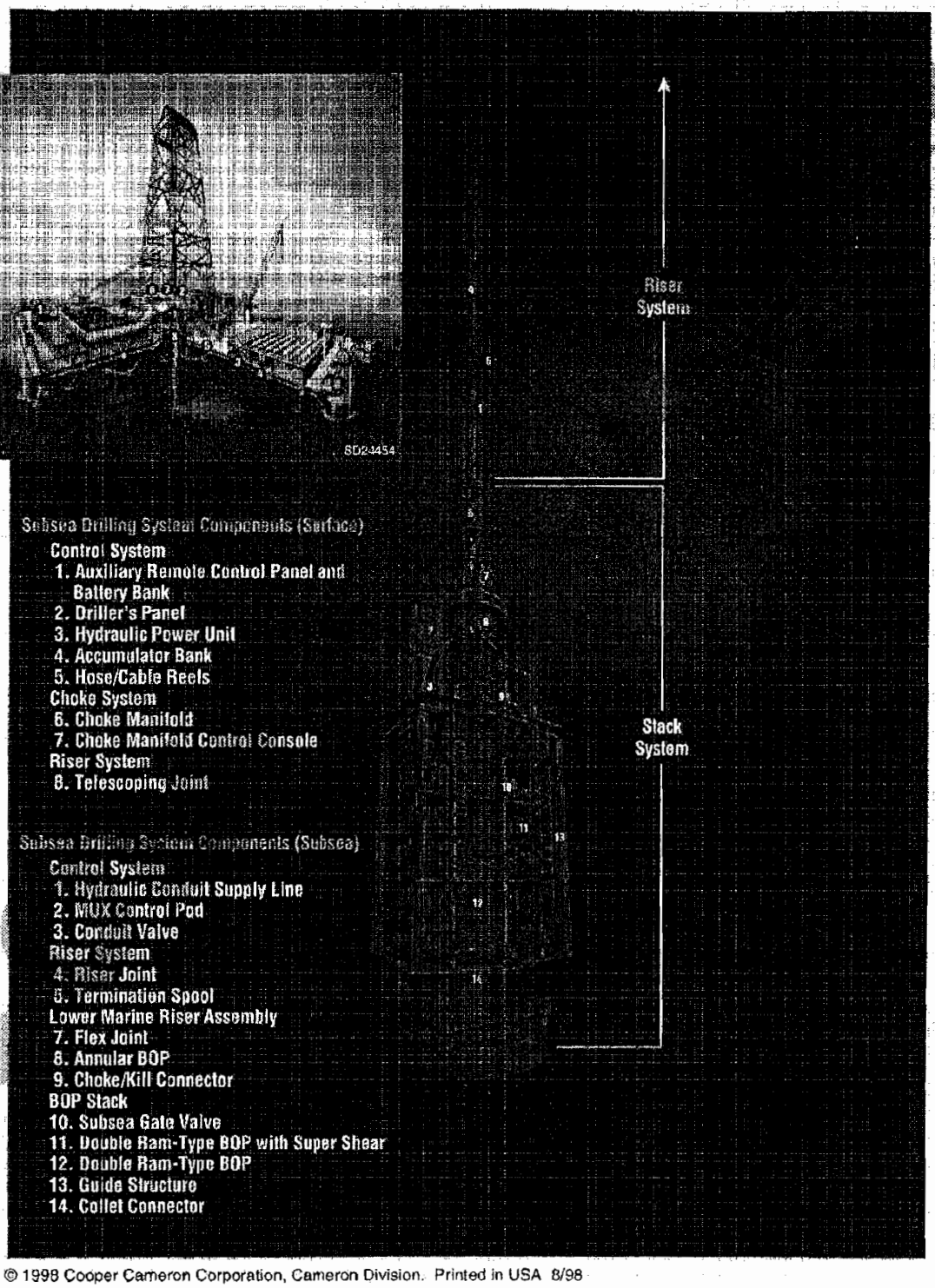
SUBSEA DRILLING SYSTEMS



Subsea Drilling System Components (Surface)

Control System
1. Auxiliary Remote Control Panel and Battery Bank
2. Driller's Panel
3. Hydraulic Power Unit
4. Accumulator Bank
5. Hose/Cable Reels

Choke System
6. Choke Manifold
7. Choke Manifold Control Console

Riser System
8. Telescoping Joint

Subsea Drilling System Components (Subsea)

Control System
1. Hydraulic Conduit Supply Line
2. MUX Control Pod
3. Conduit Valve

Riser System
4. Riser Joint
5. Termination Spool

Lower Marine Riser Assembly
7. Flex Joint
8. Annular BOP
9. Choke/Kill Connector

BOP Stack
10. Subsea Gate Valve
11. Double Ram-Type BOP with Super Shear
12. Double Ram-Type BOP
13. Guide Structure
14. Collet Connector

CAMERON

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13013 Northwest Freeway (77040)
P.O. Box 1212
Houston TX 77251-1212
Tel 713 939 2211
Fax 713 939 2620

CAMERON

March 1, 1999

Mr. Marisol Gonzalez
R&B Falcon
14701 St. Mary's, Suite 300
Houston, Texas 77079-2982

Inquiry: 087-00015

Dear Mr. Gonzalez

Cameron is pleased to have the opportunity to submit our quotation covering Cameron's Drilling Products. We have enclosed technical and commercial information within our proposal for your consideration. Also enclosed are Cameron's fundamental terms and conditions of sale. Prior to awarding an order Cameron and R&B/Falcon should negiotiate terms and conditions acceptable to both parties. The following prices are based on your specifications ex-works Berwick La. plant.

Our proposal includes a new Cameron 15,000 psi working pressure BOP stack, and 10,000 psi working pressure lower marine riser package.

We appreciate this opportunity of quoting our products and hope the following is as desired. Please let us know if we can be of further assistance.

Sincerely,

Irving Schneider
Drilling Sales Manager
713-939-2925

FUNDAMENTAL TERMS & CONDITIONS

1. **Offshore costs liability and indemnity**
   The COMPANY agrees to indemnify the SUPPLIER from and against any and all costs and claims relating to the recovery of the GOODS. Such costs shall include, but not be limited to, rig stand-by time, heavy lifting, uncovering and removal of the GOODS, re-installation and (where applicable) work at or below the water line, diving support, transportation to and from an agreed onshore base together with all costs similar in nature (ejusdem generis)."

2. **Consequential loss**
   Neither party shall be liable to the other for consequential or indirect loss or costs. Such loss or costs shall include, but not be limited to, loss of use, loss operation, loss of opportunity, loss of profit, rig stand-by time or loss or costs of a similar nature.

3. **Pollution liability and indemnity.**
   In regard to liability of Cameron for subsurface damage, surface damage arising from subsurface damage and from damages arising from pollution the Customer shall hold Cameron harmless from claims for loss from any cause resulting therefrom. The Customer also agrees to indemnify Cameron from, and against, claims or damages resulting from performance of this contract in respect of damage to underground mineral pools or reservoirs or deposits and/or loss or waste of such deposits together with damages arising from pollution irrespective of cause. It is the intent of the parties that these indemnities herein shall extend to cover property owned by the Customer or to property owned by any third party and shall apply regardless of the negligence or breach of duty of Cameron, its employees, officers, agents or sub-contractors

4. **Warranty Term.**
   Cameron warrants that the goods and/or services it provides are fit for the purpose specified by the Customer. If such goods and/or services shall become defective during a period equal to the earlier of 12 months from first use or 18 months from the date of ex-works delivery (in respect of equipment) or six months from completion of work, (in respect of services), [Cameron will repair and/or replace the same.] [Notwithstanding the above,] Cameron's sole liability under this warranty, and the Customer's sole remedy for breach of this warranty (inclusive of defects caused by Cameron's negligence) shall be limited to such repair or replacement of the equipment, or re-performance of the services, as determined by Cameron.

   Cameron will not be responsible for failure of any goods which have been in any way tampered with or altered by anyone other than an authorised representative of Cameron. This limitation also applies to failures due to lack of compliance with any recommended maintenance procedures, or in respect of any goods which have been repaired or altered, by a party other than Cameron, in such a way (in Cameron's judgement) as to adversely affect the operation of such equipment. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EITHER UNDER CONTRACT OR AT LAW.

5. Cancellation of convenience.

The Customer may terminate this contract at any time on giving written notice to Cameron. In such an event the Customer shall pay Cameron, as full and final consideration, an amount equal to the selling price of the cancelled equipment, or part of such selling price related to the percentage of completed work of the cancelled equipment, together with a cancellation fee of 50% of the selling price of the cancelled equipment by way of compensation for loss of bargain.

If the Customer has made an advance payment in respect of the cancelled equipment, the difference between the amount owed by the Customer to Cameron under this clause and the advance payment shall be returned to the Customer within 30 days of the termination of this agreement. Alternatively, if the Customer owes monies to Cameron, such sums shall be paid to Cameron within 30 days of demand.

6. Progress payments

The Customer agrees to pay Cameron the amounts equal to the percentage outlined below as proper consideration for work performed hereunder. Such payment occurring within 30 days of demand. The appropriate percentages are:

At receipt of order	15%
6 months after order placement	20%
9 months after order placement	15%
Upon completion of order	45%
At delivery of complete Documentation/certification	5%

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CAMERON

Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number Description	Qty	UM	Unit Price USD	Ext Amount USD
0050	2709000-22-02 NUT, HVY HEX 3.000-8 STL CTG ANSI B18.2.2/A194 GR 2H XYLAN 1052 (GRN) 0.85-1.35 MIL THK IDENT & PKG PER DWG 2709000	40	EA	30.00	1,200.00
0060	2013332-01 SUB ASSEMBLY, 3-1/16" 10,000 & 15,000 'AX' GASKET WITH RETAINER O-RING, API 6A 17TH EDITION, PSL1-4 MAT'L CLASS : AA THRU FF TEMP. CLASS : K+U	31	EA	173.00	5,363.00
0070	2049633-01-01 HUB, BLIND CLAMP, 3-1/16 API 15M W/ AX RING GROOVE W/ 625 INLAY, 3.00 TALL; SIMILAR TO API 16A; PER -- SP-5055-01 --	9	EA	1,485.00	13,365.00
0080	615236-06-00-06 CLAMP ASSY, THRU BOLT - 2-9/16" 20M, 3-1/16" 15M, & 4-1/16" 10M, CIW CLAMP NO. 6, FOUR BOLT STYLE W/XYLAN COATED STUDS & NUTS; PER API 6A, T/C P+U; M/C DD; PSL-3 PER SP-5055-01 REQMT'S	31	EA	4,405.00	136,555.00
0090	SPACER SPOOL, 3-1/16" 15,000# WP WITH CLAMP HUB CONNECTIONS, 625 INLAYED "AX" RING GROOVES, STRAIGHT SPOOL, UPPER KILL SIDE, #3 OUTLET TO RECEIVER PLATE.	1	EA	8,641.00	8,641.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0100	SPACER SPOOL, 3-1/16" 15,000# WP WITH CLAMP HUB CONNECTIONS, 625 INLAYED "AX" RING GROOVES, STRAIGHT SPOOL, LOWER KILL SIDE, #1 OUTLET TO #3 OUTLET	1	EA	8,460.00	8,460.00
0110	SPACER SPOOL, 3-1/16" 15,000# WP WITH CLAMP HUB CONNECTIONS, 625 INLAYED "AX" RING GROOVES, STRAIGHT SPOOL, UPPER CHOKE SIDE, ISOLATION VALVE TO ANNULAR	1	EA	10,142.00	10,142.00
0120	SPACER SPOOL, 3-1/16" 15,000# WP WITH CLAMP HUB CONNECTIONS, 625 INLAYED "AX" RING GROOVES, STRAIGHT SPOOL, LOWER CHOKE SIDE, #2 OUTLET TO RECEIVER PLATE	1	EA	11,623.00	11,623.00
0130	RECEIVER PLATE SUB ASSEMBLY, INCLUDING: 1. RECEIVER PLATE SUB ASSEMBLY PREPARED FOR MOUNTING TO TOP OF LOWER STACK ASSEMBLY. 2. MOUNTING OF TWO LOWER CHOKE AND KILL SPACER SPOOLS, ALL RING GROOVES ST/STL LINED. 3. ALIGNMENT SYSTEM FOR GUIDELINESS RE-ENTRY SYSTEM/GUIDELINE SYSTEM. 4. PREPARATION AND MOUNTING OF OWNER FURNISHED POD STACK RECEIVER HYDRAULIC ASSEMBLY. 5. ALL STUDS AND NUTS FOR BOLTING TO FRAME AND WELLBORE PRESSURE RETAINING EQUIPMENT.	1	EA	564,020.00	564,020.00

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Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0140		1	EA		

FRAME FOR LOWER BOP STACK INCLUDING:
1. ALL STUDS, NUTS, AND FABRICATION ITEMS NEEDED TO ASSEMBLE GUIDE STRUCTURE TO RECEIVER PLATE AND BOP STACK.
2. BUMPER SYSTEM.
3. GUIDANCE STRUCTURE FOR INTERFACE WITH MOONPOOL TO BOP CART AND BOP CART TO STORAGE STUMP.
4. LIFTING LUGS FOR LOWER STACK WITHOUT LMRP.
5. HANGOFF STRUCTURE FOR BOP HANDLING SYSTEM.
6. STRUCTURE REQUIRED TO SUPPORT BOP STACK WHICL CHANGING WELLHEAD CONNECTOR OR WELLHEAD GUIDANCE SYSTEM
7. STRUCTURE REQUIRED FOR WELLHEAD CONNECTOR.
8. GUIDELINELESS LOWER GUIDE FUNNEL FOR USE WHEN REQUIRED.
9. BOLTING PLATE/STRUCTURE FOR GUIDE FUNNEL.
10. ORIENTING SYSTEM FOR GUIDELINESS RE-ENTRY SYSTEM.
11. PROVISION FOR MOUNTING SWINGOUT CAGE FOR BOP POSITION TRANSPONDER AND OR TV CAMERA, PAN AND TILT UNIT, AND LAMP.
12. PREP FOR MOUNTING BOTTLE RACKS.
13. NECESSARY LADDERS AND WORK PLATFORMS TO FACILIATE RAM CHANGE OUT AND SERVICE.
14. MARINE COATING AS SPECIFIED LATER IN THE SPECIFCATION.
15. IF AN ADAPTER IS REQUIRED TO ACCEPT VETCO OR DRILL-QUIP CONNECTOR THEIR WILL BE AN ADDITIONAL CHARGE OF $18,000

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NOTE: PRICE INCLUDED IN RECEIVER PLATE ITEM 130.

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Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0150	70000491 CHARGE FOR ASSEMBLY OF BLOWOUT PREVENTER STACK, HOSES AND FITTINGS. HYDRO TESTING OF ALL PRESSURE CONTAINING ITEMS INCLUDING DIS-ASSEMBLY FOR COMPONENT SHIPPING. ********** NOTE: AFTER FINAL TESTING AND PRIOR TO SHIPMENT, THE OPERATING CYLINDERS ON ONE RANDOM RAM SELECTED BY THE R&B REP. WILL BE OPENED FOR INSPECTION.	1	EA	226,665.00	226,665.00
0160	LMRP STAB PLATE AND FRAME INCLUDING: 1. STRUCTURE FOR LMRP GUIDELINELESS SYSTEM COMPATIBLE WITH GUIDELINE SYSTEM WHEN REQUIRED. 2. PREPARATION FOR POD MOUNTING PLATES, AND MOUNTING OF CUSTOMER FURNISHED PODS AND POD MOUNTING SYSTEM. 3. MOUNTING OF TWO CHOKE AND KILL MINI CONNECTORS INCLUDING CONNECTOR MOUNTING CAGE AND ASSOCIATED MOUNTING HARDWARE. 4. LMRP CONNECTOR CAGE. 5. PREPARATION AND MOUNTING OF ANY ADDITIONAL GUIDANCE SYSTEMS REQUIRED ON LOWER BOP STACK. 6. ALL STUDS AND NUTS FOR BOLTING TO GUIDE FRAME AND ANNULAR BLOWOUT PREVENTER, INCLUDING SIDE OUTLET VALVES ON ANNULAR, ANNULAR, AND FLEX JOINT. 7. MARINE COATING OF LMRP AS SPECIFIED IN THIS SPECIFICATION. 8. LIFTING LUGS CAPABLE OF LIFTING LMRP OFF LOWER BOP STACK AND CAPABLE OF HANDLING THE WEIGHT OF THE LOWER BOP STACK AND LMRP COMBINED AS ONE UNIT. 9. MOUNTING OF ACCUMULATOR RACKS. 10. HANG OFF PROVISION FOR LANDING LMRP ONTO BOP CARRIER CART, WITHOUT LOWER BOP STACK.	1	EA	376,013.00	376,013.00

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CAMERON

Quotation

Cameron
P.O. Box 1212 (77251-1212)
13013 N W Freeway
Houston, Texas 77040
Phone-713-939-2211

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999
Valid Until : April 01, 1999

Terms: Net 30 days

Sales Contact: Russell Henske Ph. 713-939-2860, Fax 713-939-2980

Customer: 21004233
R AND B FALCON DRILLING CO
ATTN ACCOUNTS PAYABLE
901 THREADNEEDLE
HOUSTON , TX 77079
USA

Cust Inquiry No: RBS 8D Placed By: M. GONZALEZ

NOTE: THE FOLLOWING EQUIPMENT WILL BE MANUFACTURED
PER NORTH SEA/ABS SEPCIFICATIONS. ACTUAL CHARGES
FROM ABS ARE NOT INCLUDED IN THE LINE ITEM PRICING.
ABS CHARGES WILL BE BILLED AT ACTUAL COSTS.
****

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
	18-3/4" 15,000 BOP STACK AND LMRP **********				
0020	2011632-01 ADAPTER SPOOL, 18-3/4" 10M'AX' HUB TOP X 18-3/4" 15M CX-18 SPECIAL FLANGE BOTTOM --SP-5055-01--	1	EA	54,788.00	54,788.00
0030	645490-02 Est Wt: 61.00 GASKET, CX-18, 18-3/4" 10/15M#, 316 ST/STL, 160 BHN MAX	7	EA	3,698.00	25,886.00
0040	2011814-01 STUD, CONT. THD. 3.000- 8UN -2A X 27.50" LG A320/GR L43 /XLAN 1010 FLUOROCARBON COATING	20	EA	319.00	6,380.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0170	ACCUMULATOR MOUNTING RACKS: 1. PREPARED FOR (2) MAIN HYDRAULIC SUPPLY SURGE BOTTLES ON LMRP. 2. RACK FOR PRIMARY AND ACOUSTIC BOP CONTROL SYSTEM. 3. MANIFOLD REQUIRED FOR ACCUMULATOR BOTTLES. 4. PREPARED FOR MOUNTING OF ACCUMULATORS FOR THE GATE VALVE FAIL CLOES HYDRAULIC ASSIST ********** NOTE: PRICE INCLUDED IN LMRP STAB PLATE ASSEMBLY, ITEM 160 **********	1	EA		
0180	70000493 HYDRAULIC HOSES AND FITTINGS FOR LMRP AND BOP STACK FUNCTIONS, 5,000 PSI SYSTEM.	1	EA	250,000.00	250,000.00
0190	COFLEXIP HOSE, 3" 15,000# WP. WITH CLAMP HUB ENDS, 625 INLAYED "AX" RING GROOVES, APPROX. 25 FT. LONG	2	EA	47,554.00	95,108.00
0200	COFLEXIP HOSE, 3" 15,000# WP. WITH ST/STL LINED RING GROOVES, APPROX 14 FT. LONG.	1	EA	33,217.00	33,217.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number Description	Qty	UM	Unit Price USD	Ext Amount USD
0210	70000493 CHARGE FOR ASSEMBLY OF LMRP, HOSES AND FITTINGS, HYDRO TESTING OF ALL PRESSURE CONTAINING ITEMS, INCLUDING DIS-ASSEMBLY FOR COMPONENT SHIPPING.	1	EA	116,665.00	116,665.00
0220	EMERGENCY RECOVERY SYSTEM, CONSISTING OF THE FOLLOWING: 1. LIFT RING ATTACHED TO ANNULAR BOP 2. (4) SHACKLES ATTACHED TO BOP STACK 3. (4) SHACKLES ATTACHED TO LMRP 4. (8) KEVLAR ROPES/SLINGS ATTACHED TO ABOVE SHACKLES	1	EA	49,018.00	49,018.00
0230	SHIPPING SKIDS TO ALLOW SHIPMENT OF STACK IN ONE PIECE AND LMRP IN ONE PIECE, UTILIZING TEST STUMPS FOR BOP AND LMRP MOUNTED TO THE SHIPPING SKIDS.	2	EA	35,455.00	70,910.00
0231	COLLET CONNECTOR, 18-3/4" 15M# HC CLAMP HUB BTM. X CX-18 STUDDED TOP, W/SECONDARY UNLOCK PISTON, W/625 INLAY RING GROOVES, SUPER TRIM. --SP-5055-01--	1	EA	245,454.00	245,454.00
0232	TEST STUMP, (LMRP) 18-3/4" 10M# WP "AX" HUB WITH 4-1/2" I.F. TEST MANDREL, WITH 2-1/16" 10M# WP. FLGD OUTLET, APPROXIMATELY 89.22" TALL, INCLUDING FLANGE X 9/16" AUTOCLAVE, STUDS, NUTS AND RING GASKET, WITH NON-PRESSURE CONTAINING BASE PLATE AND WITH THREADED TEST JOINT ADAPTER WITH 4-1/2" I.F. MAT'L CLASS DD.	1	EA	59,838.00	59,838.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number Description	Qty	UM	Unit Price USD	Ext Amount USD
0240	278630-01 COLLET CONNECTOR, 18-3/4" 10M# HC CLAMP HUB BTM. X CX-18 STUDDED TOP, W/SECONDARY UNLOCK PISTON, W/SLOT F/TUBING HANGER ORIENTATION, W/625 INLAY RING GROOVES, SUPER TRIM. --SP-5055-01--	1	EA	221,679.00	221,679.00
0250	2011388-07 ASSY, TEST STUMP, 18-3/4" 10M AX HUB TOP X SPCL. FLANGE BOTTOM 62" HIGH --SP-5055-01--	1	EA	64,025.00	64,025.00
0260	INSERT WITH 6-5/8" PIN.	1	EA	3,289.00	3,289.00
0270	INSERT WITH 5-1/2" PIN.	1	EA	3,289.00	3,289.00
0280	INSERT WITH 3-1/2" PIN.	1	EA	3,289.00	3,289.00
0290	2011626-02 FINAL ASSEMBLY, CHOKE & KILL LINE CONNECTOR, 3 1/16" 15M	2	EA	58,972.00	117,944.00
0300	ADAPTER SPOOL, 3-1/16" 15,000# WP WITH FLANGED BOTTOM X CLAMP HUB TOP, "AX" RING GROOVES WITH 625 INLAYS, APPROX. 12" TALL, NACE TRIM.	2	EA	5,610.00	11,220.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0310	2010919-03 CHOKE & KILL LINE ADAPTER SPOOL, 3-1/16" 15M "AX" HUB X CLP HUB WITH 625 INLAYED RING GROOVES, NACE TRIM, SP-5055-01.	2	EA	5,198.00	10,396.00
0320	MINI CONNECTOR TEST EQUIPMENT SET INCL: 1. BLIND TEST HUB FOR "AX" HUB OF MINI CONNECTOR CLAMP SEGMENTS. WITH 625 INLAYED RING GROOVE.	2	EA	1,438.00	2,876.00
0330	MINI CONNECTOR SPACER SPOOL TEST EQUIPMENT SET INCLUDING: 1. (1) BLIND TEST HUBS WITH "AX" 625 INLAYED RING GROOVES, WITH 9/16" ATUOCLAVE TEST FITTING. 2. (1) #6 CLAMP ASSY., PART # 615236-06-00-06	2	EA	5,198.00	10,396.00
0340	631725-06 ASSEMBLY, MCS MARINE CHOKE & KILL DBL MASTER TARGET VALVE WITH MCK ACTUATOR, BODY STYLE F, 3-1/16 BORE; INLET & TWO OUTLETS: 3-1/16 API 15,000 CLAMP HUBS W/625 AX GROOVE, TOP: 3-1/16 API 15,000 STD'D WITH 625 AX GROOVE AND BLIND FLANGE, 6A, 17TH EDITION, TEMP CLASS U, MATERIALS CLASS DD, PSL 3, PR 2, 625 INLAY IN SEAT POCKETS, PACKING BORES; END CONNECTION AND BONNET RING GROOVES, NICKEL SULFMATE PLATED CYLINDER, SP-005055-01	2	EA	91,218.00	182,436.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0350	631725-06 ASSEMBLY, MCS MARINE CHOKE & KILL DBL MASTER TARGET VALVE WITH MCK ACTUATOR, BODY STYLE F, 3-1/16 BORE; INLET & TWO OUTLETS: 3-1/16 API 15,000 CLAMP HUBS W/625 AX GROOVE, TOP: 3-1/16 API 15,000 STD'D WITH 625 AX GROOVE AND BLIND FLANGE, 6A, 17TH EDITION, TEMP CLASS U, MATERIALS CLASS DD, PSL 3, PR 2, 625 INLAY IN SEAT POCKETS, PACKING BORES; END CONNECTION AND BONNET RING GROOVES, NICKEL SULFMATE PLATED CYLINDER, SP-005055-01	3	EA	91,218.00	273,654.00
0360	631010-10 ASSEMBLY, MCS MARINE CHOKE & KILL VALVE W/ MCK ACTUATOR, 3-1/16 OEC 15,000 FLG WITH AX GROOVE, NORMALLY OPEN, 6A 17TH EDITION, TEMP CLASS U, MATERIALS CLASS DD, PSL 3, PR 2, 625 INLAY IN PACKING BORES, END CONNECTION AND BONNET RING GROOVES, NICKEL SULFMATE PLATED CYLINDER, SP-005055-01	2	EA	49,927.00	99,854.00
0370	2724404-01 FLEX JOINT, 5K W/VETCO SUPPLIED RISER ADAPTER AND OIL STATES SUPPLIED 18 3/4"-10,000 API LOWER FLANGE, REPLACCABLE WEAR SLEEVE AND A REPLACCABLE BX-164 INCONEL LINED RING GROOVE	1	EA	420,037.00	420,037.00

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CAMERON

Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0390	70000492 COATING OF LMRP AND BOP STACK: A. SAND BLAST TO SA 2.5 B. (1) COAT INORGANIC ZINC PRIMER 3 MILS THICK C. (1) COAT OF HI-BUILD EPOXY 6-8 MILS THICK D. (1) COAT OF ACRYLIC EPOXY 2 MILS THICK, WHITE. ********** NOTE: PRICE INCLUDED WITH RECEIVER AND STAB PLATE ASSEMBLIES. **********	1	EA		
0400	70000492 CATHODIC PROTECTION SYSTEM FOR BOP STACK AND LMRP ********** NOTE: PRICE INCLUDED IN RECEIVER AND STAB PLATE ASSEMBLIES. **********	1	EA		
0410	2011656-01 BOP, DL - 18-3/4" 10,000 PSI WITH 18 3/4" 15M FLG. BTM CX-18 X 18 3/4" 15M TOP STDD CX-18 W/ (1) 3-1/16" 15M# HUB OUTLET W/AX RG W/625 WELD INLAY RING GROOVES PER API 16A T-20 - SP-5055-01 PDC MARKING: 03 18 10 MM YY (MM=MONTH YY=YEAR)	2	EA	302,490.00	604,980.00
0420	2163349-01 BOP, DOUBLE 18-3/4 15M 'TL' W/ ST-LOCKS & SEQUENCE VALVES, FLGD TOP X STDD BTM, .625 OVERLAY CX-18 GROOVE PREP W/ FOUR 3-1/16 15M 625 OVERLAY AX HUB OUTLETS, W/ 43.69" BETWEEN RAMS; API 16A SP-5055-01/ PER QP-10011-02; PDC# 02 18 15 20 (MONTH XX,YEAR XX)	1	EA	670,000.00	670,000.00

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Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0425	BOP, DOUBLE 18-3/4 15M 'TL' W/ST-LOCKS & SEQUENCE VALVES, UPPER CAVITY, WITH SUPER SHEAR BONNETS IN LOWER CAVITY, WITH 43.69" SPACE BETWEEN RAMS, FLGD TOP X STDD BTM, 625 OVERLAY CX-18 GROOVE PREP W/ FOUR 3-1/16 15M 625 OVERLAY AX HUB OUTLETS, API 16A SP-5055-01/PER QP-10011-02;	1	EA	765,011.00	765,011.00
0430	2011636-01 BOP, 'TL' 18-3/4" 15M# SINGLE UNIT WITH ST-LOCKS & SEQ. VALVES FLANGED TOP X STUDDED BOTTOM 625 OVERLAY CX-18 GROOVE PREP W/ TWO 3-1/16" 15M# 625 OVERLAY AX HUB OUTLETS; API 16A --SP-5055-01/PER QP-10011-02; PDC# 01 18 15 20 (MONTH XX,YEAR XX)	1	EA	401,156.00	401,156.00
0440	RAM SUB-ASS'Y, VBR 18-3/4" 15000 WP 'T' AND 'TL' BOP, 6-5/8" TO 3-1/2" OD PIPE API 16A, ABS AND DNV CERTIFICATION WITH CAMRAM 350 TOP SEAL.	4	EA	32,192.00	128,768.00
0450	RAM SUBASSY, 18-3/4"15M# T AND TL BOP- 5.1/2" OD PIPE API 16A, DNV AND ABS CERTIFICATION, WITH CAMRAM 350 TOP SEAL AND PACKER.	2	EA	17,800.00	35,600.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0460	RAM SUBASSY, 18-3/4"15M# T AND TL BOP- 6-5/8" OD PIPE API 16A, DNV AND ABS CERTIFICATION, WITH CAMRAM 350 TOP SEAL AND PACKER.	2	EA	17,800.00	35,600.00
0470	RAM SUBASSY, UPPER SBR 18-3/4" 15000 WP 'T' AND 'TL' BOP, API 16A, ABS AND DNV CERTIFICATION, WITH CAMRAM PACKERS AND TOP SEAL.	1	EA	30,600.00	30,600.00
0480	RAM SUBASSY, LOWER SBR 18-3/4" 15000 WP 'T' AND 'TL' BOP, API 16A, ABS AND DNV CERTIFICATION, WITH CAMRAM PACKERS AND TOP SEAL.	1	EA	32,128.00	32,128.00
0481	BODY, SHEAR RAM - LOWERBLADE, 18-3/4" 15M# TYPE TL BOP, PER API 16A (T-75) WITH NORTH SEA REQUIREMENTS	1	EA	34,043.00	34,043.00
0482	BODY, SHEAR RAM - UPPERBLADE, 18-3/4" 15M# TYPE TL BOP, PER API 16A (T-75) WITH NORTH SEA REQUIREMENTS	1	EA	32,200.00	32,200.00
0490	2724205-01 15 DEG. ELBOW F/C/K HOSE F/READING & BATES "DEEPWATER PATHFINDER" 18-3/4" 15M BOP STACK	2	EA	12,991.00	25,982.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0500	2011787-01 INSTALLATION, SECONDARY HYDRAULIC UNLOCK, CHOKE AND KILL CONNECTOR	2	EA	10,598.00	21,196.00
0510	SPACER SPOOL, 3-1/16" 15,000# WP. WITH 625 INLAID RING GROOVES.	1	EA	7,496.00	7,496.00
0520	SPACER TEE, 3-1/16" 15M FLANGE X 3-1/8" X 3-1/8" 15M# WP HUBS WITH 625 INLAID "AX" RING GROOVES.	1	EA	18,868.00	18,868.00
	SECTION 1 TOTAL SECTION 1:				6,637,323.00

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Quotation

Quotation Number: 50/H41/445415
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
	ALTERNATE EQUIPMENT **********				
0560	"FLS" MARINE CHOKE & KILL SINGLE STRAIGHT VALVE W/"DF" ACTUATOR, BOLT-ON STUFFING BOX, 3-1/16" BORE, 10,000# WP. 3-1/16" 10M# WP. BX-154 STDD ENDS, WITH 625 INLAYED RING GROOVES AND SEAT SEAL AREAS, MAT'L CLASS DD, PSL-3.	1	EA	59,000.00	59,000.00
0570	EMERGENCY DRILL PIPE HANG OFF AND RUNNING TOOL, DRILL PIPE THREAD TO BE DETERMINED.	1	EA	34,340.00	34,340.00

Price Summary:

SECTION 1	6,637,323.00
Total Price	6,637,323.00
Total Quotation Value	6,637,323.00
ALTERNATE EQUIPMENT	93,340.00

Notes:

DELIVERY: 9-MONTHS
EX-WORKS BERWICK LA

UNLESS WRITTEN AGREEMENT HAS BEEN MADE TO THE CONTRARY, CAMERON AND COOPER CAMERON VALVES, COOPER CAMERON CORPORATION TERMS AND CONDITIONS OF SALE, A COPY OF WHICH IS AVAILABLE UPON REQUEST, WILL APPLY.

CAMERON

Quotation

Cameron
P.O. Box 1212 (77251-1212)
13013 N W Freeway
Houston, Texas 77040
Phone-713-939-2211

Quotation Number: 50/H41/445415-0-1
Date Issued : March 01, 1999
Valid Until : April 01, 1999

Terms: Net 30 days

Sales Contact: Russell Henske Ph. 713-939-2860, Fax 713-939-2980

Customer: 20001977
READING AND BATES DRILLING CO
P.O. Box 79627
HOUSTON , TX 77279
USA

Cust Inquiry No: RBS-8D Placed By: M. GONZALEZ

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
	SPARES FOR SUBSEA BOP STACK ********** . .				
	18-3/4" 10M "DL" BOP ==========				
0020	049742-17 SEALS, BEARINGS, & SCRAPERS, DL BOP 18-3/4" 10M#	2	EA	12,181.00	24,362.00
	18-3/4" 15M "TL" BOP ==========				
0040	BONNET REBUILD KIT, 21-1/4" 5M# U BOP (PARTS FOR ONE BONNET) INCLUDES BONNET SEAL	8	EA	1,375.00	11,000.00
0050	645484-01-00-01 BONNET SEAL F/18-3/4" 10M# U II-B, U-II AND 15M# UII BOP, 18-3/4" 15M# TL BOP	8	EA	456.00	3,648.00

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Quotation

Quotation Number: 50/H41/445415-0-1
Date Issued : March 01, 1999

Item	Material Number Description	Qty	UM	Unit Price USD	Ext Amount USD
	"VBR" RAM ASSEMBLY				
0070	644404-01-00-01 PACKER, VBR - CAMRAM (TM) 18-3/4" 10/15M# T BOP, 7-5/8" TO 3-1/2" OD PIPE	4	EA	9,590.00	38,360.00
0080	644369-01-00-01 TOP SEAL, CAMRAM (TM) 18-3/4" "T" BOP, PER QP-10010-01.	4	EA	490.00	1,960.00
0090	2011279-01 RAM WEAR PAD, RIGHT SIDE-18-3/4" T BOP	4	EA	263.00	1,052.00
0100	2011279-02 RAM WEAR PAD, LEFT SIDE - 18-3/4" T BOP	4	EA	263.00	1,052.00
	"SBR" RAM SUBASSY, LOWER				
0120	644893-01-00-01 PKR,SIDE- RH, SBR CAMRAM 18 3/4"15M "T" & "TL" BOPS PER QP-10010-01	2	EA	966.00	1,932.00
0130	644893-02-00-01 PKR,SIDE- LH, SBR CAMRAM 18 3/4"15M "T" & "TL" BOPS PER QP-10010-01	2	EA	938.00	1,876.00

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Quotation Number: 50/H41/445415-0-1
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Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0140	645068-01-00-01 TOP SEAL, CAMRAM (TM) HIGH TEMP. 18 3/4" T-BOP PER QP-10010-02	2	EA	1,057.00	2,114.00
0150	2011279-01 RAM WEAR PAD, RIGHT SIDE-18-3/4" T BOP	2	EA	263.00	526.00
0160	2011279-02 RAM WEAR PAD, LEFT SIDE - 18-3/4" T BOP	2	EA	263.00	526.00
	"SBR" RAM SUBASSY, UPPER				
0180	644893-01-00-01 PKR,SIDE- RH, SBR CAMRAM 18 3/4"15M "T" & "TL" BOPS PER QP-10010-01	2	EA	966.00	1,932.00
0190	644893-02-00-01 PKR,SIDE- LH, SBR CAMRAM 18 3/4"15M "T" & "TL" BOPS PER QP-10010-01	2	EA	938.00	1,876.00
0200	645068-01-00-01 TOP SEAL, CAMRAM (TM) HIGH TEMP. 18 3/4" T-BOP PER QP-10010-02	2	EA	1,057.00	2,114.00
0210	644894-01-00-01 PKR,BLADE-SBR,CAMRAM 18 3/4" 15M "T" & "TL" BOPS PER QP 10010-01	2	EA	838.00	1,676.00

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Quotation

Quotation Number: 50/H41/445415-0-1
Date Issued : March 01, 1999

Item	Material Number Description	Qty	UM	Unit Price USD	Ext Amount USD
0220	2011279-01 RAM WEAR PAD, RIGHT SIDE-18-3/4" T BOP	2	EA	263.00	526.00
0230	2011279-02 RAM WEAR PAD, LEFT SIDE - 18-3/4" T BOP	2	EA	263.00	526.00
	3-1/16" 15M "MCS" GATE VALVES				
0250	700668 Est Wt: 25.00 GREASE ,STD VALVE LUBRICANT PS-1-1603 (-20 +250 DEG.F) 25 Lbs PAIL (11,3 Kg. NETT)	2	EA	61.70	123.40
0260	044652-15 BACKUP RING 1.75"STEM -	12	EA	303.00	3,636.00
0270	2013133-07 BACK-UP RING, STEM SEAL, (.375 C.S.) 1.75 ID X 2.50 OD X .25 LG, PEEK	12	EA	97.10	1,165.20
0280	140232-17-51-03 PACKING, VARIPAK 1.75 ID X 2.50 OD X .75 LG. TURCITE 99 WITH ELGILOY SPRINGS, 6A 17TH EDITION PSL 3,	12	EA	259.00	3,108.00

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Quotation

Quotation Number: 50/H41/445415-0-1
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Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0290	140170-10-01-04 RING GASKET ,6.821" OD X 6.233" ID X .379 THK. ,316 ST/STL , API 6A 17TH EDITION ,PSL4,PR2 MAT'L CLASS : AA THRU FF	12	EA	163.00	1,956.00
0300	630920-03 GATE ,'MCS' VALVE 3.1/16" API 15M AND 'MCK' 3.1/16" API 10M-15M , ALLOY STEEL WITH TUNGSTEN CARBIDE LW-45 COATING , API 6A 17TH EDITION ,PSL3,PR2 MAT'L CLASS : AA-DD	3	EA	2,903.00	8,709.00
0310	140296-01-04-03 Est Wt: 5.60 SEAT ,3.1/16" API 15000 PSI WP TYPE 'FCS' OR 'MCS' GV ,STELLITE , API 6A 17TH EDITION ,PSL3,PR2 MAT'L CLASS : AA THRU HH	6	EA	1,022.55	6,135.30
0320	140399-12-01-03 LIP SEAL ,OD 'MCS-FCS' GATE VALVE 3.1/16" 15000 ,4.382"ID x 4.670" OD VIRGIN PEEK / ELGILOY SPRING ,	12	EA	86.70	1,040.40
0330	140398-09-01-03 LIP SEAL ,ID 'MCS-FCS' GATE VALVE 3.1/16" 15000 , 3.490" ID X 3.780" OD , VIRGIN PEAK / ELGILOY SPRING .	12	EA	88.40	1,060.80

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Quotation

Quotation Number: 50/H41/445415-0-1
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Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0340	630938-02 STEM, 3-1/16 10,000-15,000 MCK MARINE CHOKE & KILL VALVE, 718, 6A 17TH EDITION, TEMP CLASS S,T,U, MATERIALS CLASS AA,BB,CC,DD,EE,FF, HH, PSL 3, SP-5055-01 3-1/16" 15M "MCK" ACTUATOR P/N 630941-06 ==========	3	EA	3,255.00	9,765.00
0360	702645-33-51 O RING, SIZE AS-568-335 2.725 ID X .210 W 90D /MS-1078 NITRILE X .210 MS-1078 NITRILE 90 -	3	EA	3.10	9.30
0370	042000-03-35 RING, BACK-UP SIZE 335, 2.768" I.D. X 3.134" O.D. NITRILE	3	EA	1.10	3.30
0380	702645-44-12 O RING, SIZE AS-568-441 6.975 ID X .275 W 70D /MS-1082 NITRILE PKG AND QUAL /CIW 702645	9	EA	9.10	81.90
0390	042000-04-41 BACK-UP RING	12	EA	4.60	55.20
0400	702645-33-31 Est Wt: 0.10 O-RING ,2.475" ID X .210" W 90 D NITRILE,PACKING & QUAL.	3	EA	2.50	7.50

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Quotation

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Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0410	204723 BACK-UP RING, SIZE 332 2.393"ID x 2.759"OD NITRILE PARBAK 8 SERIES	6	EA	1.10	6.60
0420	702645-32-71 O-RING, SIZE AS-568-327 1.725" ID X 0.210" W.TH.	3	EA	2.50	7.50
0430	042000-03-27 BACK UP RING ,1.763" ID X 2.129" OD	6	EA	0.90	5.40
	RING GASKETS ==========				
0450	645490-02 Est Wt: 61.00 GASKET, CX-18, 18-3/4" 10/15M#, 316 ST/STL, 160 BHN MAX	2	EA	4,880.00	9,760.00
0460	041700-44 Est Wt: 30.00 AX GASKET, 3-1/16" 10M/15M# ST/STL W/STYLE X RETAINER GROOVE & WITH NO RESILIENT RING	4	EA	436.00	1,744.00
	PIPE RAM 5-1/2" OD ==========				
0480	645070-09 PACKER, 5.500" OD PIPE, 18-3/4" 10/15M 'T' BOP, CAMRAM (TM) HIGH TEMP.	2	EA	2,295.00	4,590.00

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Quotation Number: 50/H41/445415-0-1
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD
0490	645068-01-00-01 TOP SEAL, CAMRAM (TM) HIGH TEMP. 18 3/4" T-BOP PER QP-10010-02	2	EA	1,057.00	2,114.00
0500	2011279-01 RAM WEAR PAD, RIGHT SIDE-18-3/4" T BOP	2	EA	263.00	526.00
0510	2011279-02 RAM WEAR PAD, LEFT SIDE - 18-3/4" T BOP	2	EA	263.00	526.00
	PIPE RAM 6-5/8" OD.				
0530	645070-12-00-01 PKR, 6.625"OD CSG., 18-3/4" 10/15M# 'T'-BOP, CAMRAM (TM)/HIGH TEMP API 16A	2	EA	2,295.00	4,590.00
0540	645068-01-00-01 TOP SEAL, CAMRAM (TM) HIGH TEMP. 18 3/4" T-BOP PER QP-10010-02	2	EA	1,057.00	2,114.00
0550	2011279-01 RAM WEAR PAD, RIGHT SIDE-18-3/4" T BOP	2	EA	263.00	526.00
0560	2011279-02 RAM WEAR PAD, LEFT SIDE - 18-3/4" T BOP	2	EA	263.00	526.00

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CAMERON

Quotation

Quotation Number: 50/H41/445415-0-1
Date Issued : March 01, 1999

Item	Material Number / Description	Qty	UM	Unit Price USD	Ext Amount USD

Price Summary:

Total Price	160,949.80
Total Quotation Value	160,949.80

Terms of Delivery:

FOB SHIPPING POINT, FREIGHT COLLECT, NO PRORATED FREIGHT TO BE CHARGED.
DOMESTIC PACKED
INSURED BY BUYER

Notes:

DELIVERY: 4-5 MONTHS
FOB BROOKSHIRE TX

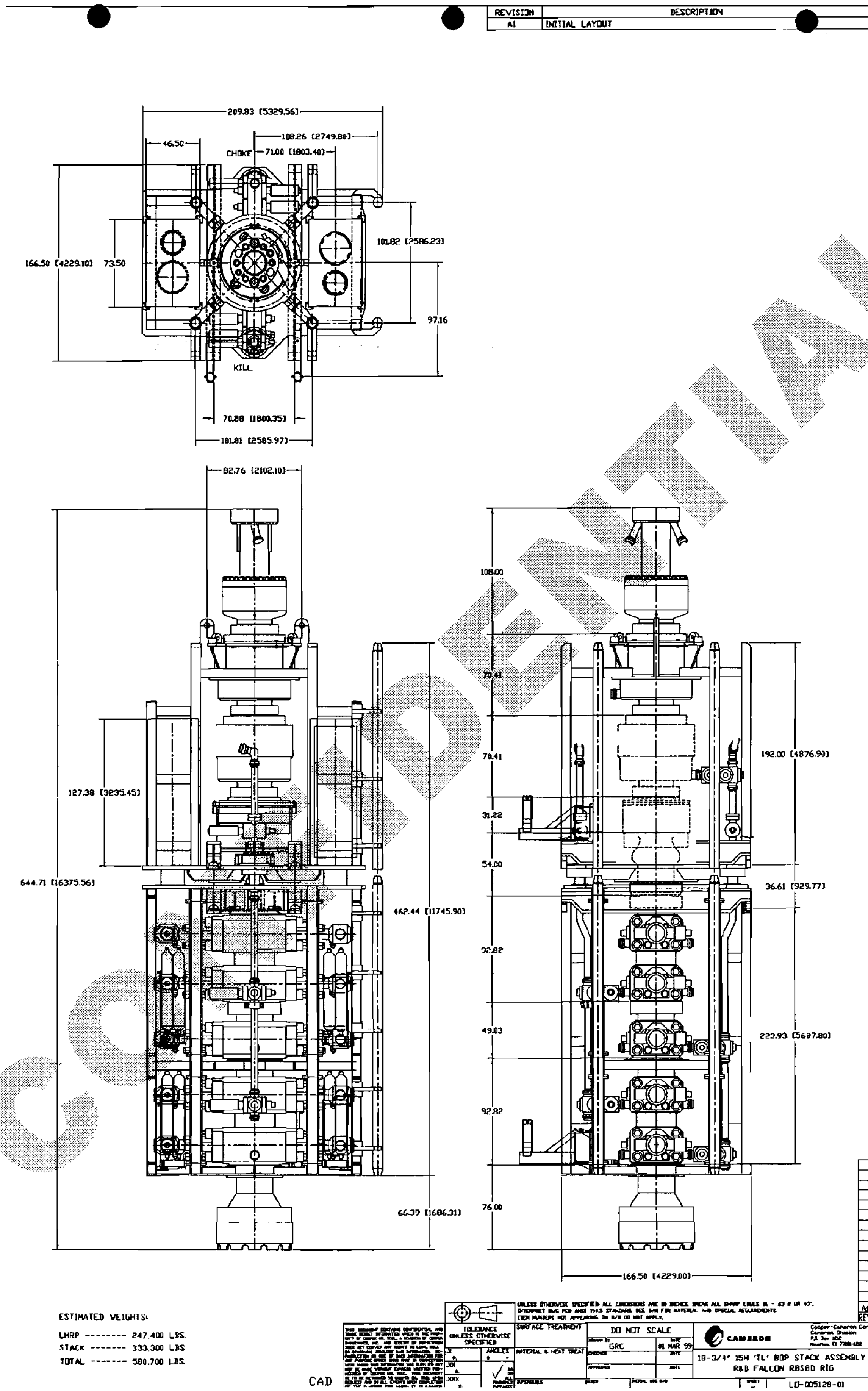
01. CAMERON DIVISION RESERVES THE RIGHT TO ISSUE A REVISED QUOTATION SHOULD THERE BE ANY DEVIATION OR ADDITIONS TO THIS QUOTATION.

02. DELIVERIES OFFERED HEREIN ARE BASED UPON MATERIAL AVAILABILITY AND MANUFACTURING CAPACITY AT TIME OF QUOTATION.

03. CAMERON DIVISION'S TERMS AND CONDITIONS OF SALE FORM A PART OF THIS QUOTATION AND SHALL APPLY TO ANY CONTRACT OF SALE.

04. PRICES QUOTED HEREIN ARE FIRM THROUGH DELIVERY IF ORDER IS PLACED WITHIN THE VALIDITY PERIOD OF THIS QUOTATION.

UNLESS WRITTEN AGREEMENT HAS BEEN MADE TO THE CONTRARY, CAMERON AND COOPER CAMERON VALVES, COOPER CAMERON CORPORATION TERMS AND CONDITIONS OF SALE, A COPY OF WHICH IS AVAILABLE UPON REQUEST, WILL APPLY.



CONFIDENTIAL

ESTIMATED WEIGHTS:

LMRP -------- 247,400 LBS.
STACK ------- 333,300 LBS.
TOTAL ------- 580,700 LBS.

CAD

CAMERON

DWHC COLLET CONNECTOR

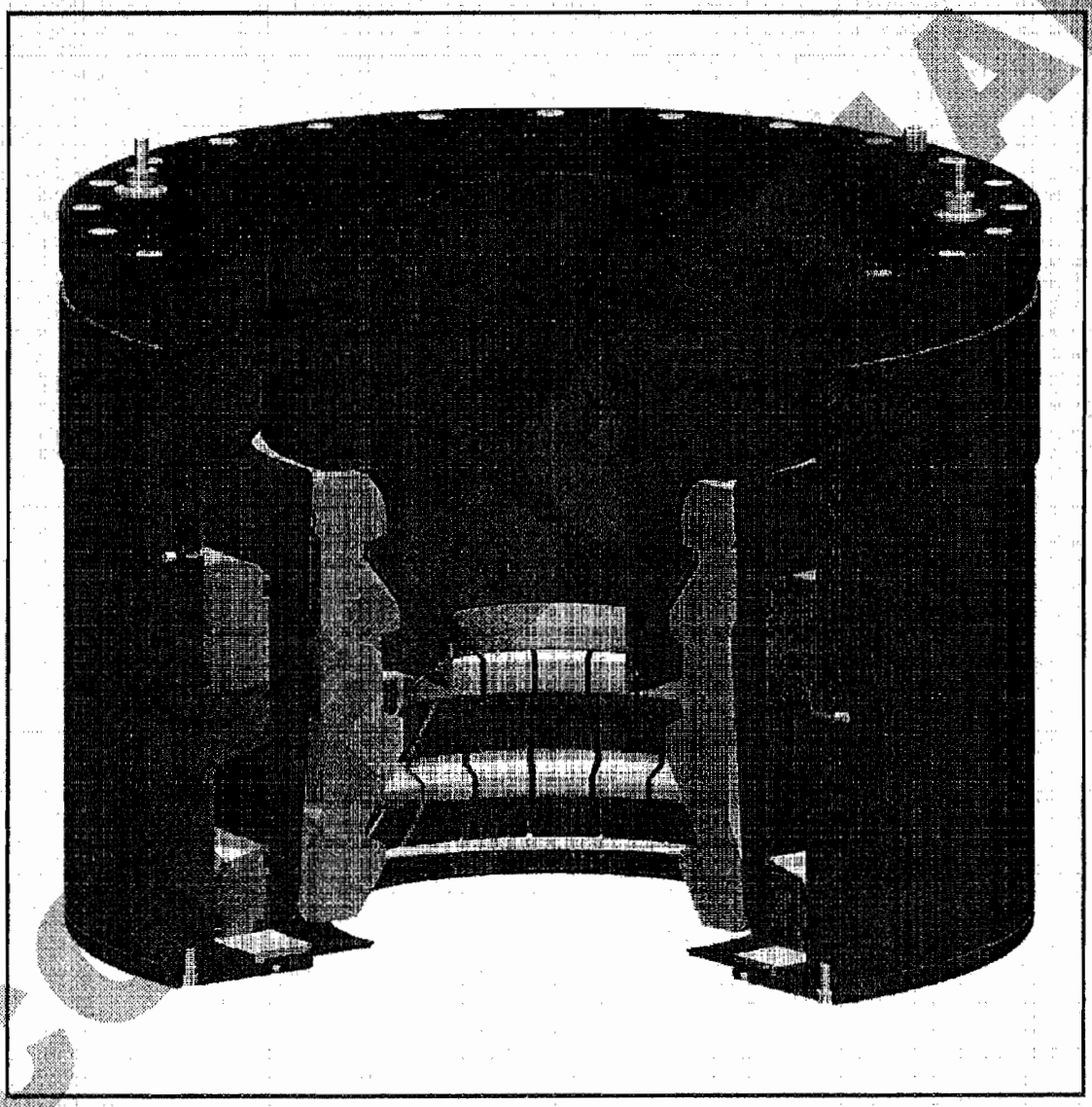
Cameron's deepwater high capacity collet connector (DWHC) is a high strength drilling and completion collet connector and hub system engineered for the high loads encountered in ultra deepwater applications. Cameron engineers designed the DWHC connector to meet these greater combined tension, bending and bore pressure loads.

Features:

- Provides 21 million pounds total equivalent tension capacity, based on API design criteria.
- Bending @ 15,000psi, 2,000,000 lb tension is 9,300,000 ft-lb. (Ratings are based on API allowable stresses for normal design loads.
- Segment and hub geometry and a large actuating piston area create a greater clamping force for the higher loads encountered in ultra deepwater conditions.
- Actuated by an annular hydraulic cylinder similar to those used in the proven Cameron HC Collet Connector.
- Positively driven-open collet segments during unlock to ensure that no overpull is required to disconnect. A secondary unlock function is also included.
- Metal-to-metal sealing is accomplished by using either the standard AX gasket or the new deepwater version of the AX gasket.
- The DWHC can lock onto the DWHC wellhead hub or the standard wellhead hub with no modification.

CAMERON

DWHC COLLET CONNECTOR



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CAMERON

CAMERON HC COLLET CONNECTOR

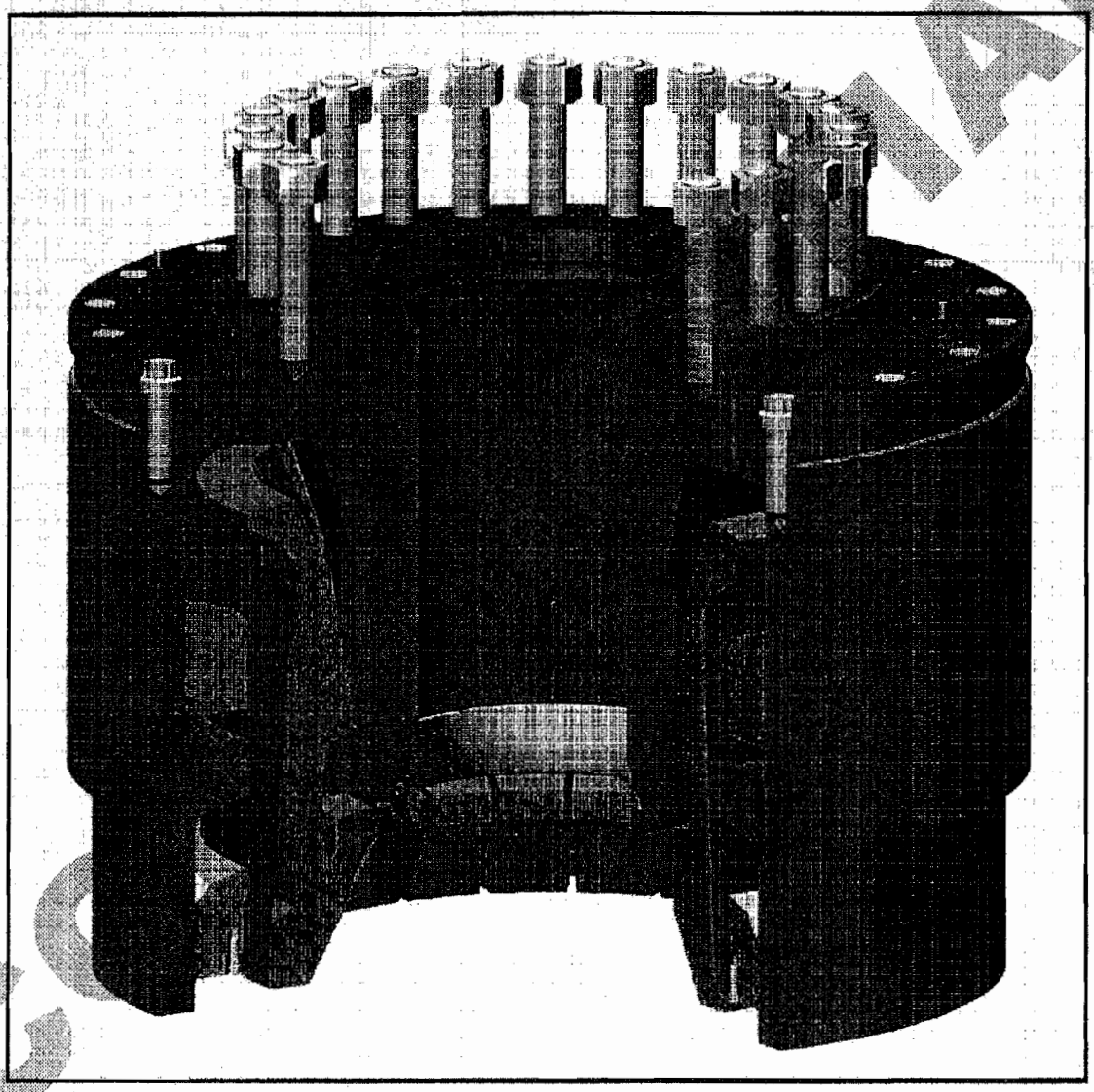
Cameron's Model HC Collet Connector utilizes the basic collet-finger/self-locking design to lock to the mating hubs connecting the wellhead to the BOP stack and the BOP stack to the lower riser package. The connector forms a tight seal while withstanding the bending stresses and separating forces caused by well pressure, riser tension and vessel motion.

Features:

- Large preloads are possible because of the mechanical advantage built into the design.
- High strength and stiffness with a very direct "load path" through the connector.
- Disconnection at angles up to 30 degrees is possible when unlocking pressure is applied rotating the segments into the fully open position due to short "swallow-up" and large collet finger opening.
- Greater clamping force at a given hydraulic pressure is created by a 25 degree angle on the clamp segment faces and a large actuating piston area.
- Higher applied loads can be tolerated without causing separation because the segments in the connector are the restraining member.
- Actuated by an annular hydraulic cylinder which provides substantially higher clamping preloads than the Model 70.
- Metal-to-metal AX gaskets on the collet end to ensure seal integrity. AX gaskets are available with bonded Hycar resilient rings.
- Available with secondary unlock pistons.

CAMERON

CAMERON HC COLLET CONNECTOR



S-1004

CAMERON

CAMERON HCH4 COLLET CONNECTOR

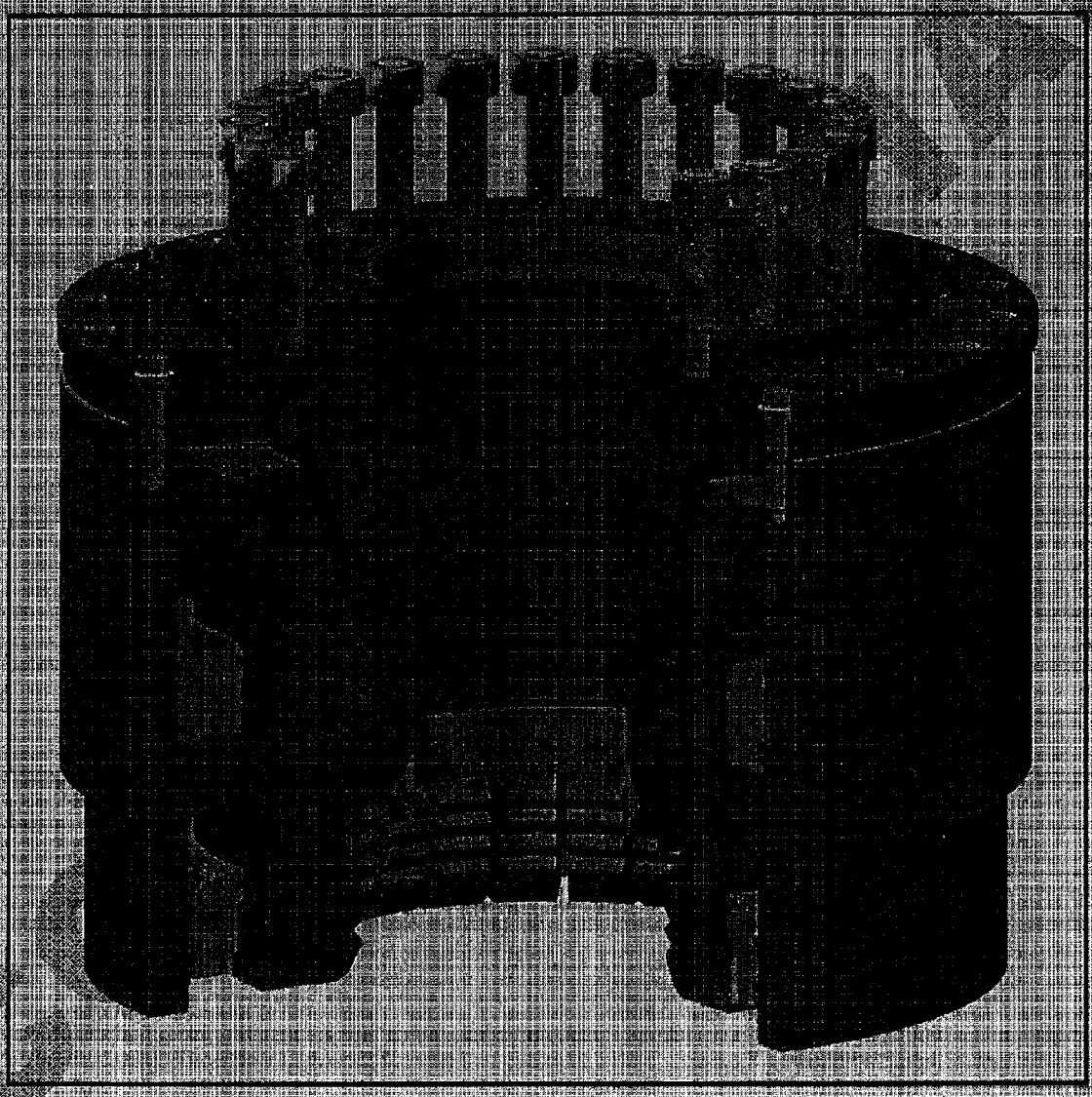
Cameron's Model HC Collet Connector utilizes the basic collet-finger/self-locking design to lock to the mating hubs connecting the wellhead to the BOP stack and the BOP stack to the lower riser package. The connector forms a tight seal while withstanding the bending stresses and separating forces caused by well pressure, riser tension and vessel motion.

Features:

- Large preloads are possible because of the mechanical advantage built into the design.
- High strength and stiffness with a very direct "load path" through the connector.
- Disconnection at angles up to 30 degrees is possible when unlocking pressure is applied rotating the segments into the fully open position due to short "swallow-up" and large collet finger opening.
- Greater clamping force at a given hydraulic pressure is created by a 25 degree angle on the clamp segment faces and a large actuating piston area.
- Higher applied loads can be tolerated without causing separation because the segments in the connector are the restraining member.
- Actuated by an annular hydraulic cylinder which provides substantially higher clamping preloads than the Model 70.
- Metal-to-metal AX gaskets on the collet end to ensure seal integrity. AX gaskets are available with bonded Hycar resilient rings.
- Available with secondary unlock pistons.

CAMERON

CAMERON HCH4 COLLET CONNECTOR



S-1006

CAMERON

CAMERON MODEL 70 COLLET CONNECTOR

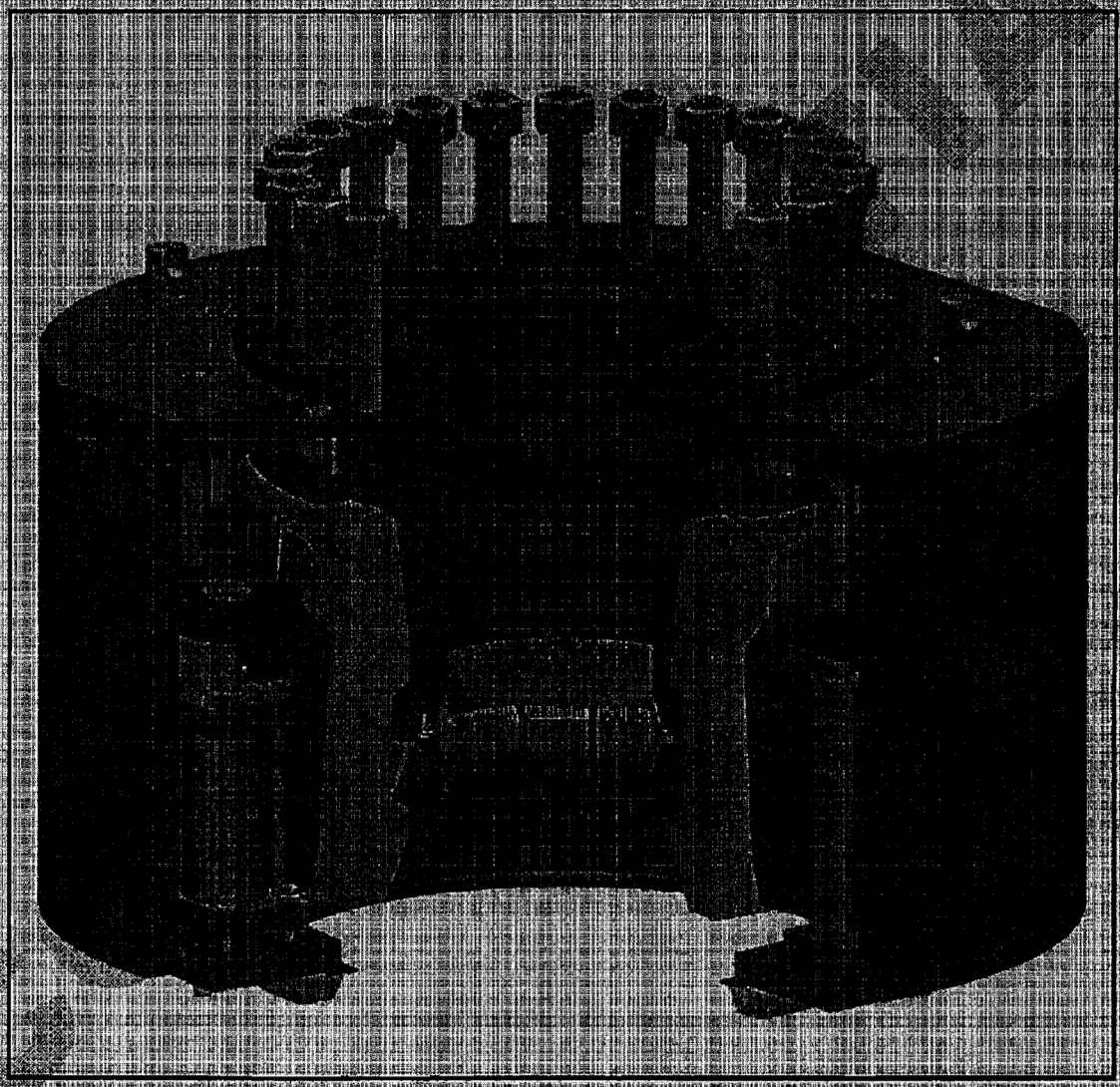
Cameron's Model 70 Collet Connector locks to the mating hubs connecting the wellhead to the BOP stack and the BOP stack to the lower riser package by means of pivoted locking segments shaped like tapered fingers. These segments form a funnel that guides the connector into position for connection to the mating hub and creates a tight seal that withstands the bending stresses and separating forces caused by well pressure, riser tension and vessel motion.

Features:

- Large preloads are possible because of the mechanical advantage built into the design.
- High strength and stiffness with a very direct "load path" through the connector.
- Inherent self-locking characteristics.
- Disconnection at angles up to 30 degrees is possible when unlocking pressure is applied rotating the segments into the fully open position due to short "swallow-up" and large collet finger opening.
- 25 degree angle on the clamp segment faces and a large actuating piston area to create a greater clamping force at a given hydraulic pressure.
- Metal-to-metal AX gaskets on the collet end to ensure seal integrity. AX gaskets are available with bonded Hycar resilient rings.
- Model 70 connectors are actuated by a set of hydraulic cylinders which operate in response to 1500 psi and provide unlocking force that is 80% higher than locking force.
- Manual override is standard on all Model 70 Collet Connectors.

CAMERON

CAMERON MODEL 70 COLLET CONNECTOR



S-1008

CAMERON

CAMERON TL BLOWOUT PREVENTER

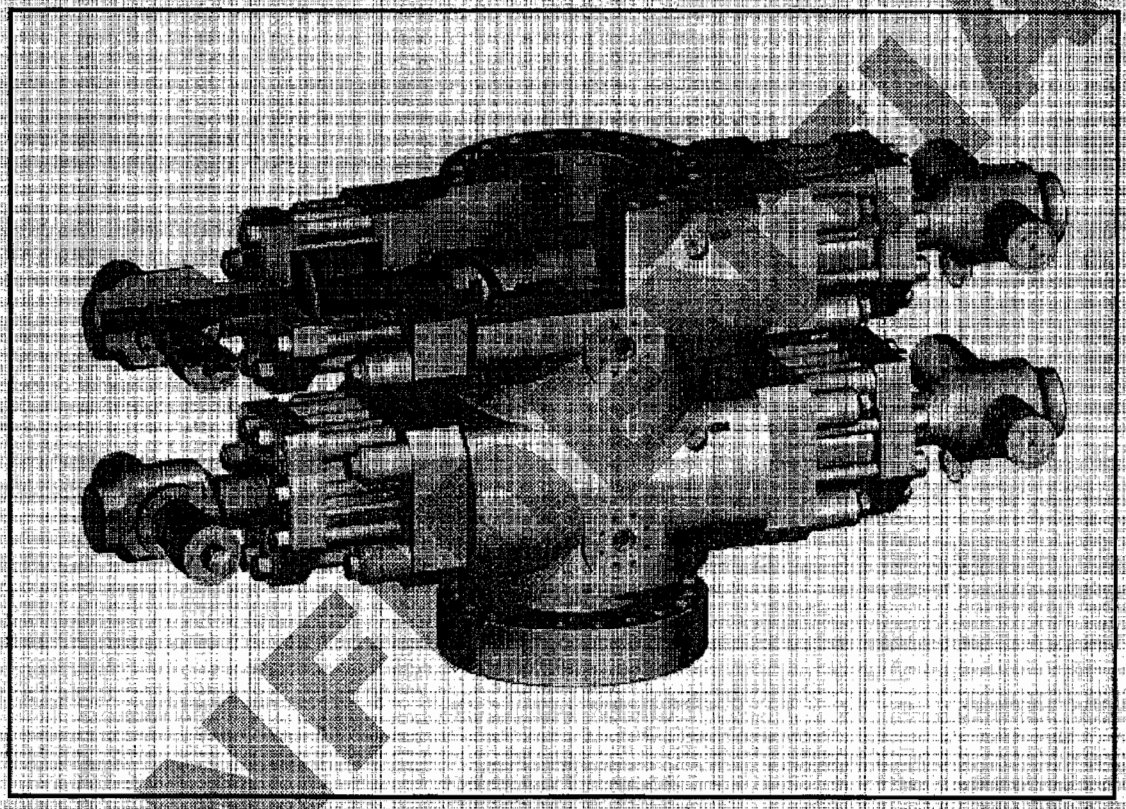
Cameron's TL Blowout Preventer is designed to meet the requirements of the drilling industry for a lightweight BOP. By eliminating separate bonnets and intermediate flanges, Cameron simplified the TL BOP while reducing the BOP's weight. The TL BOP design is based on Cameron's experience with the UII and T BOPs and combines much of this field proven technology including:

Features:

- Side ram removal reduces stack height and simplifies ram change-out.
- Wear pads are included on the bottom of all TL BOP rams.
- Bonnet seal carrier eliminates the need for high makeup torque on bonnet studs and nuts.
- Bonnet studs rather than bonnet bolts reduce the need to make and break threads in the BOP body.
- Most operating system seals can be replaced with the bonnet in the ram-change position without removing the bonnets because the operating cylinder and ram-change cylinders fit between the bonnet and end flange with tie-bolts holding the assembly together.
- Access caps on the ram-change pistons enable easier access from the end of the bonnet.
- Piston area large enough to shear all commonly used sizes and grades of drill pipe.
- Available with super shear bonnets and non-sealing super shear rams for shearing drill collars and large casing.
- Manual or Hydraulic locks are available for all sizes and pressures.
- Typical 18-3/4 5000 and 10,000 TL BOPs are fitted with hydraulically operated locking mechanisms, wedgelocks, which lock the ram hydraulically and hold the rams mechanically closed even when actuating pressure is released. The operating system can be interlocked using sequence caps to ensure that the wedgelock is retracted before pressure is applied to open the BOP.
- The typical 18-3/4 15,000 TL utilizes ST-Locks, which are hydraulically operated and act directly on the operating piston tailrod and are interlocked by sequence caps to ensure that locks are open before the BOP is opened.
- Other features include hydraulically opening bonnets, forged body and a wide selection of rams to meet all applications. Studded bodies are available.

CAMERON

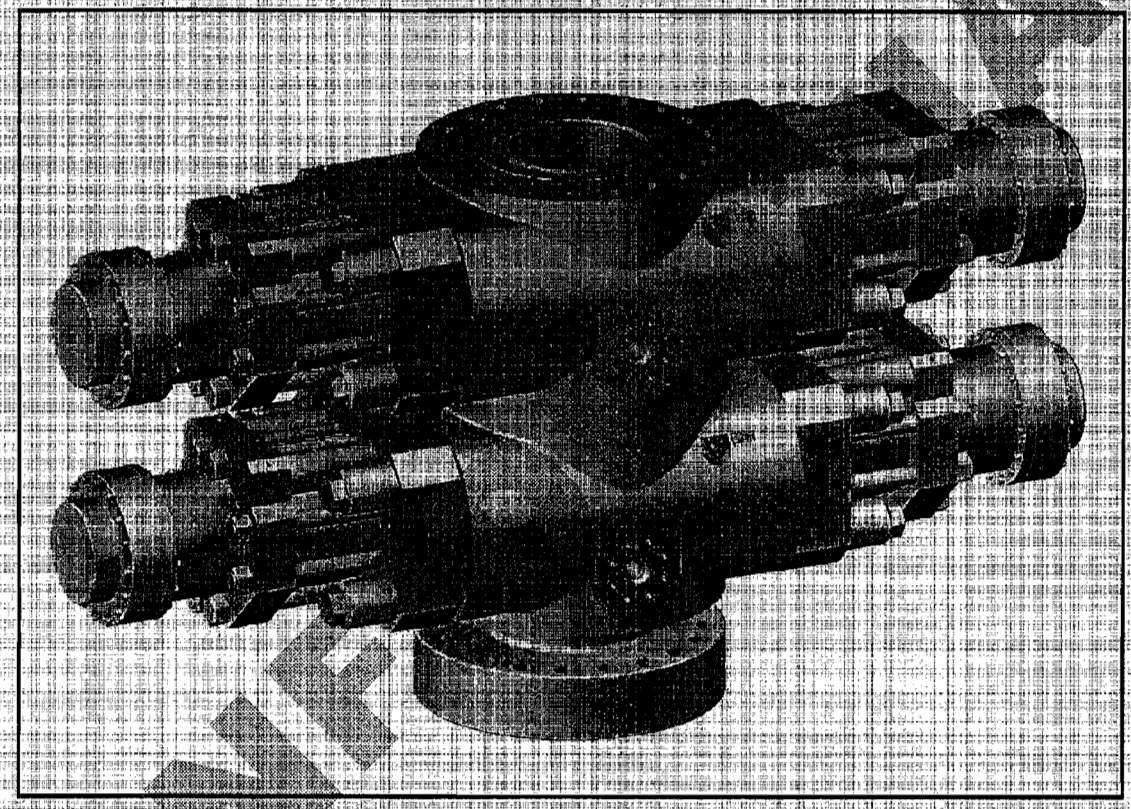
CAMERON TL BLOWOUT PREVENTER



S-1010

CAMERON

CAMERON TL BLOWOUT PREVENTER WITH HYDRO-MECHANICAL LOCKING DEVICE



S-1011

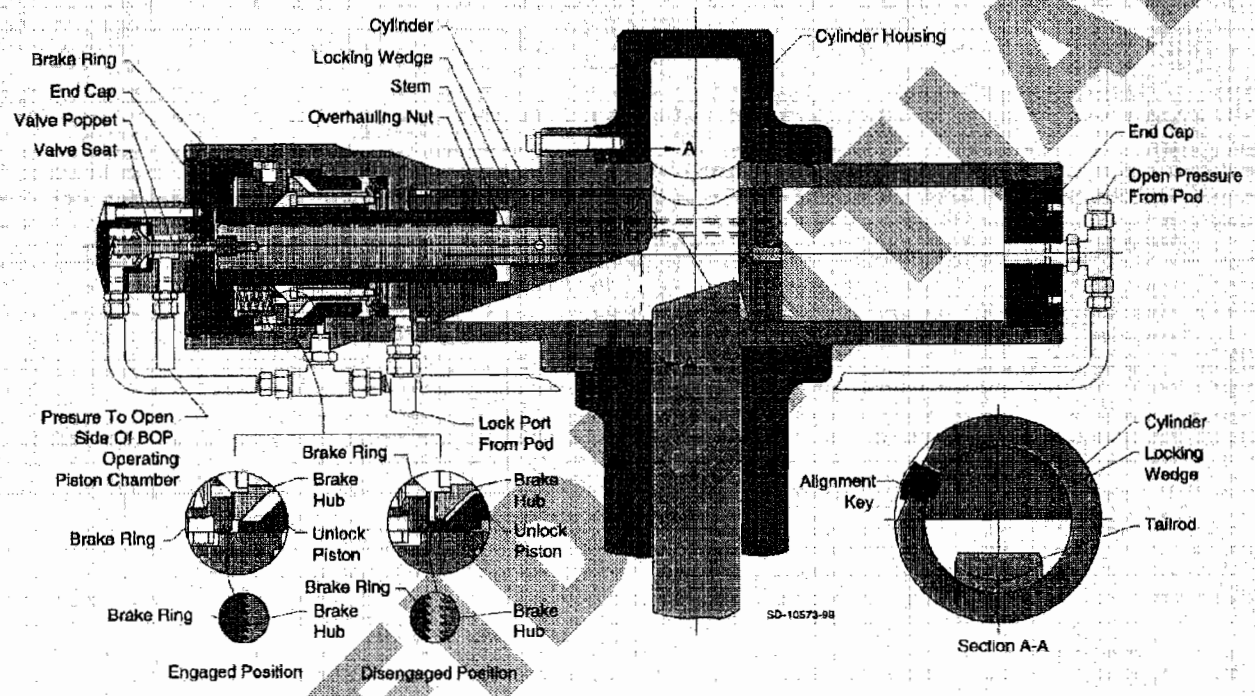
CAMERON

ST-LOCK

- Utilizes an overhauling nut and brake system.
- Brake system is field serviceable on the BOP.
- Sequence cap prevents opening the operating piston against a closed lock.
- Brake ring/hub ratchets with the close function to mechanically lock the wedge.
- Unlock piston disengages the brake ring/hub to allow the wedge to open.
- The ST-Lock has undergone extensive testing before entering field service.

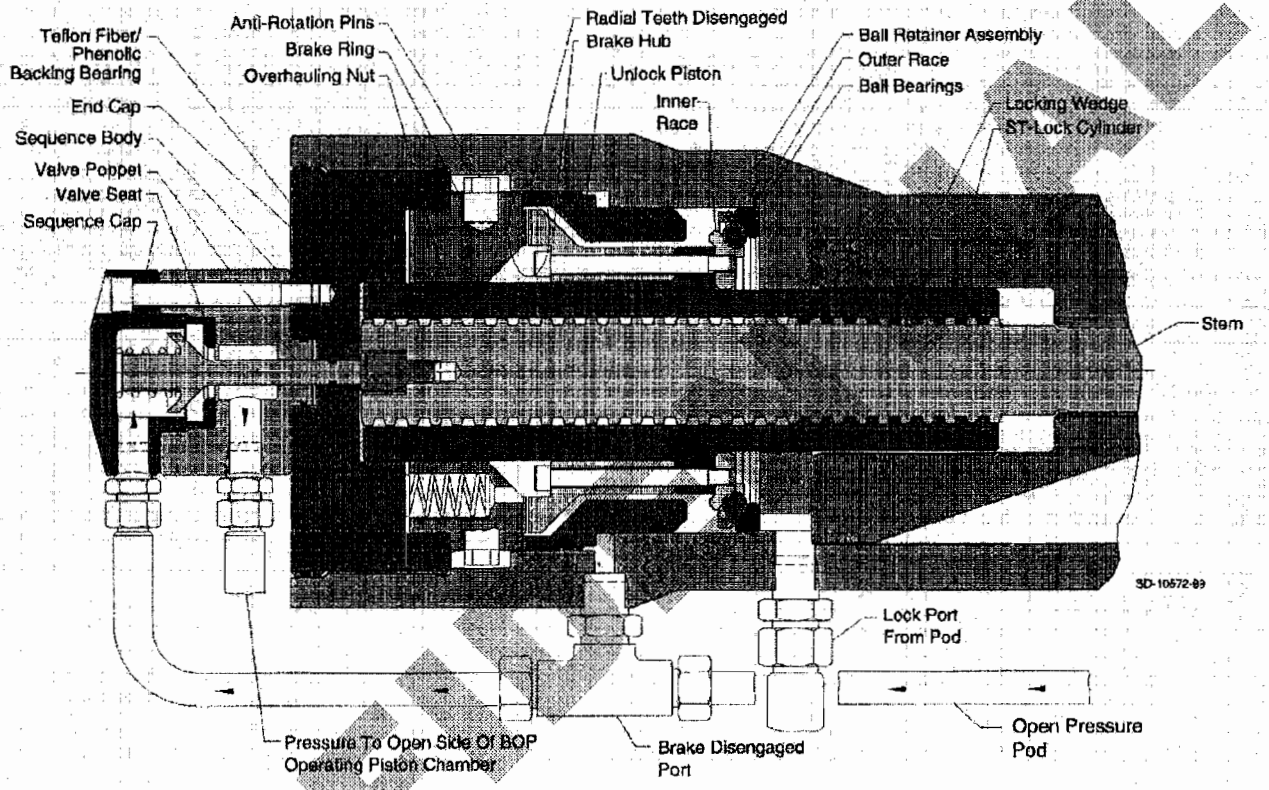
CAMERON

ST-LOCK



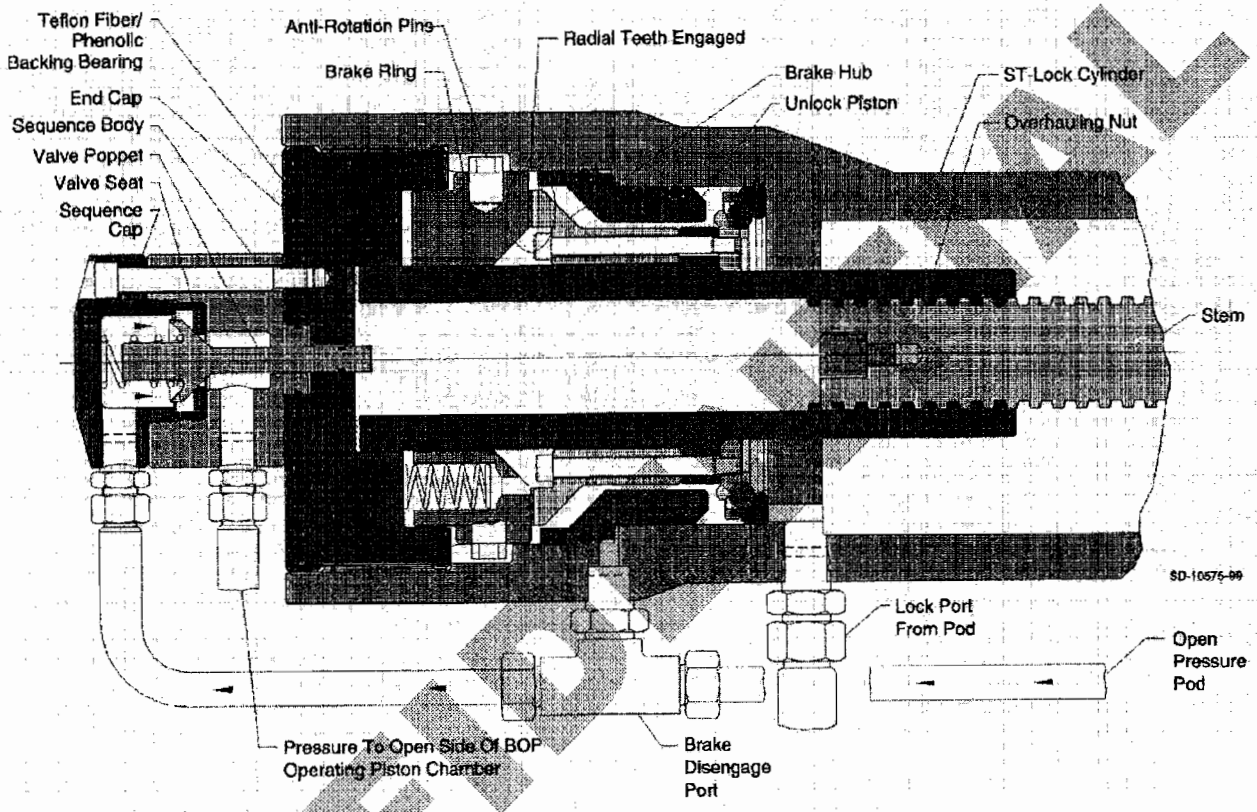
CAMERON

ST-LOCK

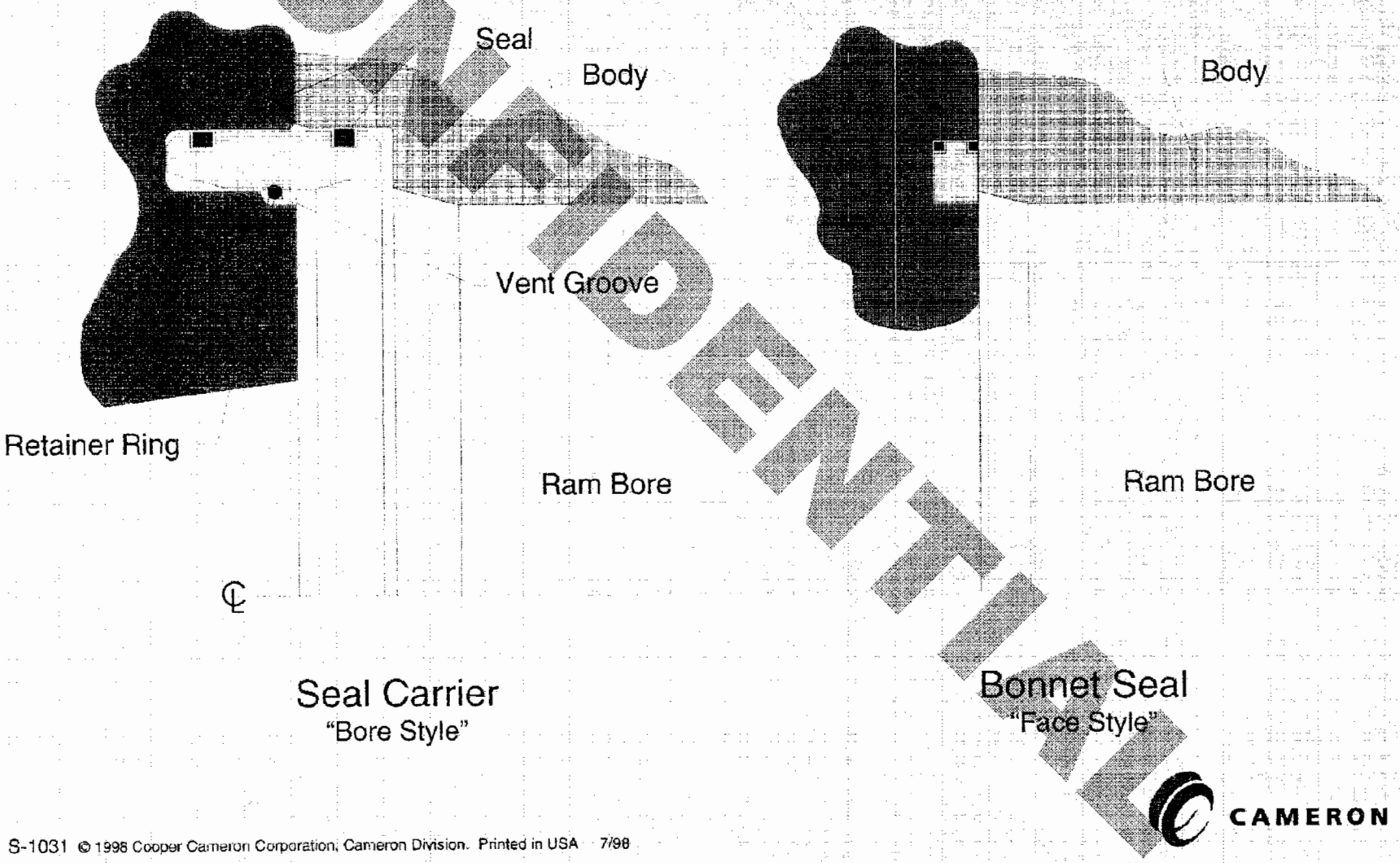


CAMERON

ST-LOCK



BOP Bonnet Seal Comparison



CAMERON

3M OPERATING SYSTEM		SHEAR DATA - 18-3/4" 15,000 TL BOP								
					SHEAR PRESSURE(psi) AMBIENT			SHR PRESS. (psi) 10M WP		
TUBULAR SIZE	GRADE	WEIGHT	OD	ID	18.00"	24.00"	28.00"	18.00"	24.00"	28.00"
3-1/2" DP	S-135	15.5	3.5	2.602						
5" DP	S-135	19.5	5	4.276						
6-5/8" DP	S-135	40.7	6.625	5.375						
5" TOOL JOINT	S-135	0	6.625	3	N/A			N/A		
6-5/8" TOOL JOINT	S-135	0	8.25	4.25	N/A			N/A		
5" HWDP	K-55	50	5	3	N/A			N/A		
5" HW TOOL JOINT	120 Ksi	0	6.625	3	N/A			N/A		
6-5/8" HWDP	K-55	72	6.625	4.5	N/A			N/A		
6-5/8" HW TOOL JOIN	120 Ksi	0	8.25	4.5	N/A			N/A		
9-1/2" DC	100 Ksi	0	9.5	3	N/A			N/A		
8" DC	110 Ksi	0	8	3	N/A			N/A		
6-1/2" DC	110 Ksi	0	6.5	2.812	N/A			N/A		
4-1/2" DC	110 Ksi	0	4.5	2.75	N/A			N/A		
16" CASING	N-80	84	16	15.01	N/A			N/A		
13-3/8" CASING	P-110	72	13.375	12.347	N/A			N/A		
9-7/8" CASING	P-110	62.8	9.875	8.625	N/A			N/A		
7" CASING	P-110	38	7	5.92						

5M OPERATING SYSTEM		SHEAR DATA - 18-3/4" 15,000 TL BOP								
					SHEAR PRESSURE(psi) AMBIENT			SHR PRESS. (psi) 10M WP		
TUBULAR SIZE	GRADE	WEIGHT	OD	ID	18.00"	24.00"	28.00"	18.00"	24.00"	28.00"
3-1/2" DP	S-135	15.5	3.5	2.602						
5" DP	S-135	19.5	5	4.276						
6-5/8" DP	S-135	40.7	6.625	5.375						
5" TOOL JOINT	S-135	0	6.625	3	N/A			N/A		
6-5/8" TOOL JOINT	S-135	0	8.25	4.25	N/A			N/A		
5" HWDP	K-55	50	5	3	N/A			N/A		
5" HW TOOL JOINT	120 Ksi	0	6.625	3	N/A			N/A		
6-5/8" HWDP	K-55	72	6.625	4.5	N/A			N/A		
6-5/8" HW TOOL JOIN	120 Ksi	0	8.25	4.5	N/A			N/A		
9-1/2" DC	100 Ksi	0	9.5	3	N/A			N/A		
8" DC	110 Ksi	0	8	3	N/A			N/A		
6-1/2" DC	110 Ksi	0	6.5	2.812	N/A			N/A		
4-1/2" DC	110 Ksi	0	4.5	2.75	N/A			N/A		
16" CASING	N-80	84	16	15.01	N/A			N/A		
13-3/8" CASING	P-110	72	13.375	12.347	N/A			N/A		
9-7/8" CASING	P-110	62.8	9.875	8.625	N/A			N/A		
7" CASING	P-110	38	7	5.92						

NOTE 1 : PRESSURES IN GREEN ARE ACHIEVEABLE WITHIN OPERATING SYSTEM LIMITATIONS.
PRESSURES IN RED ARE OUTSIDE OF OPERATING SYSTEM LIMITATIONS.

NOTE 2 : 18" OPERATOR IS STANDARD FOR SHEAR/BLIND RAMS.
NOTE 3 : 24" AND 28" OPERATORS ARE SUPER SHEAR RAMS (CUTTING RAMS ONLY).

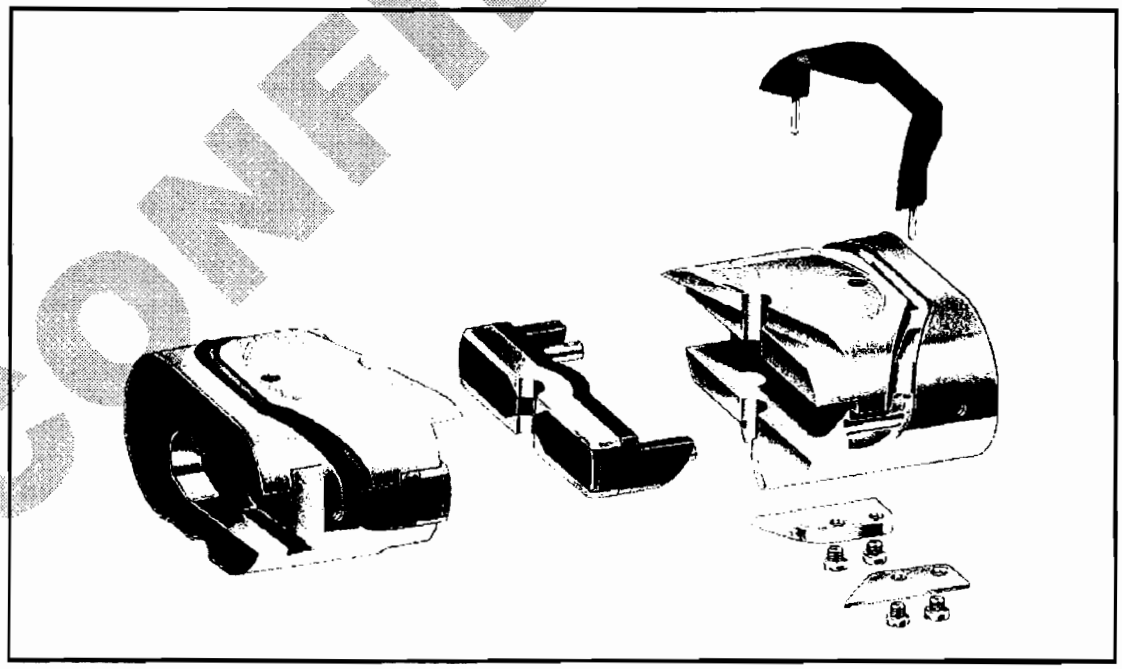
CAMERON

CAMERON TL BOP PIPE RAMS

TL BOP Pipe Rams are available to fit a wide variety of tubing, drill pipe, drill collar or casing requirements. The rams are self-feeding and feature a large reserve of packer elastomer to ensure a long-lasting seal under all conditions. Other features of the TL BOP pipe rams include:

Features:

- One piece ram body.
- Side ram removal.
- Replaceable wear pads on all rams.
- CAMRAM™ packers and top seals provide increased stripping and fatigue life as well as diesel mud service.
- CAMRAM 350™ is available for high temperature (350 °F) applications.
- Suitable for H_2S service, per NACE MR-01-75.



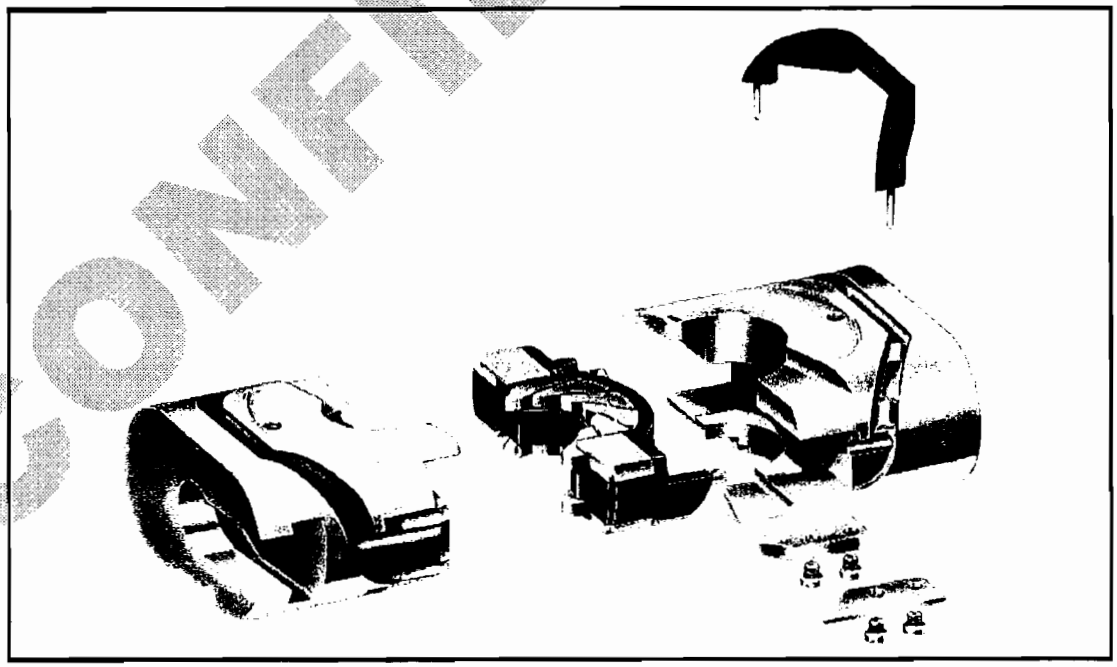
CAMERON

CAMERON TL BOP VARIABLE BORE RAMS

Cameron's TL BOP Variable Bore Rams contain steel reinforcing inserts similar to those in the Cameron annular BOP packer. These inserts rotate inward when the rams are closed, so the steel provides support for the elastomer material which seals against the pipe. The TL BOP Variable Bore Rams feature:

Features:

- One set of rams can be used to seal on several pipe sizes or hexagonal kelly.
- All TL BOP Variable Bore Rams feature high-performance CAMRAM™ packers and top seals.
- Service good up to 180 °F.
- Side ram removal.
- Replaceable wear pads.



S-1017

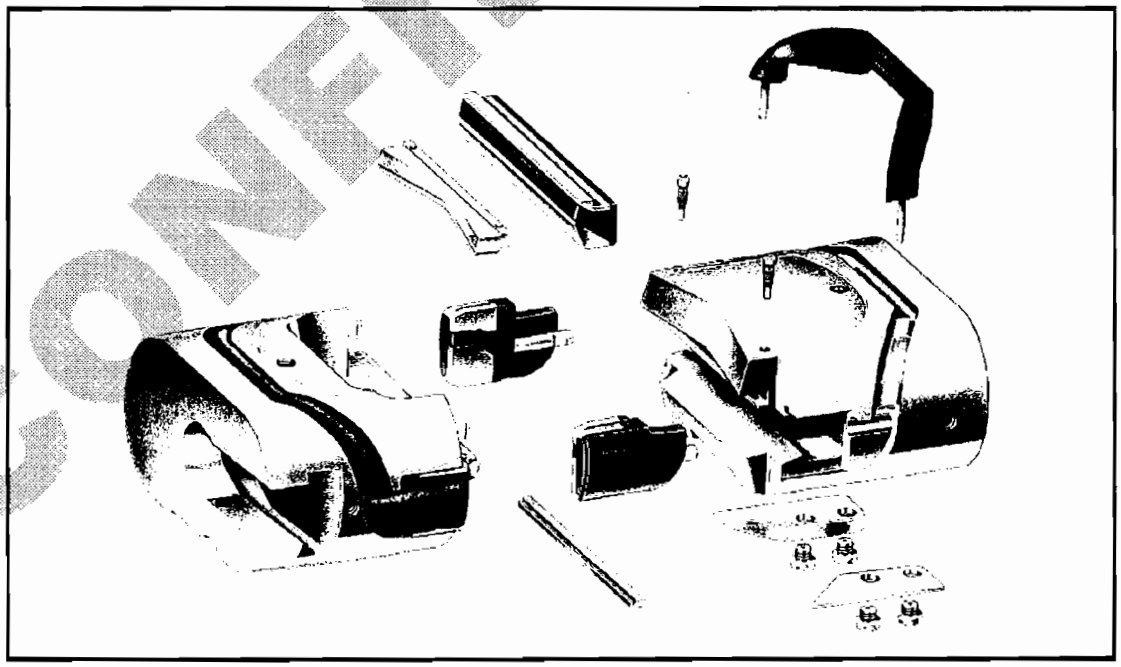
CAMERON

CAMERON TL BOP SHEARING BLIND RAMS

Cameron's TL BOP Shearing Blind Rams are similar in design to the field proven T BOP rams and incorporate many of their features including:

Features:

- Side ram removal.
- Replaceable wear pads.
- Replaceable blade inserts for H_2S compatibility.
- Suitable for H_2S service.
- CAMRAM 350™ is available for high temperature (350 °F) applications.



S-1018

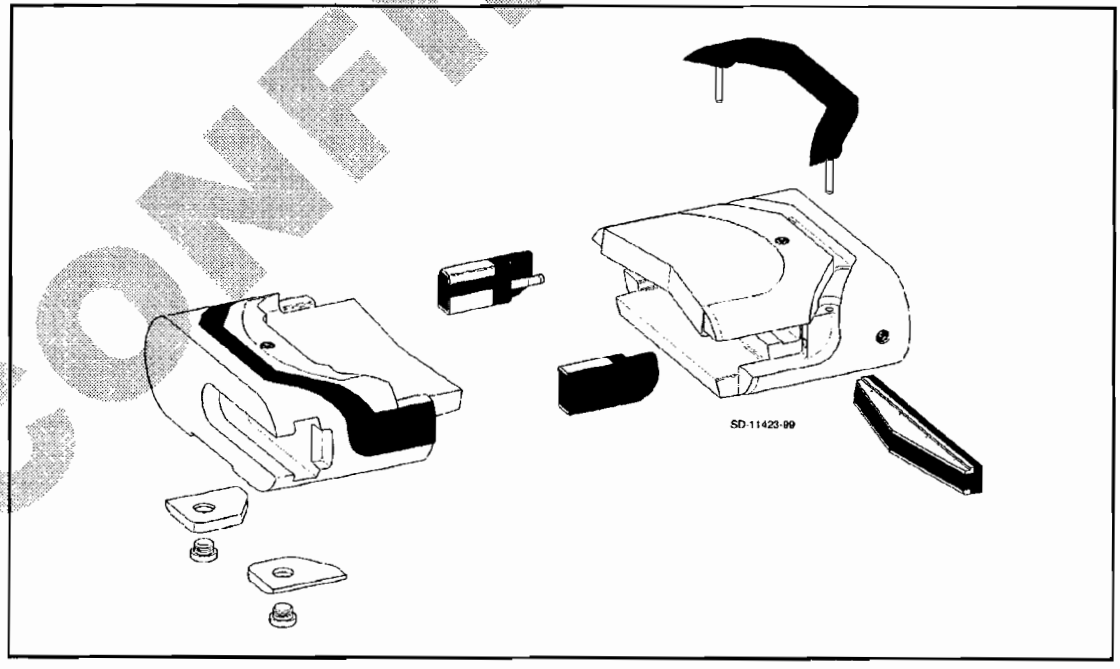
CAMERON

CAMERON TL BOP DVS SHEAR RAMS

Cameron's DVS Shearing Blind Ram is similar to a Cameron Shearing Blind Ram and has two "V" blades for more effective shearing. After shearing, the lower portion of the tubular is folded over so that the lower blade can seal against the blade packer. Features include:

Features:

- Largest blade width to fit within existing ram bores.
- Large frontal blade packer provides longer fatigue life.
- Efficient upper and lower blade geometries reduces the required shear force.
- Side ram removal.
- Replaceable wear pads on all rams.



S-1035

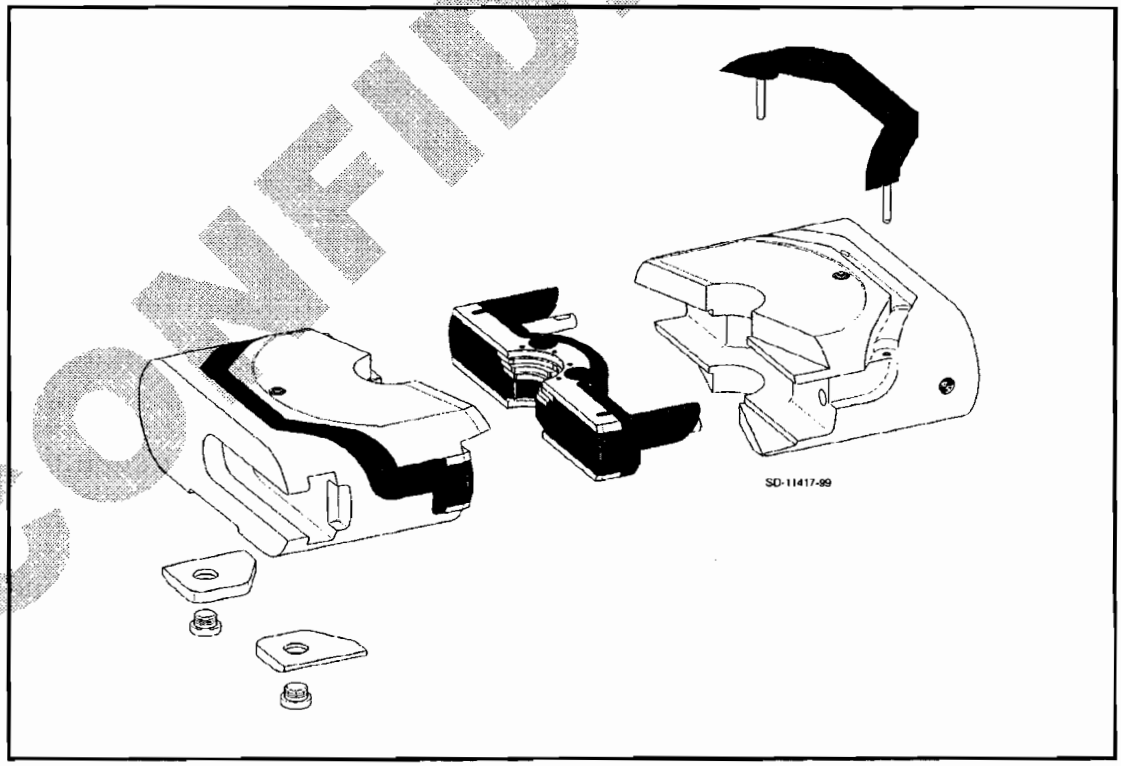
CAMERON

CAMERON TL BOP FLEXPACKER™ RAMS

TL BOP Flexpacker Rams are available to fit a wide variety of tubing, drill pipe, drill collar or casing requirements. The rams are self-feeding and feature a large reserve of packer elastomer to ensure a long-lasting seal under all conditions. Other features of the TL BOP Flexpacker Rams include:

Features:

- One piece ram body.
- Side ram removal.
- Replaceable wear pads on all rams.
- CAMRAM™ packers and top seals provide increased stripping and fatigue life as well as diesel mud service.
- CAMRAM 350™ is available for high temperature (350 °F) applications.



CAMERON

CAMERON DL ANNULAR BLOWOUT PREVENTER

In the unique design of the Cameron DL Annular BOP, closing pressure forces the operating piston and pusher plate upward to displace the solid elastomer donut and force the packer to close inward. As the packer closes, steel reinforcing inserts rotate inward to form a continuous support ring of steel at the top and bottom of the packer. The inserts remain in contact with each other whether the packer is open, closed on pipe or closed on open hole. Other features of the DL BOP include:

- The Cameron DL BOP is shorter in height than comparable annular preventers and features light weight for use on platforms and rigs where weight is a consideration.

- A quick-release top with a one-piece split lock ring permits quick packer change out with no loose parts involved. The design also provides visual indication of whether the top is locked or unlocked.

- The DL BOP is designed to simplify field maintenance. Components subject to wear are field-replaceable and the entire operating system may be removed in the field for immediate change-out without removing the BOP from the stack.

- Twin seals separated by a vented chamber positively isolate the BOP operating system from well bore pressure. High strength polymer bearing rings prevent metal-to-metal contact and reduce wear between all moving parts of the operating systems.

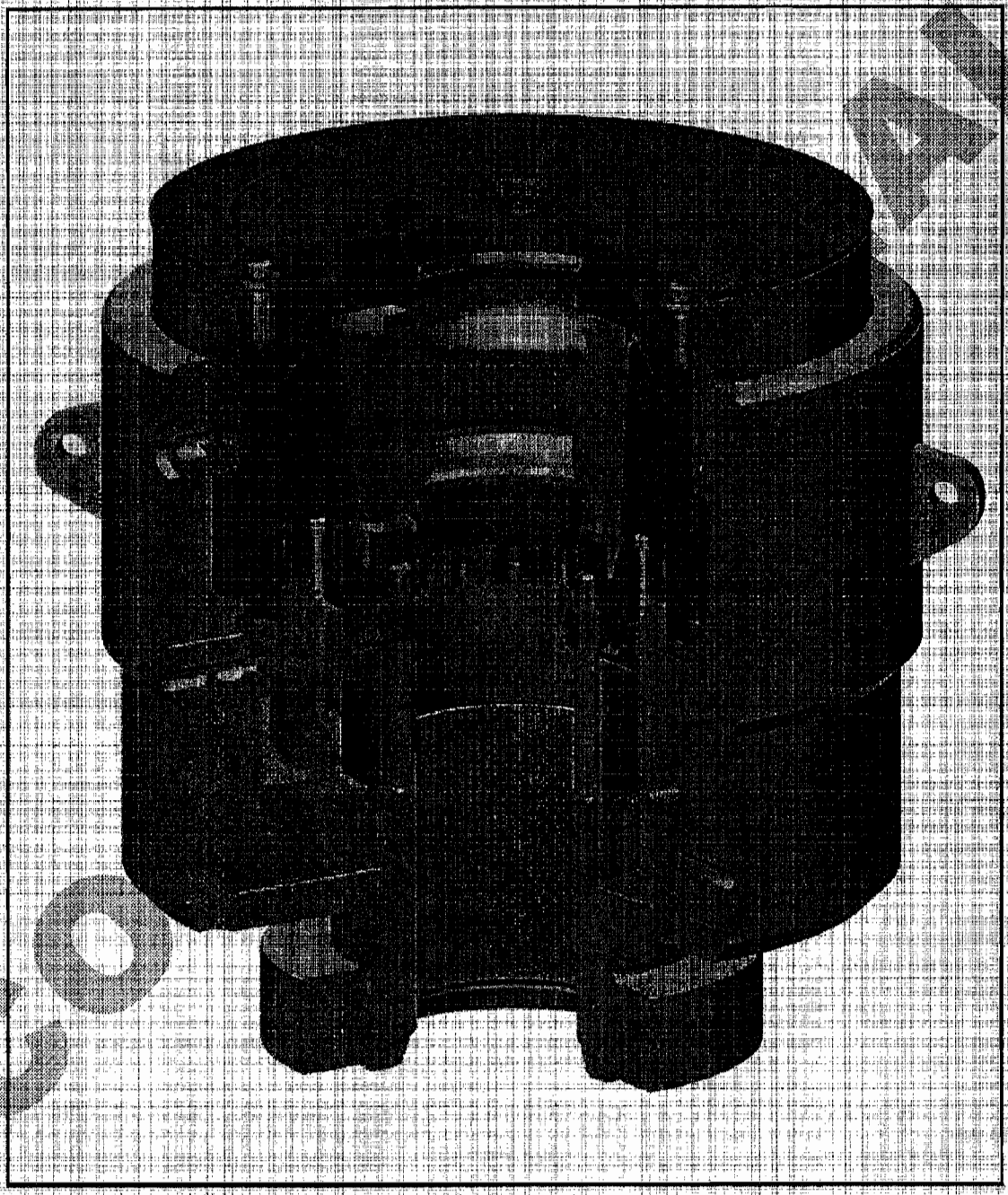
- All Cameron DL BOPs are manufactured to comply with NACE MR-01-75 for H_2S service.

- Packers for DL BOPs have the capacity to strip pipe as well as close and seal on almost any size or shape object that will fit into the wellbore. These packers will also close and seal on open hole. The annular packer can also be split for installation while pipe is in the hole. Popular sizes of the DL BOP are available with high performance CAMULAR™ annular packing subassemblies.

The Cameron DL BOP is available in sizes from 7-1/16" to 21-1/4" and in working pressures from 2000 to 20,000 psi WP.

CAMERON

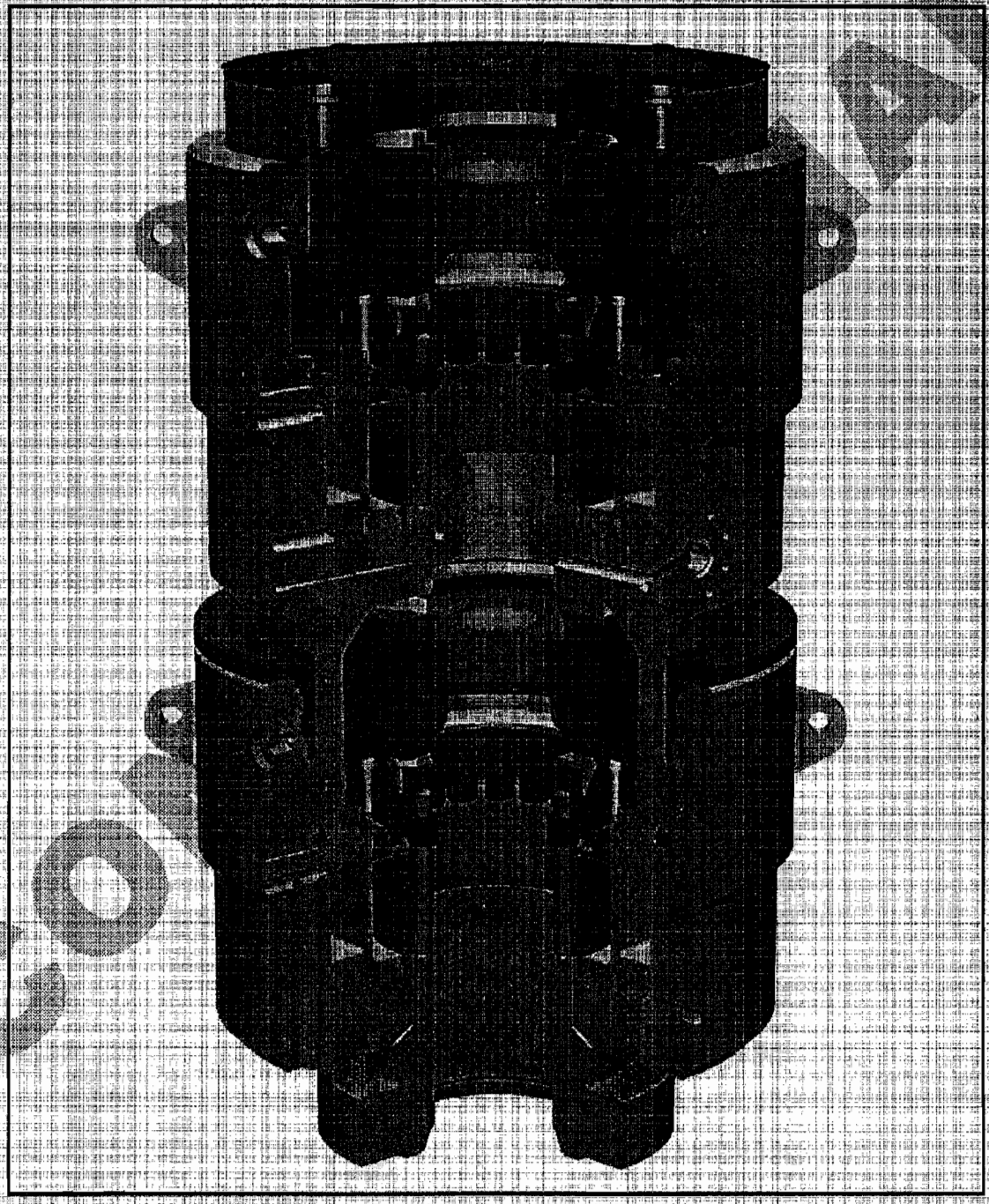
CAMERON DL ANNULAR BLOWOUT PREVENTER



S-1020

CAMERON

CAMERON DL DUAL ANNULAR BLOWOUT PREVENTER



S-1021

CAMERON

HIGH TEMPERATURE BOP ELASTOMERS

Engineering Bulletin - EB833D

There is no industry-accepted method of formally rating BOP packers and seals. The following are estimates based on lab testing and field performance. Temperature ratings for elastomer components must take into account the environmental exposure history, the mechanical loading history, the chemical environment while at temperature, and other factors. Therefore, a single number rating can be misleading if all conditions are not understood.

Preventer/Elastomer Type	Continuous	Extremes
Annular BOPs	70 - 180 degrees F.	30 - 200 degrees F.
VBR Packers	70 - 180 degrees F.	30 - 200 degrees F.
Ram Bops* - High Temp.	0 - 250 degrees F.	-20 - 350 degrees F.
Ram Bops* - Std. Temp.	0 - 220 degrees F.	-20 - 250 degrees F.

* All ram BOP elastomers except VBR packers

Studies performed by Cameron have determined that for high temperature subsea BOP stacks, the convection from the cold sea water keeps the majority of the Ram BOP from ever reaching the flowing temperature of the well. Therefore, for high temperature subsea stacks, the only elastomers that need to be changed to the high temperature variety are the ram packers and top seals. It is not necessary to change the bonnet seals or the connecting rod seals.

The same does not follow for high temperature surface stacks, since the air does not provide the same level of heat convection. On high temperature surface stacks, the entire BOP, including the operating system, should be assembled with high temperature elastomers.

CAMERON

CAMERON MCS DRILLING VALVE

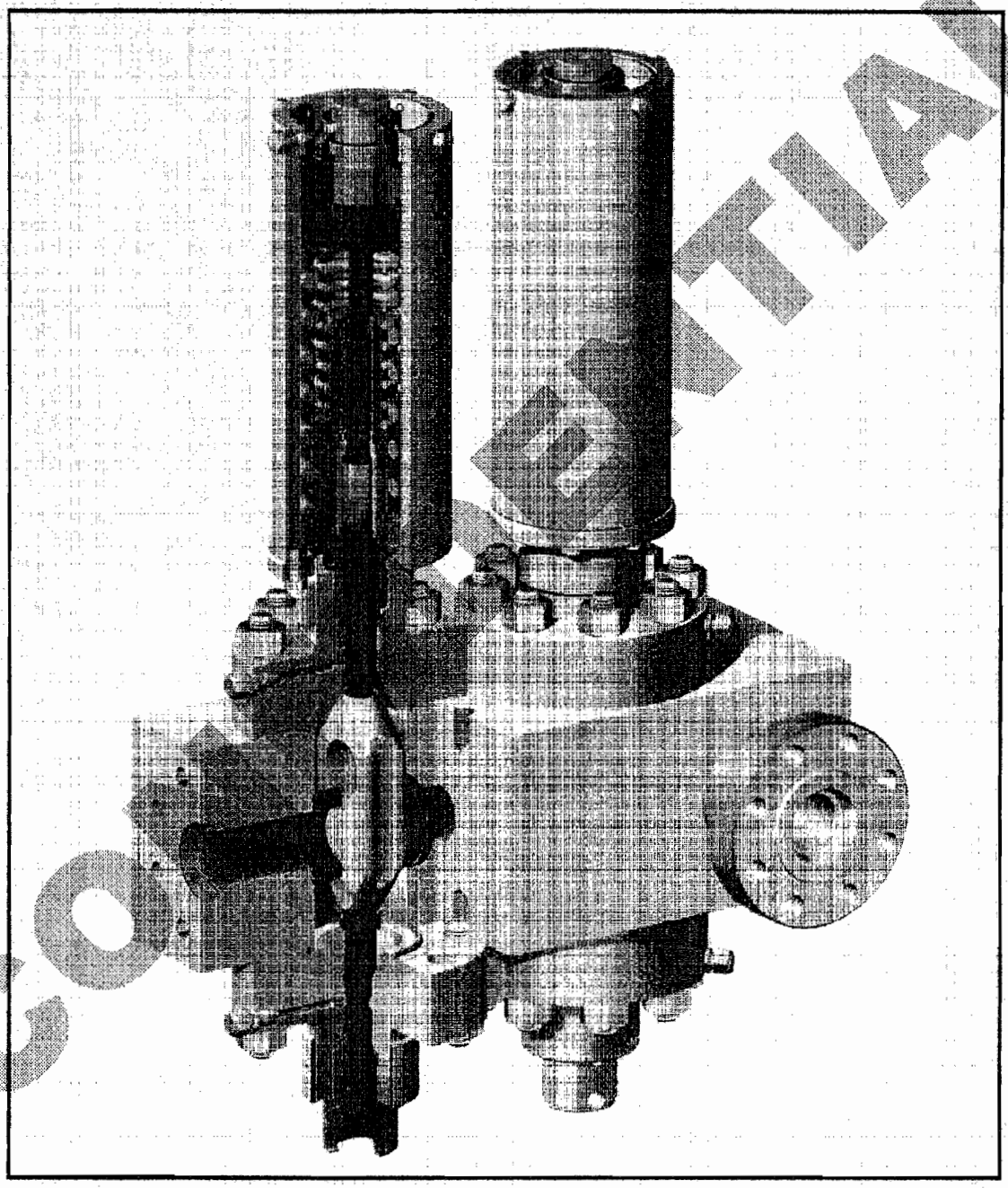
The MCS valve's one-piece seat design, featuring exclusive spring barrier seals, prevents valve body erosion, provides consistently reliable low-pressure sealing and reduces gate and seat wear. The MCS also incorporates many of the popular design features of the highly successful Cameron F and FC gate valves, including one-piece gate design and minimal number of cavity parts for easy service.

Features:

- Non-elastomeric barrier seals with encapsulated corrosion-resistant high-force springs that are unaffected by drilling and production fluids.
- No flow between seat and body in either direction at any pressure.
- Field-proven, metal-to-metal sealing.
- Internal bleed-off of excess cavity pressure.
- Simple rugged design.
- Detachable actuator requires only 5" clearance and can be removed without removing the valve from the line.
- Bonnet, packings and stem remain in the valve to ensure safety even with the actuator removed.
- Available for Normal-close and Normal-open applications.
- Body styles include dual block, straight, and target configurations.

CAMERON

CAMERON MCS DRILLING VALVE



S-1024

CAMERON

CAMERON STANDARD MINI COLLET CONNECTOR

Cameron's Mini Collet Connector provides a means of making choke and kill line connections between the subsea BOP stack and the lower marine riser package. Hydraulic pressure acting against internal annular pistons lock and unlock the connector. Pressure applied to the top of the lower, or actuator ring nose, pushes the actuator ring downward over the clamp segments which pivot on the body center section and lock the mating hubs together. To unlock, pressure is applied below the upper, or actuator ring piston, which forces the actuator ring upward engaging the clamp segments and causing them to pivot outward and disengage from the mating hub. Cameron's Mini Collet Connector incorporates many field proven features including:

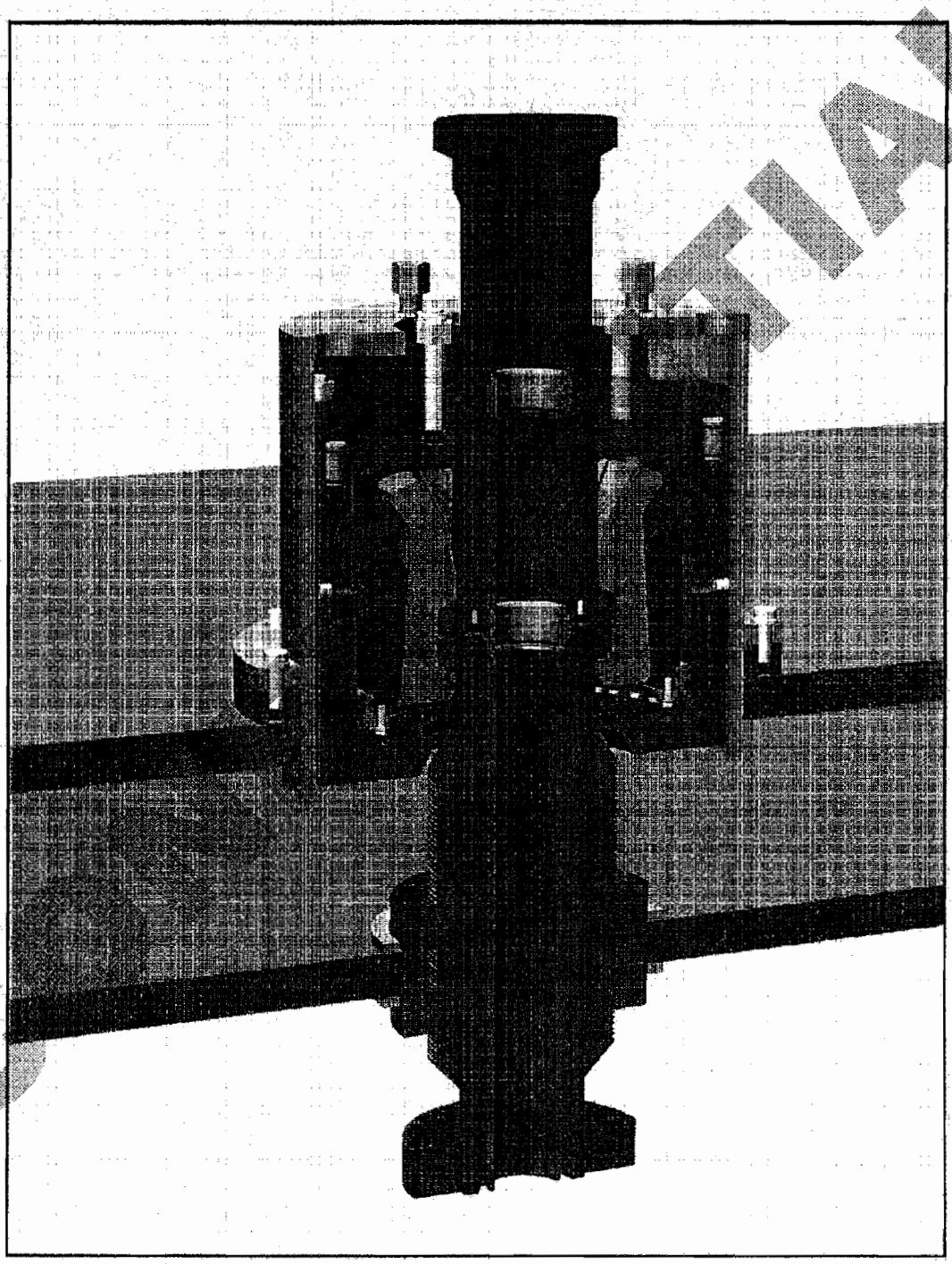
Features:

- Hydraulic operating system is designed to ensure quick release after long periods of engagement.
- Withstands strong separating forces caused by internal pressures in the choke and kill line.
- Utilizes the Cameron AX gasket.
- Equipped with a built-in mechanical override release

CAMERON

Standard Mini-Connector

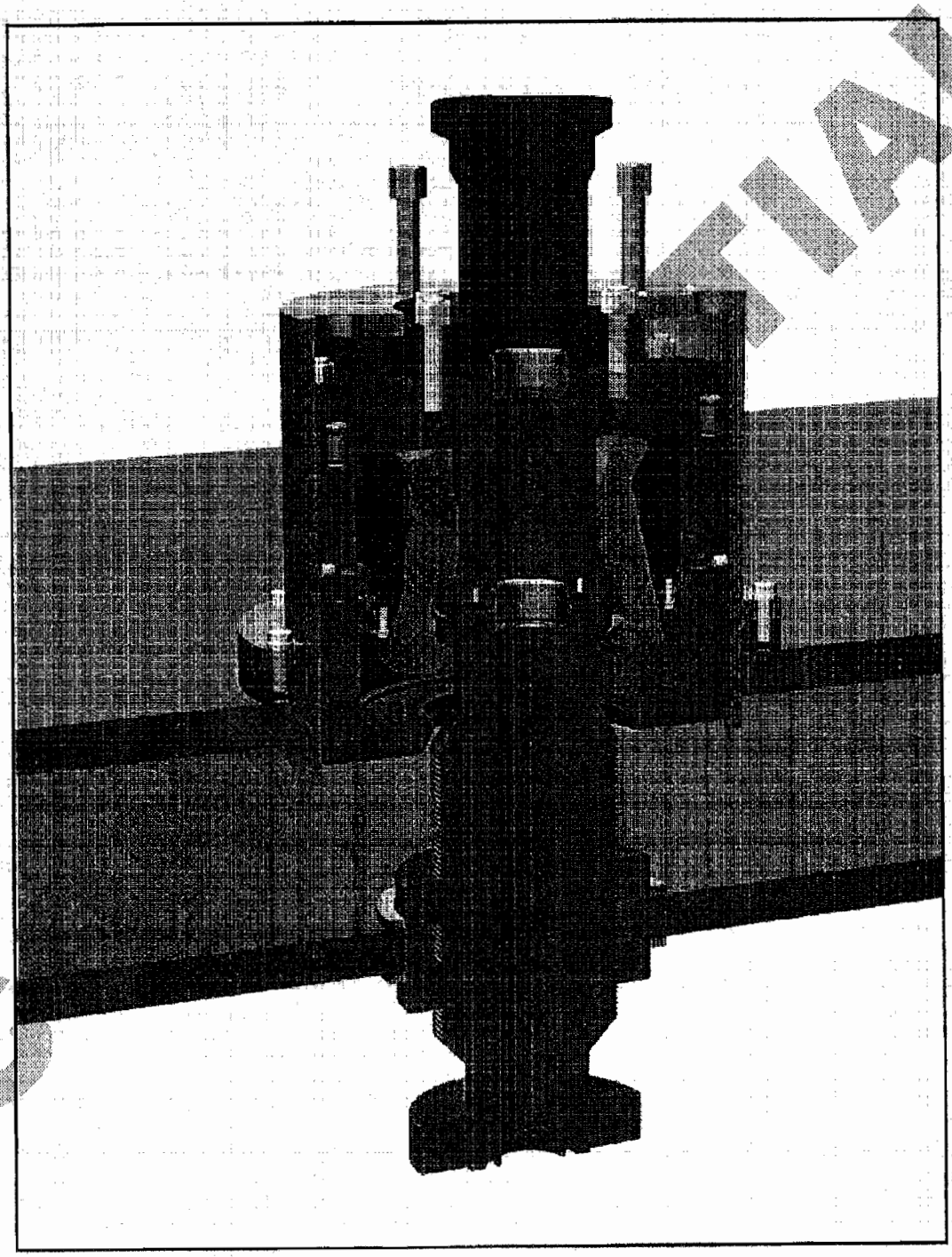
Locked Position



S-1026

CAMERON

Standard Mini-Connector
Un-Locked Position

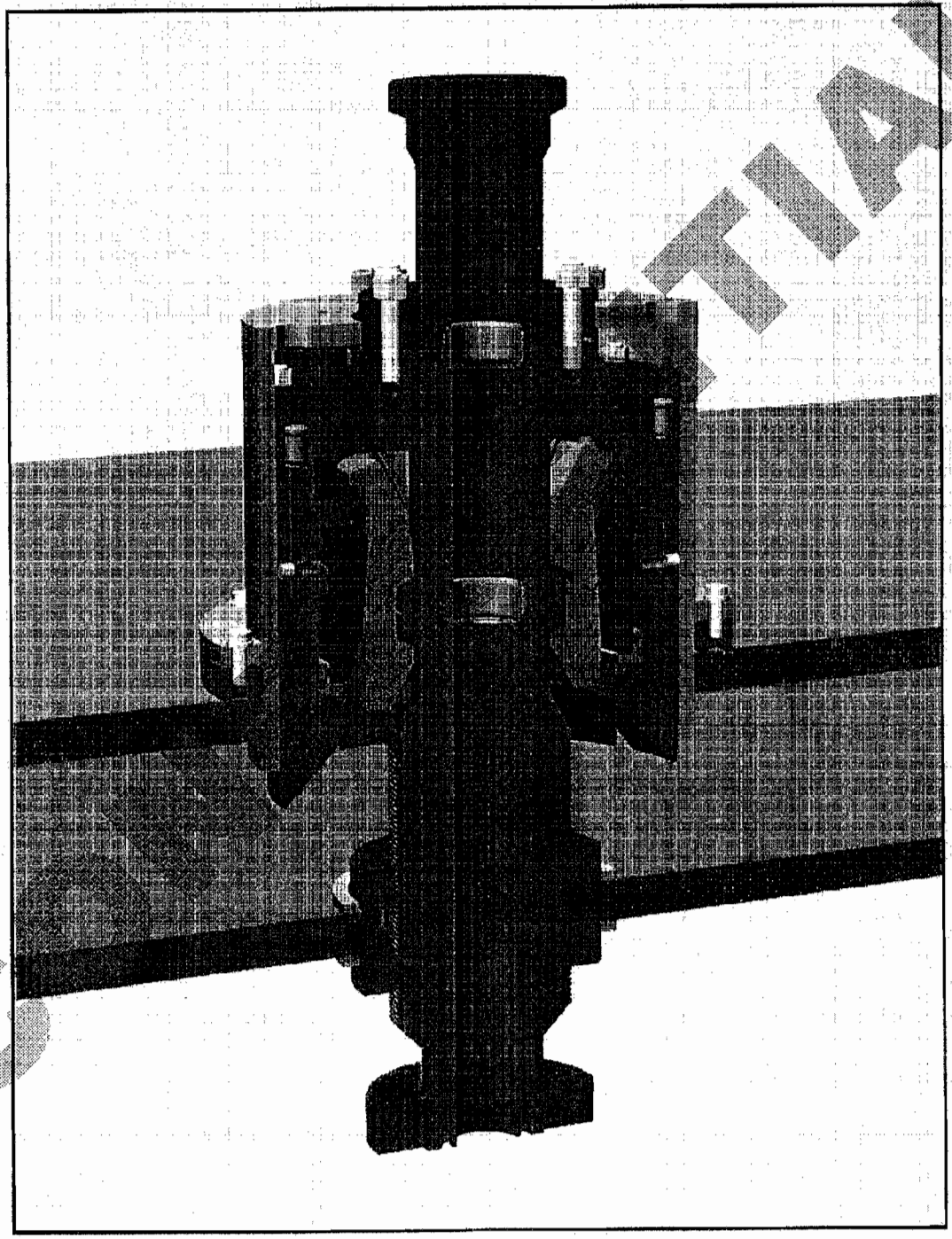


S-1027

CAMERON

Optimum Mini-Connector

Locked Position

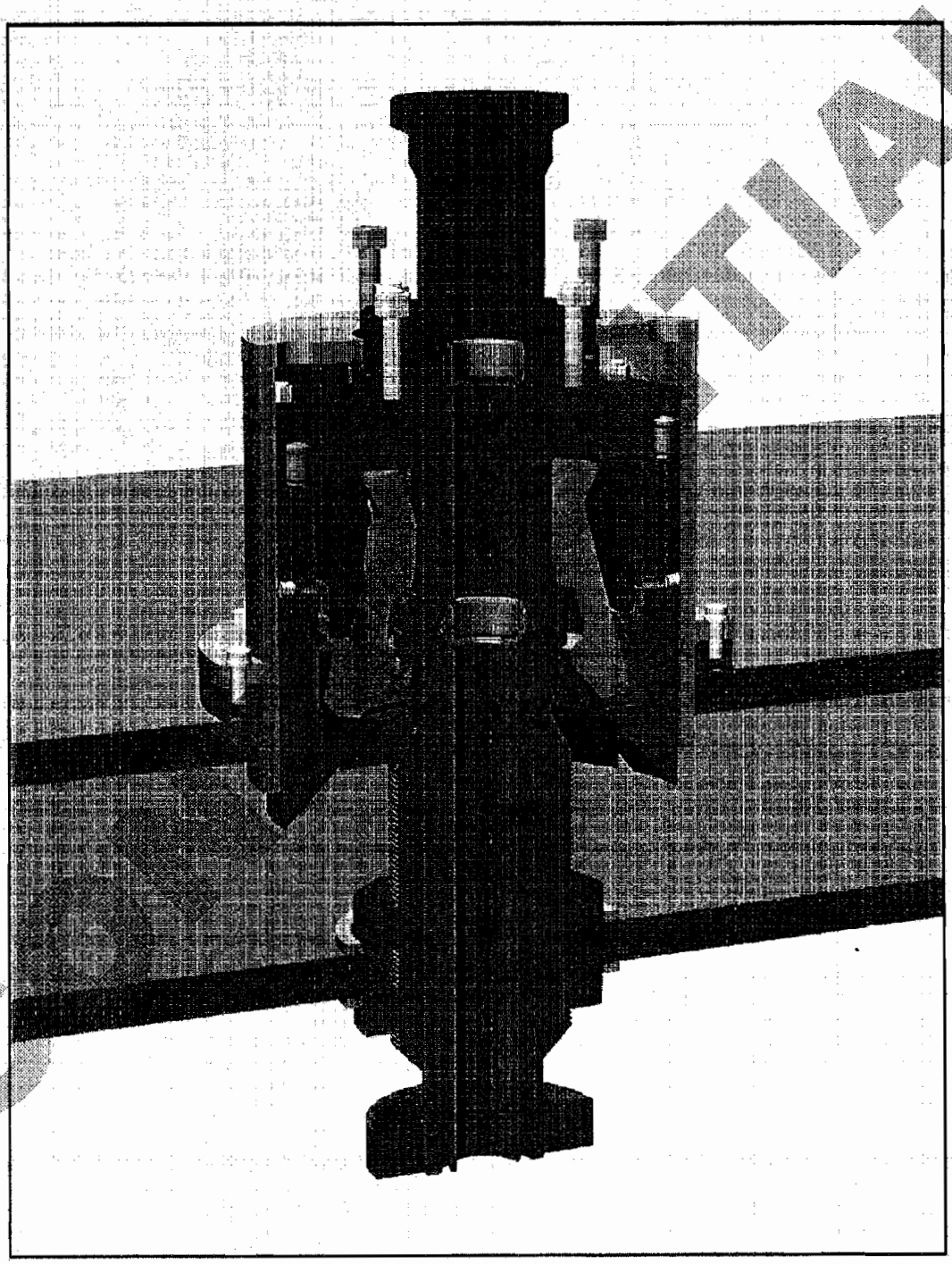


S-1028

CAMERON

Optimum Mini-Connector

Un-Locked Position



S-1029

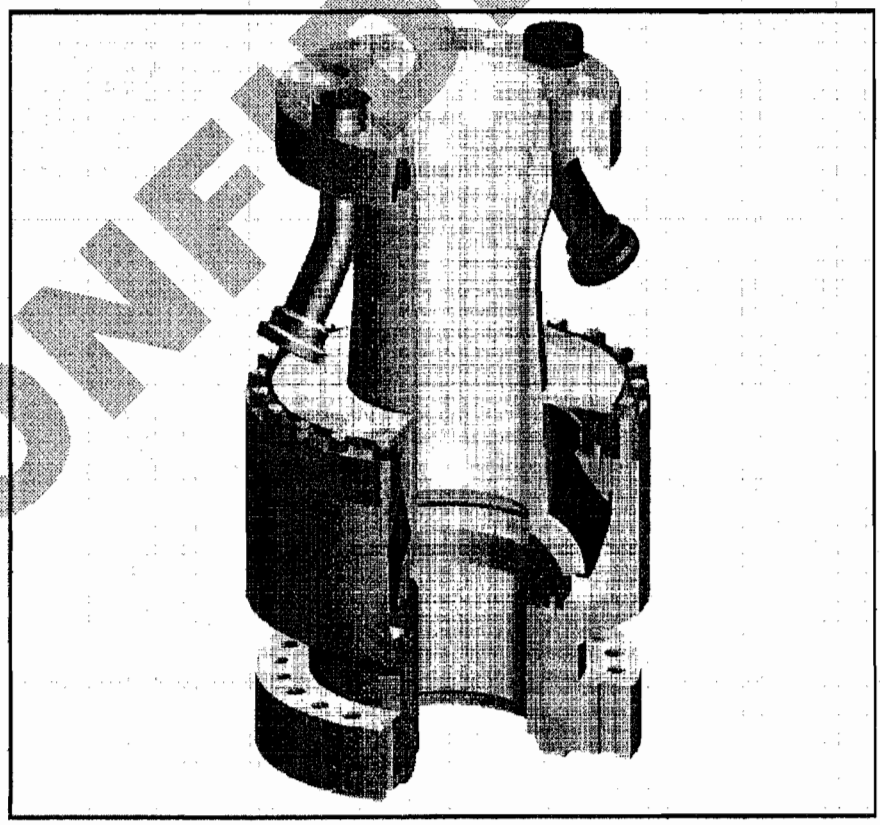
CAMERON

FLEX JOINT

The Flex Joint is installed at the top of the BOP stack to compensate for the lateral movement of the drilling rig. It is available in a complete range of sizes, working pressures, and end connections for shallow and deep water drilling (up to 10,000 feet) with a load rating up to two million pounds. The standard flex joint is rated for 3000 psi pressure differential. Flex joints rated for 5000 psi and H_2S service are available upon request.

Features:

- The flex joint is self-contained, self-centering and friction-free, requiring no lubrication.
- Flex element consists of laminated steel and Nitrile spherical layers and is integrally molded to the inner housing and outer lock-seal flange.
- Flex element can withstand high-compression loads and shear movement. The rig tensioning devices, plus mud pressure, place the elastomeric element in compression, while maintaining riser tension.

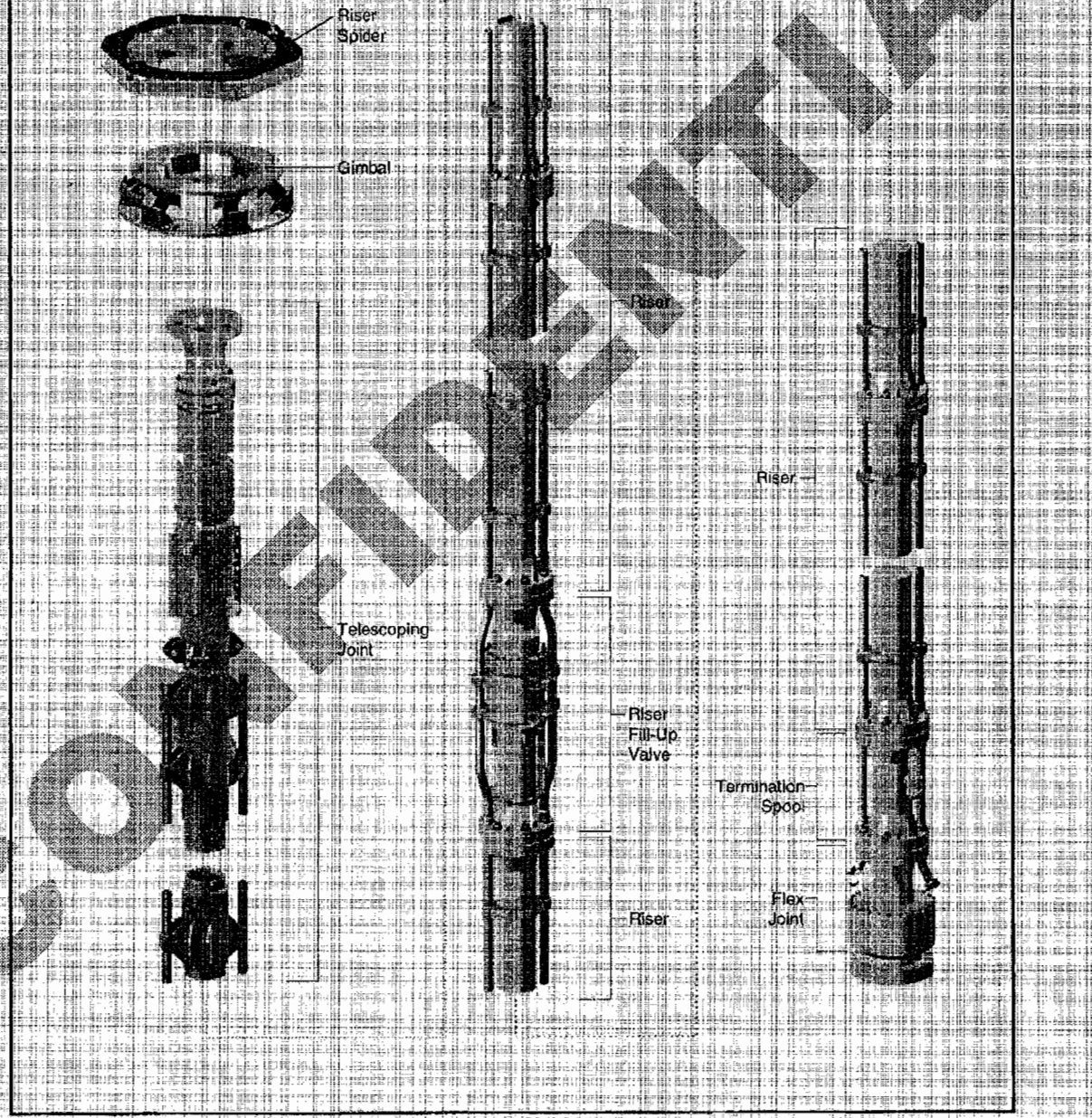


S-1030

3

CAMERON

MARINE RISER SYSTEM



R-1000

CAMERON

CAMERON RISER SYSTEM OVERVIEW

Cameron's field proven Riser Systems accommodate the stringent conditions encountered in deep water drilling including high tension loads, multiple auxiliary lines, and the need to quickly respond to changes in surface weather conditions. Riser sections are available in varying lengths and wall thicknesses and can accommodate buoyancy material as required.

From the BOP stack to the rig floor, Cameron provides riser system components that solve a variety of application requirements. These components are designed and manufactured to provide customers with a single source of high quality, dependable, low maintenance equipment that safeguards against downtime. All components are designed and certified in accordance with customer specified regulatory requirements. Featured components include:

- Riser Joint
- Mud Booster Line Termination Spool
- Automatic Riser Fill-Up Valve
- Telescoping Joint
- Goosenecks
- RST Swivel Tensioning Ring
- Gimbal
- Riser Spider
- Hydraulic Riser Running and Testing Tool
- Manual Riser Running and Testing Tool

CAMERON

LOADKING 3.5 RISER CONNECTOR

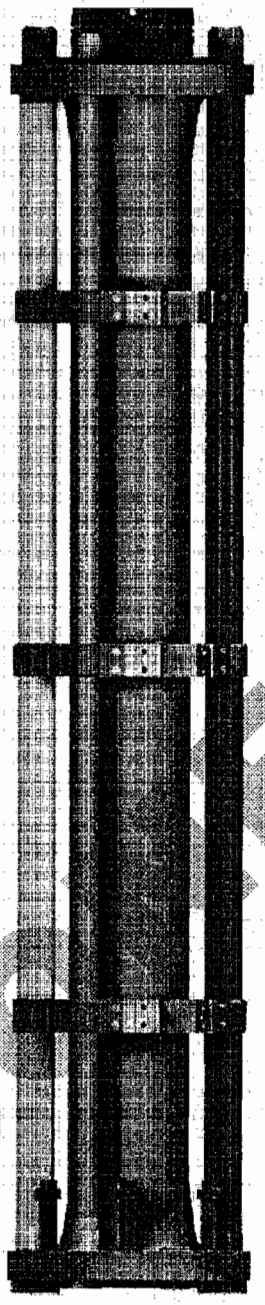
The Cameron LoadKing 3.5 flanged riser connector is designed to meet the demands of ultra deep water drilling in water depths of 7000 feet or more.

Features:

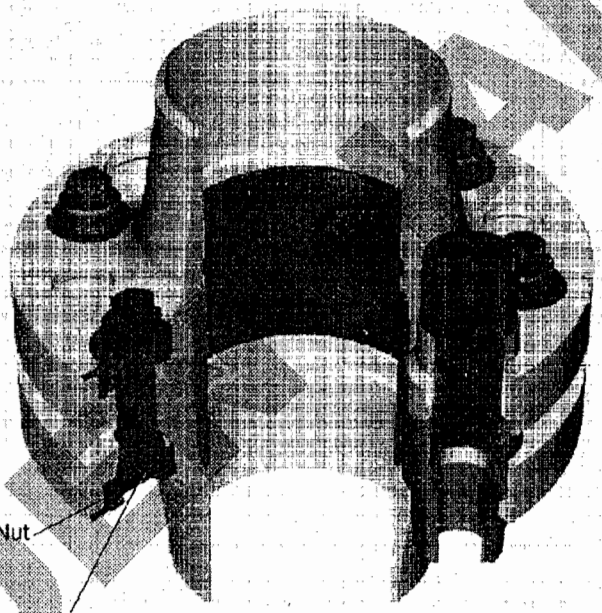
- LoadKing riser joints are the lightest weight riser joints available in the industry today because the LoadKing design allows the auxiliary lines to share the tension load that typically was carried only by the main tube.
- LoadKing 3.5 riser connector is rated for 3.5 million pounds tension load and are available in other load ratings.
- Coupling makeup will not slow down riser running time. The couplings can be preloaded in 2 minutes or less.
- All LoadKing riser connectors are prepped for up to six, fixed choke, kill line and auxiliary line positions. In sizes from 2 inch O.D. through 6-3/4 inch O.D.
- Replaceable seal subs can be mounted in either flange for running pin up or box up.
- Forged bolts have a blunt start machined onto the threads and a trash groove to reduce the chance of galling due to contamination or minor damage to the threads.
- Nuts are installed on one end and retainers in the other, so that bolts are retained and there are no loose parts. If desired, the retainers can be installed without threads and the bolts can be removed each time the riser is retrieved.
- Nuts are designed to distribute the loads evenly through the thickness of the nut. This increases the nuts' and bolts' fatigue resistance.
- Corrosion-resistant segmented clamps reduce weight and maintenance.
- Trims with temperature ratings of -20 degrees F. To +250 degrees F. Meet NACE MR-01-75 requirements.
- Free riser tension table provided with every riser system purchase.

CAMERON

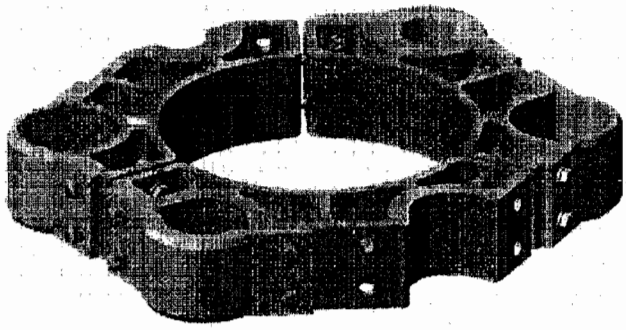
LOAD KING RISER



LoadKing Riser Joint



LoadKing Flanges - Made up



Segmented Clamp Assembly

CAMERON

RF BOLTED FLANGE RISER

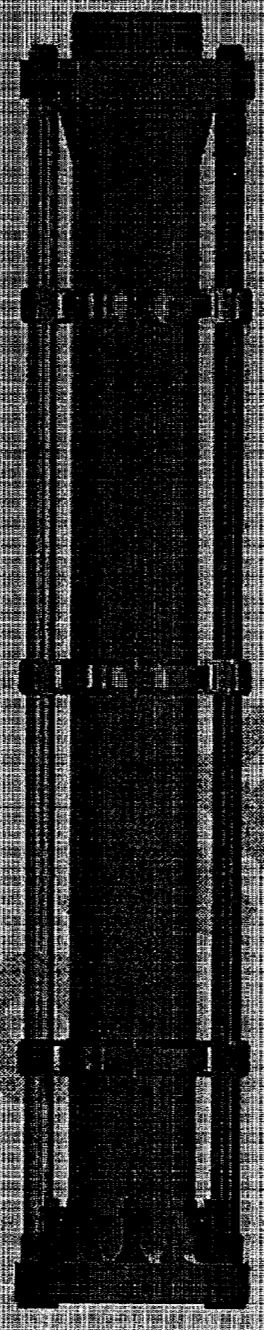
The RF drilling riser flanged connector is designed to meet API 16R 4.1.2E requirements. It is designed to meet the needs of the drilling industry for a deep water riser system that is less costly and quicker to run and operate, requires less maintenance since it has fewer components and provides higher capacity than previously supplied risers.

Features:

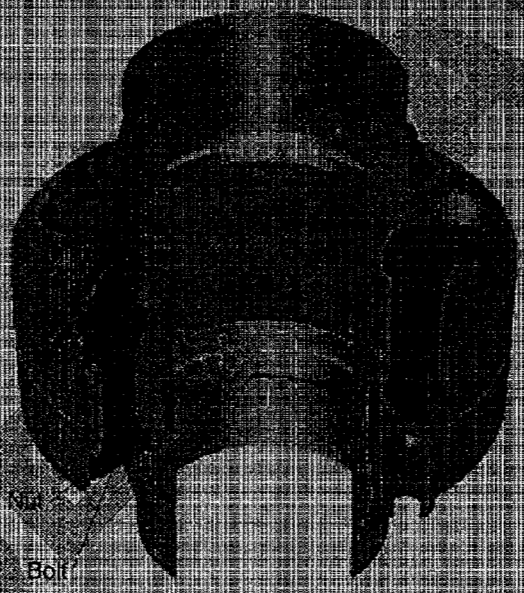
- RF flange connection is rated for two million pounds tension load with the preload equal to the design load. This eliminates separation within the design rating of the system. The actual capacity of the riser string depends on the particular components used in the fabrication (pipe size and grade). Contact your Cameron representative for a complete analysis.
- Coupling makeup will not slow down riser running time. The couplings can be pre-loaded in two minutes or less.
- All RF flanges are prepped for up to six 5" O.D. x 15,000 psi auxiliary lines. Any size line can be installed in any of the six positions. This allows the customer the flexibility to add or change position of auxiliary lines easily.
- Replaceable seal subs can be mounted in either flange for running pin up or box up. Optional metal-to-metal seal subs are available.
- Forged bolts have a blunt start machined onto the threads and a trash groove to reduce the chance of galling due to contamination or minor damage to the threads.
- Nuts are installed into both the upper and lower flange connectors. This serves a dual purpose; the bolts are retained in the top flange, so there are no loose parts and the nut in the top flange can serve as a spare nut in the event that the lower nut is damaged.
- Nuts are designed to distribute the loads evenly through the thickness of the nut. This increases the nuts' and bolts' fatigue resistance.
- Corrosion-resistant segmented urethane clamps reduce weight and maintenance.
- Trims with temperature ratings of -20°F to +250°F meet NACE MR-01-75 requirements.
- Free riser tension table is provided with every riser system purchase.

CAMERON

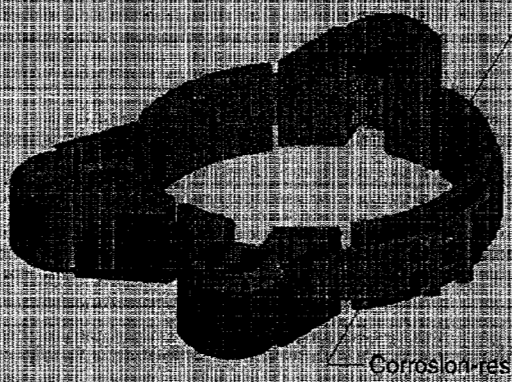
RF BOLTED FLANGE RISER



RF Riser Joint



RF Flanges - Made up



Segmented Urethane Clamp Assembly

R-1005

CAMERON

MUD BOOSTER LINE TERMINATION SPOOL

The termination spool is installed in the riser string immediately above the flex joint. Mud is pumped through the booster line to increase upward flow through the riser to the surface. The termination spool provides the additional circulation necessary for extremely deep water drilling applications. Termination spools may be equipped with a MGS Gate Valve that allows testing of the Mud Booster Line, or an automatic float valve when testing is not a requirement. Cameron supplies the Mud Booster Line Termination Spool to customer specified lengths.

R-1006

CAMERON

RISER FILL-UP VALVE

The Cameron automatic Riser Fill-Up Valve is designed to prevent collapse of the riser if the level of drilling fluid drops due to intentional drive-off, loss of circulation, or accidental line disconnection.

During normal operations, the mud column applies pressure against the diaphragm assembly which works the compression spring in the pressure pilot valve. This holds the main 4-way valve in a position that feeds the supply and accumulator fluid to the close side of both double-acting hydraulic cylinders.

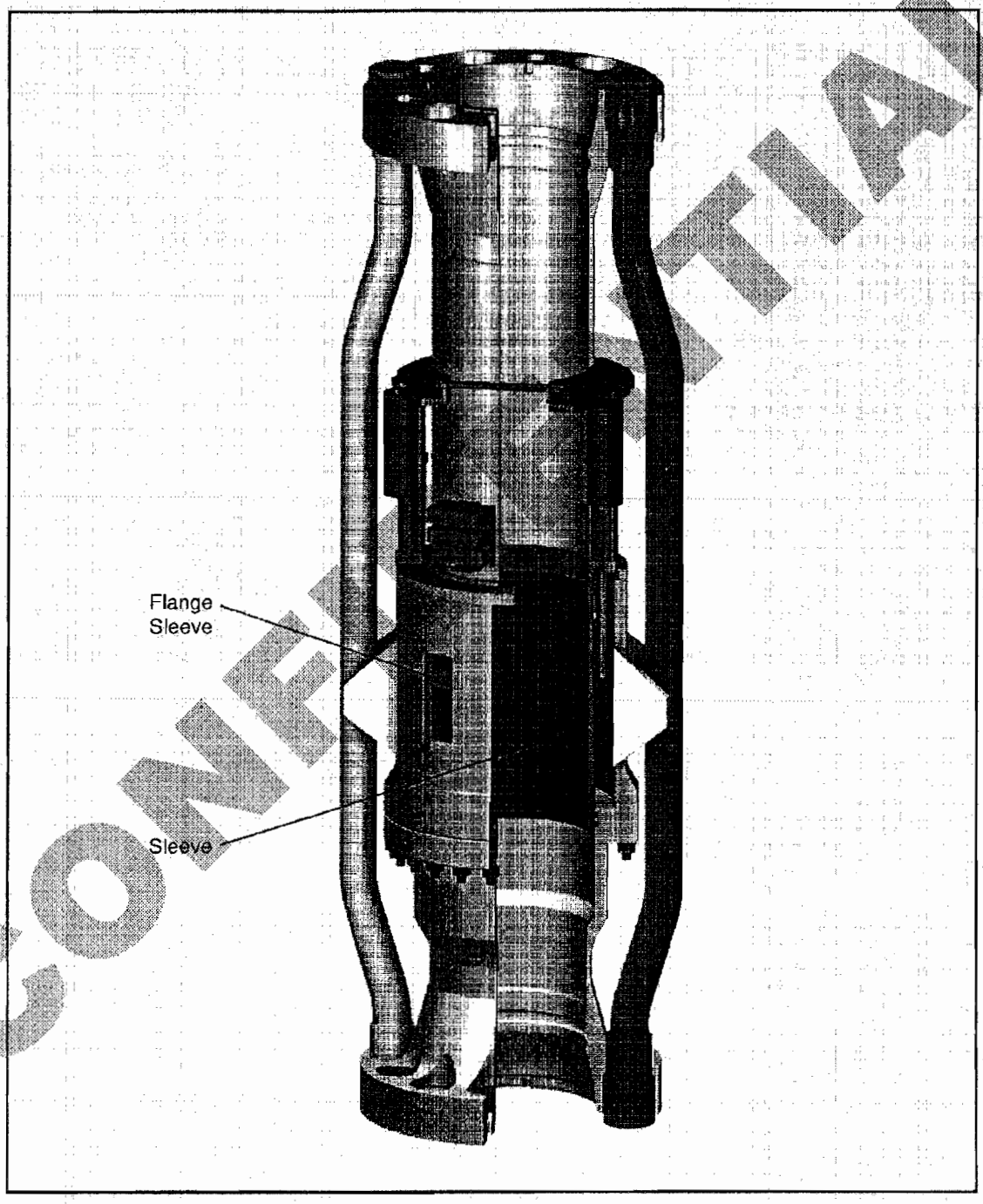
The riser fill-up valve opens automatically when the pressure inside the riser is 225 - 325 psi below the ambient ocean pressure. When the valve opens, seawater rapidly fills the riser to equalize the pressure and prevent riser collapse. The riser fill-up valve can also be opened from the surface. The riser rill-up valve closes when commanded by the disable/reset signal from the surface.

Features:

- Automatic opening - When the combination of mud column pressure and pilot compression spring drops to 225 - 325 psi below the ambient ocean pressure, the main 4-way hydraulic valve switches, rerouting supply and accumulator fluid to the open side of the hydraulic cylinders, causing the fill-up valve sleeve to fully open, and sea water enters the riser, equalizing the pressure and preventing collapse.
- Remote Opening - The fill-up valve will open when an open pilot hydraulic signal is sent from the surface.
- Rapid Opening - Accumulators are used for rapid opening of the fill-up valve and for emergency opening capability when surface hydraulic supply is lost.
- Remote Closing - One the fill-up valve opens, it remains in the open position until commanded to close by a disable/reset signal from the surface.
- Field Proven

CAMERON

RISER FILL-UP VALVE



R-1008

CAMERON

TELESCOPING JOINT

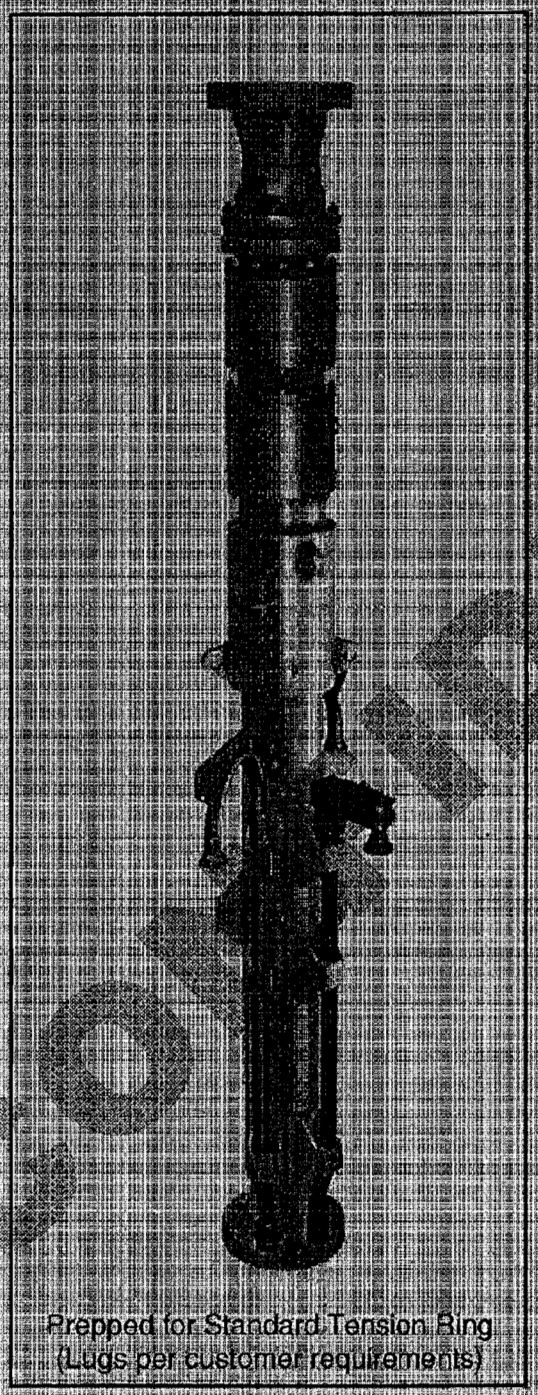
The Cameron Telescoping Joint consists primarily of two pieces, an inner barrel and an outer barrel. To compensate for changes in the rig-to-stack distance, the Cameron telescoping joint is extended by securing the inner barrel to the diverter and the outer barrel to the riser, thus allowing the inner barrel to stroke. Then the loops in the connection fluid lines are extended to meet the changing vertical distance. The lower ends of these lines are attached to external goosenecks on the outer barrel of the telescoping joint or on the RST ring.

Features:

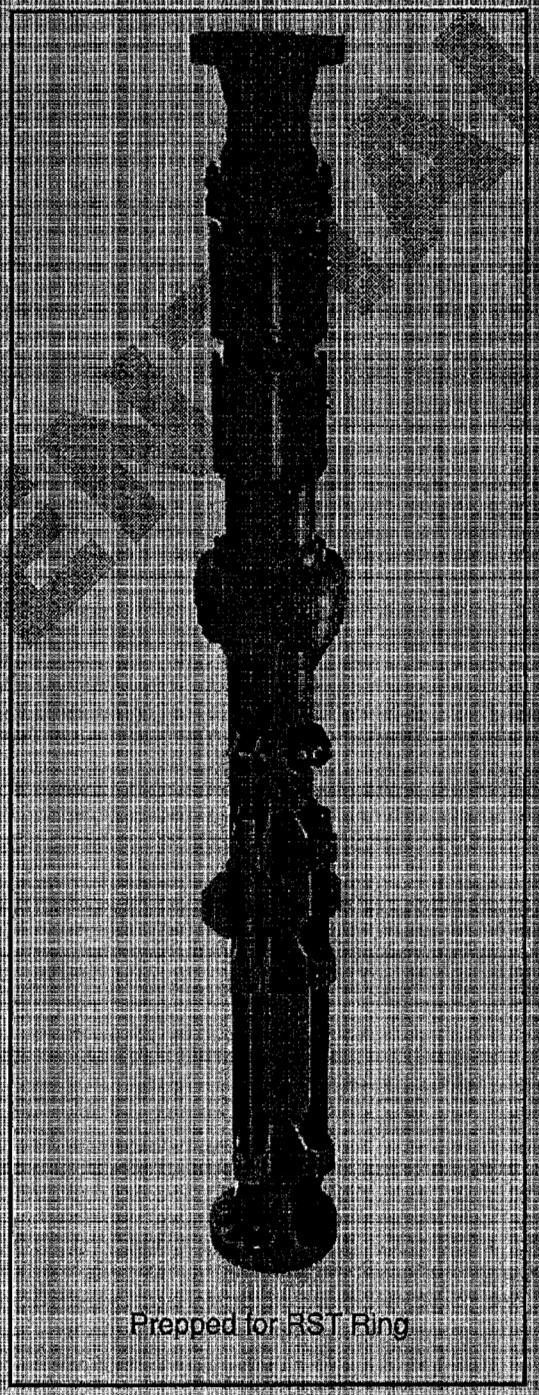
- During operation, drilling fluid is retained and the inner barrel is centralized by a pressure-actuated dual packer that requires a minimum amount of air or hydraulic pressure, 25 to 30 psi, to seal between the inner and outer barrels.
- The dual segment packer can be replaced without disassembly of the telescoping joint or drill pipe.
- The packer is molded with load absorbing steel rings to increase seal life and reduce heat due to friction. Four grooves in the packer bore control contact with the inner barrel and trap fluid to improve lubrication and cooling.
- A lubrication reservoir and replaceable wear bushing above the packer extend the packer seal life. The wear bushing inhibits uneven wear of the seal and helps centralize the inner barrel. The lubrication reservoir supplies the sealing element with lubrication fluid.
- A locking device enables the installation of the telescoping joint in the retracted position. In the extended position, compressive loads are transmitted from the inner to the outer barrel through the packer housing. The telescoping joint supports the weight of the BOP stack and riser system in either the extended or retracted position.
- Various locking devices are also available.
- Single or dual packer models in varying stroke lengths are available. All telescoping joints are conditioned for any customer-specified stationary or swivel tension rings, or can be fitted with Cameron's RST Ring.
- Replaceable shoe threads onto the inner barrel.
- Cameron telescoping joints are available with fold back goosenecks to allow passage through the rotary table.

CAMERON

TELESCOPING JOINT



Prepped for Standard Tension Ring
(Lugs per customer requirements)



Prepped for RST Ring

R-1010

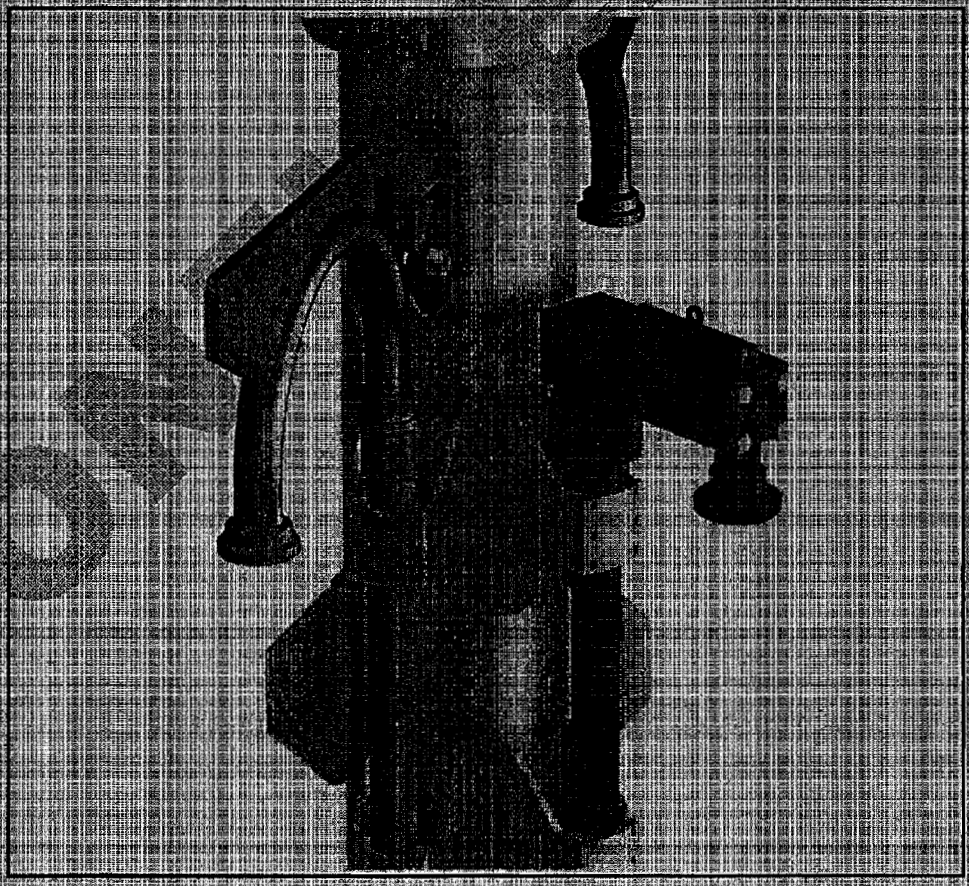
CAMERON

GOOSENECKS

The Cameron Goosenecks are available in three basic styles. The standard bent pipe version is designed for pressures of 10,000 psi or less and bolts on the telescoping joint. For pressures of 10,000 to 15,000 psi, a more rugged target/block style high pressure gooseneck which also bolts on the telescoping joint is utilized. The RST swivel tensioning ring eliminates the requirement for goosenecks on the telescoping joint.

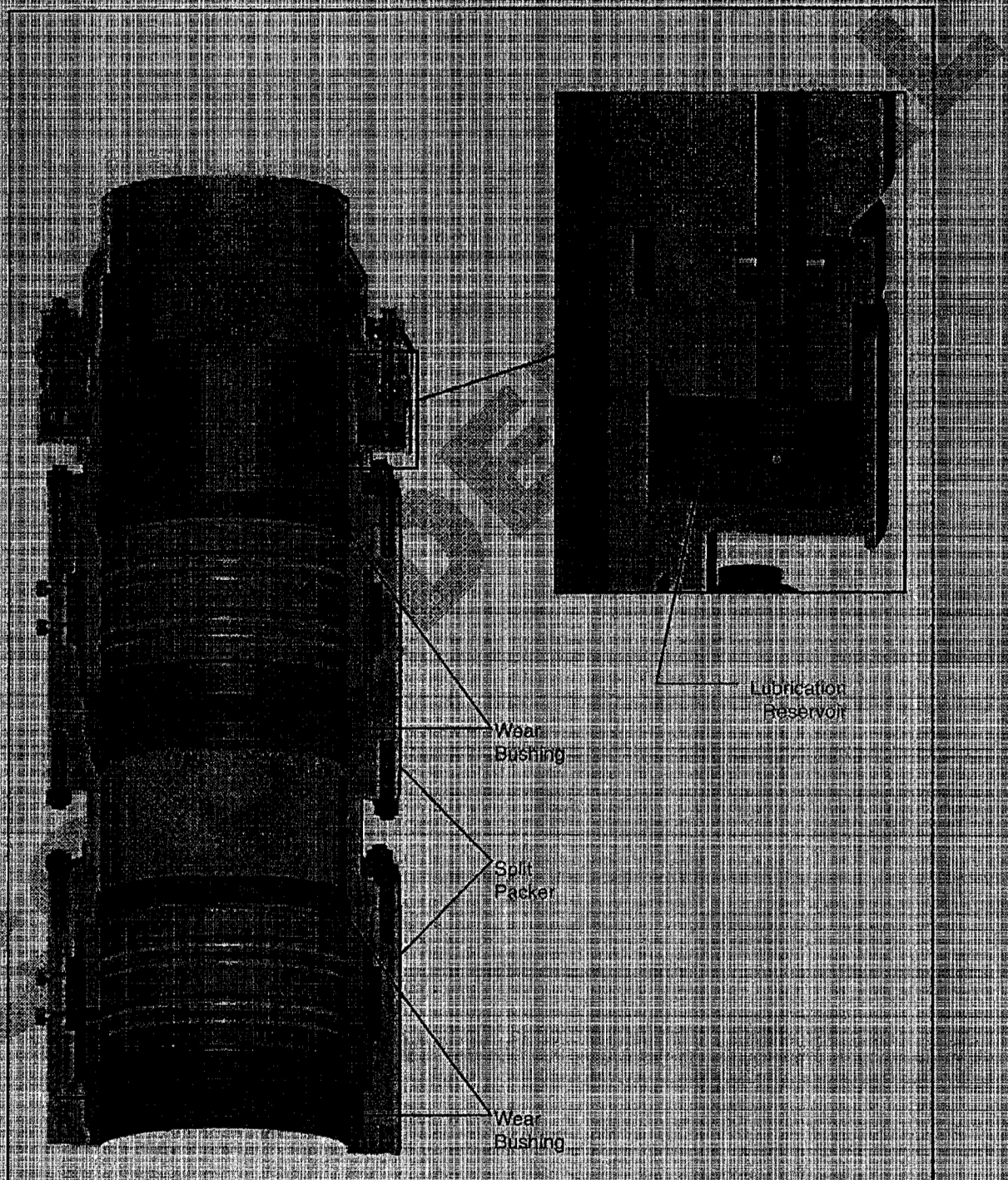
Features:

- Field proven
- Fold-back style available for goosenecks mounted on the telescoping joint
- High pressure goosenecks include replaceable wear sleeves



CAMERON

DUAL PACKER ASSEMBLY



R-1012

CAMERON

RST SWIVEL TENSIONING RING

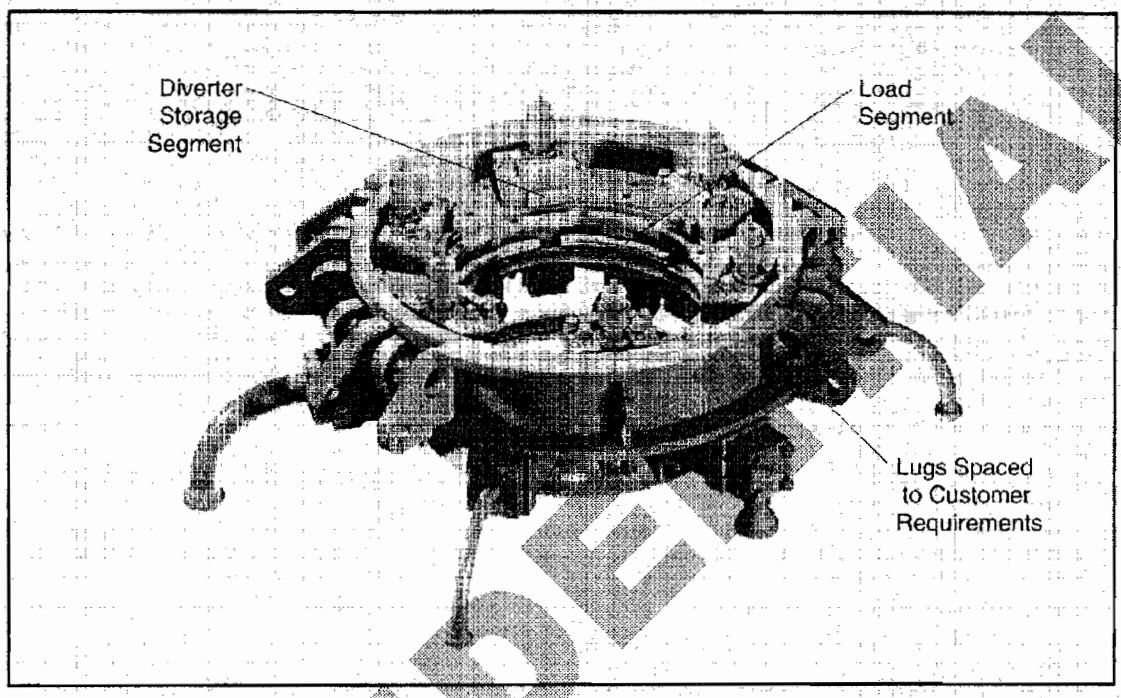
The Cameron RST Ring is a swivel/tension ring that eliminates the need to manually connect riser tensioner lines and goosenecks everytime the riser is run. In the stored position, the RST ring is suspended from the diverter housing. The tension lines, as well as the choke/kill/auxiliary line hoses remain connected to the ring in the stored position. The RST ring is designed to meet customer required tension capacities up to two million pounds.

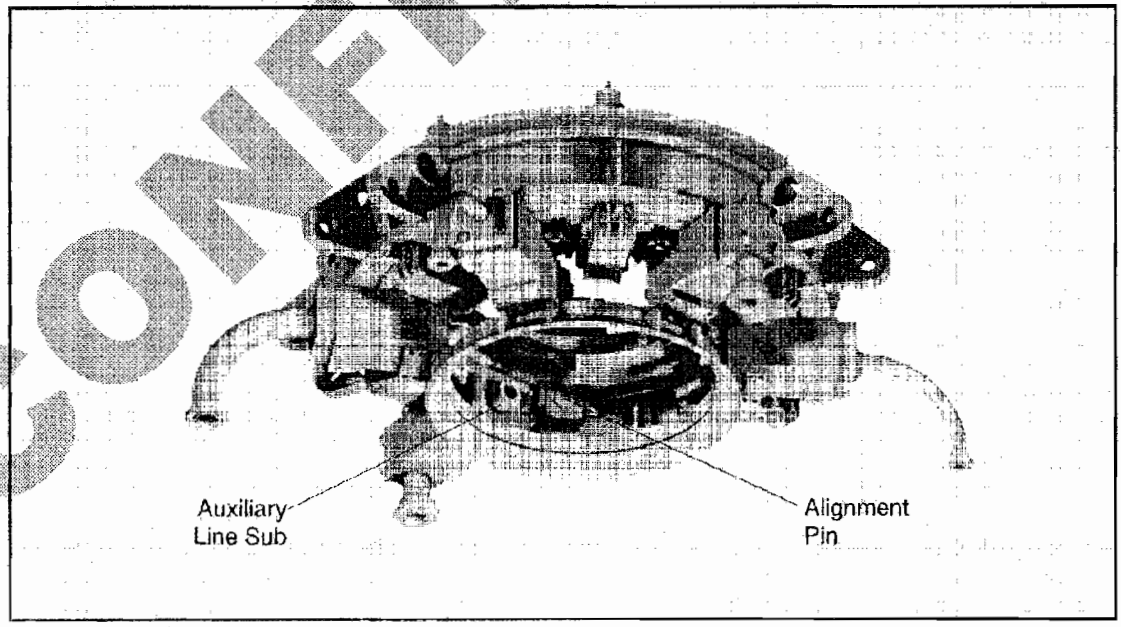
Features:

- Hydraulically actuates the load segments, retracts the alignment pins, stabs the choke/kill/auxiliary line subs and actuates the diverter storage segments.
- Alignment pins ensure proper orientation of the telescoping joint to the RST ring and support the weight of the ring until the load is transferred to the tension lines.
- Load shoulders in the ring are hydraulically extended/retracted to engage/disengage the load shoulder on the telescoping joint.
- Load shoulder position indicators provide visual assurance that the load shoulders are in position.
- Choke/kill/auxiliary line pins are hydraulically stabbed into floating seal subs on the telescoping joint to ensure proper engagement, eliminating the need to manually connect the lines in the moon pool area.
- Replaceable seal inserts and replaceable pistons on the gooseneck stabs are provided to ensure ease of maintenance.
- Alignment funnel to provide guidance when pulling the riser.
- Full 60" bore through the ring while running riser.

CAMERON

RST SWIVEL TENSIONING RING

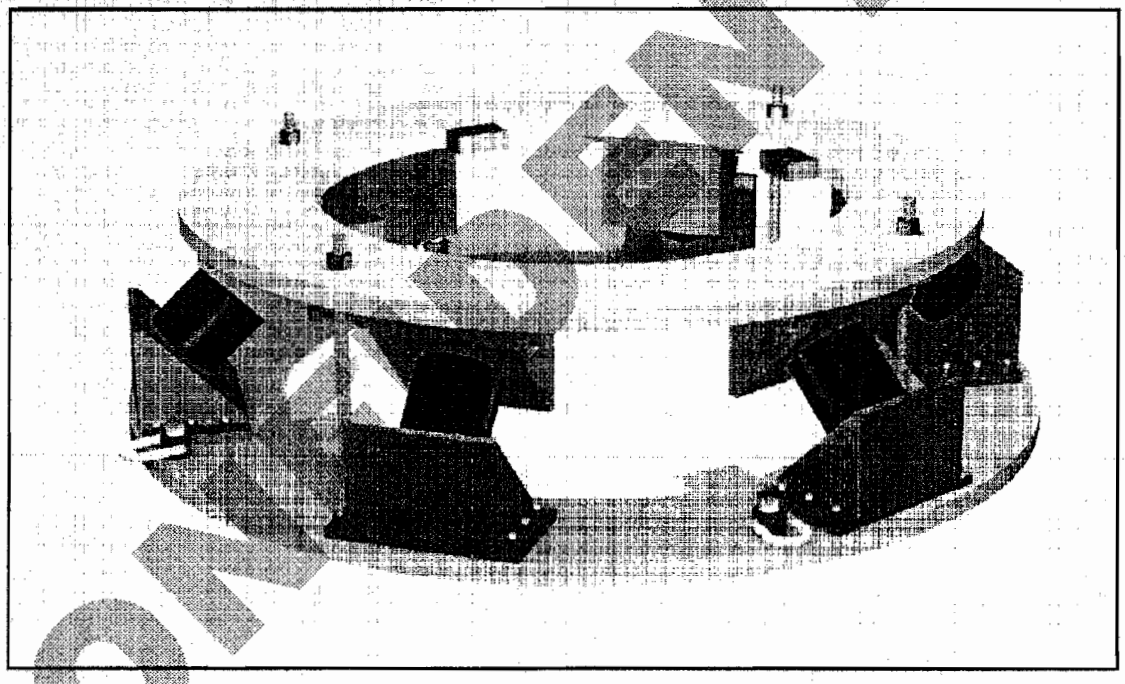




CAMERON

GIMBAL

The Gimbal is installed between the Riser Spider and the rotary table. It is used to reduce shock and to evenly distribute loads on the spider as well as the riser sections. Gimbals are available with load ratings up to 4.0 million pounds. The maximum angle of deflection is ±5 degrees.



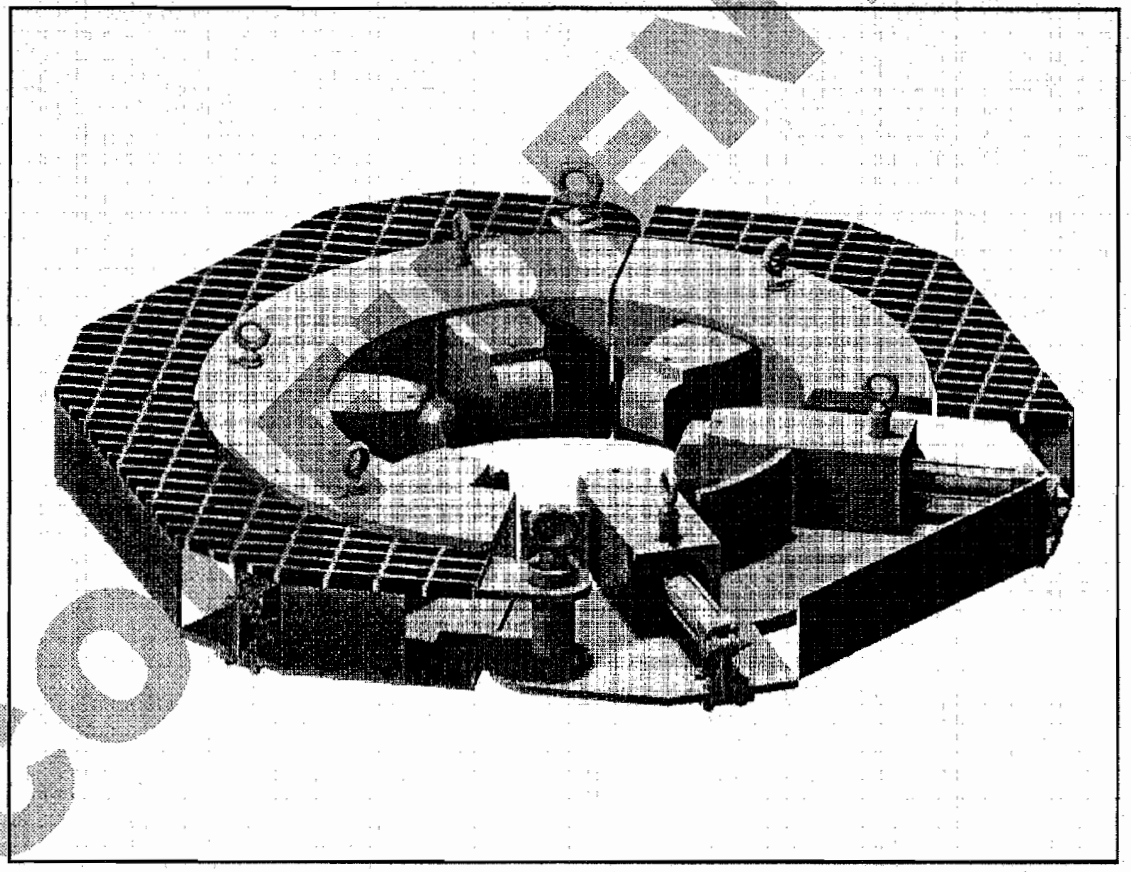
CAMERON

HX SPIDER

The lightweight HX Spider is used to run riser sections through rotary tables with a diameter of 49.5 inches or less. Retractable dogs are hydraulically activated to support the riser string. The spider is operated through the driller's panel, eliminating the need to manually retract and extend the six dogs.

Features:

- Designed to meet customer specified rotary table
- Split design for ease of handling



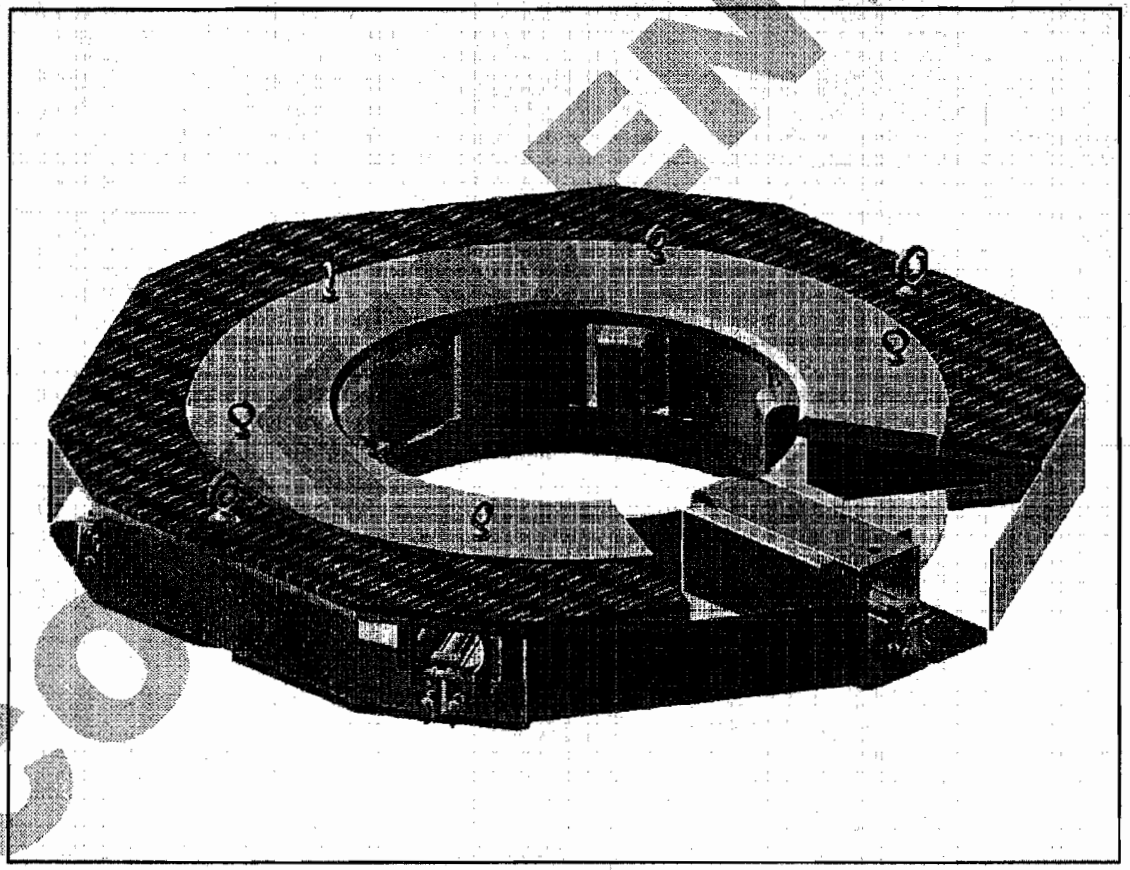
CAMERON

LOADKING RISER SPIDER

The LoadKing Riser Spider is used to run riser sections through any size rotary tables up to 60 inches in diameter. Retractable dogs are hydraulically activated to support the riser string. The spider is operated through the driller's panel, eliminating the need to manually retract and extend the six dogs.

Features:

- Designed to meet customer specified rotary table
- Split design for ease of handling



CAMERON

HYDRAULIC RF RISER RUNNING TOOL

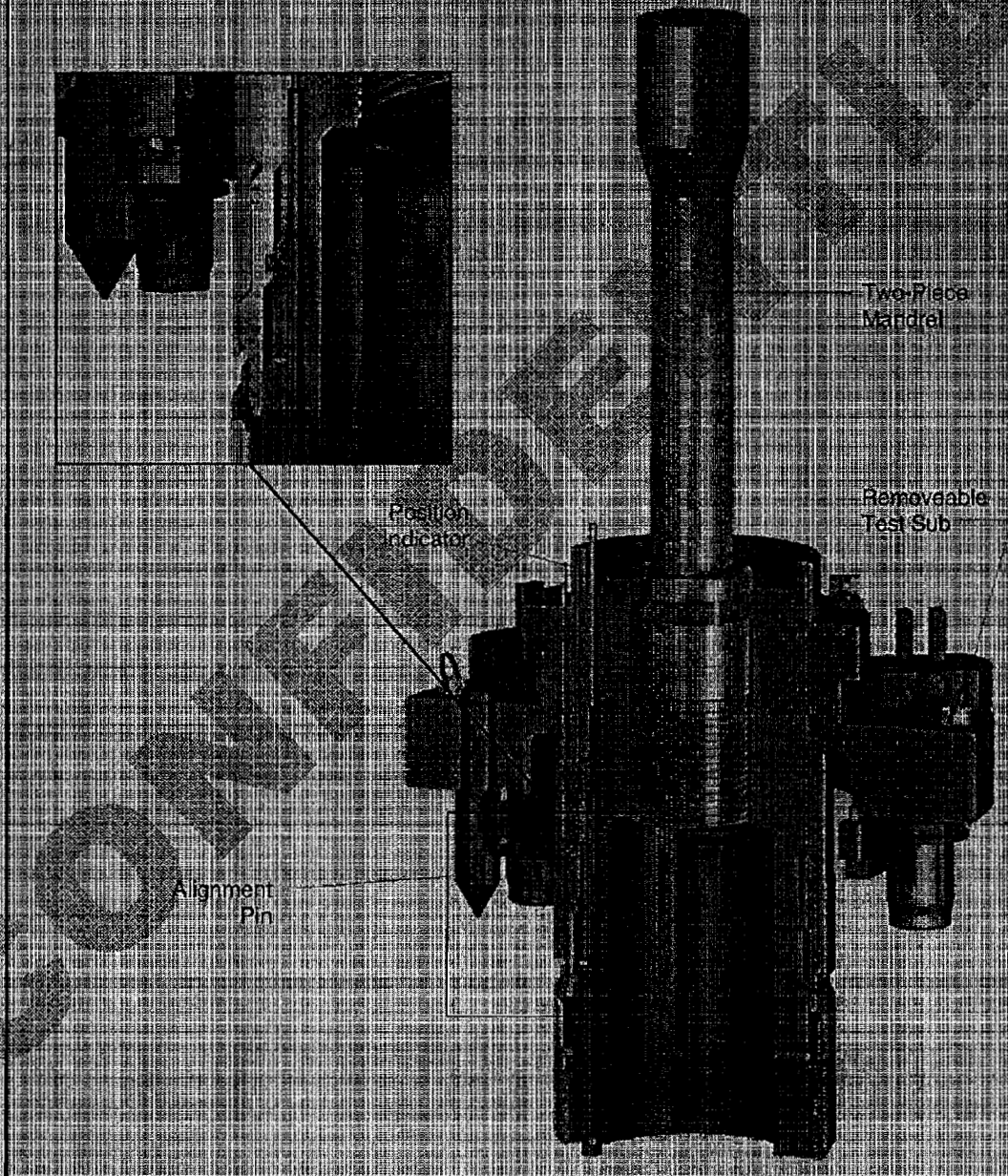
Cameron's Hydraulic RF Riser Running Tool is designed to provide a fast, safe and convenient method for running and testing riser joints. The tool has an RF configuration on the lower end to stab onto the riser connector and hydraulically lock into place. When hydraulic pressure is applied to the tool, a cylindrical sleeve with a tapered nose is driven behind a split ring, causing the ring to expand into a groove in the RF flange. Once the ring is expanded, the sleeve continues to travel until cylindrical surfaces on the ring and sleeve engage, preventing the possibility of the sleeve backing off. When pressure testing of the auxiliary lines is required, the running tool is left locked in place and the test plugs are lowered into position.

Features:

- The two-piece mandrel is designed so that common rig tools can be used for handling. The standard mandrel utilizes 4-1/2" IFTJ threads; optional mandrel threads/shoulders are available. The two-piece body/mandrel design provides the ability to change out the mandrel due to wear, elevator damage, or a change in tool joint threads or elevators without the need to repair/modify the entire running tool assembly.
- Load rating for mandrel style tool is 1.5 million pounds.
- Load ratings up to 2.0 million pounds are available for tools with special handling devices.
- Locking pressure can be relieved and the tool remains locked, so a riser joint may be run without dragging hose along with the tool.
- Removeable test plugs eliminate the need to stab the test subs every joint.
- Alignment pin provides orientation of the running tool, ensuring proper position for installation of the removeable test plugs for testing auxiliary lines.
- Position indicator also serves as an emergency manual unlock device.

CAMERON

HYDRAULIC RF RISER RUNNING TOOL



R-1019

CAMERON

HYDRAULIC LOADKING RISER RUNNING TOOL

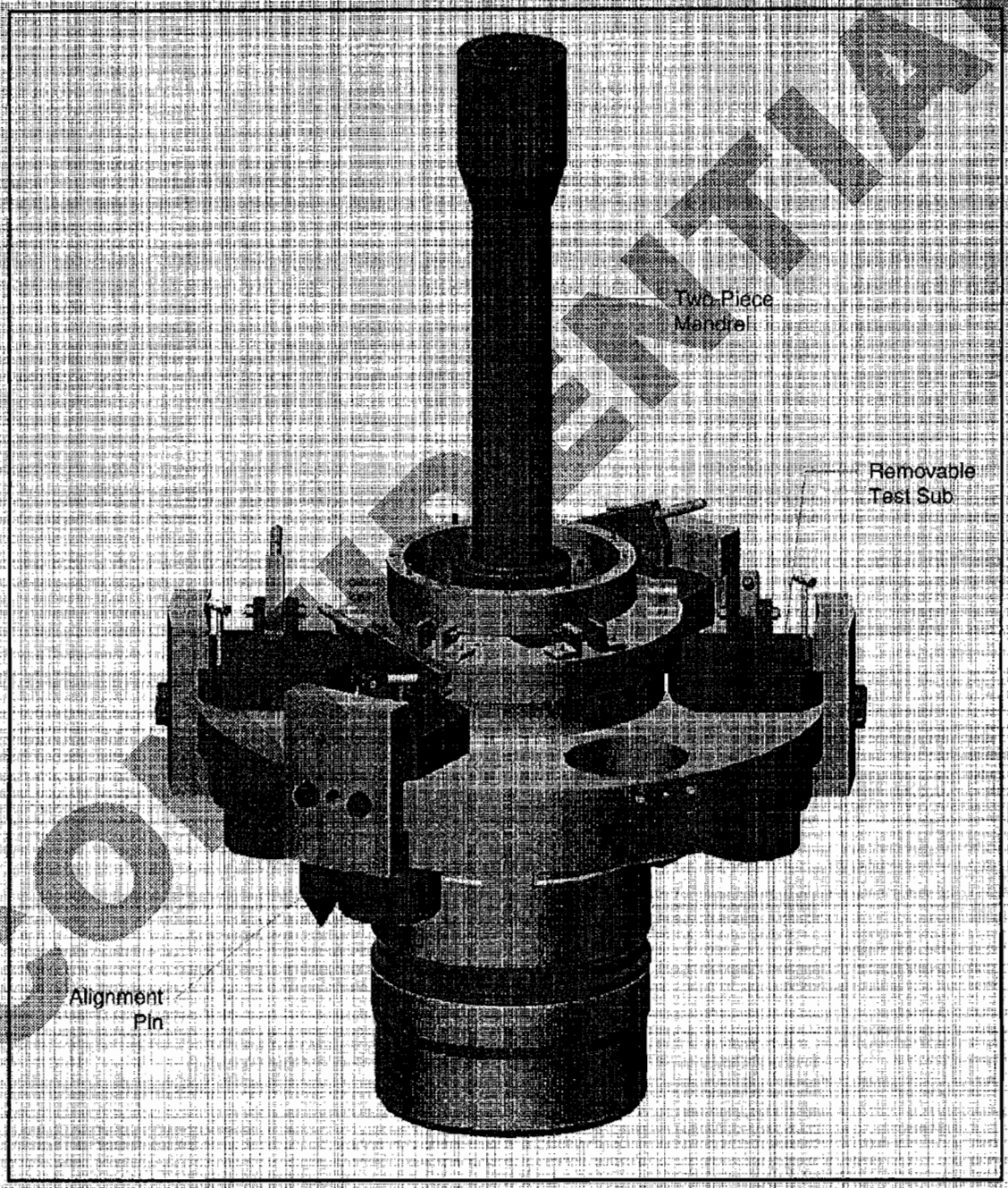
Cameron's Hydraulic LoadKing Riser Running Tool is designed to provide a fast, safe and convenient method for running and testing riser joints. The tool has a LoadKing configuration on the lower end to stab onto the riser connector and hydraulically lock into place. When hydraulic pressure is applied to the tool, a cylindrical sleeve with a tapered nose is driven behind a split ring, causing the ring to expand into a groove in the RF flange. Once the ring is expanded, the sleeve continues to travel until cylindrical surfaces on the ring and sleeve engage, preventing the possibility of the sleeve backing off. When pressure testing of the auxiliary lines is required, the running tool is left locked in place and the test plugs are lowered into position.

Features:

- The two-piece mandrel is designed so that common rig tools can be used for handling. The standard mandrel utilizes 4-1/2" IFTJ threads; optional mandrel threads/shoulders are available. The two-piece body/mandrel design provides the ability to change out the mandrel due to wear, elevator damage, or a change in tool joint threads or elevators without the need to repair/modify the entire running tool assembly.
- Load rating for mandrel style tool is 1.5 million pounds.
- Load ratings up to 3.5 million pounds are available for tools with special handling devices.
- Locking pressure can be relieved and the tool remains locked, so a riser joint may be run without dragging hose along with the tool.
- Removeable test plugs eliminate the need to stab the test subs every joint.
- Alignment pin provides orientation of the running tool, ensuring proper position for installation of the removeable test plugs for testing auxiliary lines.
- Position indicator also serves as an emergency manual unlock device.

CAMERON

HYDRAULIC LOADKING RISER RUNNING TOOL



R-1021

CAMERON

MANUAL RF RISER RUNNING TOOL

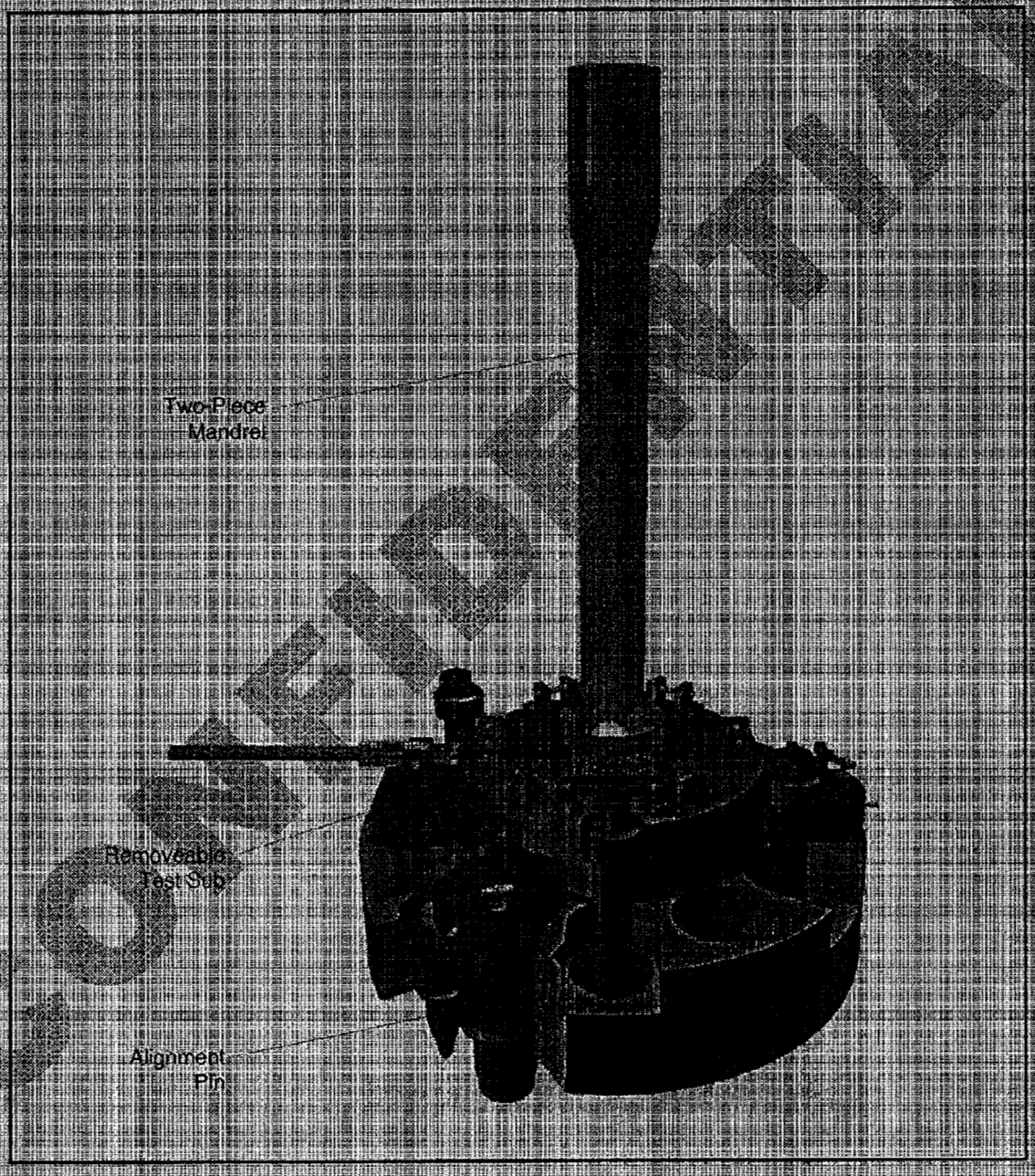
Cameron's Manual RF Riser Running Tool is used to lift and handle the marine riser joints and test the auxiliary lines. The tool has an RF flange on the lower end to make up with an RF flange connector and manually lock into place using standard riser bolts. The mandrel on the other end has a 4-1/2" IFTJ so that common rig tools can be used for handling. When pressure testing of the auxiliary lines is required, the running tool is left locked in place and the test plugs are lowered into position.

Features:

- Two-piece mandrel is designed so that common rig tools can be used for handling. The standard mandrel utilizes 4-1/2" IFTJ threads; optional mandrel threads/shoulders are available. The two-piece body/mandrel design provides the ability to change out the mandrel due to wear, elevator damage, or a change in tool joint threads or elevators without the need to repair/modify the entire running tool assembly.
- Load rating for mandrel style tool is 1.5 million pounds.
- Load ratings up to 2.0 million pounds are available for tools with special handling devices.
- Removeable test plugs eliminate the need to stab the test subs every joint.
- Alignment pin provides orientation of the running tool, ensuring proper position for installation of the removeable test plugs for testing auxiliary lines.

CAMERON

MANUAL RF RISER RUNNING TOOL



R-1023

CAMERON

MANUAL LOADKING RISER RUNNING TOOL

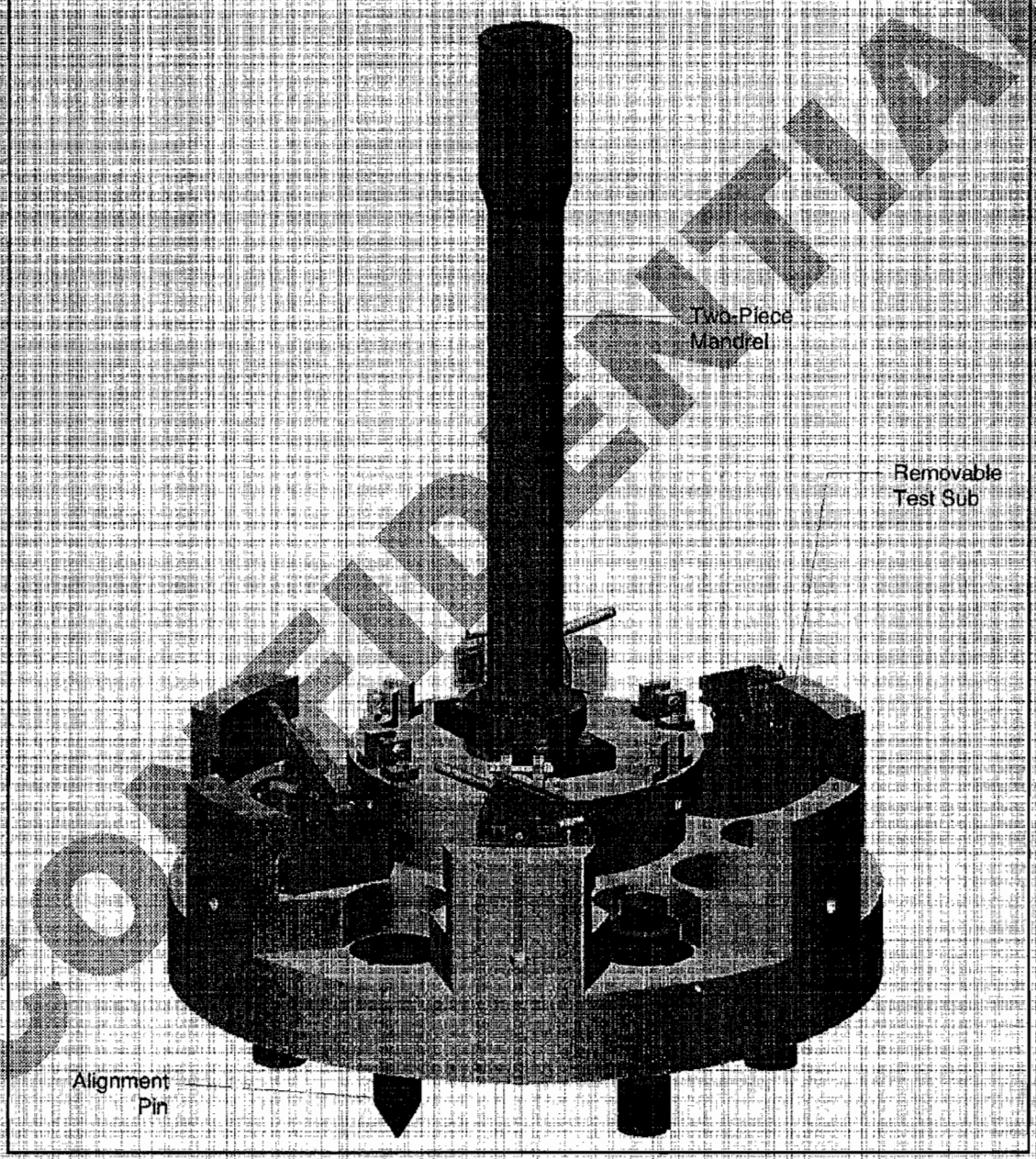
Cameron's Manual LoadKing Riser Running Tool is used to lift and handle the marine riser joints and test the auxiliary lines. The tool has a LoadKing flange on the lower end to make up with a LoadKing flange connector and manually lock into place using standard riser bolts. The mandrel on the other end has a 4-1/2" IFTJ so that common rig tools can be used for handling. When pressure testing of the auxiliary lines is required, the running tool is left locked in place and the test plugs are lowered into position.

Features:

- Two-piece mandrel is designed so that common rig tools can be used for handling. The standard mandrel utilizes 4-1/2" IFTJ threads; optional mandrel threads/shoulders are available. The two-piece body/mandrel design provides the ability to change out the mandrel due to wear, elevator damage, or a change in tool joint threads or elevators without the need to repair/modify the entire running tool assembly.
- Load rating for mandrel style tool is 1.5 million pounds.
- Load ratings up to 3.5 million pounds are available for tools with special handling devices.
- Removeable test plugs eliminate the need to stab the test subs every joint.
- Alignment pin provides orientation of the running tool, ensuring proper position for installation of the removeable test plugs for testing auxiliary lines.

CAMERON

MANUAL LOADKING RISER RUNNING TOOL



R-1025

CAMERON

CAMERON FLS MANUAL GATE VALVE

The Cameron FLS gate valve offers the durability and integrity of a forged steel body and bonnet; the field proven performance characteristics of the basic Cameron design; low maintenance requirements, and ease of service.

Features:

- Metal-to-metal Sealing at gate-to-seat and seat-to-body provide security and reliability.

- Simple Gate and Seat design enables quick and easy change-out without special tools and minimizes inventory requirements.

- Gate and Seat assembly features bidirectional sealing so it can be reversed for increased service life.

- One piece gate construction and two spring-loaded, pressure-energized, non-elastomeric lip-seals on each seat at the seat-to-body interface. This provides maximum protection against intrusion of particle contaminants and optimum performance under severe conditions such as mud, sand and low pressures.

- Modified Acme stem threads allow the one-piece gate to float and effect a positive downstream seal.

- Stem packing can be replaced while the valve is under pressure since the shoulder on the stem can be backseated against the bonnet to isolate the stuffing box.

- Stem seal designs cover the full range of temperatures, pressures and fluids encountered in drilling service, including severe high temperature, high pressure applications.

- The grease injection port permits lubrication of the gate and seat assembly and is used to vent trapped body pressure after stem backseating.

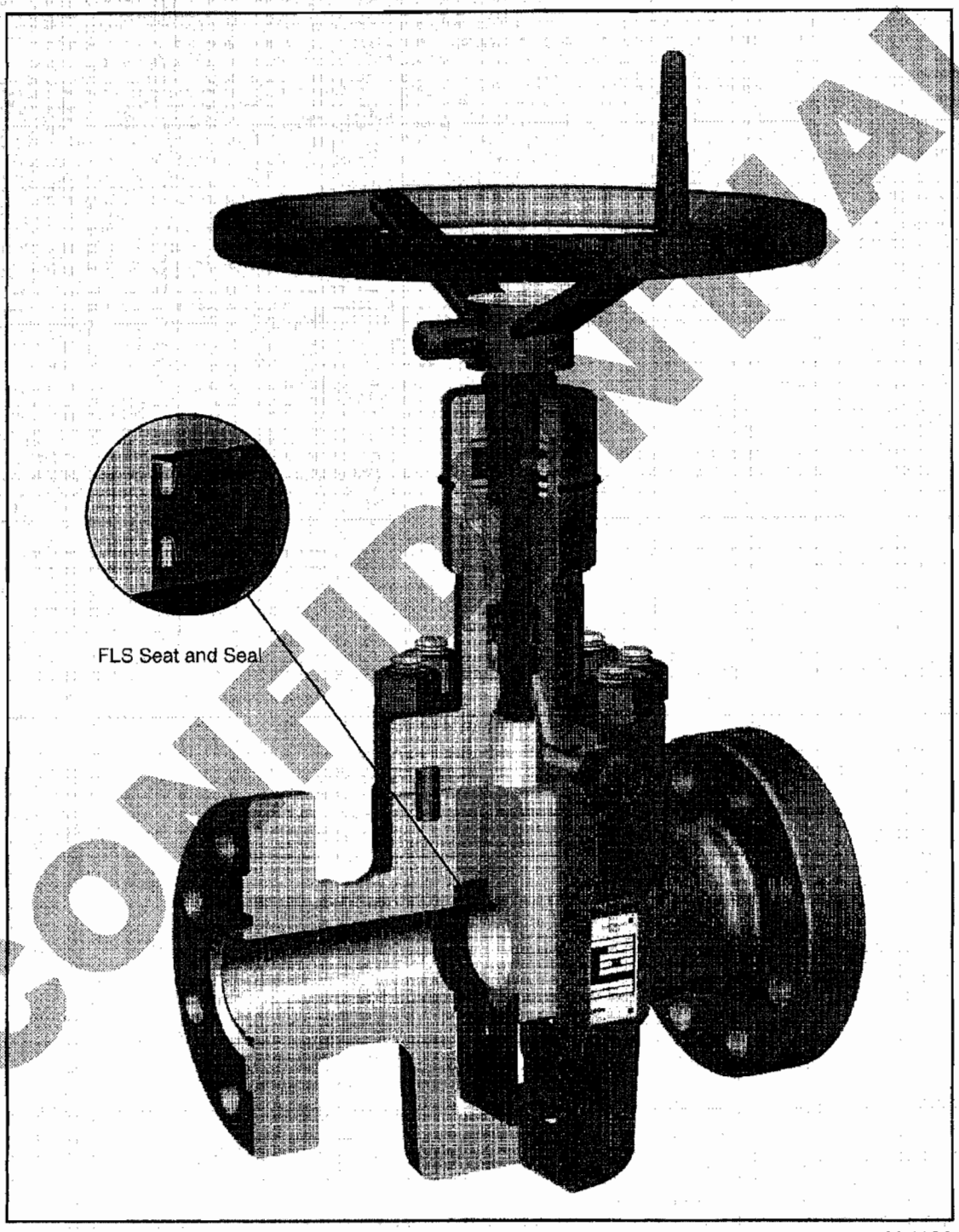
- Non-Rising stem means that valve operation does not cause an increase in cavity pressure and does not displace cavity filler grease.

- Excessive force is not necessary to close the valve. The handwheel should be backed off 1/4 turn after the valve is fully closed.

- FLS valves have been fully tested and qualified to API 6A Appendix PR2 requirements and are available in all API Temperature Classes, Materials Classes, and Product Specification Levels, including customer specified inspection agency requirements.

CAMERON

FLS MANUAL GATE VALVE



M-1002

CAMERON

CAMERON TAILROD HYDRAULIC GATE VALVE

The tailrod hydraulic is a hydraulically-actuated valve used for land based drilling applications. The Cameron tailrod hydraulic gate valve includes all of the features and benefits of the Cameron FLS valve plus the following:

Features:

- Cylinder is sized for normal operation with 1500 psi operating pressure.

- Cylinder ports are located a sufficient distance from the cylinder head to allow the piston to cover the exhaust port before the end of the stroke. This arrangement provides sufficient damping to protect the valve from shock loading.

- Valve body has a stuffing box through which the tailrod passes. The tailrod compensates for the volume displaced by the operating stem and also provides visual indication of whether the valve is open or closed.

- The tailrod and operating stem have backseating shoulders that allow replacement of the stem packing while the valve is under pressure.

- Optional manual closing and locking screw is available.

- Tailrod hydraulic gate valves are available in bore sizes ranging from 1-13/16" to 6-3/8" in several working pressure ranges to meet customer specified requirements.

CAMERON

TAILROD HYDRAULIC GATE VALVE

M-1004

CAMERON

CAMERON HYDRAULICALLY ACTUATED DRILLING CHOKE

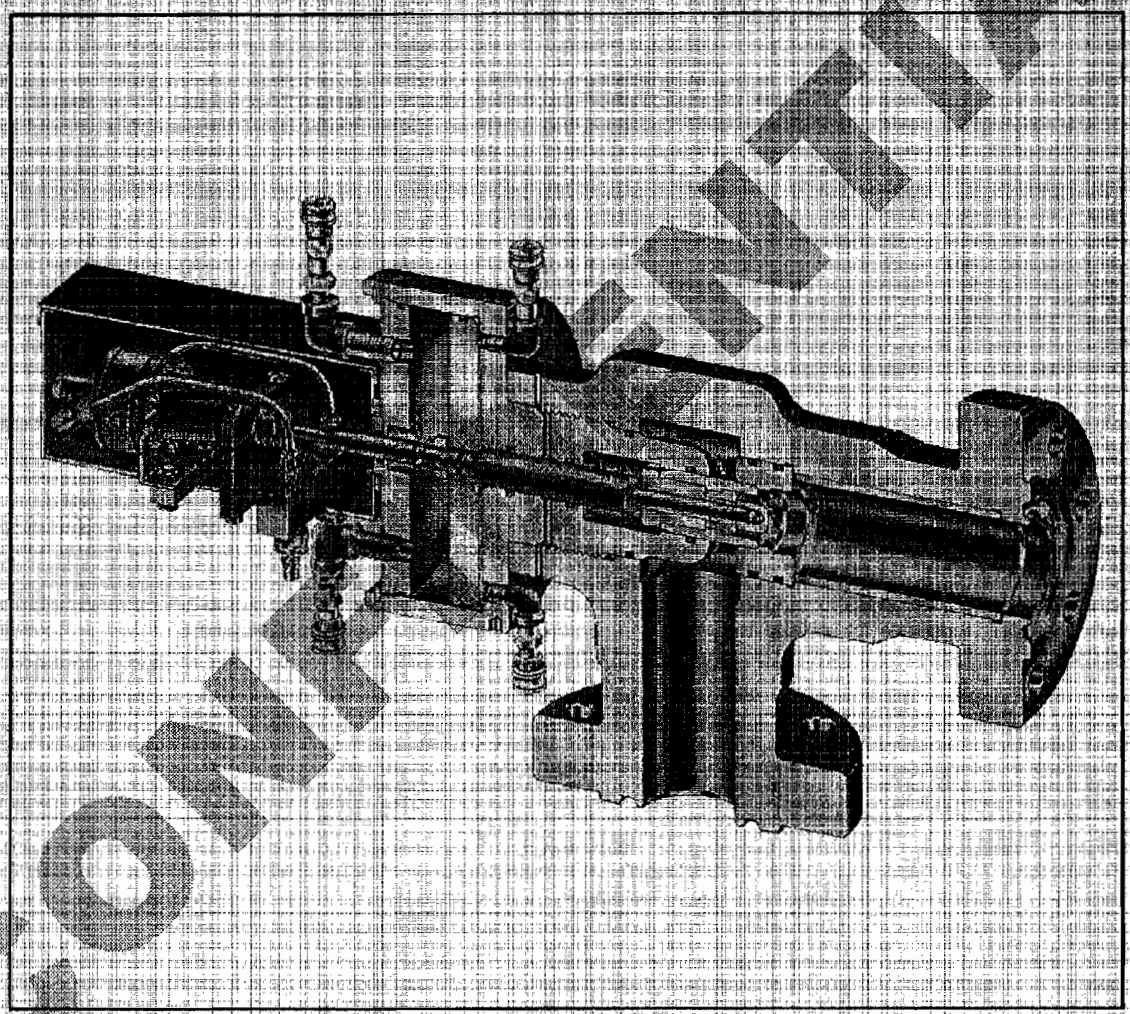
Cameron hydraulically actuated drilling chokes are available in working pressures from 5000 to 20,000 psi with inlet and outlet flange sizes from 3-1/16" to 4-1/16". The standard orifice size is 1-3/4".

Features:

- Cylindrical gate and large body cavity provide high flow capacity and extremely quiet operation.
- Gate and seat are constructed of erosion resistant tungsten carbide and are reversible for double life.
- Gate and seat can be replaced or reversed without removing the choke from the manifold.
- An air operated hydraulic pump in the control console ensures positive action gate movement. Hydraulic pressure of 300 psi applied to the actuator results in an opening or closing force of 21,500 lb at the gate.

CAMERON

HYDRAULICALLY ACTUATED DRILLING CHOKE



M-1006

CAMERON

CAMERON MANUALLY ACTUATED DRILLING CHOKE

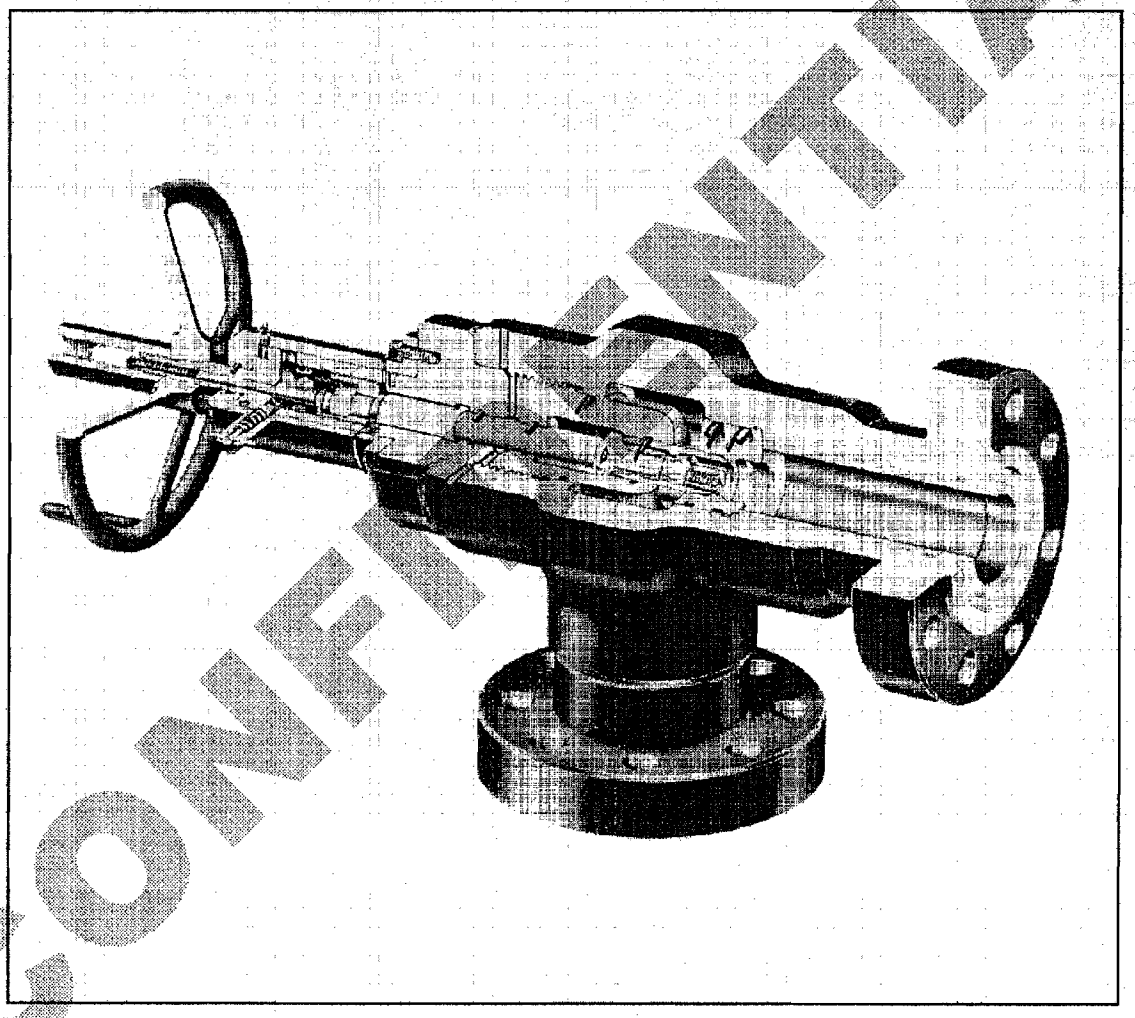
Cameron manually actuated chokes are available in working pressures from 5000 to 20,000 psi with inlet and outlet flange sizes from 3-1/16" to 4-1/16". The standard orifice size is 1-3/4".

Features:

- Thrust bearings in the actuator provide low torque handwheel operation. Upstream pressure has no thrust loading on the actuator; only downstream pressure affects the torque. Maximum required torque is 150 ft/lb at the maximum rated downstream working pressure.
- Cylindrical gate and large body cavity provide high flow capacity and extremely quiet operation.
- Gate and seat are constructed of erosion resistant tungsten carbide and are reversible for double life.
- Gate and seat can be replaced or reversed without removing the choke from the manifold.
- Actuator is easily lubricated through the fittings on the actuator housing.

CAMERON

MANUALLY ACTUATED DRILLING CHOKE



CAMERON

CAMERON H2/H2I ADJUSTABLE AND POSITIVE CHOKES

The Cameron H2 is a multi-purpose needle and seat choke that handles standard, erosive and corrosive service with pressure ratings up to 15,000 psi. Three configurations are available, positive choke (fixed flow); adjustable choke (variable flow rate); and PAC (positive/adjustable choke).

Features:

- The PAC feature allows conversion to an adjustable choke for bringing a well on slowly. It can be returned to positive operation when a fixed flow bean is desired.

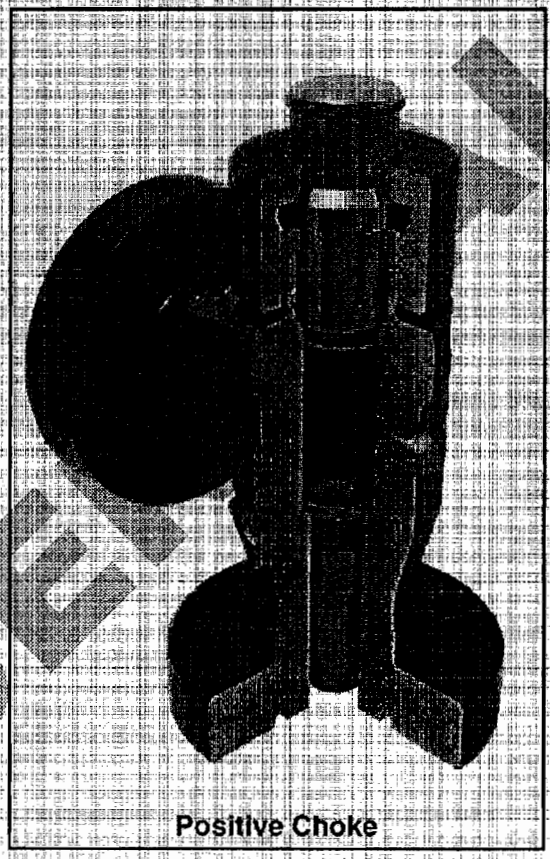
- The forged body Cameron H2I positive and adjustable chokes accept the same beans and seats as the H2 Choke. However, the bean/seat is recessed in the body below the inlet flow path to extend the life of the H2I. Each body of the H2I is equipped with a port for monitoring or venting pressure. Bonnet and body connection threads are designed for easy access for cleaning and maintenance.

- A bleed screw allows pressure to be vented so the bonnet can be safely removed. The bleed screw assembly uses metal-to-metal seals. The gland and replaceable metal seal protect the choke body threads from wear.

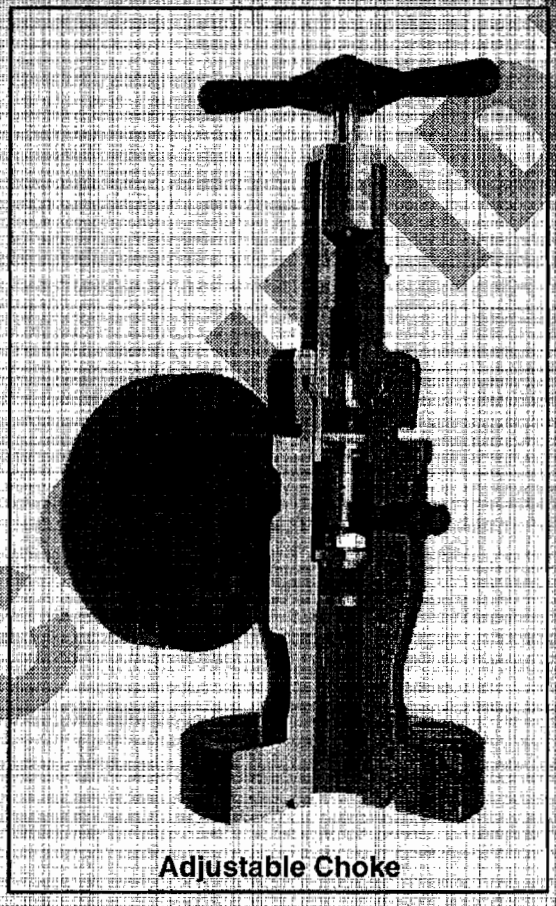
- The H2/H2I are designed and manufactured in accordance with API 6A, 16 Edition, including performance verification testing to PR2 and can be supplied in accordance with any additional customer required specifications.

CAMERON

H2/H2I POSITIVE AND ADJUSTABLE CHOKES



Positive Choke



Adjustable Choke

M-1010

CAMERON

CAMERON MS CHECK VALVE

The MS Check Valve is used primarily for choke manifolds that require high pressure or high temperature service where elastomer seals would deteriorate. The Cameron MS Check Valve provides dependable metal-to-metal sealing.

Features:

- Metal-to-metal seals offer advantages over elastomeric seals in applications where chemical and well fluid attack and extremes of temperature are factors.
- Streamlined valve seat area results in less flow turbulence and improves body longevity.
- Non-lubricated and requires no routine maintenance.
- MS Check Valves are made from forged steel not castings.
- Available for use with oil, gas, water or drilling fluids in all material and temperature classes as well as product specification levels as specified in API 6A.
- Standard pressure ratings range from 3000 to 20,000 psi with bore sizes from 1-13/16" to 7-1/16".

CAMERON

MS CHECK VALVE