

PLAINTIFF'S EXHIBIT

CHV-679

C
A
L

E
N

T
3

Chevron BB
012540

ENGINEERING INSTRUCTIONS
NUMERICAL INDEX - ALL ISSUES

<u>NUMBER</u>	<u>TITLE</u>
ES-14	Handling of Work by Engineering Work Requisition (EWO)
R-21	Administration and Control of Rigging
ES-32	Distribution of Reports and Recommendations of Equipment Inspections
R-34	Control of Heat Exchanger Tube Bundle Replacements
R-100	Steel Tank Shell Design
R-101	Code for Welding Instructions on Drawings
ES-102	Safe Oil Heights and Hold-Off Distances Tanks and Reservoirs
SF-104	Safety Instruction Sheets
SF-105	Refinery Piping
ES-204	Washing Insulators on High Voltage Distribution System
ES-209	Radiography Program, Operating and Emergency Procedures
R-209	Handling 500 MC Cobalt 60 Radiographic Capsule
ES-212	PRECAUTIONS WHEN SPRAY PAINTING
ES-219	Safety Inspection Checklist
ES-300	Pressure Testing Refinery Equipment
ES-301	Hydrostatic Testing of Tube and Header Installations
R-301	Hydrostatic Testing of Tube and Header Installations
R-302	Hydrostatic Testing of Power Boilers
ES-304	Installation and Inspection of Retractable Corrosion Probes
R-306	Qualifying Welders for Welding of Alloy Materials
SF-307	Qualification of Welders for Boiler Repairs
ES-308	Electrical Alterations or Installations
R-310	Qualification of Welders
SF-310	Qualification of Welding Procedures and Welders
ES-310	Qualification of Welders and Welding Procedures
R-311	Preparation of Inspection Record Books
ES-312	Protection of Underground Electrical Circuits
R-401	Maintaining and Operating Hoisting Equipment
R-402	Tool Service on Night Shifts, Weekends and Holidays
R-407	Operation of Over Head Power Wrench at Hydrogenation Plant
R-408	Fueling of Gasoline Engine Driven Equipment
R-500	Installation and Care of Packing in Pumps, Compressors, Turbines and Valves

ENGINEERING INSTRUCTIONS
NUMERICAL INDEX - ALL ISSUES

<u>NUMBER</u>	<u>TITLE</u>
ES-501	Installing Strip and Sheet Lining in Pressure Vessels
R-501	Installing Plug Welded Alloy Steel Sheet Lining in Pressure Vessels
ES-502	Depositing Austenitic Stainless Steel Weld Overlay on Carbon Steel
ES-503	Refinery Heat Treating Practices
R-504	Identification of Metals by Markings
R-505	Stress Relieving of Ferritic Steel Pipe Welds by Induction Heating
R-506	Selecting and Installing Gaskets
R-510	Stocking of Heat Exchanger Gaskets
ES-511	Procedure for Establishing Gasket Book Information
ES-520	Procedure for Fabricating Hastelloy and Stainless Steel Lined Pipe
R-600	Care and Handling of Pumps during Construction
R-601	Care and Handling of Material and Equipment during Construction
R-602	Testing and Servicing Askarel Filled Transformers and Capacitators
R-604	Setting, Installation, and Replacement of 2,400 Volt and 12,000 Volt Fuses
ES-650	Repairing Pressure Vessels and Boilers
R-650	Repairing Unfired Pressure Vessels
ES-651	Installing and Removing Furnace Tube Headers
R-653	Installing Riveted and Welded Lap Joint Patches in Shell Stills
R-654	Installing Welded Butt Joint Patches in Shell Stills
R-654-1	Installing Butt Welded Patches on Columns and Vessels, and Door Sheets on Tanks
R-655	Welded Steel Storage Tanks
R-656	Breaking Lines
R-659	Repair to Refinery Fuel Gas Lines
ES-662	Cleaning Tube Stills
R-662	Cleaning Tube Stills
ES-669	IN-PIPE WELD PROCEDURES FOR REPLACEMENT OF DAMAGED PIPELINES
R-751	Masonry Mortar
ES-670	RECONDITIONING USED TUBE HEADERS
ES-753	Inspection and Maintenance of Drainage Lines Under Concrete Pavement
R-800	Bolting Up Practice
R-804	Re-ending Tubes for Fired Service
ES-805	Inspecting, Classifying and Reconditioning of Cl Furnace Tubes

ENGINEERING INSTRUCTIONS
NUMERICAL INDEX - ALL ISSUES

<u>NUMBER</u>	<u>TITLE</u>
ES-810	Gas Metal Arc Welding
ES-811	Shop Welding the Carbon- $\frac{1}{2}$ Moly, Chrome-Moly and Austenitic (18 CC-8 Ni) Stainless Steel
R-813	Electric Welding Grade "D" Seamless Steel Pipe
ES-814	Pressure Relieving Safety Devices
ES-817	SMAW Welding of Monel and Nickel Alloys
R-819	Welding of Monel
R-820	Approved Rigging Practices
R-833	Grouting-In Machinery
ES-835	Maintenance of Tracks, Roads, Bridges and Parking Lots
ES-836	Railroad Track Clearances
R-836	Required Clearances for Refinery Tracks (Dwg. Rev. 10/27/47)
ES-837	Temporary Leak Repair
ES-838	Installation and Repair of Underground Lines
ES-839	Electrical Permit and Inspection Guidelines
ES-2709	Tank Painting and Coating

Number	Date	Title
ES-801	12-14-54	Installing and Removing Protected Type Thermocouples on Furnace Tubes
ES-802	3-15-55	Installing Protected Type Thermocouples on Furnace Tubes
ES-802	6-29-51	Bending Chrome-Nickel Pipe
ES-802	1-15-45	Bending 18-8 Chrome-Nickel Pipe
ES-804	6-19-51	Re-ending Tubes for Fired Service
R-804	2-16-55	Re-ending Tubes for Fired Service
ES-805	6-15-55	Inspecting, Classifying and Reconditioning of Chrome-Nickel Furnace Tubes
ES-806	7-20-49	Job Cleanup (Appendix 8-4-49)
ES-808	3-28-51	Inspecting and Maintaining Thermocouples and Potentiometers
ES-811	4-23-53	Welding Low Chrome and Chrome-Nickel Steels
R-811	2-15-55	Electric Welding Chrome-Moly Steel
R-812	8-15-44	Electric Welding 18-8 Chrome-Nickel Pipe, Flanges, and Cast Fittings
R-813	6-9-39	Electric Welding Grade "D" Seamless Steel Pipe
ES-814	10-22-51	Pressure Relieving Safety Devices
ES-817	7-5-51	Welding of Dissimilar Chrome and Chrome-Nickel Steels
R-817	2-18-55	Welding of Dissimilar Chrome and Chrome-Nickel Alloy Steels
ES-819	9-8-53	Electric Welding of Steel
R-819	4-15-49	Welding of Steel
ES-820	4-10-55	Approved Welding Practices
R-820	9-17-42	Approved Welding Practices
R-833	5-5-39	Grouting in Machinery
ES-835	3-23-51	Maintenance of Freeway, Roads, Bridges and Parking Lots
ES-836	6-14-50	Railroad Track Clearances
R-836	9-2-41	Required Clearances for Railway Trucks (Reg. Rev. 10-2-41)
ES-838	6-24-53	Installation of Railway Trucks

Revised: 2-15-55

Abrasive Wheels	- Use and Care	800
Alloys	- Arc Depositing of Chromium and Chromium Alloy Lining	801
Alloys	- Bending 18-8% Chrome-Nickel Pipe	802
Alloys	- Electric Welding 4-6% Chrome-Molybdenum	803
Alloys	- Electric Welding 18-8% Chrome-Nickel Pipe Flanges and Cast Fittings	804

Alloys	- Inspecting, Classifying and Reconditioning of Chrome-Nickel Furnace Tubes	805
Alloys	- Installing Plug welded Alloy Steel Sheet Lining in Pressure Vessels	501
Alloys	- Re-welding Tubes for Plant Service	806
Alloys	- Welding Dissimilar Chrome and Chrome-Nickel Alloy Steels	807
Alloys	- Welding Steel	808
Alterations	- Process of Annealing	100
Annealing	- Annealing of Steel and Alloy Steel	503
Applications	- Methods for Handling and Storing of Steel	35
Assigned Tools		405

Back Flow Protection Devices
Bending
Boilers
Bolting
Breaking
Bridges
Butadiene Lines

Cable	- Electrical Wiring for Control and Instrumentation	809
Capacitors	- Electrical Wiring for Control and Instrumentation	810
Cast Fittings	- Electrical Wiring for Control and Instrumentation	811
Castings	- Annealing of Steel and Alloy Steel	812
Caterpillar Crane	- Maintenance of Caterpillar Crane	813
Cement Lined Pipe	- Maintenance of Cement Lined Pipe	814

Cleaning	- Tube Mills	100
Cleaning and Pickling	- Special Piping Systems	100
Cleaning	- Vessels	100
Cleanup	- Job Cleanup	100
Compressors	- Gas Engine Maintenance	100
Compressors	- Installation and Care of Packing in	100
Concrete	- Placing and Curing	100
Construction	- Care and Handling of Material and Equipment During	100
Construction	- Care and Handling of Pumps During	100
Construction Projects	- Expenditure Control of	100
Contracts	- Handling	100
Contracts	- Supervision and Control of	100
Contracts	- Specifications for work	100
Control	- Heat Exchanger Tube Bundle Replacements	34
Control	- Rigging	21
Courses	- Method for Handling Applications for Junior Mechanic Training Course	35
Cranes	- Maintaining and Operating Conveyors and Caterpillars	100
Cylinders	- Handling Cylinders Containing Compressed Gases	100

Dumpster - Dumpster	100
Design	100

Electric Driven	100
-----------------	-----

Electrical Circuits	100
Electrical Equipment	100

Electrical Equipment	100
----------------------	-----

Electrical Work	100
Engineering Instructions	100

Engines	- Fueling Gasoline Driven Equipment	100
Equipment	- Care and Handling of Material and Equipment During Construction	100

Eye Protection	100
Expenditure Control	100

Fire	100
Flanges	100
Forgings	100
Foremen	100

Revised 2-15-54

Foundations - Grouting-in Machinery
 Fuel - Oil Gasoline Engines
 Puses, 1,000 and 12,000 - Install and Maintain
 Volt

Gaskets - Selecting and Installing

Gaskets - Stacking of Heat Exchangers
 Goggles - Selection and Use of
 Grinders - Use and Care of
 Grouting-in - Machinery

Handling Contracts

Headers

Headers

Headers

Heat Exchanger

Heat Exchanger

Heat Exchanger Equipment

Highways

Hoisting Equipment

Hot Tapping Lines

Houdry Salt

Heat Treating

Hats

Identification

Inspecting

Inspection

Inspections

Inspections

Instructions

Instructions

Inspection

Instructions
Instructions
Instructions
Insulators

Lines
Lines
Lines
Lines

Lines
Lines
Lining
Lining

Machinery
Machines

Maintenance
Maintenance
Maintenance
Maintenance
Marking
Masonry Mortar
Material

Material
Material
Mechanics

Motors
Monel
Mortar
Mud Packing Lines
Maintenance

Normalizing

Castings, Forgings, and Bar Stock

Orifice Meters

Oven Head Power Wrench

Over Speed Trips

Maintaining Records of

Operation at Hydrogenation Plant

Testing, Adjusting and Reporting of

407

603

Packing

Installation and Care of In Pumps, Compressors,
Turbochargers and Valves

500

Patches

Installing Riveted and Welded Lap Joint Patches
on Shell Stills

653

Patches

Installing Riveted Lap Joints in Shell Stills

654

Parking Lots

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Pipe

Qualifying

Qualifying

Qualifying

Radiographic Capsule

Radiographic Inspection

Refinery Piping

Relief Valve

Repair

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Repairs

Reservoirs

Rigging

Rigging

Roads

Roofs

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety

Safety Instructions

Safety Rules

Safety Rules

San Pedro Island

Scaffolding

Scaffolds

Shops Field

Shutdowns

Signs

Schematic Construction

Stills

Stills

Stills

Streets

Street Lighting

Street Lighting

Specifications

Tanks

Tanks

Tanks

Tanks

Tanks

Tanks

Tanks

Tanks

Testing

Testing

Testing

Testing

Testing

Testing

Testing

Testing

Thermocouples

Thermocouples

Tools

Tools

Tools

Tools

Tools

Tracks

Tracks

Transformers

Tube Headers

Tubes, Furnace

Tubes, Furnace

Tubes, Furnace

Tubes

Tubes

Tubing

Turbines

Valves

Valves

Varityper

Vessels

Vessels

Vessels

Vessels

Vessels

Welders	- Qualifying for Welding	
Welders	- Qualifying for Welding	
Welders	- Qualifying for Welding	
Welding	- Dissimilar Carbon and Carbon-Metal Alloy Steels	
Welding	- Electric - Grade 15 Stainless Steel Pipe	
Welding	- Electric - 4-6 Carbon-Metal Alloy Steels	
Welding	- Electric - 18-8 Carbon-Metal Alloy Steels, Flanges and Cast Fittings	
Welding	- None	
Welding Equipment	- Operation and Maintenance of Electric Welders	
Welding Instructions	- Code for Welding	
Welds	- Electric - Grade 15 Stainless Steel Pipe	
Welds	- Electric - 4-6 Carbon-Metal Alloy Steels	
Welding Instructions	- Electric - 18-8 Carbon-Metal Alloy Steels, Flanges and Cast Fittings	

SELECTING AND INSTALLING GASKETS

Purpose

1. This Instruction pertains to the proper selection and installation of the most common types of gaskets in general Refinery use.

Responsibility

2. The Foreman Mechanic in charge is responsible for the proper supervision of the work and the close adherence to this Instruction.
3. Satisfactory service from gaskets depends chiefly on three things - the condition of the gasketed surfaces, the type of gasket used, and the method of installation. These are considered in turn in the following sections.

- PREPARATION OF FLANGE FACES -

Cleaning

4. Remove all foreign material from the flange faces, tongue, and grooves with a wire brush or metal scraper before bolting together. On tongue and groove and ring joint flanges, make certain that the groove is clean. In cases where flanges cannot be separated enough to permit the use of a wire brush, use a thin scraper (obtained from the Tool Room) to remove any accumulated foreign matter.

Inspection and Repair

5. Determine whether any condition exists which will prevent a tight joint being made without excessive bolt tension. Report all conditions of dished or warped flanges, cracks, excessive misalignment, and abnormal cold pull to the Foreman Mechanic or Job Foreman. He shall report unusual conditions to the Maintenance or Construction Foreman who shall report serious distortion of the flanges and shall procure the approval of this office whenever the corrective measures required are at variance with accepted practice. Minor defects (not affecting the strength of the flange) found on a flange face may be repaired. Pits and low spots may be built up with weld metal and high spots or distorted faces dressed off with an emery wheel or portable flange facing tool. It is preferable to leave flange faces rough machined to permit a "grip" on the gasket.

Rewritten 7/21/41

SELECTING AND INSTALLING GASKETS

- SELECTION OF GASKET -

- | | |
|---------------------------|---|
| General | 6. Select the correct type and size of gasket from the Gasket Table MF-3648, and the Gasket Dimension Chart, ME-4481 attached to this Instruction. Order machine cut gaskets of the correct size when practicable. For ring type joints, select the proper ring size from GC-32500. |
| Plain-Face Flanges | 7. On all <u>plain-face</u> flanges, use as thin a gasket as the conditions of the flanges will permit.

Use only one gasket between flanges except in those locations where frequent blinding will be facilitated by the use of two gaskets. |
| Raised-Face Flanges | 8. On <u>cast iron raised-face</u> flanges, use only flat ring gaskets. On <u>steel raised-face</u> flanges, use either asbestos composition or asbestos filled steel ring gaskets for services below 500°F. Above 500°F., use asbestos filled steel ring gaskets, except in special cases approved by this office Tauril gasket material may be used for temperatures up to 600°F. |
| Tongue and Groove Flanges | 9. On <u>tongue and groove</u> flanges, use an asbestos filled steel ring gasket, the width being that of the tongue. |
| Ring-Type Flanges | 10. On ring-type flanges, use a metal ring gasket: soft iron rings for ordinary services and annealed alloy rings for corrosive services. |
| Other Flanges | 11. On heat exchanger, cooler, or condenser heads, use the type of gasket required for the particular service. If the flange face is badly warped or is rough, use a hard twisted asbestos cord, coiling it on the flange face until the gasket surface is covered. Shellac or water proof grease may be used to hold the cord in place while the joint is being bolted up. |

- INSTALLING GASKETS -

- | | |
|------------------|--|
| Flange Paste | 12. Cover the flange faces with the type of flange paste specified for the service in the Appendix (page 6) of Engineering Instruction 800, "Bolting Up Practice". |
| Inserting Gasket | 13. On <u>raised-face</u> , <u>ring type</u> , and <u>plain-face</u> flanges, insert the gasket carefully to center it with the flanges and to prevent damage to the gasket. |

Rewritten 7/21/41

SELECTING AND INSTALLING GASKETS

Bolting Up	When <u>asbestos filled steel ring gaskets</u> are used with tongue and groove flanges, insert the gaskets with the seam at the bottom of the groove. 14. Determine that the bolts are in good condition and that the flanges are lined up correctly. Insert two or three bolts, slide the gasket into place, insert the remainder of the bolts and tighten them in accordance with directions outlined in "Bolting Up Practice," Engineering Instruction 800.
Making Up Joints	- <u>GASKETS FOR SPECIAL SERVICES</u> -
	15. Make up gasketed flanges for special services as follows: a. <u>Lines in Strong Acid Service</u> Cut the pipe thread well back on the pipe. Screw the flange on tight using red lead or litharge as a thread compound. Machine down the protruding end of the pipe flush with the flange face. Use a ring type red rubber or asbestos composition gasket with an I.D. the same as the pipe. Install as directed in Section 12 above.
	b. <u>Lead Lines in Acid Service</u> On thick lead pipe use cast iron flanges per Drawing No. E-25963. Back fill between the pipe and flange with molten lead. Use a red rubber gasket. On thin lead lines use a Van Stone joint. c. <u>Flanges on Lead Lined Treaters in Severe Service</u> Make up a gasket of 3/8" lead tubing with asbestos rope threaded through tubing to form a core. Burn the tubing together to form a complete ring gasket.

APPROVED: 8/28/39

REWRITTEN: 7/21/41

Signed _____

GASKET CHART
for
GENERAL REFINERY SERVICE

Note: This chart is for general use only. For special cases consult the Engr. Dept.
This chart is to be appended to Engineering Instruction No. 506.

Service	Equipment	L O G A T I O N		Type of Gasket
		Type of Surface	Operating Limitations Press. Temp.	
Air, Gas Water, Steam Oil, Tar, Distillate, Vapor Acid Oil, Sludge SO ₂ , SO ₂ Extract, Caustic, Ammonia, Phenol	Pump Cases Line Flanges Valve Bonnets	Plain face-All	Under 150# Under 350°F.	Asbestos Composition
		Raised Face Steel	Over 150# 350°F.-500°F.	Asbestos Composition or Asbestos Metallic (2)
		G.I. Tongue & Groove Ring Joint	All	Thin High Pressure Asbestos Comp. Ring or Asbestos Filled Steel Ring
			Over 500°F.	Asbestos Filled Steel Ring, or (4) to 600°F.
			All	Asbestos Composition
			All	Asbestos Filled Steel Ring
		Plain Face	All	Soft Iron Ring for Normal Services; Annealed Alloy for Corrosive Service
			Under 500°F.	Asbestos Composition, Asbestos Filled Steel Ring or Asbestos Cord
			Over 500°F.	Asbestos Composition (4) or Asbestos Filled Steel Ring
			All	Asbestos Filled Steel Ring
Sulfuric Acid	Pressure Vessel, Cooler Exchangers and Condenser Heads	Tongue & Groove Ring Joint	All	Soft Iron Ring for Normal Services; Annealed Alloy for Corrosive Service
	Acid Oil Treaters Still Head Manholes	Plain Face	All	Asbestos Composition, Asbestos Cord or Asbestos Filled Lead Tube Ring
	Tank Manways	Plain Face	All	Asbestos Millboard
	Meter Cases	Plain Face	All	Asbestos Composition
	Boiler Manholes & Boiler	Wet Steam	All	Asbestos Composition
	Handholes	Dry or Superheated Steam	All	Wire Inserted Folded Asbestos Asbestos Filled Copper Ring
	Centrifugal Pump Case All Other Equipment			Asbestos Composition or Asbestos Millboard (1) Red Rubber or Asbestos Composition
	Vapor Proof Equipment			Rubber (3) Cork, Vellumoid or equivalent

- Notes:**
1. If flanges are rough, use Asbestos Millboard in this service.
 2. If flanges are rough, use Asbestos Metallic in this service.
 3. Change gaskets once a year.
 4. Tantalum or equivalent for temperatures not exceeding 600°F.

General Revision 5-1-39
General Revision 8-3-39
General Revision 11-8-39
General Revision 7-2-41
MF - 3648-4

DATE	12/15/83						
BY	PSA						
CHKD	PSA						
ENGR							
SCALE							
DATE							
OPR'S DEPT.							
ENG. DEPT.							
APPROVALS							
REVISIONS	<table border="1"> <tr> <td>1</td> <td>REDUCE COL. TO 32nds, ADD "S PIPE.</td> </tr> <tr> <td>2</td> <td>RETOINED</td> </tr> <tr> <td>3</td> <td>GENERAL REVISION</td> </tr> </table>	1	REDUCE COL. TO 32nds, ADD "S PIPE.	2	RETOINED	3	GENERAL REVISION
1	REDUCE COL. TO 32nds, ADD "S PIPE.						
2	RETOINED						
3	GENERAL REVISION						

DIMENSION SHEET FOR GASKETS **TO ACCOMPANY ENGINEERING INSTRUCTION #506**

STEEL CLAD GASKETS ARE $\frac{3}{32}$ " THICK FOR PIPE SIZES $\frac{1}{2}$ " TO 12" - $\frac{1}{8}$ " THICK FOR SIZES OVER 12"

NOMINAL PIPE SIZE	$\frac{1}{16}$ " ASBESTOS COMPOSITION RING GASKETS				STEEL CLAD ASBESTOS RING GASKETS		STEEL CLAD ASBESTOS SMALL T & G GASKETS	
	125# C.I.	150# STEEL	175# 250# C.I. 300# STEEL	400# STEEL	600# STEEL	150# STEEL	300# STEEL	ALL STEEL FLANGES
$\frac{1}{2}$	$1\frac{1}{2} \times 3\frac{3}{8}$			$1\frac{1}{2} \times 3\frac{3}{4}$		$2\frac{1}{8} \times 3\frac{3}{8}$	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{32} \times 2\frac{17}{32}$
2	$2 \times 4\frac{1}{8}$			$2 \times 4\frac{3}{8}$		$2\frac{1}{8} \times 4\frac{1}{8}$	$2\frac{1}{8} \times 4\frac{3}{8}$	$2\frac{2}{32} \times 3\frac{9}{32}$
$2\frac{1}{2}$	$2\frac{1}{2} \times 4\frac{7}{8}$			$2\frac{1}{2} \times 5\frac{1}{8}$		$3\frac{3}{8} \times 4\frac{7}{8}$	$3\frac{3}{8} \times 5\frac{1}{8}$	$3\frac{11}{32} \times 3\frac{25}{32}$
3	$3 \times 5\frac{3}{8}$			$3 \times 5\frac{7}{8}$		$4\frac{1}{4} \times 5\frac{3}{8}$	$4\frac{1}{4} \times 5\frac{7}{8}$	$4\frac{7}{32} \times 4\frac{21}{32}$
4	$4 \times 6\frac{7}{8}$		$4 \times 7\frac{1}{8}$	4×7	$4 \times 7\frac{5}{8}$	$5\frac{3}{16} \times 6\frac{7}{8}$	$5\frac{3}{16} \times 7\frac{1}{8}$	$5\frac{5}{32} \times 5\frac{23}{32}$
6	$6 \times 8\frac{3}{4}$		$6 \times 9\frac{7}{8}$	$6 \times 9\frac{3}{4}$	$6 \times 10\frac{1}{2}$	$7\frac{1}{2} \times 8\frac{3}{4}$	$7\frac{1}{2} \times 9\frac{1}{8}$	$7\frac{15}{32} \times 8\frac{1}{32}$
8	8×11		$8 \times 12\frac{1}{8}$	8×12	$7\frac{1}{8} \times 12\frac{5}{8}$	$9\frac{3}{8} \times 11$	$9\frac{3}{8} \times 12\frac{1}{8}$	$9\frac{11}{32} \times 10\frac{1}{32}$
10	$10 \times 13\frac{3}{8}$		$10 \times 14\frac{1}{4}$	$10 \times 14\frac{1}{8}$	$9\frac{3}{4} \times 15\frac{3}{4}$	$11\frac{1}{4} \times 13\frac{3}{8}$	$11\frac{1}{4} \times 14\frac{1}{4}$	$11\frac{1}{32} \times 12\frac{1}{32}$
12	$12 \times 16\frac{1}{8}$		$12 \times 16\frac{5}{8}$	$12 \times 16\frac{1}{2}$	$11\frac{3}{4} \times 18$	$13\frac{1}{2} \times 16\frac{1}{8}$	$13\frac{1}{2} \times 16\frac{5}{8}$	$13\frac{5}{32} \times 14\frac{1}{32}$
14	$14 \times 17\frac{3}{4}$	$13\frac{1}{4} \times 17\frac{3}{4}$	$13\frac{1}{4} \times 19\frac{1}{8}$	$13\frac{1}{8} \times 19$	$12\frac{1}{8} \times 19\frac{3}{8}$	$14\frac{3}{4} \times 17\frac{3}{4}$	$14\frac{3}{4} \times 19\frac{1}{8}$	$14\frac{23}{32} \times 15\frac{1}{32}$
16	$16 \times 20\frac{1}{4}$	$15\frac{1}{4} \times 20\frac{1}{4}$	$15\frac{1}{4} \times 21\frac{1}{4}$	$15 \times 21\frac{1}{8}$	$14\frac{3}{4} \times 22\frac{1}{4}$	$16\frac{3}{4} \times 20\frac{1}{4}$	$16\frac{3}{4} \times 21\frac{1}{4}$	$16\frac{23}{32} \times 17\frac{2}{32}$
18	$18 \times 21\frac{5}{8}$	$17\frac{1}{4} \times 21\frac{5}{8}$	$17 \times 23\frac{1}{2}$	$17 \times 23\frac{3}{8}$	$16\frac{1}{2} \times 24\frac{1}{8}$	$19\frac{1}{4} \times 21\frac{5}{8}$	$19\frac{1}{4} \times 23\frac{1}{2}$	$19\frac{1}{32} \times 20\frac{5}{32}$
20	$20 \times 23\frac{7}{8}$	$19\frac{1}{4} \times 23\frac{7}{8}$	$19 \times 25\frac{3}{4}$	$18\frac{7}{8} \times 25\frac{1}{2}$	$18\frac{1}{4} \times 26\frac{1}{8}$	$21 \times 23\frac{7}{8}$	$21 \times 25\frac{3}{4}$	$20\frac{3}{32} \times 22\frac{1}{32}$
24	$24 \times 28\frac{1}{4}$	$23\frac{1}{4} \times 28\frac{1}{4}$	$23 \times 30\frac{1}{2}$	$22\frac{3}{8} \times 30\frac{1}{4}$	$22 \times 31\frac{1}{8}$	$25\frac{1}{4} \times 28\frac{1}{4}$	$25\frac{1}{4} \times 30\frac{1}{2}$	$25\frac{1}{32} \times 26\frac{1}{32}$
* 5	$5 \times 7\frac{3}{4}$		$5 \times 8\frac{1}{2}$	$5 \times 8\frac{3}{8}$	$5 \times 9\frac{1}{2}$	$6\frac{3}{4} \times 7\frac{5}{8}$	$6\frac{3}{4} \times 8\frac{3}{8}$	$6\frac{9}{32} \times 6\frac{27}{32}$

DIMENSION SHEET FOR GASKETS

ME-4481-2