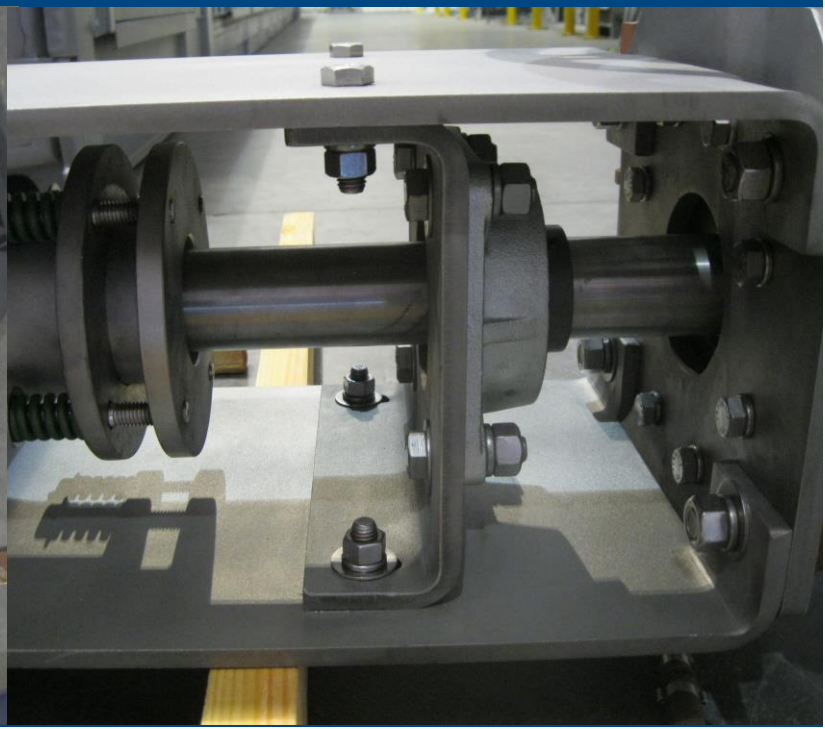


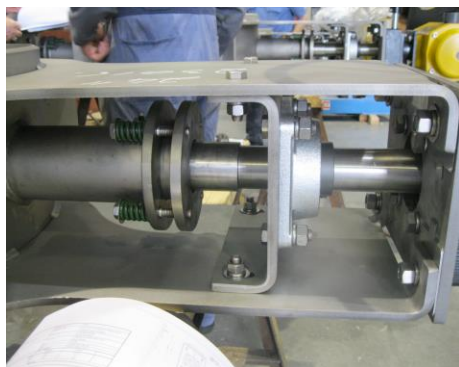
NORAM
SULFURIC ACID
Products and Services

NORAM BUTTERFLY GAS DAMPERS





**Swing-Type Machined Bar Seal
Disk Blade**



**Flange Mounted External
Bearings. Packing Gland
and Lantern Ring Design c/w
Air Purge**

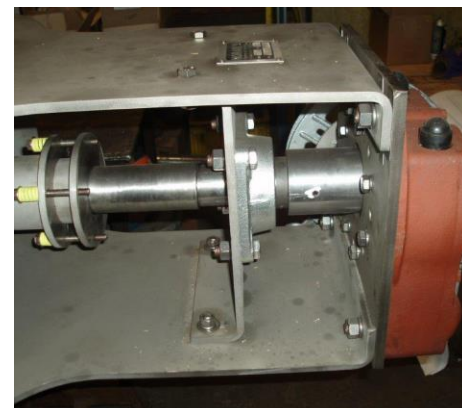


**Quality Manufacturing and
Shop Tested Product**

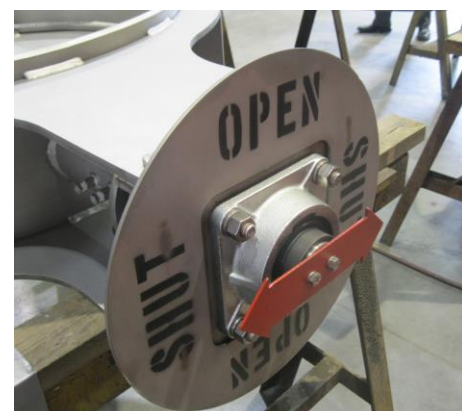
NORAM Butterfly Gas Damper features plain or beveled or flange end connections in carbon steel, stainless steel, Hastalloys, and NORAM SX[®] alloy materials.



Manual Gear Operator



Solid Large Diameter Shaft



External Position Indicator

NORAM offers butterfly dampers for low pressure, high temperature, erosive and corrosive services in new or existing sulfuric acid plants.

Each damper is custom engineered to customer requirements. NORAM offer manual drive operation as well as comprehensive packages for actuation and control.

NORAM ENGINEERING AND CONSTRUCTORS LTD.

Suite #1800 – 200 Granville Street
Vancouver, British Columbia, Canada, V6C1S4
Tel: 604-681-2030 Fax: 604-683-9164

E-mail: acid@noram-eng.com Website: www.noram-eng.com

Ask about the products and services
NORAM supplies to the sulfuric acid industry:

NORAM PLANTS, PROCESSES, SYSTEMS, AND PROCESS EQUIPMENT

NORAM PLANT UPGRADE AND DEBOTTLENECKING ENGINEERING STUDIES
NORAM/CPPE HYBRID SULFURIC ACID PROCESS (HSAP)
NORAM CLEAN START™ PROCESS
NORAM PLANT PREHEATING SYSTEMS
NORAM'S TURBOSCRUBBER FOR GAS SCRUBBING
NORAM STAINLESS STEEL CATALYTIC CONVERTERS
NORAM RF™ RADIAL FLOW GAS-TO-GAS HEAT EXCHANGERS
NORAM SF™ SPLIT FLOW GAS-TO-GAS HEAT EXCHANGERS
NORAM BRICK-LINED ACID TOWERS
NORAM SULFUR & SPENT ACID BURNERS
NORAM CELLCHEM SULFUR BURNERS
NORAM ANODICALLY PROTECTED ACID COOLERS
NORAM SX® ACID COOLERS
NORAM SX® TOWERS AND NORAM SX® PUMP TANKS

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NORAM SMART™ ACID DISTRIBUTORS FOR ACID TOWERS
NORAM TROUGH ACID DISTRIBUTORS FOR ACID TOWERS
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NORAM ENTRAINMENT MITIGATION DEVICE (EMD)
NORAM ACID DILUTION SYSTEMS
NORAM SX® MATERIAL
NORAM SX® ACID DISTRIBUTORS
NORAM SX® PIPING
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