

Sizonke Trading

MECHANICAL PACKING

BROCHURE
2027



PETROCHEMICAL



MINING



PULP & PAPER



SUGAR

IMPROVING
RELIABILITY.



DEVELOPING
CONSISTENCY.



CREATING
PERFECTION.



DELIVERING
QUALITY.



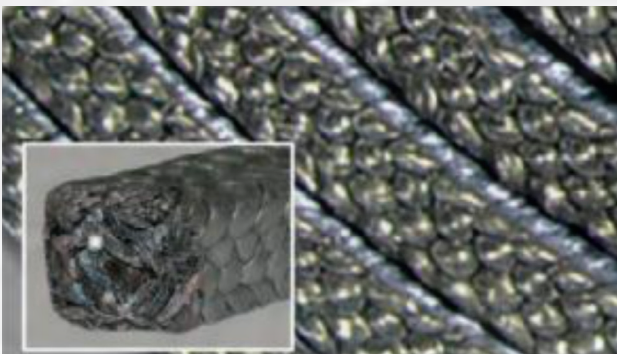
ENGINEERED FOR PERFORMANCE. BUILT FOR INDUSTRY.



AIGI HIGH QUALITY PACKINGS

AIGI 12 (Slurry Packing)

DATA SHEET



AIGI 12 - is manufactured with high quality synthetic fiber yarn, coated with PTFE and graphite lubricant. The gland packing is economical and an effective packing solution for general and light slurry applications. For heavy slurries please see AIGI SSSP

Properties Value

Color	Black/Grey
Temperature	240°C
PH Range	PH 2-12
Max. Liner speed	15 /s (3600 Ft/ min)
Pressure	28 Kg/cm2 (400 PSI / 28 Bar)

Service Media & Conditions

light slurry applications and general applications

Application

Wide range for slurry sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

AIGI 12 comes in all cross-sections (size) and 5 pound and 10 pound boxes



AIGI HIGH QUALITY PACKINGS

AIGI16(Graphite PTFE)

DATA SHEET



Properties Value

Color	Black/White
Temperature	260°C (500 F)
PH Range	PH 0-14
Max. Liner speed	18 m/s (3600 Ft/ min)
Pressure	28Kg/cm2 (400 PSI / 28 Bar)

Service Media & Conditions

Ash Slurry, Mineral Slurry, Bauxite Slurry, Bottom Ash Slurry, Fly Ash, Dirty water and other aggressive slurry applications

Application

Wide range for general sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

AIGI16 comes in all cross-sections (size) and 5 pound and 10 pound boxes



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AIGI HIGH QUALITY PACKINGS

AIGI 22 Power Station Packing

DATA SHEET



Properties Value

Color	Black
Temperature	570°C
PH Range	PH 0-14
Max. Liner speed	15 m/s
Pressure	250Kg/cm2 (3625 PSI)

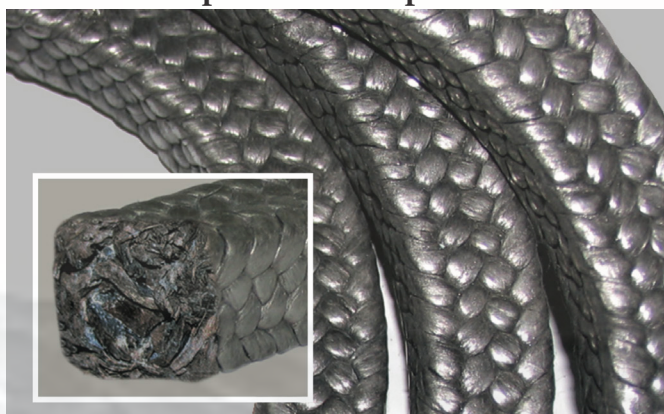
Service Media & Conditions

Pumps and valves against steam, water, solvents, acids and alkalies

Application

Wide range for general sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

AIGI22 comes in all cross-sections (size) and 5 pound and 10 pound boxes



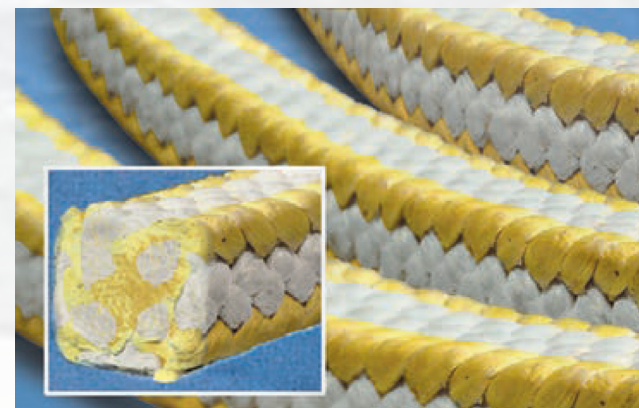
AIGI 22 is made from a high strength, high purity carbon fiber with only minor quantities of braiding sizings added giving the finished packing great temperature and pressure resistance. It is designed for use in high temperature valves and pumps against steam, hot water, solvents, acids and alkalies especially in Power Stations



AIGI HIGH QUALITY PACKINGS

AIGI 23 (PTFE/Aramid Packing)

DATA SHEET



Properties Value

Color	White/Yellow
Temperature	260°C (500 F)
PH Range	PH 2-12
Pressure	28Kg/cm2 (400 PSI / 28 Bar)

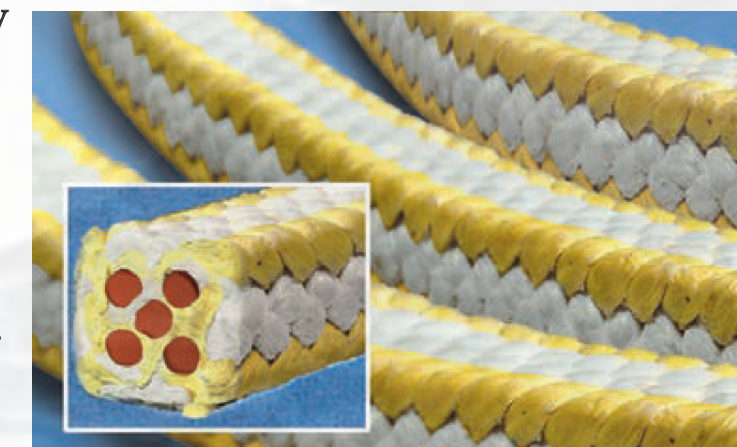
Service Media & Conditions

Sugar Mill Packing

Application

Wide range for general sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

AIGI 23 is a braided PTFE fiber packing with high strength Aramid fiber corners. Because of the Aramid fiber's high strength and PTFE's self-lubrication, AIGI 23 has excellent flexibility and abrasion resistance. With the addition of a post braiding PTFE lubricant, AIGI 23 significantly reduces shaft wear normally associated with Aramid fiber packings. AIGI 23 is designed to be used in aggressive slurry and high abrasive content applications.



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AIGI HIGH QUALITY PACKINGS

AIGI 24 (High Temperature Packing)

DATA SHEET



Properties Value

Color	Black
Temperature	565°C (1050 F)
PH Range	PH 1-13
Max. Liner speed	15 /s (3000 Ft/ min)
Pressure	250 Kg/cm2 (3625 PSI)

Service Media & Conditions

It is specially designed for pumps, agitators, mixers, condensate pumps, boilerfeed and vacuum pumps

Application

Wide range for high temperature sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

AIGI 24 comes in all cross-sections (size) and 5 pound and 10 pound boxes



AIGI 24 is braided from a heat resistant high carbon content fiber and dipped in special lubricants which allow for faster pump start up and better sealability. Specially designed for high temperature and high speed pump applications, unlike traditional Carbon fiber packings AIGI 24 will not burn because of its extreme heat dissipation and low friction properties. It is specially designed for pumps, agitators, mixers, condensate pumps, boilerfeed and vacuum pumps. It is suitable for use in metal industry.



AIGI HIGH QUALITY PACKINGS

AIGI 27W(Synthetic Fiber Packing)

DATA SHEET



Properties Value

Color	White/Black
Temperature	150°C
PH Range	PH 4-12
Max. Liner speed	12m/s
Pressure	80Kg/cm2 (1160 PSI)

Service Media & Conditions

Pumps and valves against steam, water, solvents, acids and alkalies

Application

Wide range for general sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

AIGI27W comes in all cross-sections (size) and 5 pound and 10 pound boxes



AIGI 27W are lubricated Synthetic Fiber Packings for general service pump applications. AIGI 27W is lubricated with special lubricants to produce a clean, white non-staining packing. AIGI 27W are general service pump packings for use in mining, wastewater and sewage plants, municipal water plants, paper mills and marine applications as well as in mild acid and alkali



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AIGI HIGH QUALITY PACKINGS

AIGI 28 Power Station Packing

DATA SHEET



Properties Value

Color	Black
Temperature	1000°C (over 650°C ask for technical advise)
PH Range	PH 0-14
Max. Liner speed	13m/s
Pressure	200Kg/cm2 (3000 PSI)

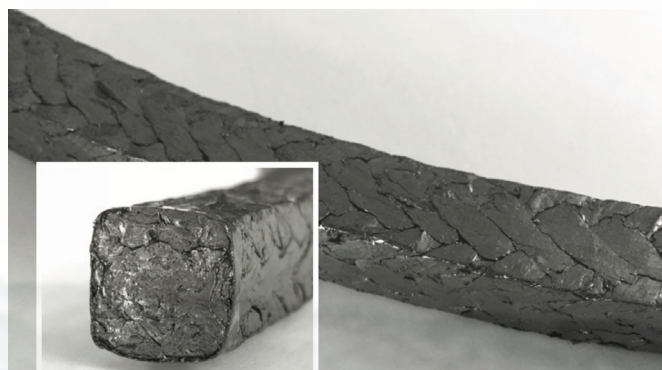
Service Media & Conditions

Pumps and valves against steam, water, solvents, acids and alkalies

Application

Wide range for general sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating

AIGI28 comes in all cross-sections (size) and 5 pound and 10 pound boxes



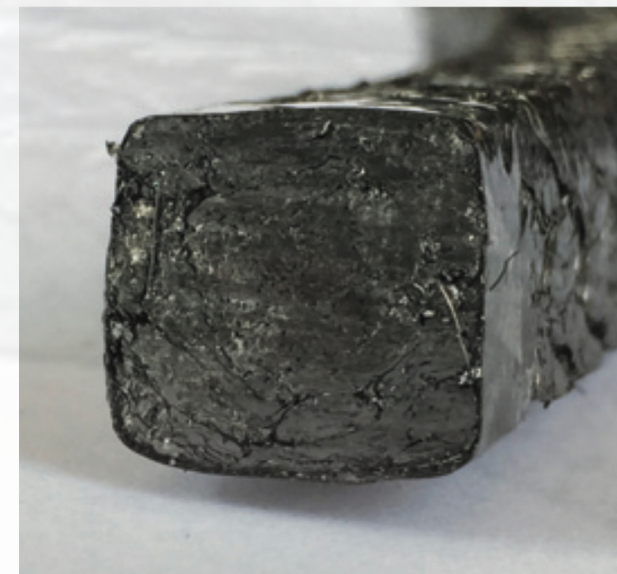
AIGI 28 is an interbraid Packing using high quality carbon fiber reinforced flexible graphite tape. The extreme temperature resistance, self-lubricated capability and high heat dissipation make AIGI 28 an excellent choice for high temperature and high speed equipment. The tremendous seal-ability and strength of the reinforced flexible graphite also make it an excellent choice for valves in power plants.



AIGI HIGH QUALITY PACKINGS

AIGI 29 Power Station Packing

DATA SHEET



Properties Value

Color	Black
Temperature	570°C
PH Range	PH 0-14
Pressure	300Kg/cm2 (4350 PSI)

Service Media & Conditions

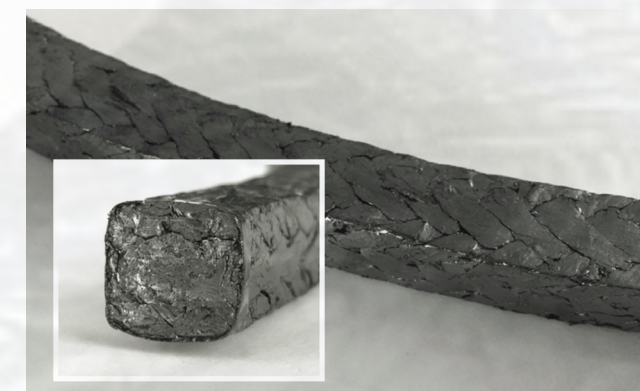
Valves against steam, water, solvents, acids and alkalies

Application

Wide range of Steam Valves

AIGI 29 uses a nickel wire reinforced Flexible Graphite yarn embedded in a nickel wire knit jacket which is inter-baided and then coated with special blocking agents for enhanced sealability. The extreme temperature resistance of the flexible graphite combined with the outstanding extrusion resistance of the nickel wire makes AIGI 29 an obvious choice for high temperature/high pressure steam valve applications. The chemical resistance of Flexible Graphite makes AIGI 29 also a good choice for valves in Power Stations and petrochemical plants.

AIGI22 comes in all cross-sections (size) and 5 pound and 10 pound boxes



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AIGI HIGH QUALITY PACKINGS

AIGI 30 FDA Packing

DATA SHEET



Properties Value

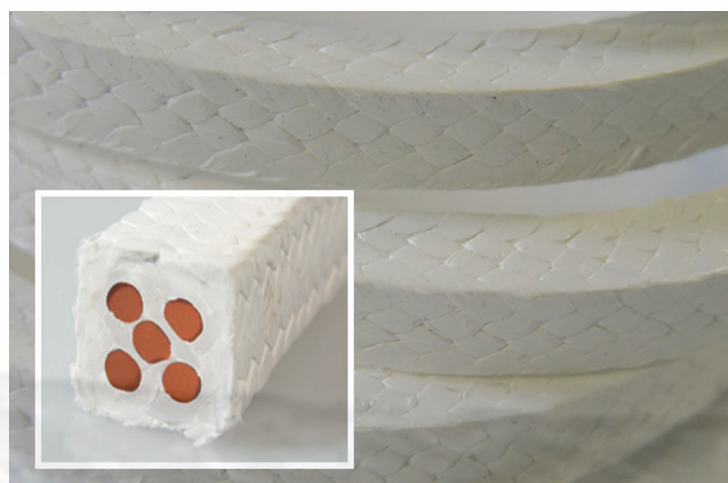
Color	White
Temperature	260°C
PH Range	PH 0-14
Max. Liner speed	18 m/s (3600 Ft/ min)
Pressure	28Kg/cm2

Service Media & Conditions

All Food applications

AIGI 30 FDA Packing is braided from FDA compliant PTFE filament yarn which has been lubricated with a Food Grade lubricant to provide outstanding sealing capability in a wide range of food industry applications. Its dense interbraid construction prevents wicking through the packing while providing resiliency and responsiveness to gland adjustments. It is applicable for use in pumps, agitators, mixers, rotary valves and other rotary and reciprocating equipment

AIGI30 comes in all cross-sections (size) and 5 pound and 10 pound boxes



AIGI HIGH QUALITY PACKINGS

AIGI 97W (Synthetic Multi-Service Packing)

DATA SHEET



Properties Value

Color	White
Temperature	230°C
PH Range	PH 4-14
Max. Liner speed	10m/s
Pressure	18Kg/cm2 (1160 PSI)

Service Media & Conditions

High reliability pump packing for general service use in agitators, mixers, water pumps, etc.

Application

Wide range for general sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

AIGI97W comes in all cross-sections (size) and 5 pound and 10 pound boxes



AIGI 97W is an interbraid packing combines a newly developed synthetic composite yarn with a specially formulated break-in lubricant. Purified colloidal lubricant and high tensile strength of AIGI 97W prevent failure at start-up and maintain continuous lubrication throughout the break-in process.



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AIGI HIGH QUALITY PACKINGS

Super Severe Slurry Packing

DATA SHEET



Properties Value

Color	Black/Grey
Temperature	260°C (500 F)
PH Range	PH 0-13
Max. Liner speed	18 m/s (3600 Ft/ min)
Pressure	28 Kg/cm2 (400 PSI / 28 Bar)

Service Media & Conditions

Ash Slurry, Mineral Slurry, Bauxite Slurry, Bottom Ash Slurry, Fly Ash, Dirty water and other aggressive slurry applications

Application

Wide range for slurry sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

SSSP comes in all cross-sections (size) and 5 pound and 10 pound boxes



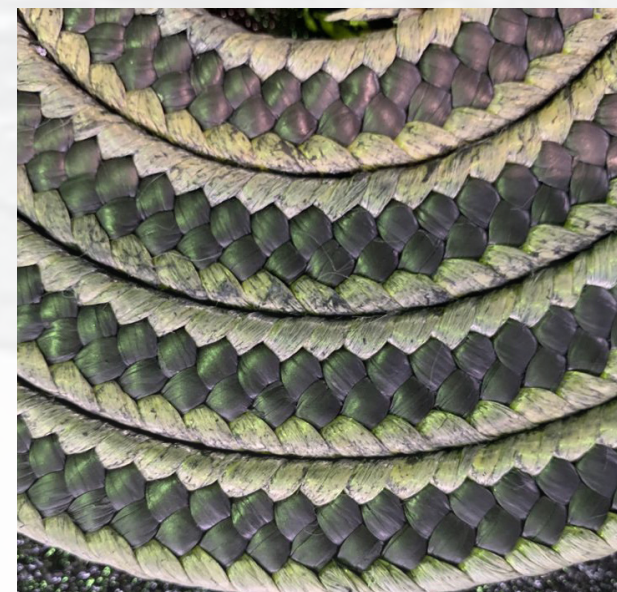
SSSP is braided using a mix of high carbon content carbon fibers and PTFE yarn and then finish lubricated with high quality graphite. The high temperature resistance strength, self-lubricating properties of high carbon fiber combined with the flexibility, chemical resistance and stuffing box conformability of PTFE fibers makes SSSP the optimal choice for slurry applications in industries such as mining, pulp and paper, metals processing and **Power Stations**



AIGI HIGH QUALITY PACKINGS

Super Severe Slurry Packing

93K DATA SHEET



Properties Value

Color	Black/Yellow
Temperature	260°C
PH Range	PH 3-13
Max. Liner speed	12 m/s (3600 Ft/ min)
Pressure	25Kg/cm2

Service Media & Conditions

Ash Slurry, Mineral Slurry, Bauxite Slurry, Bottom Ash Slurry, Fly Ash, Dirty water and other aggressive slurry applications

Application

Wide range for slurry sealing applications: Pumps, mixers, refiners, Valves, Agitators and other rotating equipment.

SSSP93K comes in all cross-sections (size) and 5 pound and 10 pound boxes



SSSP93K Multi-Service packing is a combination of heat dissipating PTFE/ Graphite yarn and high strength lubricated Aramid yarn. The PTFE/ Graphite yarn provides excellent conformability to the shaft and stuffing box bore which results in excellent leakage performance and sealability while the Aramid reinforced corners provide resistance to extrusion. The combination of the two unique yarns makes SSSP93K an optimal choice for the most aggressive abrasion and slurry applications in mining, power plants, waste water, steel and other metals processing industries



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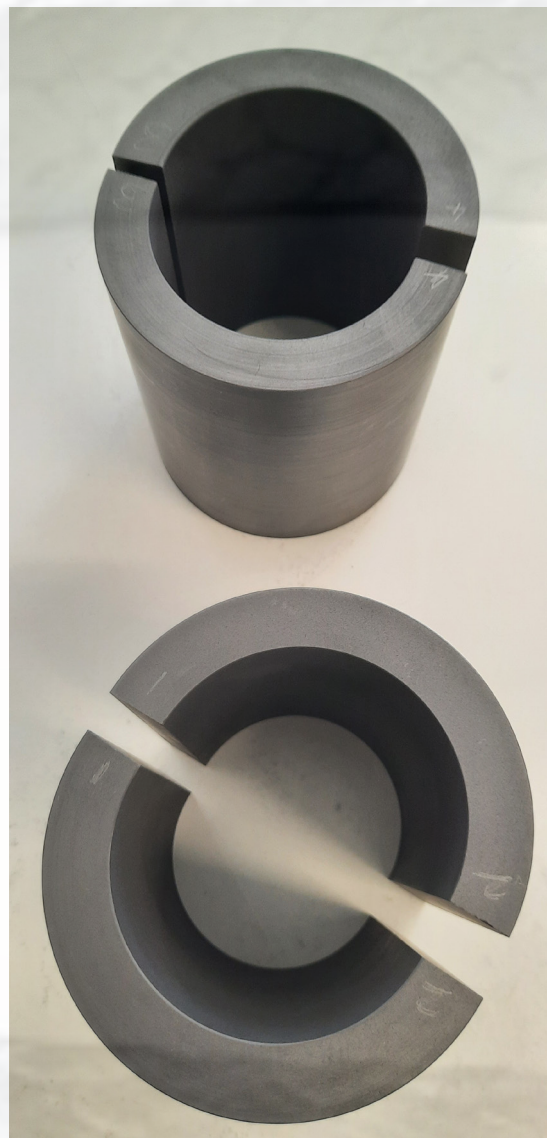
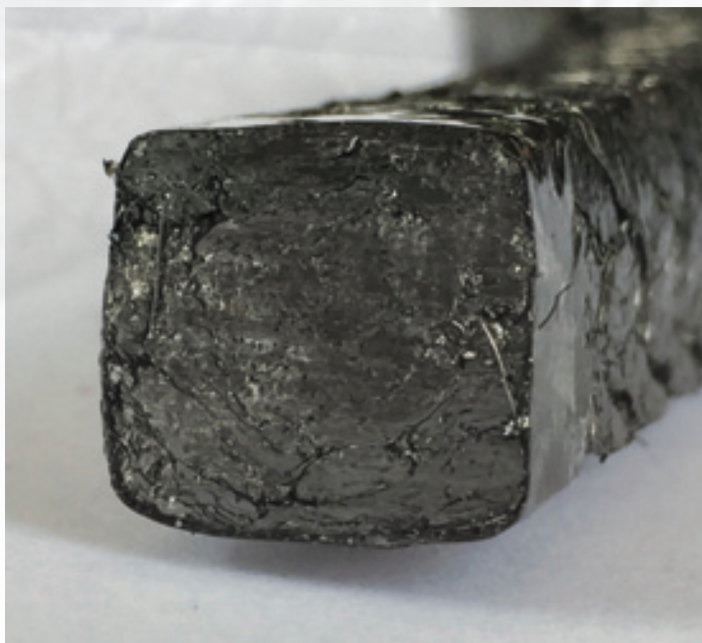
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AIGI HIGH QUALITY PACKINGS

AIGI SootBlower System Kits

AIGI29 - High Grade Carbon Bushing - Disc Springs



AIGI HIGH QUALITY PACKINGS

PU/16K-PTFE (Leak-Less solution)

DATA SHEET

Properties Value

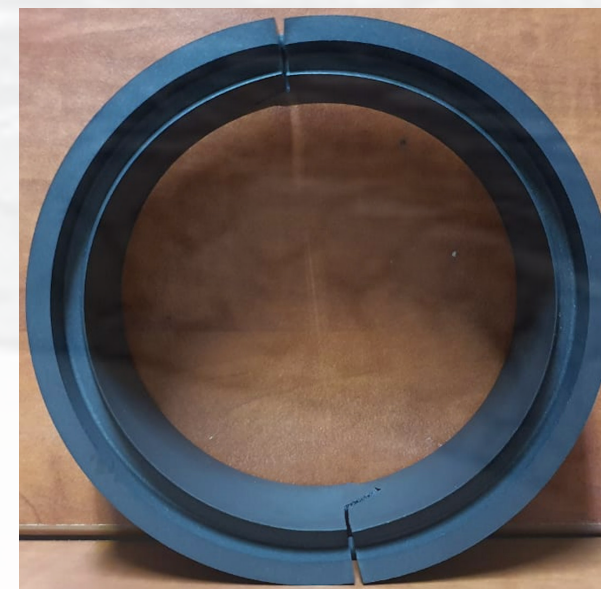
Color	Black
Temperature	300°C
PH Range	PH 0-14
Max. Liner speed	20 m/s

Service Media & Conditions

Sugar - magma, molassas, water and low steam
Available in FDA material

Application

Sugar - SEED Recievers, Strike Recievers, Air Hoppers



Easy dis-assembly and assembly
Energy-saving and cost-reducing
Ash facility Packing special
Excellent temperature and
chemical resistance



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To Order Please Specify the Following

Packing Style		Major Fiber Material	Recommended Cuts	Tested Cuts
AIGI 21	Carbon Fiber Packing	Carbon Fiber	450	> 900
AIGI 22	High Temperature Pump/Valve Packing	Carbon Fiber & Graphite Fiber	450	> 900
AIGI 23	Special Abrasion Resistant Packing	PTFE Filament & Aramid Fiber	400	> 800
AIGI 24	High Temperature Pump Packing	Carbon Fiber	450	> 900
AIGI 25	Special Aramid Packing	Aramid Fiber	350	> 700
AIGI 26	General Service Pump Packing	PTFE Fiber & Graphite	600	> 1,200
AIGI 26W	General Service PTFE Valve Packing	PTFE Fiber (White)	600	> 1,200
AIGI 27/27W	General Service Pump Packing	Ramie Fiber	500	> 1,000
AIGI 28NEW	Universal Pump/Valve Packing	Graphite Fiber	500	> 1,000
AIGI 29	High Temperature/High Pressure Valve Packing	Graphite Fiber	*	*
AIGI 95	High Efficiency Pump/Valve Packing	Phenolic Fiber	350	> 700
AIGI 98	High Temperature/High Speed Pump and Valve Packing	Graphite Fiber	500	> 1,000
AIGI 99	Super High Temperature/High Pressure Valve Packing	Graphite Fiber	*	*
AIGI 93SSSP	Super Slurry Sealing Packing	Carbon Fiber & PTFE	350	> 700

* Wire may shorten knife useful life

Packing Size

mm	6	8	10	12	14	16	19	20	22
inch	1/4	5/16	3/8	1/2	9/16	5/8	3/4	13/16	7/8

Package Details

2.5KG per Castle, 5Lbs per Castle



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AIGI ENVIRONMENTAL INC. inspected this product under experimental conditions. Users shall judge independently whether to use this product, and shall ensure correct storage, installation and application of this product. As such, our company assumes no responsibility with regard to any situation arising from inappropriate storage, installation and application. All products of our company were strictly examined under the relevant national or business standards. Users shall complete checking this product within 30 working days upon receipt of the same. If users discover any problem related to the quality of this product, they shall raise their concerns within the above-mentioned period. If users fail to raise their concerns upon expiration of the above-mentioned period, this shall be treated as full acceptance of the product. Our company guarantees the provision of products of premium quality. Should any dispute arise with regard to the quality of the products, the verification of a third-party authority shall then be required. If any defect in quality is spotted out during inspection upon delivery, our company undertakes to provide a new product of equivalent value. Our company reserves the right to change the manufacturing processes, the materials and sources of the materials without further notification. In addition, our company assumes no responsibility or liability for any unintentional typographical error or omission during printing, or any non-timely update of information. Thank you for your consideration.

J102-2024E2V1.0E



Another **Patented** Product from **AIGI ENVIRONMENTAL INC.**



Castle® **PACKING**
S Y S T E M



BonePac™



Packing with "Spine"

- ★ Cross-spine enhances strength, preventing extrusion
- ★ Four-side elastomers enhance elasticity, preventing deformation
- ★ Reduces leakage under bad equipment conditions
- ★ Multiple fiber options for diverse media
- ★ with *Castle®* patented boxes: Carry, Measure & Safe Cut all-in-1

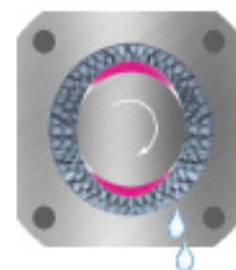


BonePac™ Packing with "Spine"

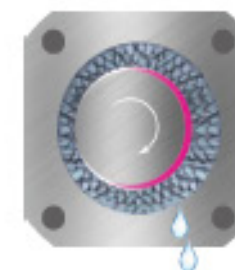


Causes of Conventional Packings Failure

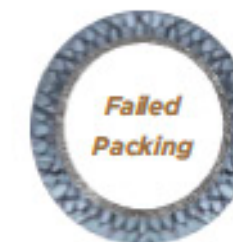
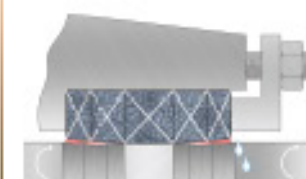
× Shaft Runout



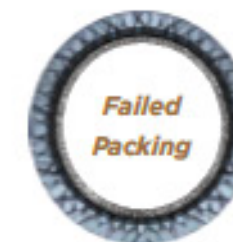
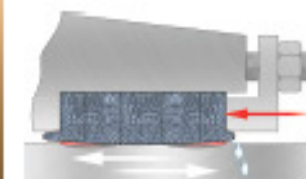
× Shaft Eccentricity



× Shaft Axial Movement



× Extrusion

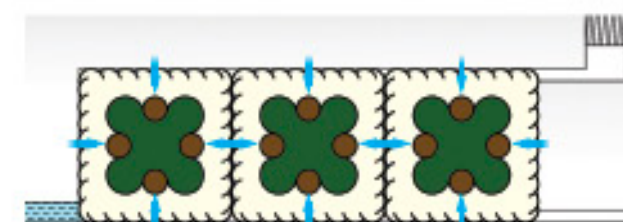


How BonePac™ Works:



Anti-extrusion

Spine mechanism



Anti-deformation

Rebound mechanism

Solution Comparison

Item	Elasticity	Strength	Radial Runout	Axial movement	Eccentricity	Extrusion
Silicone Core Packing	✓	-	✓	-	-	-
BonePac™	✓	✓	✓	✓	✓	✓



Improving Reliability.
Developing Consistency.
Creating Perfection.
Delivering Quality.



AIGI HIGH QUALITY
PACKINGS