

ANEXO 8

ORDEN DE COMPRA Y COTIZACIONES

COTIZACIONES DE EQUIPOS

Cliente		Oferta
Empresa	Promasa	649521ARM
Atn. Sr(a)	Gabriel Pincheira	Fecha
e-mail	gpincheira@promasa.cl	9/8/21
Ciudad	Los Angeles	
Referencia		

Estimados Señores, agradecemos su consulta y a continuación enviamos nuestra oferta por lo siguiente:

Item	Cant.	Descripción	Precio unitario
1	2	Grupo motobomba multietapas marca FLOWSERVE SIHI modelo HEGA 3203/0 BB BK3 OB PO acoplada a motor eléctrico SIHI CHILE, IE3 3/400/50Hz, 11 Kw, 2900 rpm IP55 y montada sobre base metálica	US 5.066
Condiciones de Operación		Equipo Seleccionado	Motor Eléctrico
Fluido	Agua	Diam. Imp.	mm
Temperatura	40 °C	Eficiencia	%
Densidad	1 Kg/dm ³	Potencia Abs	7.88 kW.
Viscosidad	1 mm ² /s	Potencia Ins	11 kW.
Caudal	19 m ³ /h	DNs/DNd	65/32 mm
Presión	90 M	Acoplamiento	Flender 95
Tam. sólidos		Materiales bomba	
NPSH disp.		Carcasa	Fundición GG 20
NPSH req.		Impulsor	Fundición GG 20
Instalación		Eje	Acero
Otras Condiciones Especiales		Camisa Eje	
		Anillo desgaste	
		Sello del eje	Sello mecánico
		Mat. sello	

Condiciones Comerciales	
Moneda Ofertada	Dolares americanos mas IVA
Plazo de entrega	2 a 3 semanas aprox
Lugar de entrega	Bodegas SIHI Santiago. Flete con cargo al cliente
Validez de la Oferta	10 días

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Condiciones Generales de Venta SIHI CHILE S.A.

- 1.- La Aceptación de la Orden de Compra (en adelante OC) esta está sujeta a la revisión y aprobación por parte de SIHI CHILE S.A. (en adelante SIHI), quienes verificarán que el cliente esté solicitando lo que efectivamente se ha ofrecido y que los Equipos, Repuestos o Accesorios cumplen y satisfacen plenamente las condiciones de operación requeridas.
- 2.- Los precios indicados son NETOS, SIN IVA y tendrán una vigencia de 30 días desde la fecha de envío de la oferta, salvo que se haya acordado algo distinto en la etapa de negociación, lo cual será explicitado en el formato de cotización de SIHI. Los valores son expresados en Moneda Extranjera o Nacional. Las OC emitidas en moneda extranjera, se facturarán en Moneda Nacional, tomando el valor del Tipo de Cambio publicado por el Diario oficial al momento de emitir la Guía de Despacho. Se incluyen los costos de embalaje apropiado para las condiciones y medio de transporte requerido.
- 3.- El Plazo de Entrega ofrecido para productos de stock, está sujeto a la disponibilidad de inventario en el momento de la recepción de la OC. En caso de que el producto no esté disponible en el momento de la recepción de la OC, se informará al cliente dicha situación indicando la fecha probable de reposición de stock, eximiendo de responsabilidad y pago de cualquier tipo de multa a SIHI por este concepto. Para el caso de Bienes Importados a Pedido, los plazos de entrega informados son aproximados y no constituyen fecha a firme. Salvo se haya suscrito y firmado un Contrato especial, SIHI se exime de pagar multas por cualquier atraso que se produzca en el proceso de importación, cuyas causas son diversas y que se enumeran como sigue: fuerza mayor, caso fortuito, disturbios civiles, incendios, siniestros, paros o huelgas, daños en el transporte, atrasos en fábrica originados por causa imputable a los proveedores, materias primas que no aprueban controles de calidad, retrasos en transporte, pérdidas de mercadería durante el transporte y cualquier otro motivo que esté fuera del alcance de acción de SIHI.
- 4.- SIHI se reserva el derecho de realizar embarques parciales de sus Pedidos.
- 5.- Los bienes se consideran puestos sobre camión en bodega SIHI Santiago ubicadas en Avda. Colorado 861, comuna de Quilicura o Bodega de Transporte autorizado y designado por el cliente, siempre y cuando estas bodegas no se encuentren más allá de 10 Km. de las instalaciones centrales de SIHI. Si el despacho de la OC se atrasa por responsabilidad del Transportista asignado por el cliente, la mercadería se almacenará sin cobro alguno por un periodo máximo de 5 días hábiles. En el caso de que este plazo sea mayor al indicado, SIHI se reserva el derecho de aplicar un cargo por concepto de bodegaje, cuyo valor será evaluado y comunicado al cliente, dependiendo de las dimensiones y peso del bulto.
- 6.- Se considera que la mercadería ha sido aceptada por el cliente cuando éste (incluido el Transportista a cargo del flete) recepciona sin reparos la Guía de Despacho de SIHI. Reclamos por suministros incompletos en el despacho, deben ser efectuados por escrito dentro de un plazo máximo de 5 días de entregada la mercadería. Se pone especial atención de que el cliente debe demostrar con registro fotográfico u otro medio visual, que los embalajes no fueron intervenidos de manera incorrecta por terceros.
- 7.- La factura será enviada a su casilla oficial de intercambio definida para ello ante el SII.
Si el DTE no es reclamado por el receptor dentro del plazo de 8 días contado desde su recepción y de acuerdo a lo señalado por la Ley 19.983, desde ese momento se entiende que ha sido irrevocablemente aceptado y se presume que las mercaderías han sido entregadas o los servicios han sido prestados.
- 8.- La condición normal de pago de SIHI es 30 días contados desde la fecha de facturación, salvo acuerdo diferente previamente pactado entre SIHI y el cliente. La aprobación de este crédito, está sujeto a la verificación de antecedentes comerciales del cliente y de que no existan deudas pendientes. En caso de que los boletines comerciales sean negativos, se exigirá pago 100% adelantado de la mercadería. Pagos más allá de 30 días sin previo acuerdo, serán sancionados con una multa por mora de 0.5% semanal del valor de la factura. SIHI se reserva el derecho de tomar todas las acciones legales disponibles y necesarias con el fin de obtener el pago correspondiente. Mientras esta situación no se regularice, se suspenderá todo despacho de mercadería pendiente de entrega.
- 9.- La cancelación de las Facturas debe ser depositada mediante documentos Bancarios (cheques, transferencias, vales vista) en moneda Nacional (CLP) a nombre de " SIHI CHILE S.A. ", RUT 79.790.600-K en nuestras cuentas corrientes del Banco Chile cuenta 155-35908-08 y Banco Santander cuenta 00-24495-3. Los clientes no están autorizados para deducir pagos en forma unilateral de los valores facturados.
- 10.- SIHI garantiza que todos los equipos vendidos son nuevos, sin uso y que tienen una garantía de funcionamiento de 12 meses, contados desde la fecha de despacho y cubre toda falla por defecto de materiales y/o fabricación, quedando exentas de garantía todo elemento de desgaste normal como sellos mecánicos u otros elementos de uso y desgaste normal. La intervención de los equipos sin autorización por escrito por parte de SIHI implica la pérdida inmediata de esta Garantía.
- 11.- Todo cambio o devolución de mercaderías deberá ser autorizada por el Representante Comercial de SIHI previa Revisión Técnica. La única causa válida para aceptar una devolución es el NO cumplimiento de las Especificaciones Técnicas del Equipo ofrecido.
- 12.- Todo servicio de asesoría de instalación, comisionamiento o puesta en marcha de cualquier equipo comercializado por SIHI, deberá ser solicitado con una antelación mínima de 10 días hábiles.
- 13.- Ambas partes, SIHI y el cliente, renuncian a un eventual fuero y se someten en caso de litigio a la jurisdicción de los juzgados de la ciudad de Santiago, Chile.

Versión 01 - Válido desde el 23 de Mayo de 2017.



Promasa S.A.

Binding Commercial Proposal

Rotary valves

Document No.: 3608552
Revision No.: 1

Ref. No.:
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ENGINEERED SUCCESS

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TABLE OF CONTENTS

1. PRICE SUMMARY	3
2. TECHNICAL DESCRIPTION	4
3. DETAILED MACHINERY DESCRIPTION	5
3.1. ROTARY VALVES	5
3.2. FREIGHT	7
4. COMMERCIAL TERMS	9
5. GENERAL CONDITIONS OF SALE	11
6. SIGNATURE PAGE	15

1. PRICE SUMMARY

Description		Price
Rotary valves	EUR	10,525.00
Freight	EUR	500.00
Total Price	EUR	11,025.00

The scope of supply includes the components and/or services and/or engineering explicitly mentioned in the technical part of this document. No other deliveries, whether parts, equipment, material, engineering or other services, are included in the scope.

Supervision or commissioning conducted by an ANDRITZ Engineer.

Price per day: 1.350,00 EUR

Return flight tickets not included.

Board, lodging & local transport not included.

A working day consist of 10 working hours. Traveling time is also to be considered as working time.

Supervision or commissioning conducted by an ANDRITZ Engineer.

Price per week: 8.100,00 EUR

Return flight tickets not included.

Board, lodging & local transport not included.

A working week is defined as 6 working days of 10 working hours each, 60 working hours in total per week. Traveling time is also to be considered as working time.

All ANDRITZ employees are subject to the ANDRITZ GROUP safety guidelines. If safety is compromised on the worksite, work stops can occur until safety is restored. Any delays due to the above will be invoiced.

Prices for supervision, start-up and any other services are valid from the date of contract effectiveness and for a period of 1 year, afterwards price escalation shall be agreed or failing such agreement upon a 60 day negotiation period during which current prices will be applicable, either party may be entitled to terminate the contract with valid cause.



2. TECHNICAL DESCRIPTION

Power supply:	Main supply voltage:	3x380 VAC, $\pm 3\%$
	Single phase supply:	220 VAC
	Control voltage:	24 VDC
	Frequency:	50Hz, $\pm 0.2\%$
Electrical standard:		EN 60204-1 & EN 61439
Motors:	0.75 – 1000 kW	IE3
	If ATEX requirements is present default energy efficient listing will become invalid.	
	All listed motors are nominal values for proposal purpose. Actual motor sizes might change during the detailed engineering phase.	
Frequency converters:		IP54
Color:	Machines supplied in color:	RAL code: 1013
	Motors supplied in color:	RAL code: 5015
	Corrosion class:	C2
		According to ISO 12944-2
	Galvanized and stainless steel parts are generally not painted.	
Classification:	CE: Marking. A-component, individual ATEX: Unless explicitly mentioned the equipment quoted in the present document is supplied as "non-classified" Seller reserves the right to get all expenses covered in relation to fulfilling the ATEX or other directives in excess of classifications explicitly described in present document.	
Documentation:	All documents are supplied in English and the Documentation package consists of: <ul style="list-style-type: none"> • Operation Manual • Spare part lists • Datasheets on electrical, hydraulic and pneumatic components, valves, safety components, motor/gear and lubrication. • Motor and component list • Drawings Documentation package is sent according to ANDRITZ standard to the customer as a digital version (E-parcel and/or digital media). The Operating Manual and spare part lists are not customer specific.	
	All dimensional diagrams, drawings, brochures and data sheets provided should be considered as preliminary unless written otherwise.	
	Any capacities or parameters specified in this document are for information purposes only unless clearly marked "Performance Guarantee"	



3. DETAILED MACHINERY DESCRIPTION

3.1. ROTARY VALVES

Item	Qty.	Description	Model		Price
Rotary valve type RS10-250/250					
11901	2	Rotary valve type RS10-250/250	RS	EUR	10,525.00
Total Price				EUR	10,525.00



Detailed machinery description:

Item	Qty.	Description
11901	2	Rotary valve type RS 10-250/250
		Including:
		<ul style="list-style-type: none">• Housing in cast iron.• Worm reduction gear with 0,75 kW electric motor.• Welded steel rotor.



3.2. FREIGHT

Item	Qty.	Description	Model		Price
Freight					
90000	1	Freight	FCA	EUR	500.00
Total Price				EUR	500.00



Detailed machinery description:

Item	Qty.	Description
90000	1	Freight FCA Humenne Slovakia, According INCOTERMS 2020.



4. COMMERCIAL TERMS

Price basis:

Currency:	The prices are for sale in EUR.
Adjustments and surcharges:	Seller's prices are based on material costs, freight tariffs, standards, personnel costs, statutory obligations and legal requirements, prices for sub-Sellers, exchange rates affecting sub-Seller prices, etc. ruling as of the date of this commercial document. Any changes in the above mentioned price components will entitle the Seller to adjust the prices accordingly.
Taxes and duties:	Seller's prices do not include value added tax, customs or any other taxes, duties, levies and fees in the country of destination.

Terms of payment:

50 %	of the purchase price to be paid as down payment on formation of the contract/placement of order.
50 %	of the contract price to be paid when the goods are notified as ready for delivery (2 weeks prior to confirmed delivery).

Delay in Payment:	All invoices are payable without deductions. In case of delays in effecting payments, the Seller shall be entitled to suspend its works, to extend the time schedule and to charge its additional costs (including overheads and profit) arising out of such suspension. Furthermore, interest, calculated on the basis of 3-months EURIBOR + 800 basis points p.a., will be charged. The Seller shall be entitled to terminate any contract if a delay in effecting payments exceeds 60 days.
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Delivery terms:

Terms of delivery:	FCA ANDRITZ FEED AND BIOFUEL Humenne Slovakia, according to Incoterms® 2020.
Transfer of risk:	The passing of risk from the Seller to the Buyer shall take place in accordance with the agreed Incoterms® 2020.
Delivery time:	The scheduled delivery period shall be 14 FCA weeks and shall start after the conditions as set out in the clause "Pre-conditions" have been fulfilled.
Suspension:	In case the Buyer is in delay of any of its obligations arising out of or in connection with the final contract, the Seller shall be entitled to suspend its works, to extend the time schedule and to charge its additional costs (including overheads and profit) arising out of such suspension.
Warehouse storage:	Should warehouse storage become necessary for reasons not attributable to the Seller or be desired by the Buyer, such storage shall be at the Buyer's cost. Furthermore passing of risk takes



place at the time the scope of supply is ready for dispatch respectively storage. The Buyer shall conclude storage insurance for the stored equipment. Any accidental damage to the scope of supply arising after the passing of risk shall be the Buyer's responsibility. Should the equipment in above mentioned cases not yet be fully paid at the time of its readiness for storage, the outstanding payment amount shall be due immediately and the Buyer shall be obliged to immediate payment. Should the unpredicted storage last for more than 6 months, the Buyer shall be obliged to accept the stored equipment.

Origin of the goods:

Upon request ANDRITZ will inform you about the country where the equipment and/or spare parts in this document are manufactured or sourced by ANDRITZ. ANDRITZ will provide an itemized declaration of the country of origin under request at delivery for export/import purpose.

Pre-conditions:

The Seller shall commence its work and services and thus the contract will be effective and the delivery time will commence when all of the following conditions have been fulfilled:

- Receipt of Purchase Order or signed copy of this document based on present conditions.
- Clarification of all technical details.
- Receipt of the down-payment.
- Achievement of all necessary approvals by authorities and institutions, including but not limited to any Export Credit Agency approval or confirmation of credit risk insurance.
- Buyer and Seller have reached a mutual agreement on all terms and conditions.
- Where applicable, if the product is to be exported outside the US, an End User Statement is required to be filled out and signed by the purchasing entity.

Validity of the proposal:

This proposal is valid for 1 month from the date of issue.

The delivery dates and price in this proposal have been calculated based on sourcing and manufacturing certain components in countries impacted by restrictions resulting from the COVID-19 break-out and are based on assumptions drawn from the information currently available about the impact of the coronavirus and the expected timing for and costs associated with resuming normal sourcing, manufacturing, personnel travel and transportation. The quoted delivery dates and price shall remain firm for a period of thirty (30) days, except and expressly subject to the following. In the event that further developments related to the outbreak and spread of the coronavirus, including but not limited to travel advisories, steps taken to protect the health and safety of employees, Government orders, and temporary facility shutdowns, increase the time for delivery or the price of the quoted equipment or services, ANDRITZ reserves its right and shall be entitled to adjust its quoted delivery dates and/or price in order to reflect these impacts. Nothing in this quotation, or in any contractual documentation based upon this quotation shall be construed as a waiver of this right.



5. GENERAL CONDITIONS OF SALE

1 TERMS APPLICABLE

The Terms and Conditions of Sale listed below are the exclusive terms and conditions applicable to quotations made and order confirmations issued by the ANDRITZ entity supplying the same ("Seller") for the sales of products, equipment and associated parts and/or services relating thereto ("Products"). Any of Buyer's terms and conditions that are in addition to or different from those contained herein, which are not separately agreed to by Seller in writing, are hereby objected to and shall be of no effect. The term "Agreement" as used herein means collectively (a) the Seller's quotation, (b) the Buyer's purchase order expressly accepted by the Seller and (c) the Seller's order confirmation, together with any attachment hereto, any documents expressly incorporated by reference, (d) and these General Terms and Conditions of Sale.

2 DELIVERY OR PERFORMANCE

Delivery or performance dates are good faith estimates and do not mean that "time is of the essence" Buyer's failure to promptly make advance or interim payments, supply technical information, drawings and approvals will result in a commensurate delay in delivery or performance. Upon and after delivery, risk of loss or damage to the Products shall be Buyer's. Delivery of the Products hereunder will be made on the terms agreed to by the parties as set forth in the Agreement, according to INCOTERMS 2020.

3 WARRANTY

- (1) Product Warranty: Seller warrants to Buyer that the Products manufactured by it will be delivered free from defects in material and workmanship. This warranty shall commence upon delivery of the Products and shall expire on the earlier to occur of 12 months from initial operation of the Products and 18 months from delivery thereof (the "Warranty Period"). If during the Warranty Period Buyer discovers a defect in material or workmanship of a Product and gives Seller written notice thereof within 10 days of such discovery, Seller will, at its option, either (a) deliver to Buyer, on the same terms as the original delivery was made, according to INCOTERMS 2020, a replacement part or (b) repair the defect in place. Any repair or replacement part furnished pursuant to this warranty are warranted against defects in material and workmanship for one period of 12 months from completion of such repair or replacement, with no further extension. Seller will have no warranty obligations for the Products under this paragraph 3(1): (i) if the Products have not been operated and maintained in accordance with generally approved industry practice and with Seller's specific written instructions; (ii) if the Products are used in connection with any mixture or substance or operating condition other than that for which they were designed; (iii) if Buyer fails to give Seller such written 10 day notice; (iv) if the Products are repaired by someone other than Seller or have been intentionally or accidentally damaged; (v) for corrosion, erosion, ordinary wear and tear or in respect of any parts which by their nature are exposed to severe wear and tear or are considered expendable; or (vi) for expenses incurred for work in connection with the removal of the defective articles and reinstallation following repair or replacement.
- (2) Seller further warrants to Buyer that at delivery, the Products manufactured by it will be free of any liens or encumbrances. If there are any such liens or encumbrances, Seller will cause them to be discharged promptly after notification from Buyer of their existence.
- (3) THE EXPRESS WARRANTIES SELLER MAKES IN THIS PARAGRAPH 3 ARE THE ONLY WARRANTIES IT WILL MAKE. THERE ARE NO OTHER WARRANTIES, WHETHER STATUTORY, ORAL, EXPRESS OR IMPLIED. IN PARTICULAR, THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- (4) The remedies provided in paragraphs 3 are Buyer's exclusive remedy for breach of warranty.
- (5) With respect to any Product or part thereof not manufactured by Seller, Seller shall pass on to Buyer only those warranties made to Seller by the manufacturer of such Product or part which are capable of being so passed on.

4 LIMITATION OF LIABILITY

Notwithstanding any other provision in this Agreement, the following limitations of liability shall apply:

- (1) In no event, whether based on contract, tort (including negligence), strict liability or otherwise, shall Seller, its officers, directors, employees, subcontractors, suppliers or affiliated companies be liable to Buyer or any third party (a) for loss of profits or anticipated profits, revenue or business opportunity, loss of production, loss of use, loss of goodwill, loss arising from business interruption, loss of anticipated savings or wasted overheads, loss by reason of shutdown of facilities or inability to operate any facility at full capacity, or cost of obtaining other means for performing the functions performed by the Products, loss of contracts, claims of customers, cost of money or loss of use of capital, increased capital or financing in each case whether or not foreseeable, or for any fines or penalties or damages (liquidated or otherwise) payable under agreements other than this Agreement and (b) for any indirect, special, incidental, punitive, exemplary, aggravated, nominal or consequential damages of any nature.
- (2) The aggregate liability of Seller, its officers, directors, employees, subcontractors, suppliers or affiliated companies, for all claims of any kind for any loss, damage, indemnity or expense resulting from, arising out of or connected with the Products or this Agreement or from the performance or breach thereof, together with the cost of performing make good obligations to pass performance tests, if applicable, shall in no event exceed 50% of the contract price.
- (3) The limitations and exclusions of liability set forth in this paragraph 4 shall take precedence over any other provision of this Agreement and shall apply whether the claim of liability is based on contract, warranty, tort (including negligence), strict liability, indemnity, or otherwise. The remedies provided in this Agreement are Buyer's exclusive remedies.
- (4) All liability of Seller, its officers, directors, employees, subcontractors, suppliers or affiliated companies, resulting from, arising out of or connected with the Products or this Agreement or from the performance or breach thereof shall terminate on the third anniversary of the date of this Agreement.
- (5) In no event shall Seller be liable for any loss or damage whatsoever arising from its failure to discover or repair latent defects or defects inherent in the design of Products (unless such discovery or repair is normally discoverable by tests expressly specified in the scope of work under this Agreement) or caused by the use of Product by the Buyer against the advice of Seller. If Seller furnishes Buyer with advice or assistance concerning any products or systems that is not required pursuant to the Agreement, the furnishing of such advice or assistance shall not be subject to any liability whether in contract, indemnity, warranty, tort (including negligence), strict liability or otherwise.

5 CHANGES, DELETIONS AND EXTRA WORK

- (1) Seller shall not make any changes in the Products unless Buyer and Seller have executed a written Change Order for such change. Any such Change Order shall include an appropriate adjustment to the contract price and delivery terms. If the change impairs Seller's ability to satisfy any of its obligations to Buyer, the Change Order shall include appropriate modifications to this Agreement. If, after the date of this quotation or acknowledgment, new or revised governmental requirements should require a change in the Products, the change shall be subject to this paragraph 5.
- (2) The Seller shall be eligible for extension of time and/or cost compensation for events, such as - site risks, unforeseen conditions, Buyer's default, change in law and regulation, change in facilities, force majeure, or any reasons not attributable to the Seller.



6 TAXES

Seller's prices do not include any sales, use, excise or other taxes. In addition to the price specified herein, the amount of any present or future sales, use, excise or other tax applicable to the sale or use of the Products shall be billed to and paid by Buyer unless Buyer provides to Seller a tax-exemption certificate acceptable to the relevant taxing authorities.

7 RETENTION OF TITLE

The ownership in the Products vests in the Supplier until all payments hereunder have been made in full. Buyer acknowledges that Seller may file a financing statement or comparable document as required by applicable law and may take all other action it deems reasonably necessary to perfect and maintain such retention of title in Seller and to protect Seller's interest in the Products.

8 SET OFF

Neither Buyer nor any of its affiliates shall have any right to set off claims against Seller or any of its affiliates for amounts owed under this Agreement or otherwise.

9 DATA COLLECTION – SOFTWARE

(1) Buyer is aware of the fact that parts of the Product generate machine and/or process data (the "Machine Data") that the Seller may use for the optimization of the performance and further improvement of the Product (the "Purpose"). Machine Data related to the Product shall be kept confidential by the Buyer and may be accessed exclusively by the Seller free of charge without prior notice either by direct duplication from the control systems installed at the plant, by direct access via a computer network or by any other means agreed between the parties. The Seller shall only be entitled to use such Machine Data for the Purpose. Seller shall keep confidential all Machine Data, and shall neither publish nor communicate such Machine Data to third parties in a form that personally identifies the Buyer or its clients. In order to ensure the operation of such tools the Buyer will fulfill the system requirements as requested by the Seller in writing. The undisturbed collection of and access to such proprietary Machine Data is an important pre-requisite for the proper fulfillment of Seller's warranty obligations and Seller's possibility to support Buyer operation remotely.

In the event Seller develops new methods, tools, improvements, etc., based on the Machine Data, Seller shall be the owner of all intellectual property rights and shall have title to any patent, trademark, copyright and other intellectual property rights.

(2) The following Software Terms and Conditions apply to any software furnished by Seller, whether separately packaged or embedded in the Products furnished by Seller hereunder.

(a) Seller hereby grants to Buyer a non-exclusive, non-transferable, fully paid-up license to use any computer software delivered to Buyer under this Agreement in machine-readable, object code form and any modifications made by Seller thereto, ("Software"), but only in connection with the configuration of the Products and operating system for which the Software is ordered and for the end-use purpose stated in the related Seller operating documentation. Buyer agrees that neither it nor any third party shall modify, reverse engineer, decompile, translate, transfer from object code to source code or reproduce the Software, without Seller's prior written consent. Except to the extent that the parties otherwise agree in writing, Buyer's license to use such Software shall terminate upon breach of this license or Agreement by Buyer, including, without limitation, breach of payment or confidentiality obligations.

(b) Buyer may not transfer this software license and warranty to a third party without Seller's previous written consent, signed by a Seller authorized representative.

(c) Seller warrants that on the date of shipment of the Software only to Buyer or Buyer's Seller-authorized transferee hereunder that: (1) the Software media is free from material defects; (2) Seller has the right to grant the license hereunder; and (3) the Software will function substantially in accordance with the related Seller operating documentation. Seller disclaims any warranty that the operation of the Software will be uninterrupted or error free and that the programs selected by the Buyer are compatible. Software products from other manufacturers shall be subject only to the warranty conditions of the manufacturer concerned. Any warranty for malfunctions caused by computer viruses is excluded.

(d) If within 6 months from date of initial installation (but not more than one year from date of shipment by Seller to Buyer) of Software, Buyer discovers that the Software is not as warranted above and promptly notifies Seller in writing, within this period of time, of the nonconformity, the Supplier shall at his discretion either supply a new software or modify the existing software. (e) If any infringement and trade secret claims are made against Buyer based on the Buyer's use of the Software in a manner specified or approved by Seller, Seller shall: (i) defend against any suit or proceeding brought by an unaffiliated third party against Buyer to the extent the suit or proceeding is based on a claim that the Software or that the specified or approved use of the Software infringes a copyright or violates a trade secret agreement in which Seller was a party and provided that Seller is notified promptly in writing and given the necessary authority, information and assistance for the defense and settlement of such suit or proceeding (including the sole authority to select counsel and remove the Software or stop accused infringing usage); (ii) Seller shall satisfy any settlement or final judgment (after any appeals) for damages entered against Buyer in such suit; and (iii) if such settlement prohibits or judgment enjoins Buyer from using the Software, Seller shall at its option: (a) obtain for Buyer the right to continue using such Software; (b) eliminate the infringement by replacing or modifying the Software, or (c) take back such Software and refund to Buyer all payments on the purchase price which Seller has received, in which case neither Buyer nor Seller will have any claim against the other under this Agreement or arising out of the subject matter of this Agreement. However, Seller's obligations with respect to infringement and trade secret claims will not apply to the extent that the claim or adverse final judgment is based on: (1) Buyer's running of the Software after being notified to discontinue running due to such a claim; (2) the combination of the Software with a non-Seller software, product, data or process; (3) damages attributable to the value of the use of a non-Seller software, product, data, or process; (4) Buyer's alteration of the Software; (5) Buyer's distributed the Software to, or its use for the benefit of, any third party; or (6) Buyer's acquiring a trade secret (a) through improper means; (b) under circumstances giving rise to a duty to maintain its secrecy or limit its use; or (c) from a person (other than Seller) who owed to the party asserting the claim a duty to maintain the secrecy or limit the use of the trade secret. Buyer will reimburse Seller for any costs or damages that result from these actions 1 to 6. If Seller receives information about an infringement claim related to the Software, Seller may do any of the following, at its expense and without obligation to do so: (i) procure the right to continue use of the Software, (ii) replace the Software with a functional equivalent and (iii) modify the Software to make it non-infringing (including disabling the challenged functionality and under circumstances (ii) and (iii) Buyer will stop running the allegedly infringing software immediately).

(f) This warranty will apply for the period specified in (d) above, provided that: (1) the Software is not modified, changed, or altered by anyone other than Seller or its suppliers, unless authorized by Seller in writing; (2) the Software was installed on goods supplied or authorized by the Seller and that there is no change by anyone other than Seller to the goods for which the Software is ordered; (3) the goods are in good operating order and are installed in a suitable operating environment; (4) the nonconformity is not caused by Buyer or any of their agents, servants, employees, or contractors, or any third party; (5) Buyer promptly notifies Seller in writing, within the period of time set forth in (d) above, of the nonconformity after it is discovered; and (6) All fees for the Software due to Seller have been paid. SELLER HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH REGARD TO THE SOFTWARE, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING AND USAGE OF TRADE.

(g) Buyer and successors of Buyer are limited to the remedies specified in this paragraph 9 and shall have no others for a nonconformity in the Software. Buyer agrees that these remedies provide Buyer and its successors with a minimum adequate remedy and are their exclusive remedies, whether Buyer's or successors' remedies are based on contract, warranty, tort (including negligence), strict liability, indemnity, or any other legal theory, and whether claims arise out of warranties, representations, instructions, operating documentation, installations, or non-conformities from any cause.

(h) Unless otherwise provided in this Agreement, the fees for this Software license are included in the purchase price of the Products. Any subsequent modifications or enhancements to the Software made by Seller are, at Seller's option, subject to a fee.



10 SITE RISKS

(1) Concealed Conditions. The parties acknowledge and agree that increased costs or schedule extensions due to any concealed conditions at the job site or other events and circumstances coming for the Buyer's sphere of influence including strikes of personnel not in our employ shall be to Buyer's account. Buyer shall hold Seller harmless for increased costs and grant any necessary schedule extensions if any concealed or hazardous conditions are found.

(2) Environmental Remediation. Buyer acknowledges that Seller is not an expert in environmental remediation and shall not be directed by change order or otherwise to perform any environmental remediation as part of the Product supply, including but not limited to asbestos and lead paint removal. If any environmental remediation becomes necessary, Buyer will contract directly with a qualified third party to perform such work.

11 TERMINATION

In general a Party may have the right to terminate its obligations under this Agreement if the other Party is in material breach of the Agreement and a period to cure the breach of at least 30 days has been granted to the breaching Party. In case of such termination by the Buyer, the Seller shall be compensated by the Buyer for the expenses and investments incurred to the date of termination for the performance of Agreement. Seller shall have the right to suspend and/or terminate its obligations under this Agreement if any payment is not received within 30 days of due date. In the event of the bankruptcy or insolvency of Buyer or in the event of any bankruptcy or insolvency proceeding brought by or against Buyer, Seller shall be entitled to terminate any order outstanding at any time during the period allowed for filing claims against the estate and shall receive reimbursement for its cancellation charges.

12 CONFIDENTIALITY AND INTELLECTUAL PROPERTY

(1) Buyer acknowledges that the information which Seller share with the Buyer (whether orally or in written form) in connection with this quotation, acknowledgment or performance of this Agreement includes Seller's confidential and proprietary information, both of a technical and commercial nature. Buyer agrees not to disclose such information to third parties without Seller's prior written consent.

(2) The intellectual property rights, copyrights and other rights connected therewith, in respect of design, manufacture, supply of the Product, drawings, specifications, documents, data and software made available by the Seller to the Buyer shall be owned solely by the Seller and shall remain its property and may be reclaimed by the Seller at any time.

(3) Seller grants to Buyer a non-exclusive, non-transferable, royalty-free, perpetual, paid-up license to use Seller's software, confidential and proprietary information for purposes of this Agreement and the Products that are the subject hereof only. Buyer further agrees that it is not allowed to permit any third party to fabricate the Products or any parts thereof from Seller's drawings or to use the drawings other than in connection with this Agreement. Buyer will defend and indemnify Seller from any claim, suit or liability based on personal injury (including death) or property damage related to any Product or part thereof which is fabricated by a third party without Seller's prior written consent and from and against related costs, charges and expenses (including attorney fees).

13 END USER

If Buyer is not the end user of the Products sold hereunder (the "End User"), then Buyer will use its best efforts to obtain the End User's written consent to be bound to Seller by the provisions hereof. If Buyer does not obtain such End User's consent, Buyer shall defend and indemnify Seller and Seller's agents, employees, subcontractors and suppliers from any action, liability, cost, loss, or expense for which Seller would not have been liable or from which Seller would have been indemnified if Buyer had obtained such End User's consent. If the Buyer of the Products is not the end user, the Buyer is obliged to name (i) the end user, (ii) the Product, (iii) the Product number and (iv) the country where the Products are used.

14 FORCE MAJEURE

(1) Force Majeure defined: For the purpose of this Agreement "Force Majeure" will mean all events, beyond the reasonable control of either party, whether foreseeable or not, which affect the performance of this Agreement, including, without limitation, strikes, lockouts or other industrial disturbances, acts of public enemy, wars, riots, earthquakes, fires, storms, severe weather, floods, inability to obtain labor or materials from usual sources, serious accidents involving the work of suppliers.

(2) Suspension of obligations: If either Buyer or Seller is unable to carry out its obligations under this Agreement due to Force Majeure, other than the obligation to make payments due hereunder, and the party affected promptly notifies the other of such delay, then all obligations that are affected by Force Majeure will be suspended or reduced for the period of Force Majeure and for such additional time as is required to resume the performance of its obligations, and the delivery schedule will be adjusted to account for the delay.

(3) Option to terminate: If the period of suspension or reduction of operations will extend for more than four (4) consecutive months, then either Buyer or Seller may terminate this Agreement.

15 GENERAL

(1) If the Buyer decides, whatever the reason, not to take possession of the Product according to the agreed Incoterm at the agreed delivery date, (a) the risk of loss shall pass to the Buyer, (b) the acceptance shall be deemed as achieved, (c) the Seller shall be allowed to invoice any storage costs on the basis of documentary evidence and (d) the mechanical warranty period shall start at the agreed delivery date.

If the storage period exceeds thirty (30) days (a) the Seller shall be entitled to invoice the total amount of the Agreement and (b) the Seller shall be compensated for all costs incurred and duly proved.

(2) If the delivery date mentioned in the order confirmation has been expressly defined as a Seller's obligation to comply with, the following shall apply: (i) Seller's liability for late delivery for reasons attributable only to Seller is limited to the payment of liquidated damages on the basis of 0.5% of the delayed delivery per completed week of delay, limited to 5% of the contract price as Buyer's sole and exclusive remedy.

(3) If performance guarantees are expressly agreed between the parties, the following shall apply: (ii) Seller's liability for failure to achieve performance guarantees expressly agreed is limited to the payment of liquidated damages in accordance with the Seller's acceptance and test protocol. Such liquidated damages shall be limited to 5% of the contract price as Buyer's sole remedy.

(4) The aggregate liability for all liquidated damages (for delay and performance) shall be limited to an amount not exceeding 10% of the contract price.

(5) The Buyer shall notify any claim for damages within ten (10) days from the occurrence date of the event generating the claim. If the Buyer fails to issue a claim for damages within such period of ten (10) days, the Buyer shall not be entitled to obtain any compensation.

(6) Seller represents that any Products or parts thereof manufactured by Seller will be produced in compliance with all applicable federal, state and local laws applicable to their manufacture and in accordance with Seller's engineering standards. Seller shall not be liable for failure of the Products to comply with any other specifications, standards, laws or regulations.

(7) This Agreement shall inure only to the benefit of Buyer and Seller and their respective successors and assigns. Any assignment of this Agreement or any of the rights or obligations hereunder, by either party without the written consent of the other party shall be void.

(8) This Agreement contains the entire and only agreement between the parties with respect to the subject matter hereof and supersedes all prior oral and written understandings between Buyer and Seller concerning the Products and any prior course of dealings or usage of the trade not expressly incorporated herein.

(9) This Agreement may be modified, supplemented or amended only by a writing signed by an authorized representative of Seller. Seller's waiver of any breach by Buyer of any terms of this Agreement must also be in writing and any waiver by Seller or failure by Seller to enforce any of the terms and conditions of this Agreement at any time, shall not affect, limit or waive Seller's right thereafter to enforce and compel strict compliance with every term and condition thereof.

(10) This Agreement is governed by Swiss Law under exclusion of its conflict of law rules and the Vienna Convention for the International Sale of Goods. Only in case the parties are located in the same country, the national law of that country shall apply.



(11) Any dispute, controversy or claim arising out of, or in relation to, this Agreement, including the validity, invalidity, breach, or termination thereof, shall be settled by the competent national court provided that both parties are located in the same country. In all other cases such disputes, controversies or claims arising out of or in relation to this Agreement shall be settled by arbitration in accordance with the Swiss Rules of International Arbitration of the Swiss Chambers' Arbitration Institution in force on the date on which the Notice of Arbitration is submitted. (i) The number of arbitrators shall be one or three; (ii) The seat of the arbitration shall be Zurich, (Switzerland); (iii) The arbitral proceedings shall be conducted in English; (iv) the arbitration award shall be final and binding by the Parties.



6. SIGNATURE PAGE

Document No.: 3608552

Revision No.: 1

Date of issue: 22-Jul-2021

When signed by Seller and Buyer, the parties have agreed to the terms and conditions of this Binding Commercial Proposal for the delivery of the ordered scope. The parties hereby waive the use of any other terms and conditions, unless agreed in writing.

Signed on behalf of Seller (ANDRITZ Feed and Biofuel)

Signed on behalf of Buyer (Promasa S.A.)

At _____ on ____/____/____

At _____ on ____/____/____

Signature of:

Signature of:

Title

Title





GLOBAL SUPPLIER – LOCAL PRESENCE

With sales, service, engineering, manufacturing and production sites located all around the world, ANDRITZ Feed and Biofuel is truly a global organization with a local presence. ANDRITZ is vital to ensuring a reliable global supply of aqua feed, animal feed, pet food, and biofuel. With full process lines accounting for half the world's production of aqua feed and biomass alone, we continuously support leading producers in achieving the highest levels in safety, quality, and control from feedstock to final product.

How can we help grow your business?

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Bomba centrífuga horizontal multietapa HEGA 3204 ... 6506



DATOS TÉCNICOS

Caudal:	máx. 120 m³/h
Altura:	máx. 320 m
Velocidad:	máx. 3.000 rpm
Material:	Fundición gris. (0B)
Temperatura:	máx. 120 °C
Presión carcasa:	máx. 40 bar
Cierre de eje:	Empaquetadura, cierre mecánico
Conexiones brida:	Brida aspiración según DIN 2501 PN 16. Brida impulsión según DIN 2501 PN 40.
Sentido de giro:	A derechas, visto desde el lado de accionamiento.

APLICACIÓN

Las bombas centrífugas multietapa HEGA son usadas para el bombeo de líquidos limpios o ligeramente contaminados en las siguientes aplicaciones:

- Circulación de agua caliente
- Suministro de agua
- Limpieza a alta presión
- Contra incendio.
- Ósmosis inversas
- Riego
- Alimentación de calderas
- Aumento de presión etc.

DISEÑO

Bomba centrífuga horizontal multietapa con impulsores cerrados.

El programa de fabricación comprende cuatro tamaños, de 3 a nueve etapas, dependiendo del tamaño, velocidad y cierre de eje. La compensación de empuje axial se consigue equilibrando los impulsores de forma independiente. El restante empuje axial es compensado por un adecuado dimensionado de los rodamientos.

Todas las bombas contienen difusores reemplazables.

La brida de impulsión siempre se monta hacia arriba, mientras que la de aspiración puede ser girada en intervalos de 90° para adaptar la posición de la brida de aspiración a los requerimientos de la instalación. El accionamiento se sitúa en el lado de aspiración. Se puede suministrar bajo pedido una ejecución especial con accionamiento en el lado de impulsión (o ambos lados).

CONSTRUCCIÓN

Presión carcasa [bar]:

Carcasa impulsión	Carcasa aspiración	Rango temperatura ⁽¹⁾
máx. 40	máx. 16	-10 a 120 °C

(1) Tenga en cuenta el límite de aplicación del cierre de eje.

Presión de trabajo = presión de aspiración + presión a caudal cero

Advertencia: Se deberán tener en cuenta las regulaciones y normas de seguridad pertinentes.



Bridas:

Brida aspiración según DIN 2533 PN16, brida de impulsión según DIN 2535 PN40.

Posición de las bridas:

Brida de aspiración dispuesta horizontalmente hacia la derecha (visto desde el extremo de eje) y brida de impulsión hacia arriba.

Bajo pedido, la brida de aspiración se puede situar hacia la izquierda y, en el caso de bombas con tres etapas o más, también verticalmente hacia arriba.

Rodamientos:

Un rodamiento de rodillos según DIN 5412 en el lado de extremo de eje y un rodamiento de una hilera de bolas según DIN 625 en el lado de impulsión, ambos lubricados por grasa. Denominación de esta ejecución: B.

Cierre de eje:

El sellado de eje puede llevarse a cabo mediante empaquetadura o cierre mecánico, según se requiera.

- Denominación 001:

Empaquetadura no refrigerada.

Intervalo de temperatura: -10 hasta 110 °C.

- Denominación BK3:

Cierre mecánico simple no equilibrado.

Materiales: Carbón-SiC-EPDM

Intervalo de temperatura: -10 °C hasta 120 °C

Materiales:

Pos.	Designación	Material	Construcción 0B
10.6	Carcasa aspiración	Fundición gris GG-25	x
10.7	Carcasa impulsión	Fundición gris GG-25	x
10.8	Carcasa etapa	Fundición gris GG-25	x
23.0	Impulsor	Fundición gris GG-25	x
17.1	Difusor	Fundición gris GG-25	x
21.1	Eje	Acero al cromo	x
52.4	Camisa de eje (emaquetadura)	Acero al cromo	x
52.33	Camisa de eje (cierre mecánico)	Acero al cromo	x
46.1	Empaquetadura	Fibra sintética con impregnación PTFE	x
43.3	Cierre mecánico	AQ1EGG [Carbón / SiC / EPDM]	x

Junta de carcasa:

El sellado de las carcasas se realiza mediante tóricos de Perbunan. Denominación de esta ejecución: P.

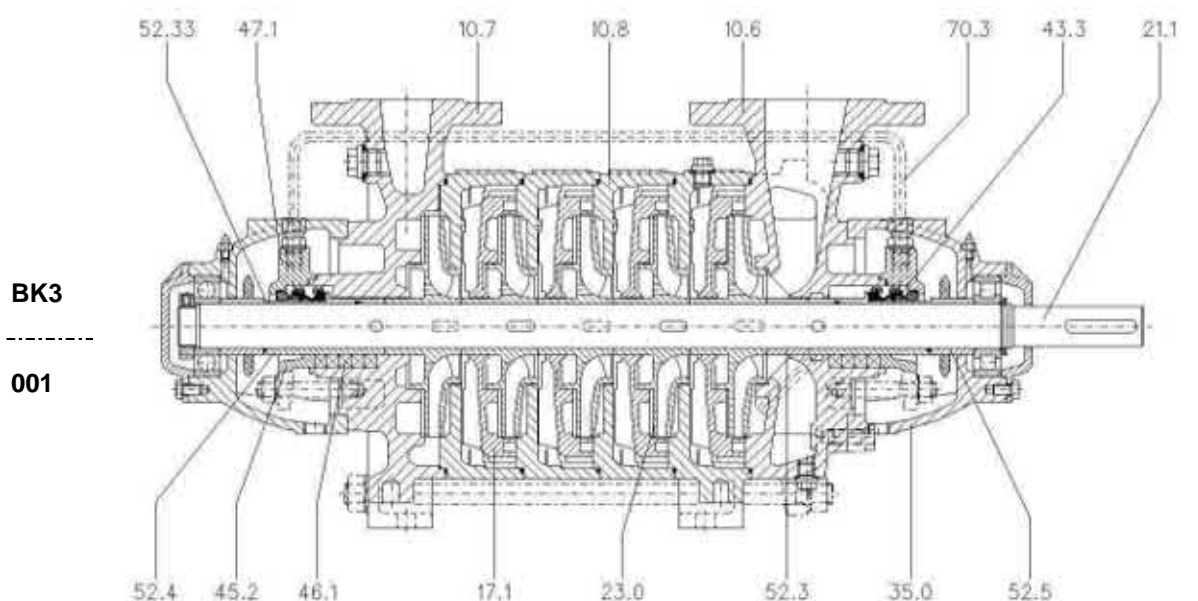
Potencia motor, velocidad y número de etapas:

Mediante motores estándar, tipo constructivo IM B3.

Debe tenerse en cuenta el siguiente número máximo de etapas, en función del cierre de eje y la velocidad y del número de etapas:

Tamaño bomba	Velocidad máx [rpm]	Máximo número de etapas dependiendo del sellado de eje	
		001	BK3
3200	3 000	9	9
4000	3 000	8	9
5000	3 000	6	8
6500	3 000	5	6

Plano seccional y lista de partes



10.6	Carcasa aspiración	43.3	Cierre mecánico	52.31	Camisa distanciadora
10.7	Carcasa impulsión	45.1	Cámara empaquetadura	52.3	Camisa distanciadora
10.8	Carcasa etapa	45.2	Prensaestopa	52.33	Camisa de eje
17.1	Difusor	45.8	Linterna	52.4	Camisa de eje
21.1	Eje	46.1	Empaquetadura	52.5	Camisa distanciadora
23.0	Impulsor	47.1	Tapa de cierre	70.3	Tubería de circulación de líquido
35.0	Soporte rodamientos	52.3	Camisa distanciadora		

Campo de aplicación

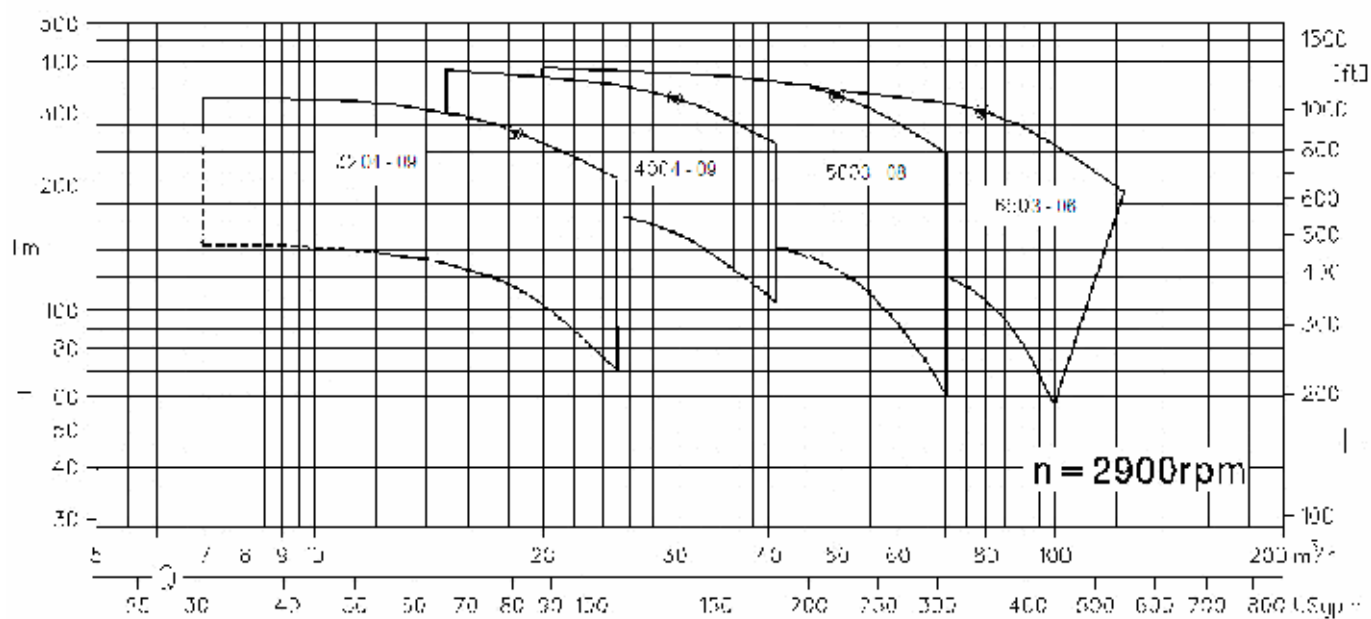
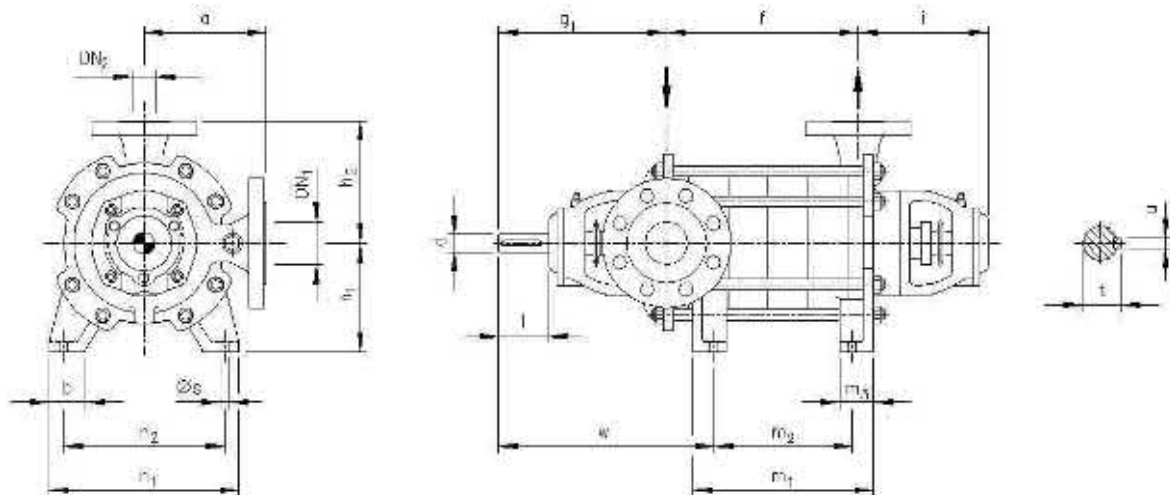


Tabla de dimensiones

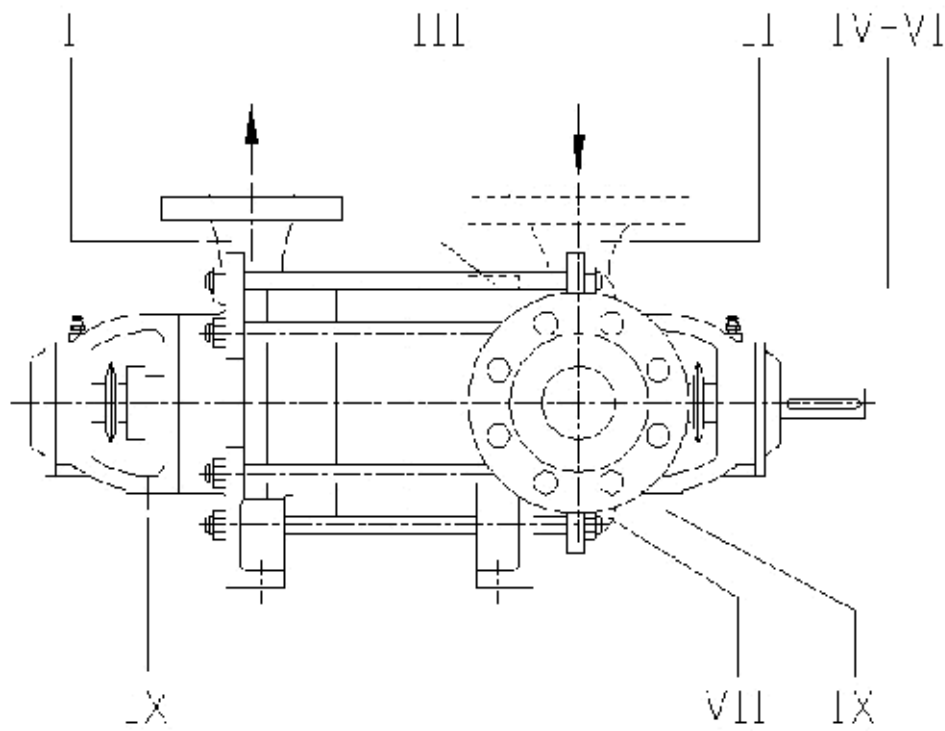


Tamaño	DN ₂	DN ₁	Dimensiones bomba							Dimensiones pata								Extremo eje			
			a	f	g ₁	h ₁	h ₂	i	b	c	m ₁	m ₂	m ₃	n ₁	n ₂	s	w	d _{k6}	l	t	u
3200	32	50	180	Depende de etapas	230	160	180	173	45	12	Depende de etapas		45	280	245	15	295	28	60	30,9	10
4000	40	65			265			193					50				345	32	80	35,3	
5000	50	80			275			200					55				365			41,3	
6500	65	100			300			216					60				405				

Bomba	3200			4000			5000			6500		
Etapas	f	m ₁	m ₂	f	m ₁	m ₂	f	m ₁	m ₂	f	m ₁	m ₂
3							218	198	128	270	225	145
4	228	213	163	255	235	175	283	263	193	350	305	225
5	283	268	218	315	295	235	348	328	258	430	385	305
6	338	323	273	375	355	295	413	393	323	510	465	385
7	393	378	328	435	415	355	478	458	388			
8	448	433	383	495	475	415	543	523	453			
9	503	488	438	555	535	475						

Dimensiones brida según DIN 2501						
DN ₂ / DN ₁	32	40	50	65	80	100
Ø D	140	150	165	185	200	220
Ø k	100	110	125	145	160	180
d ₂ x cant.	PN 16	18 x 4	18 x 4	18 x 4	18 x 4	18 x 8
	PN 40				18 x 8	-

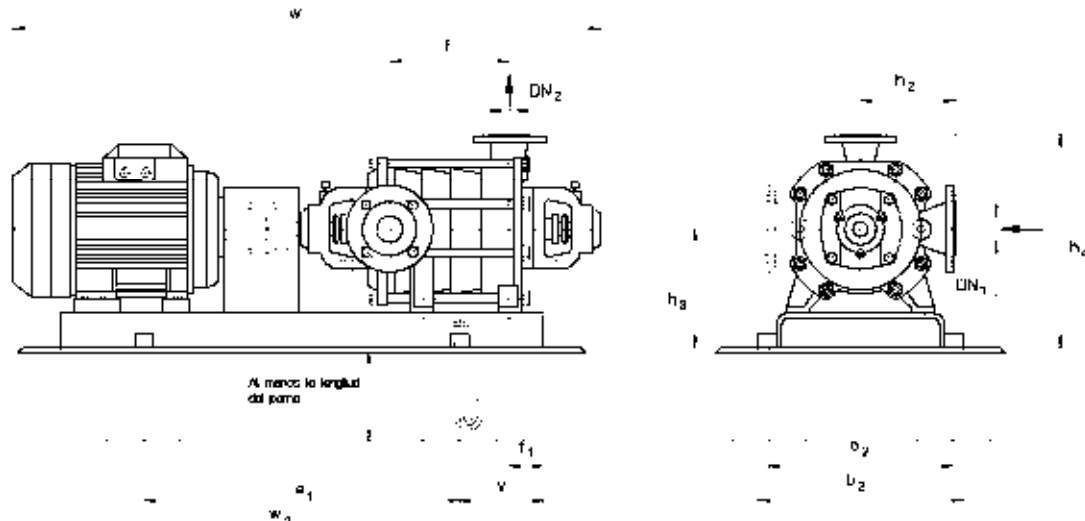
Conexiones



Código	Conexiones	Localización	Dimensiones	
			3200 - 5000	6500
I	Conexión manómetro	Brida impulsión	G1/2"	G1/2"
II	Conexión mano-vacuómetro	Brida aspiración	G1/2"	G1/2"
III	Venteo	Carcasa primera etapa	G1/4"	G3/8"
IV ⁽¹⁾	Purga	Carcasa aspiración	G1/4"	G3/8"
VI ⁽¹⁾	Llenado	Carcasa aspiración	G1/4"	G3/8"
VII	Vaciado	Carcasa aspiración	G1/4"	G3/8"
IX	Líquido goteo y fuga	Soporte rodamiento (lado aspiración e impulsión)	G3/8"	G1/2"

(1) Cuando la posición de la brida de aspiración es horizontal, derechas o izquierdas

Tabla de dimensiones de grupos completos, HEG.



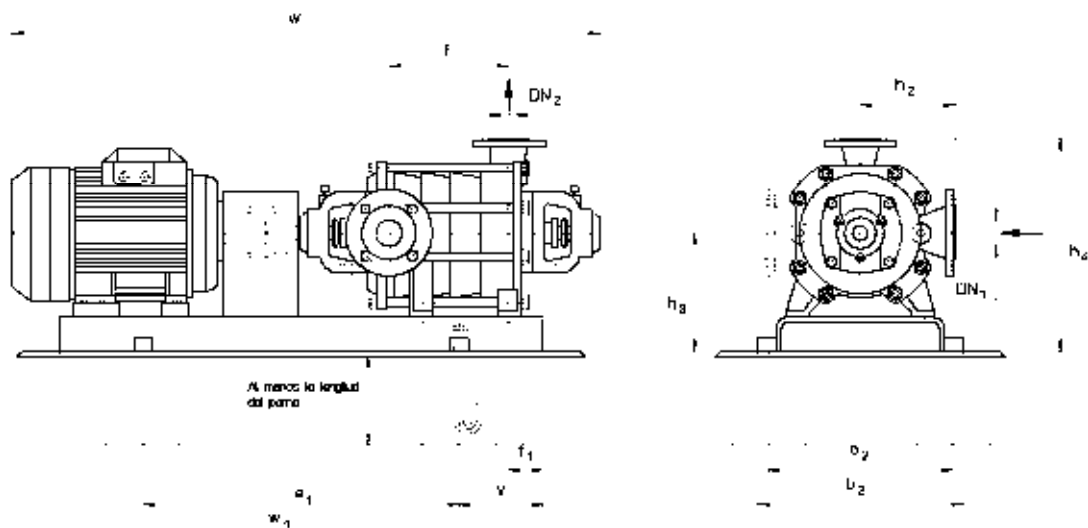
Dimensiones en mm

Tolerancias para piezas soldadas según DIN 8570 B

n = 2900 rpm

Tamaño	Motor	Bancada	Acopl.	Peso kg		DN ₂	DN ₁	f	b ₂	e ₁	e ₂	v	f ₁	h ₂	h ₃	h ₄	w*	w ₁	Perno anclaje
03204	90L 2.20	S344	B68	80	137	32	50	228	450	660	400	180	100	180	240	420	966	1020	M20x400
	100L 3.00	S344	B80	80	144	32	50	228	450	660	400	180	85	180	240	420	1007	1020	M20x400
	112M 4.00	S344	B80	80	151	32	50	228	450	660	400	180	85	180	240	420	1028	1020	M20x400
	132S 5.50	S344	B95	80	162	32	50	228	450	660	400	180	65	180	240	420	1088	1020	M20x400
	132S 7.50	S344	B95	80	171	32	50	228	450	660	400	180	65	180	240	420	1088	1020	M20x400
	160M 11.00	S344	B95	80	191	32	50	228	450	660	400	180	70	180	240	420	1223	1020	M20x400
	160M 15.00	S344	B95	80	200	32	50	228	450	660	400	180	70	180	240	420	1223	1020	M20x400
	160L 18.50	S344	B95	80	209	32	50	228	450	660	400	180	50	180	240	420	1223	1020	M20x400
03205	100L 3.00	S344	B80	90	154	32	50	283	450	660	400	180	60	180	240	420	1062	1020	M20x400
	112M 4.00	S344	B80	90	161	32	50	283	450	660	400	180	60	180	240	420	1083	1020	M20x400
	132S 5.50	S344	B95	90	172	32	50	283	450	660	400	180	37	180	240	420	1143	1020	M20x400
	132S 7.50	S344	B95	90	181	32	50	283	450	660	400	180	37	180	240	420	1143	1020	M20x400
	160M 11.00	S385	B95	90	218	32	50	283	490	740	440	200	45	180	240	420	1278	1140	M20x400
	160M 15.00	S385	B95	90	227	32	50	283	490	740	440	200	45	180	240	420	1278	1140	M20x400
	160L 18.50	S436	B95	90	249	32	50	283	540	840	490	215	120	180	240	420	1278	1270	M20x400
	180M 22.00	S436	B110	90	277	32	50	283	540	840	490	215	115	180	260	440	1402	1270	M20x400
03206	100L 3.00	S344	B80	100	164	32	50	338	450	660	400	180	120	180	240	420	1117	1020	M20x400
	112M 4.00	S344	B80	100	171	32	50	338	450	660	400	180	120	180	240	420	1138	1020	M20x400
	132S 5.50	S344	B95	100	182	32	50	338	450	660	400	180	100	180	240	420	1198	1020	M20x400
	132S 7.50	S344	B95	100	191	32	50	338	450	660	400	180	100	180	240	420	1198	1020	M20x400
	160M 11.00	S436	B95	100	241	32	50	338	540	840	490	215	115	180	240	420	1333	1270	M20x400
	160M 15.00	S436	B95	100	250	32	50	338	540	840	490	215	115	180	240	420	1333	1270	M20x400
	160L 18.50	S436	B95	100	259	32	50	338	540	840	490	215	95	180	240	420	1333	1270	M20x400
	180M 22.00	S436	B110	100	287	32	50	338	540	840	490	215	85	180	260	440	1457	1270	M20x400
03207	200L 30.00	S487	B125	100	374	32	50	338	610	940	550	240	70	180	300	480	1514	1420	M24x400
	200L 37.00	S487	B125	100	394	32	50	338	610	940	550	240	70	180	300	480	1514	1420	M24x400
	112M 4.00	S385	B80	110	198	32	50	393	490	740	440	200	95	180	240	420	1193	1140	M20x400
	132S 5.50	S385	B95	110	209	32	50	393	490	740	440	200	75	180	240	420	1253	1140	M20x400
	132S 7.50	S385	B95	110	218	32	50	393	490	740	440	200	75	180	240	420	1253	1140	M20x400
	160M 11.00	S436	B95	110	251	32	50	393	540	840	490	215	90	180	240	420	1388	1270	M20x400
	160M 15.00	S436	B95	110	260	32	50	393	540	840	490	215	90	180	240	420	1388	1270	M20x400
	160L 18.50	S436	B95	110	269	32	50	393	540	840	490	215	65	180	240	420	1388	1270	M20x400
03208	180M 22.00	S436	B110	110	297	32	50	393	540	840	490	215	60	180	260	440	1512	1270	M20x400
	200L 30.00	S487	B125	110	384	32	50	393	610	940	550	240	75	180	300	480	1569	1420	M24x400
	200L 37.00	S487	B125	110	404	32	50	393	610	940	550	240	75	180	300	480	1569	1420	M24x400
	132S 5.50	S385	B95	120	219	32	50	448	490	740	440	200	45	180	240	420	1308	1140	M20x400
	132S 7.50	S385	B95	120	228	32	50	448	490	740	440	200	45	180	240	420	1308	1140	M20x400
	160M 11.00	S436	B95	120	261	32	50	448	540	840	490	215	60	180	240	420	1443	1270	M20x400
	160M 15.00	S436	B95	120	270	32	50	448	540	840	490	215	60	180	240	420	1443	1270	M20x400
	160L 18.50	S436	B95	120	279	32	50	448	540	840	490	215	38	180	240	420	1443	1270	M20x400
03209	180M 22.00	S487	B110	120	342	32	50	448	610	940	550	240	95	180	280	460	1567	1420	M24x400
	200L 30.00	S487	B125	120	394	32	50	448	610	940	550	240	56	180	300	480	1624	1420	M24x400
	200L 37.00	S487	B125	120	414	32	50	448	610	940	550	240	56	180	300	480	1624	1420	M24x400
	132S 5.50	S436	B95	130	242	32	50	503	540	840	490	215	90	180	240	420	1363	1270	M20x400
	132S 7.50	S436	B95	130	251	32	50	503	540	840	490	215	90	180	240	420	1363	1270	M20x400
	160M 11.00	S487	B95	130	306	32	50	503	610	940	550	240	100	180	260	440	1498	1420	M24x400
	160M 15.00	S487	B95	130	315	32	50	503	610	940	550	240	100	180	260	440	1498	1420	M24x400
	160L 18.50	S487	B95	130	324	32	50	503	610	940	550	240	75	180	260	440	1498	1420	M24x400
03209	180M 22.00	S487	B110	130	352	32	50	503	610	940	550	240	70	180	280	460	1622	1420	M24x400
	200L 30.00	S538	B125	130	427	32	50	503	660	1060	600	280	120	180	300	480	1679	1620	M24x400
	200L 37.00	S538	B125	130	447	32	50	503	660	1060	600	280	120	180	300	480	1679	1620	M24x400

Tabla de dimensiones de grupos completos, HEG.



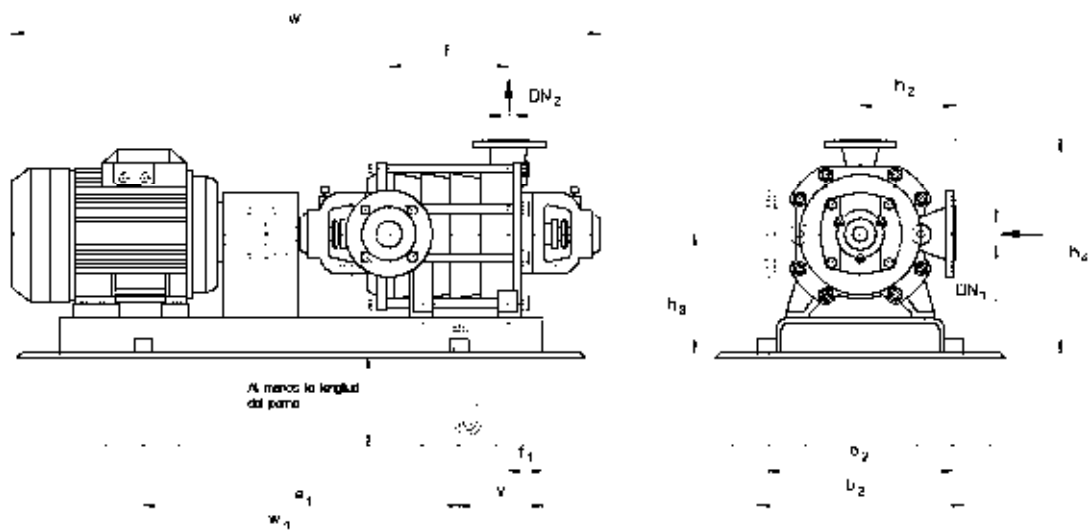
Dimensiones en mm

Tolerancias para piezas soldadas DIN 8570 B

n = 2900 rpm

Tamaño	Motor		Bancada	Acopl.	Peso kg		DN ₂	DN ₁	f	b ₂	e ₁	e ₂	v	f ₁	h ₂	h ₃	h ₄	w*	w ₁	Perno anclaje
04004	112M	4.00	S344	B80	94	165	40	65	255	450	660	400	180	55	180	240	420	1110	1020	M20x400
	132S	5.50	S344	B95	94	176	40	65	255	450	660	400	180	125	180	240	420	1170	1020	M20x400
	132S	7.50	S344	B95	94	185	40	65	255	450	660	400	180	125	180	240	420	1170	1020	M20x400
	160M	11.00	S385	B95	94	222	40	65	255	490	740	440	200	42	180	240	420	1305	1140	M20x400
	160M	15.00	S385	B95	94	231	40	65	255	490	740	440	200	42	180	240	420	1305	1140	M20x400
	160L	18.50	S436	B95	94	253	40	65	255	540	840	490	215	120	180	240	420	1305	1270	M20x400
	180M	22.00	S436	B110	94	281	40	65	255	540	840	490	215	115	180	260	440	1429	1270	M20x400
	200L	30.00	S487	B125	94	368	40	65	255	610	940	550	240	70	180	300	480	1486	1420	M24x400
	200L	37.00	S487	B125	94	388	40	65	255	610	940	550	240	70	180	300	480	1486	1420	M24x400
04005	132S	5.50	S385	B95	106	205	40	65	315	490	740	440	200	100	180	240	420	1230	1140	M20x400
	132S	7.50	S385	B95	106	214	40	65	315	490	740	440	200	100	180	240	420	1230	1140	M20x400
	160M	11.00	S436	B95	106	247	40	65	315	540	840	490	215	115	180	240	420	1365	1270	M20x400
	160M	15.00	S436	B95	106	256	40	65	315	540	840	490	215	115	180	240	420	1365	1270	M20x400
	160L	18.50	S436	B95	106	265	40	65	315	540	840	490	215	90	180	240	420	1365	1270	M20x400
	180M	22.00	S436	B110	106	293	40	65	315	540	840	490	215	85	180	260	440	1489	1270	M20x400
	200L	30.00	S487	B125	106	380	40	65	315	610	940	550	240	100	180	300	480	1546	1420	M24x400
	200L	37.00	S487	B125	106	400	40	65	315	610	940	550	240	100	180	300	480	1546	1420	M24x400
04006	225M	45.00	S538	B125	106	453	40	65	315	660	1060	600	280	100	180	325	505	1553	1620	M24x400
	132S	5.50	S385	B95	118	217	40	65	375	490	740	440	200	65	180	240	420	1290	1140	M20x400
	132S	7.50	S385	B95	118	226	40	65	375	490	740	440	200	65	180	240	420	1290	1140	M20x400
	160M	11.00	S436	B95	118	259	40	65	375	540	840	490	215	85	180	240	420	1425	1270	M20x400
	160M	15.00	S436	B95	118	268	40	65	375	540	840	490	215	85	180	240	420	1425	1270	M20x400
	160L	18.50	S436	B95	118	277	40	65	375	540	840	490	215	60	180	240	420	1425	1270	M20x400
	180M	22.00	S436	B110	118	305	40	65	375	540	840	490	215	55	180	260	440	1549	1270	M20x400
	200L	30.00	S487	B125	118	392	40	65	375	610	940	550	240	75	180	300	480	1606	1420	M24x400
04007	200L	37.00	S487	B125	118	412	40	65	375	610	940	550	240	75	180	300	480	1606	1420	M24x400
	225M	45.00	S538	B125	118	465	40	65	375	660	1060	600	280	65	180	325	505	1613	1620	M24x400
	250M	55.00	S608	B140	118	640	40	65	375	730	1060	670	270	125	180	350	530	1727	1600	M24x400
	132S	5.50	S436	B95	130	242	40	65	435	540	840	490	215	105	180	240	420	1350	1270	M20x400
	132S	7.50	S436	B95	130	251	40	65	435	540	840	490	215	105	180	240	420	1350	1270	M20x400
	160M	11.00	S436	B95	130	271	40	65	435	540	840	490	215	50	180	240	420	1485	1270	M20x400
	160M	15.00	S436	B95	130	280	40	65	435	540	840	490	215	50	180	240	420	1485	1270	M20x400
	160L	18.50	S487	B95	130	324	40	65	435	610	940	550	240	95	180	260	440	1485	1420	M24x400
04008	180M	22.00	S487	B110	130	352	40	65	435	610	940	550	240	90	180	280	460	1609	1420	M24x400
	200L	30.00	S538	B125	130	427	40	65	435	660	1060	600	280	147	180	300	480	1666	1620	M24x400
	200L	37.00	S538	B125	130	447	40	65	435	660	1060	600	280	147	180	300	480	1666	1620	M24x400
	225M	45.00	S538	B125	130	477	40	65	435	660	1060	600	280	140	180	325	505	1673	1620	M24x400
	250M	55.00	S608	B140	130	652	40	65	435	730	1060	670	270	95	180	350	530	1787	1600	M24x400
	132S	5.50	S436	B95	142	254	40	65	495	540	840	490	215	75	180	240	420	1410	1270	M20x400
	132S	7.50	S436	B95	142	263	40	65	495	540	840	490	215	75	180	240	420	1410	1270	M20x400
	160M	11.00	S487	B95	142	318	40	65	495	610	940	550	240	90	180	260	440	1545	1420	M24x400
04009	160M	15.00	S487	B95	142	327	40	65	495	610	940	550	240	90	180	260	440	1545	1420	M24x400
	160L	18.50	S487	B95	142	336	40	65	495	610	940	550	240	65	180	260	440	1545	1420	M24x400
	180M	22.00	S487	B110	142	364	40	65	495	610	940	550	240	60	180	280	460	1669	1420	M24x400
	200L	30.00	S538	B125	142	439	40	65	495	660	1060	600	280	115	180	300	480	1726	1620	M24x400
	200L	37.00	S538	B125	142	459	40	65	495	660	1060	600	280	115	180	300	480	1726	1620	M24x400
	225M	45.00	S538	B125	142	489	40	65	495	660	1060	600	280	105	180	325	505	1733	1620	M24x400
	250M	55.00	S608	B140	142	664	40	65	495	730	1060	670	270	65	180	350	530	1847	1600	M24x400
	280S	75.00	S608	B160	142	792	40	65	495	730	1060	670	270	50	180	380	560	1917	1600	M24x400
04009	200L	37.00	S538	B125	159	476	40	65	555	660	1060	600	280	105	180	300	480	1786	1620	M24x400
	225M	45.00	S538	B125	159	506	40	65	555	660	1060	600	280	95	180	325	505	1793	1620	M24x400
	250M	55.00	S608	B140	159	681	40	65	555	730	1060	670	270	50	180	350	530	1907	1600	M24x400

Tabla de dimensiones de grupos completos, HEG.



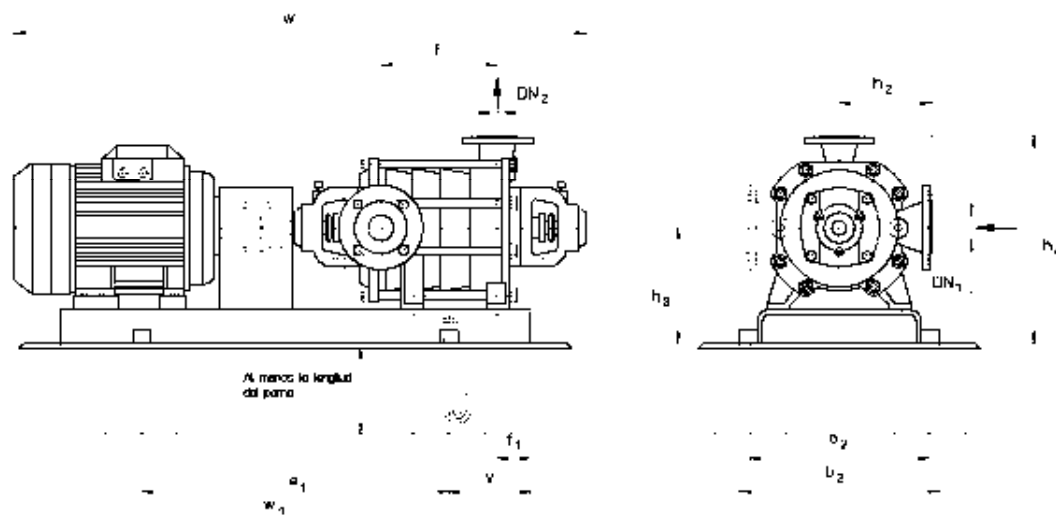
Dimensiones en mm

Tolerancias para piezas soldadas DIN 8570 B

n = 2900 rpm

Tamaño	Motor		Bancada No.	Acopl.	Peso kg		DN ₂	DN ₁	f	b ₂	e ₁	e ₂	v	f ₁	h ₂	h ₃	h ₄	w*	w ₁	Perno anclaje
	Tamaño	kW			Bomba	Grupo														
05003	132S	5.50	S344	B95	95	177	50	80	218	450	660	400	180	52	200	240	440	1143	1020	M20x400
	132S	7.50	S344	B95	95	186	50	80	218	450	660	400	180	52	200	240	440	1143	1020	M20x400
	160M	11.00	S344	B95	95	206	50	80	218	450	660	400	180	60	200	240	440	1278	1020	M20x400
	160M	15.00	S344	B95	95	215	50	80	218	450	660	400	180	60	200	240	440	1278	1020	M20x400
	160L	18.50	S385	B95	95	241	50	80	218	490	740	440	200	135	200	240	440	1278	1140	M20x400
	180M	22.00	S436	B110	95	282	50	80	218	540	840	490	215	130	200	260	460	1402	1270	M20x400
	200L	30.00	S487	B125	95	369	50	80	218	610	940	550	240	85	200	300	500	1459	1420	M24x400
	200L	37.00	S487	B125	95	389	50	80	218	610	940	550	240	85	200	300	500	1459	1420	M24x400
	225M	45.00	S538	B125	95	442	50	80	218	660	1060	600	280	145	200	325	525	1466	1620	M24x400
05004	132S	5.50	S344	B95	110	192	50	80	283	450	660	400	180	110	200	240	440	1208	1020	M20x400
	132S	7.50	S344	B95	110	201	50	80	283	450	660	400	180	110	200	240	440	1208	1020	M20x400
	160M	11.00	S436	B95	110	251	50	80	283	540	840	490	215	125	200	240	440	1343	1270	M20x400
	160M	15.00	S436	B95	110	260	50	80	283	540	840	490	215	125	200	240	440	1343	1270	M20x400
	160L	18.50	S436	B95	110	269	50	80	283	540	840	490	215	105	200	240	440	1343	1270	M20x400
	180M	22.00	S436	B110	110	297	50	80	283	540	840	490	215	100	200	260	460	1467	1270	M20x400
	200L	30.00	S487	B125	110	384	50	80	283	610	940	550	240	120	200	300	500	1524	1420	M24x400
	200L	37.00	S487	B125	110	404	50	80	283	610	940	550	240	120	200	300	500	1524	1420	M24x400
	225M	45.00	S538	B125	110	457	50	80	283	660	1060	600	280	110	200	325	525	1531	1620	M24x400
250M	55.00	S608	B140	110	632	50	80	283	730	1060	670	270	70	200	350	550	1645	1600	M24x400	
05005	160M	11.00	S436	B95	125	266	50	80	348	540	840	490	215	95	200	240	440	1408	1270	M20x400
	160M	15.00	S436	B95	125	275	50	80	348	540	840	490	215	95	200	240	440	1408	1270	M20x400
	160L	18.50	S436	B95	125	284	50	80	348	540	840	490	215	70	200	240	440	1408	1270	M20x400
	180M	22.00	S436	B110	125	312	50	80	348	540	840	490	215	65	200	260	460	1532	1270	M20x400
	200L	30.00	S487	B125	125	399	50	80	348	610	940	550	240	85	200	300	500	1589	1420	M24x400
	200L	37.00	S487	B125	125	419	50	80	348	610	940	550	240	85	200	300	500	1589	1420	M24x400
	225M	45.00	S538	B125	125	472	50	80	348	660	1060	600	280	80	200	325	525	1596	1620	M24x400
	250M	55.00	S608	B140	125	647	50	80	348	730	1060	670	270	135	200	350	550	1710	1600	M24x400
	280S	75.00	S608	B160	125	775	50	80	348	730	1060	670	270	115	200	380	580	1780	1600	M24x400
05006	160M	11.00	S436	B95	140	281	50	80	413	540	840	490	215	60	200	240	440	1473	1270	M20x400
	160M	15.00	S436	B95	140	290	50	80	413	540	840	490	215	60	200	240	440	1473	1270	M20x400
	160L	18.50	S487	B95	140	334	50	80	413	610	940	550	240	105	200	260	460	1473	1420	M24x400
	180M	22.00	S487	B110	140	362	50	80	413	610	940	550	240	100	200	280	480	1597	1420	M24x400
	200L	30.00	S538	B125	140	437	50	80	413	660	1060	600	280	150	200	300	500	1654	1620	M24x400
	200L	37.00	S538	B125	140	457	50	80	413	660	1060	600	280	150	200	300	500	1654	1620	M24x400
	225M	45.00	S538	B125	140	487	50	80	413	660	1060	600	280	150	200	325	525	1661	1620	M24x400
	250M	55.00	S608	B140	140	662	50	80	413	730	1060	670	270	105	200	350	550	1775	1600	M24x400
	280S	75.00	S608	B160	140	790	50	80	413	730	1060	670	270	85	200	380	580	1845	1600	M24x400
280M	90.00	S608	B160	140	830	50	80	413	730	1060	670	270	65	200	380	580	1845	1600	M24x400	
05007	225M	45.00	S538	B125	155	502	50	80	478	660	1060	600	280	130	200	325	525	1726	1620	M24x400
	250M	55.00	S608	B140	155	677	50	80	478	730	1060	670	270	85	200	350	550	1840	1600	M24x400
	280S	75.00	S609A	B160	155	860	50	80	478	744	1200	696	300	140	200	380	580	1910	1800	M24x400
05008	250M	55.00	S609A	B140	170	748	50	80	543	744	1200	696	300	140	200	350	550	1905	1800	M24x400
	280S	75.00	S609A	B160	170	875	50	80	543	744	1200	696	300	145	200	380	580	1975	1800	M24x400
	280M	90.00	S609A	B160	170	915	50	80	543	744	1200	696	300	160	200	380	580	1975	1800	M24x400

Tabla de dimensiones de grupos completos, HEG.



Dimensiones en mm

Tolerancias para piezas soldadas DIN 8570 B

n = 2900 rpm

Tamaño	Motor		Bancada No.	Acopl.	Peso kg		DN ₂	DN ₁	f	b ₂	e ₁	e ₂	v	f ₁	h ₂	h ₃	h ₄	w*	w ₁	Perno anclaje
06503	132S	5.50	S385	B95	130	229	65	100	270	490	740	440	200	65	220	260	480	1243	1140	M20x400
	132S	7.50	S385	B95	130	238	65	100	270	490	740	440	200	65	220	260	480	1243	1140	M20x400
	160M	11.00	S385	B95	130	258	65	100	270	490	740	440	200	100	220	260	480	1378	1140	M20x400
	160M	15.00	S385	B95	130	267	65	100	270	490	740	440	200	100	220	260	480	1378	1140	M20x400
	160L	18.50	S436	B95	130	289	65	100	270	540	840	490	215	80	220	260	480	1378	1270	M20x400
	180M		S436	B110	130	317	65	100	270	540	840	490	215	85	220	260	480	1502	1270	M20x400
	200L	30.00	S487	B125	130	404	65	100	270	610	940	550	240	45	220	300	520	1559	1420	M24x400
	200L	37.00	S487	B125	130	424	65	100	270	610	940	550	240	45	220	300	520	1559	1420	M24x400
	225M	45.00	S538	B125	130	477	65	100	270	660	1060	600	280	95	220	325	545	1566	1620	M24x400
	250M	55.00	S608	B140	130	652	65	100	270	730	1060	670	270	75	220	350	570	1680	1600	M24x400
	280S	75.00	S608	B160	130	780	65	100	270	730	1060	670	270	140	220	380	600	1750	1600	M24x400
	280M	90.00	S608	B160	130	820	65	100	270	730	1060	670	270	130	220	380	600	1750	1600	M24x400
06504	132S	5.50	S385	B95	150	249	65	100	350	490	740	440	200	125	220	260	480	1323	1140	M20x400
	132S	7.50	S385	B95	150	258	65	100	350	490	740	440	200	125	220	260	480	1323	1140	M20x400
	160M	11.00	S436	B95	150	291	65	100	350	540	840	490	215	60	220	260	480	1458	1270	M20x400
	160M	15.00	S436	B95	150	300	65	100	350	540	840	490	215	60	220	260	480	1458	1270	M20x400
	160L	18.50	S436	B95	150	309	65	100	350	540	840	490	215	40	220	260	480	1458	1270	M20x400
	180M	22.00	S436	B110	150	337	65	100	350	540	840	490	215	45	220	260	480	1582	1270	M20x400
	200L	30.00	S487	B125	150	424	65	100	350	610	940	550	240	65	220	300	520	1639	1420	M24x400
	200L	37.00	S487	B125	150	444	65	100	350	610	940	550	240	65	220	300	520	1639	1420	M24x400
	225M	45.00	S538	B125	150	497	65	100	350	660	1060	600	280	60	220	325	545	1646	1620	M24x400
	250M	55.00	S608	B140	150	672	65	100	350	730	1060	670	270	135	220	350	570	1760	1600	M24x400
	280S	75.00	S608	B160	150	800	65	100	350	730	1060	670	270	115	220	380	600	1830	1600	M24x400
	280M	90.00	S608	B160	150	840	65	100	350	730	1060	670	270	90	220	380	600	1830	1600	M24x400
06505	160M	11.00	S487	B95	170	346	65	100	430	610	940	550	240	85	220	280	500	1538	1420	M24x400
	160M	15.00	S487	B95	170	355	65	100	430	610	940	550	240	85	220	280	500	1538	1420	M24x400
	160L	18.50	S487	B95	170	364	65	100	430	610	940	550	240	65	220	280	500	1538	1420	M24x400
	180M	22.00	S487	B110	170	392	65	100	430	610	940	550	240	70	220	280	500	1662	1420	M24x400
	200L	30.00	S538	B125	170	467	50	80	430	660	1060	600	280	125	200	300	520	1719	1620	M24x400
	200L	37.00	S538	B125	170	487	50	80	430	660	1060	600	280	125	200	300	520	1719	1620	M24x400
	225M	45.00	S538	B125	170	517	50	80	430	660	1060	600	280	115	200	325	545	1726	1620	M24x400
	250M	55.00	S608	B140	170	692	65	100	430	730	1060	670	270	95	220	350	570	1840	1600	M24x400
	280S	75.00	S608	B160	170	820	65	100	430	730	1060	670	270	75	220	380	600	1910	1600	M24x400
	280M	90.00	S608	B160	170	860	65	100	430	730	1060	670	270	165	220	380	600	1910	1600	M24x400
	280S	75.00	S609A	B160	190	895	65	100	510	744	1200	696	300	180	220	280	500	1990	1800	M24x400
	280M	90.00	S609A	B160	190	935	65	100	510	744	1200	696	300	170	220	280	500	1990	1800	M24x400

* Protección del motor tipo IP 55, las dimensiones dependen del fabricante del motor.

Dimensiones indicadas de acuerdo al catálogo de Siemens.

Dimensión f₁ según estándar de SIHI.

Denominación – Resumen

La tabla describe la codificación de la denominación de la bomba según su ejecución.

Tipo, tamaño y número de etapas	Comb. impulsores	Hidráulica y soporte	Sellado de eje	Materiales	Junta de carcasa	Posición bridas (visto desde el extremo de eje)
HEGA 03204 - 03209 04004 - 04009 05003 - 05008 06503 - 06506	0	<ul style="list-style-type: none"> A • Hidráulica A B • Hidráulica B⁽¹⁾ • B Un rodamiento de rodillos según DIN 5412 en la aspiración y un rodamiento de una hilera de bolas según DIN 625 en la descarga, ambos lubricados por grasa 	001 Empaquetadura no refrigerada BK3 Cierre mecánico simple no equilibrado	0B Partes principales en fundición gris GG-25	P Tóricos en NBR (Perbunan)	0 Brida descarga vertical. Brida aspiración horizontal a derechas 1 Igual a cero, pero brida aspiración horizontal a izquierdas 2 Igual a cero, pero brida aspiración hacia arriba

(1) Sólo tamaño 3200

AVISO SOBRE LOS DERECHOS DE AUTOR

Por favor, lea esta nota

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Cualquier uso ilegal del material de este documento puede dar lugar a demanda por recurso civil, incluyendo un interdicto para suspender su utilización con la correspondiente demanda por daños; o se puede incurrir en responsabilidad criminal

Sterling Fluid Systems (Spain), S.A.

Vereda de los Zapateros s/n, Pozuelo de Alarcón 28223 Madrid, España.
Teléfono +34 91 709 1310 Fax +34 91 715 9700. E-mail sihi@sihi.es

Srs.:
PROMASA S.A.

Rut: 96540490-2

Av. Las Indus. Pedro Stark Troncoso 1015 LOS ANGELES LOS ANGELES Chile

Atencion Sr(a): Pamela Fernandez SAP-80015183

COTIZACION Nro. 23482355

Fecha: 04.08.2021

Nro. Pedido Cliente:

Moneda: CLP

Nos es grato cotizar lo siguiente:

Pagina 1 de 1

Item	Cod.	Descripcion	Cant.	Unidad	Valor Unitario	Total	Plazo de Entrega
10	10603	PLANCHA L/F INOX 304L 3X1000XL 2B C/PVC Pieza Rectángulo : LxA : 3.000 mm x1.000 Servicios: Servicio corte	3	UN		709.559	4 Días
20	10987	ANGULO LAMINADO INOX 304 4X50X50MM	24	M		224.903	4 Días
30	39468	ANG LAMINADO 50X50X4X6000 18,36KG	10	UN	23.574,10	235.741	4 Días
40	39464	ANG LAMINADO 65X65X5X6000 29,82KG	10	UN	37.393,90	373.939	4 Días
50	10239	CUADRADO 50X50X4,0MM	8	UN	46.608,63	372.869	4 Días
60	10235	CUADRADO 40X40X3,0MM	10	UN	28.281,10	282.811	4 Días
70	235	BARRA REDO SAE 1045 015,9MM (5/8") Largo de venta de barra mm : 6.000 mm	5	UN		60.272	4 Días
80	67725	PARRILLA GALVANIZADA IMPORT TIPO RS3	2	UN	174.003,00	348.006	4 Días
Neto Cotizado						2.608.100	
IVA						495.539	
Total Cotizado						3.103.639	

Observaciones

- * Validez Oferta: Desde el 04.08.2021 hasta el 20.08.2021
- * Condiciones de Pago: Crédito 30 Días
- * Todos los materiales estan sujetos a venta previa
- * Valores unitarios son netos y no incluyen I.V.A.
- * Al plazo de entrega, se deber agregar los das de despacho.

*DESPACHO A PROMASA

Atentamente,

Nelson Jara S

Vendedor Meson Integral KEX

njara@kupfer.cl

Teléfono: 043-2362797-87393642

La orden de compra debe ser emitida a nombre de Kupfer Hnos. S.A. Rut: 90.844.000-5.

La Cotización, que ya fuere aprobada y firmada, tendrá igual valor que una Orden de Compra para el aceptante, produciendo los efectos propios de esta.

Kupfer - Los Angeles Fono: 043-2362797-87393642 Fax: (56-43)345573 Los Angeles Chile

Sucursales: Iquique - Antofagasta - Calama - Copiap - La Serena - Vina del Mar - Santiago - Diez de Julio - Rancagua - Talca - Concepción -

Los Angeles - Temuco - Valdivia - Puerto Montt - Castro - Punta Arenas.

Srs.:
PROMASA S.A.

Rut: 96540490-2

Av. Las Indus. Pedro Stark Troncoso 1015 LOS ANGELES LOS ANGELES Chile

Atencion Sr(a): JORGE SEGUEL

COTIZACION Nro. 23493761

Fecha: 12.08.2021

Nro. Pedido Cliente:

Moneda: CLP

Nos es grato cotizar lo siguiente:

Pagina 1 de 1

Item	Cod.	Descripcion	Cant.	Unidad	Valor Unitario	Total	Plazo de Entrega
10	10247	CUADRADO 100X100X4,0MM	20	UN	106.441,90	2.128.838	5 Dias
20	39464	ANG LAMINADO 65X65X5X6000 29,82KG	30	UN	36.977,00	1.109.310	5 Dias
30	10987	ANGULO LAMINADO INOX 304 4X50X50MM	24	M		223.865	5 Dias
40	25666	PLANCHA LAM CAL 3,0X1000X3000MM	2.160	KG	1.085,01	2.343.616	5 Dias
50	10603	PLANCHA L/F INOX 304L 3X1000XL 2B C/PVC Pieza Rectángulo : LxA : 3.000 mm x1.000 Servicios: Servicio corte	4	UN		942.050	5 Dias
60	10580	PLANCHA L/C INOX 304L 6X1500XL N1 Pieza Rectángulo : LxA : 3.000 mm x1.500 Servicios: Servicio corte	5	UN		3.435.488	5 Dias
70	39635	PLETINA A42-27ES 100X10MM 6MT 47,1KG	2	UN	59.959,00	119.918	5 Dias
Neto Cotizado						10.303.085	
IVA						1.957.586	
Total Cotizado						12.260.671	

Observaciones

- * Validez Oferta: Desde el 12.08.2021 hasta el 20.08.2021
- * Condiciones de Pago: Crédito 30 Días
- * Todos los materiales estan sujetos a venta previa
- * Valores unitarios son netos y no incluyen I.V.A.
- * Al plazo de entrega, se deber agregar los das de despacho.

*DESPACHO A PROMASA

Atentamente,

Nelson Jara S

Vendedor Meson Integral KEX

njara@kupfer.cl

Teléfono: 043-2362797-87393642

La orden de compra debe ser emitida a nombre de Kupfer Hnos. S.A. Rut: 90.844.000-5.

La Cotización, que ya fuere aprobada y firmada, tendrá igual valor que una Orden de Compra para el aceptante, produciendo los efectos propios de esta.

Kupfer - Los Angeles Fono: 043-2362797-87393642 Fax: (56-43)345573 Los Angeles Chile

Sucursales: Iquique - Antofagasta - Calama - Copiap - La Serena - Vina del Mar - Santiago - Diez de Julio - Rancagua - Talca - Concepción -

Los Angeles - Temuco - Valdivia - Puerto Montt - Castro - Punta Arenas.

COTIZACIONES SISTEMA DE ABATIMIENTO



MAESTRANZA BLEST SPA
SERVICIOS DE INGENIERIA, OBRAS DE
INGENIERIA, MAESTRANZA
AVENIDA ALEMANIA 1225
www.maestranzablest.cl

RUT: 76.518.982-9

COTIZACIÓN

N° 568

Empresa: PROCESADORA DE MADERAS LOS ANGELES S A

Fecha: 22/07/2021

RUT: 96.540.490-2

Teléfono: 41

Dirección: AVDA LAS INDUSTRIAS 1015 PEDRO STARK

Contacto:

Correo: promasa@promasa.cl

Cod.	cant	Descripción	Precio Uni.	Total
0	1 UND	FABRICACIÓN LAVADOR VENTURI	6.710.000.00	6.710.000
0	1 UND	FABRICAR ESTANQUE DE LAVADO	6.840.000.00	6.840.000
0	1 UND	FABRICAR CICLON DE ALTA EFICIENCIA 1	6.850.000.00	6.850.000

Condiciones Comerciales Generales

Validez: 15 Días

Forma Pago: CREDITO

Plazo Entrega: 22/10/2021

Datos Bancarios para Depósito :

Cuenta Corriente:

Enviar comprobante a:

Subtotal	\$	20.400.000
Descto.	\$	0
Total Neto	\$	20.400.000
I.V.A.	\$	3.876.000
Total	\$	24.276.000

Observaciones:



MAESTRANZA BLEST SPA
SERVICIOS DE INGENIERIA, OBRAS DE
INGENIERIA, MAESTRANZA
AVENIDA ALEMANIA 1225
www.maestranzablest.cl

RUT: 76.518.982-9

COTIZACIÓN

N° 586

Empresa: PROCESADORA DE MADERAS LOS ANGELES S A

Fecha: 05/08/2021

RUT: 96.540.490-2

Teléfono: 41

Dirección: AVDA LAS INDUSTRIAS 1015 PEDRO STARK

Contacto:

Correo: promasa@promasa.cl

Cod.	cant	Descripción	Precio Uni.	Total
0	1 UND	FABRIC. DE DEMISTER Y CRUCETA	9.900.000.00	9.900.000

Condiciones Comerciales Generales

Validez: 15 Días

Forma Pago: CREDITO

Plazo Entrega: 05/10/2021

Datos Bancarios para Depósito :

Cuenta Corriente:

Enviar comprobante a:

Subtotal	\$	9.900.000
Desccto.	\$	0
Total Neto	\$	9.900.000
I.V.A.	\$	1.881.000
Total	\$	11.781.000

Observaciones:

Contacto: Gabriel Pincheira



COTIZACIÓN N°218-A/21

Señores
PROMASA
Presente

Atn.: Sr. Gabriel Pincheira

REF.: FABRICACIÓN DE CICLONES Y
LAVADORES VENTURI.

Por lo siguiente:

Efectuar servicio de fabricación de ciclones y lavadores Venturi, de acuerdo a planos finales y antecedentes referenciales entregados por Uds.

Costo del servicio (valor neto):

Ciclón lámina N°2:	\$ 10.700.000.-
Ciclón lámina N°1:.....	\$ 8.600.000.-
Lavador Venturi lámina N°1:	\$ 7.900.000.-
Torre ciclón:.....	\$ 8.400.000.-

Nota: Este presupuesto no contempla montaje

- Los tiempos asociados a la fabricación y traslado de cada equipo están de acuerdo a :

Verificación de la Ingeniería	: 5 días
Fabricación de equipos	: 30 días
Certificación	: 5 días
Traslado	: 5 días
Montaje	: 10 días (de requerir)

Nota: Estos tiempos pueden ser ajustados en cuanto a generar traslapes entre ellos.

➤ Las condiciones de pago y validez de la oferta están dadas según:

30% Contra Orden de Compra

60% Contra avance

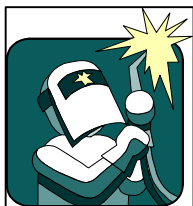
10%, 20 días entregados los equipos

60 días Validez de la oferta

Nota: Este presupuesto no contempla todo lo referente a fundaciones, sistema eléctrico control y otros.

Sixto Saldivia P.
P/TURBOMECÁNICA LTDA.

Talcahuano, 26 de Julio 2021
SSP/oach



SOCIEDAD INDUSTRIAL Y MAESTRANZA

SIMS LTDA.

RUT. 76.446.090-1 FONO: 99390843

maestranzasims@hotmail.com



COTIZACION POR TRABAJOS

EMPRESA	PROMASA S.A.	N° O/T	
SOLICITA	GABRIEL PINCHEIRA	COTIZACION N°	9099
FECHA	26-07-2021	FECHA DE TRABAJO	

DESCRIPCION DEL TRABAJO

***FABRICACION DE LAVADOR VENTURI EN MATERIAL INOX 304 ***

NOTA: DURACION DE FABRICACION 6 DIAS HABILES

MATERIALES	\$	1.055.000
MANO DE OBRA	\$	2.460.000
MANO DE OBRA EXTRA	\$	-
ARRIENDO EQUIPOS	\$	1.235.000
G. GENERALES O UTILIDAD	\$	1.180.800
TOTAL	\$	5.930.800

MAS I.V.A.



FIRMA CONTRATISTA

V°B° ACEPTACION

DETALLE COSTOS

MATERIAL

ITEM	DESCRIPCION	UNIDAD	CANTIDAD	V. UNITARIO	SUB-TOTAL
1	SOLDADURA TIG INOX	GL	1		\$ 710.000
2	SOLDADURA 316 L	GL	1		\$ 130.000
3	DISCO CORTE	GL	1		\$ 110.000
4	DISCO PULIR	GL	1		\$ 50.000
5	COPLA 1" INOX	GL	1		\$ 55.000
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
				TOTAL	\$ 1.055.000

ARRIENDO EQUIPO

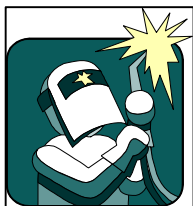
ITEM	DESCRIPCION	UNIDAD	CANTIDAD	V. UNITARIO	SUB-TOTAL
1	HERRAMIENTAS VARIOS	GL	1		\$ 430.000
2	FLETE TRASLADO	GL	1		\$ 180.000
3	COLACION	GL	1		\$ 295.000
4	EQUIPO MANIOBRA	GL	1		\$ 330.000
					\$ -
					\$ -
					\$ -
				TOTAL	\$ 1.235.000

MANO DE OBRA

C/U	CALIFICACION			SUB-TOTAL
1	MAESTRO	1		
1	AYUDANTE	1		
1	SOLDADOR	1		
1	SUPERVISOR	1		
			TOTAL	\$ 2.460.000

MANO DE OBRA EXTRA 50%

C/U	CALIFICACION	TOTAL H.H	VALOR H.H	SUB-TOTAL
			TOTAL	



SOCIEDAD INDUSTRIAL Y MAESTRANZA

SIMS LTDA.

RUT. 76.446.090-1 FONO: 99390843

maestranzasims@hotmail.com



COTIZACION POR TRABAJOS

EMPRESA	PROMASA S.A.	N° O/T	
SOLICITA	GABRIEL PINCHEIRA	COTIZACION N°	9101
FECHA	26-07-2021	FECHA DE TRABAJO	

DESCRIPCION DEL TRABAJO

***FABRICAR CICLON EN MATERIAL A.C. ***

NOTA: DURACION DE FABRICACION 6 DIAS HABILES

MATERIALES	\$	969.000
MANO DE OBRA	\$	3.280.000
MANO DE OBRA EXTRA	\$	-
ARRIENDO EQUIPOS	\$	1.120.000
G. GENERALES O UTILIDAD	\$	1.476.000
TOTAL	\$	6.845.000

MAS I.V.A.



FIRMA CONTRATISTA

V°B° ACEPTACION

DETALLE COSTOS

MATERIAL

ITEM	DESCRIPCION	UNIDAD	CANTIDAD	V. UNITARIO	SUB-TOTAL
1	SOLDADURA TIG	GL	1		\$ 825.000
2	DISCO CORTE	GL	1		\$ 144.000
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
				TOTAL	\$ 969.000

ARRIENDO EQUIPO

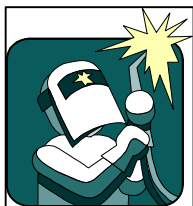
ITEM	DESCRIPCION	UNIDAD	CANTIDAD	V. UNITARIO	SUB-TOTAL
1	HERRAMIENTAS VARIOS	GL	1		\$ 510.000
2	FLETE TRASLADO	GL	1		\$ 180.000
3	COLACION	GL	1		\$ 140.000
4	EQUIPO MANIOBRA	GL	1		\$ 290.000
					\$ -
					\$ -
					\$ -
				TOTAL	\$ 1.120.000

MANO DE OBRA

C/U	CALIFICACION			SUB-TOTAL
1	MAESTRO	1		
1	AYUDANTE	1		
1	SOLDADOR	1		
1	SUPERVISOR	1		
			TOTAL	\$ 3.280.000

MANO DE OBRA EXTRA 50%

C/U	CALIFICACION	TOTAL H.H	VALOR H.H	SUB-TOTAL
			TOTAL	



SOCIEDAD INDUSTRIAL Y MAESTRANZA

SIMS LTDA.

RUT. 76.446.090-1 FONO: 99390843

maestranzasims@hotmail.com



COTIZACION POR TRABAJOS

EMPRESA	PROMASA S.A.	N° O/T	
SOLICITA	GABRIEL PINCHEIRA	COTIZACION N°	9101
FECHA	26-07-2021	FECHA DE TRABAJO	

DESCRIPCION DEL TRABAJO

***FABRICAR CICLON EN MATERIAL A.C. ***

NOTA: DURACION DE FABRICACION 6 DIAS HABILES

MATERIALES	\$	969.000
MANO DE OBRA	\$	3.280.000
MANO DE OBRA EXTRA	\$	-
ARRIENDO EQUIPOS	\$	1.120.000
G. GENERALES O UTILIDAD	\$	1.476.000
TOTAL	\$	6.845.000

MAS I.V.A.



FIRMA CONTRATISTA

V°B° ACEPTACION

DETALLE COSTOS

MATERIAL

ITEM	DESCRIPCION	UNIDAD	CANTIDAD	V. UNITARIO	SUB-TOTAL
1	SOLDADURA TIG	GL	1		\$ 825.000
2	DISCO CORTE	GL	1		\$ 144.000
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
				TOTAL	\$ 969.000

ARRIENDO EQUIPO

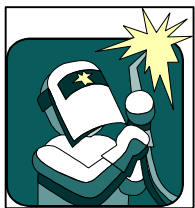
ITEM	DESCRIPCION	UNIDAD	CANTIDAD	V. UNITARIO	SUB-TOTAL
1	HERRAMIENTAS VARIOS	GL	1		\$ 510.000
2	FLETE TRASLADO	GL	1		\$ 180.000
3	COLACION	GL	1		\$ 140.000
4	EQUIPO MANIOBRA	GL	1		\$ 290.000
					\$ -
					\$ -
					\$ -
				TOTAL	\$ 1.120.000

MANO DE OBRA

C/U	CALIFICACION			SUB-TOTAL
1	MAESTRO	1		
1	AYUDANTE	1		
1	SOLDADOR	1		
1	SUPERVISOR	1		
			TOTAL	\$ 3.280.000

MANO DE OBRA EXTRA 50%

C/U	CALIFICACION	TOTAL H.H	VALOR H.H	SUB-TOTAL
			TOTAL	



SOCIEDAD INDUSTRIAL Y MAESTRANZA

SIMS LTDA.

RUT. 76.446.090-1 FONO: 99390843

maestranzasims@hotmail.com



COTIZACION POR TRABAJOS

EMPRESA	PROMASA S.A.	N° O/T	
SOLICITA	GABRIEL PINCHEIRA	COTIZACION N°	9100
FECHA	27-07-2021	FECHA DE TRABAJO	

DESCRIPCION DEL TRABAJO

***FABRICAR TORRE CICLON EN MATERIAL INOX 304 ***

NOTA: DURACION DE FABRICACION 7 DIAS HABILES

MATERIALES	\$	1.385.000
MANO DE OBRA	\$	3.121.000
MANO DE OBRA EXTRA	\$	-
ARRIENDO EQUIPOS	\$	660.000
G. GENERALES O UTILIDAD	\$	1.634.000
TOTAL	\$	6.800.000

MAS I.V.A.



FIRMA CONTRATISTA

V°B° ACEPTACION

DETALLE COSTOS

MATERIAL

ITEM	DESCRIPCION	UNIDAD	CANTIDAD	V. UNITARIO	SUB-TOTAL
1	SOLDADURA TIG INOX	GL	1	\$ 950.000	\$ 950.000
2	SOLDADURA 316 L	GL	1	\$ 175.000	\$ 175.000
3	DISCO CORTE	GL	1	\$ 150.000	\$ 150.000
4	DISCO PULIR	GL	1	\$ 75.000	\$ 75.000
5	SILICONA ALTA T°	GL	1	\$ 35.000	\$ 35.000
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
				TOTAL	\$ 1.385.000

ARRIENDO EQUIPO

ITEM	DESCRIPCION	UNIDAD	CANTIDAD	V. UNITARIO	SUB-TOTAL
1	HERRAMIENTAS VARIOS	GL			\$ -
2	FLETE TRASLADO	GL			\$ -
3	COLACION	GL			\$ -
4	EQUIPO MANIOBRA	GL			\$ -
					\$ -
					\$ -
					\$ -
				TOTAL	\$ 660.000

MANO DE OBRA

C/U	CALIFICACION			SUB-TOTAL
1	MAESTRO			\$ -
2	AYUDANTE			\$ -
2	SOLDADOR			\$ -
1	SUPERVISOR			\$ -
				\$ -
			TOTAL	\$ 3.121.000

MANO DE OBRA EXTRA 50%

C/U	CALIFICACION	TOTAL H.H	VALOR H.H	SUB-TOTAL
			TOTAL	